



July 30, 2025

**New Mexico Oil Conservation Division**

1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Closure Request  
Arcturus 18 Fed 6H Flowline  
Incident Number: nAPP2508641982  
Eddy County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Devon Energy Production Company, LP (Devon), has prepared this *Closure Request* to document excavation and soil sampling activities associated with a produced water and crude oil release at the Arcturus 18 Fed 6H Flowline (Site). Based on the excavation activities and analytical results from the soil sampling events, Devon is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Numbers nAPP2508641982.

## **BACKGROUND**

The Site is located in Unit A, Section 18, Township 19 South, Range 31 East, in Eddy County, New Mexico (32.664030°, -103.901092°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On March 27, 2025, a production flow line failed which resulted in the release of approximately 12 barrels (bbls) of produced water and 3 bbls of crude oil, no fluid was recovered. The release impacted an area off-pad approximately 8,264 square feet in size, 2,142 square feet of this was a pooled zone and approximately 6,122 square feet was overspray. Devon reported the release to the New Mexico Oil Conservation Division (NMOCD) via the NMOCD Portal on March 27, 2025, and submitted a Release Notification Form C-141 on March 31, 2025. The release was assigned Incident Number nAPP2508641982. The Form C-141 can be referenced on the NMOCD Portal.

## **SITE CHARACTERIZATION AND CLOSURE CRITERIA**

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well CP 01907, located approximately 554 feet north of the Site. The well was drilled to assess depth to water and has a reported depth to groundwater greater than 55 feet below ground surface (bgs) and a total depth of 55 feet bgs. The well was subsequently plugged and abandoned. There are no regional or Site-specific hydrogeological conditions, such as shallow surface water, karst features, wetlands, or vegetation to suggest the Site is conducive to shallower groundwater.

All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 2,145 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is potentially underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

Advanced Geophysics, a BLM approved third-party cave and karst contractor, conducted a desktop survey, aerial survey, and geophysical survey of the Site to assess for the presence or absence of karst features and/or unstable geology. In summary, the aerial and geophysical karst surveys did not identify any karst features within 200 meters of the release extent. Results of the geophysical study indicated a well-layered geologic system and no anomalies, consistent with air-filled subsurface voids, were found within the survey area, indicating stable ground that would not pose a safety concern or act as an immediate conduit to groundwater. Based on the desktop, aerial, and geophysical surveys completed at the Site, the Site does not appear to exhibit karst features or unstable geology and as such, those are not considered sensitive receptors as they relate to this Site. The detailed report provided by Advanced Geophysics is included in Appendix B.

Based on the results of the Site Characterization and the results of additional site-specific surveys indicating the absence of karst features and unstable geology, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

## **SITE ASSESSMENT AND DELINEATION SOIL SAMPLING ACTIVITIES**

On April 09, 2025, Ensolum personnel were onsite to delineate the extent of release as indicated by field screening and laboratory analytical results. Four delineation soil samples (SS01 through SS04) were collected from areas surrounding the release extent to verify the lateral extent of impacted soil at ground surface; lateral delineation soil samples SS01 and SS02 were advanced to a depth of 1-foot bgs and lateral delineation soil samples SS03 and SS04 were advanced to a depth of 0.5 feet bgs. Six boreholes (BH01 through BH06) were advanced via hand auger within the release extent to assess the vertical extent of impacted soil. Borehole BH01 was advanced to a depth of 7 feet bgs, borehole BH02 was advanced to a depth of 2 feet bgs, borehole BH03 was advanced to a depth of 3 feet bgs, and boreholes BH04 through BH06 were advanced to a depth of 0.5 feet bgs. Lateral and vertical delineation soil samples were field screened for chloride using Hach® Chloride QuanTab® test strips. Field screening

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results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix C. Photographic documentation of delineation activities is included in Appendix D.

All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Envirotech Analytical Laboratory (Envirotech) in Farmington, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results from lateral delineation soil samples SS01 through SS04 were in compliance with the strictest Closure Criteria at ground surface. Laboratory analytical results for delineation soil samples collected from boreholes BH01 through BH06 indicated concentrations of TPH and/or chloride exceeded the reclamation requirement in the top 4 feet. Borehole sample BH01 was in compliance with the strictest Closure Criteria at a depth of 7 feet bgs, boreholes BH02 and BH03 were in compliance with the strictest Closure Criteria at a depth of 2 feet bgs and 3 feet bgs, respectively. Laboratory analytical results for boreholes BH04 through BH06 were in compliance with the strictest Closure Criteria at a depth of 0.5 feet bgs. Laboratory results are summarized in Table 1 and laboratory analytical reports are included in Appendix E.

## EXCAVATION AND CONFIRMATION SOIL SAMPLING ACTIVITIES

The excavation of impacted soil was completed utilizing a tracked excavator, loader, hydro-vac, and belly dump trucks. To direct excavation activities, soil was field screened for TPH utilizing a PetroFLAG® soil analyzer system and chloride utilizing test strips. The excavation depth was determined by delineation sampling to be 4 feet bgs. Photographic documentation of excavation activities is included in Appendix D.

Beginning on May 16, 2025, 5-point composite confirmation samples were collected by placing five equivalent aliquots of soil into a resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS43 were collected from the floor of the excavation at depths ranging from 0.5 feet bgs to 4 feet bgs. Composite soil samples SW01 through SW05 were collected from the sidewalls of the pooled zone excavation area at depths ranging from ground surface to 4 feet bgs. Sidewall soil samples collected from the overspray area were incorporated into the composite floor samples at a depth of 0.5 feet bgs. The soil samples were collected, handled, and analyzed following the same procedures as described above.

The final excavation extent measured approximately 8,597 square feet. A total of approximately 455 cubic yards of waste-containing soil was removed during the excavation activities. The waste-containing soil was transported and properly disposed of at the R360 Hobbs. The excavation extent and excavation soil sample locations are presented in Figure 3.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for excavation floor samples FS01 through FS43, collected at depths ranging from 0.5 feet bgs to 4 feet bgs, and for excavation sidewall samples SW01 through SW05, collected from depths ranging from ground surface to 4 feet bgs, indicated all COC concentrations were compliant with the Site Closure Criteria and in compliance with the reclamation requirement in the top

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4 feet. Laboratory analytical results are summarized in Tables 2 and 3 and laboratory analytical reports are included as Appendix E.

## RECLAMATION PLAN

The entire release occurred off pad in the pasture, and as such, a reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH were applied to the top 4 feet of the subsurface that was impacted by the release per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation. The following Reclamation Plan proposes reclamation of the excavated area:

- The excavation will be backfilled with locally sourced topsoil to match surrounding grade.
- Soil in the vicinity of the release includes: Berino loamy fine sand 0 to 3 percent slopes according to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey completed on April 28, 2025;
- The backfilled areas will be seeded utilizing a weed-free seed mix designed by the NMSLO to meet reclamation standards for this region, which will be: BLM Seed Mix (2) for sand;
- The seed mixture will be distributed with either a push broadcaster seed spreader, tractor operated broadcast seed spreader, drill seeding, or other means;
- Application of the seed mixture will be at a coverage of 10 pounds of seeds per acre of reclaimed pasture with distribution by a drilling method or 20 pounds of seeds per acre of reclaimed pasture with distribution by a broadcast method;
- Erosion control management is not anticipated, but if needed, will potentially include:
  - The placement of wattles in areas with a propensity for high run off rates;
  - Straw cover if high winds are anticipated to support moisture retention and limit wind from blowing seeds away before they have had time to germinate; and/or
  - Other erosional control best management practices (BMP) as necessary to support timely and healthy regrowth of vegetation in disturbed areas;
- Seeding is anticipated to be completed in the Spring or Fall when temperatures and precipitation is most conducive for vegetation growth. In general, seeding should occur approximately one month after the last frost in the Spring up until approximately one month prior to the first fall frost. Regulatory agencies has recognized the optimal time to seed is between July and early September, which will be adhered to for this Site;
- Annual inspections (at a minimum) will take place on the location until revegetation is consistent with local natural vegetation density. The Site will be inspected the following Fall to assess the success of regrowth. If necessary, an additional application of the pure live seed mixture will be applied as well as any needed BMPs will be installed to support growth and limit erosion;
- Upon completion of revegetation, a copy of the C-103 submitted to NMOCD for final inspection and release.

## CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the March 2025 release of produced water and crude oil. Following remediation efforts, 43 composite confirmation floor soil samples (FS01 through FS43) and five composite confirmation sidewall samples (SW01 through SW05) were collected. Laboratory analytical results for the excavation soil samples, collected from the final



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excavation extent, indicated all COC concentrations were in compliance with Site Closure Criteria and with the reclamation requirement in the top 4 feet of soil. Based on the soil sample analytical results, no further remediation was required. Reclamation will be completed as described above.

Based on horizontal and vertical delineation sampling in accordance with the strictest Closure Criteria per NMOCD Table I, depth to groundwater greater than 55 feet bgs, and laboratory analytical results from confirmation soil sampling activities, Devon believes these remedial actions have been protective of human health, the environment, and groundwater. As such, Devon respectfully requests closure for Incident Numbers nAPP2508641982.

If you have any questions or comments, please contact Ms. Ashley Giovengo at (575) 988-0055 or [agiovengo@ensolum.com](mailto:agiovengo@ensolum.com).

Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink, appearing to read 'Ashley Giovengo'.

Ashley Giovengo  
Associate Principal

A handwritten signature in black ink, appearing to read 'Daniel R. Moir'.

Daniel R. Moir, PG  
Senior Managing Geologist

cc: Jim Raley, Devon  
BLM

#### Appendices:

Figure 1 Site Receptor Map  
Figure 2 Delineation Soil Sample Locations  
Figure 3 Excavation Soil Sample Locations

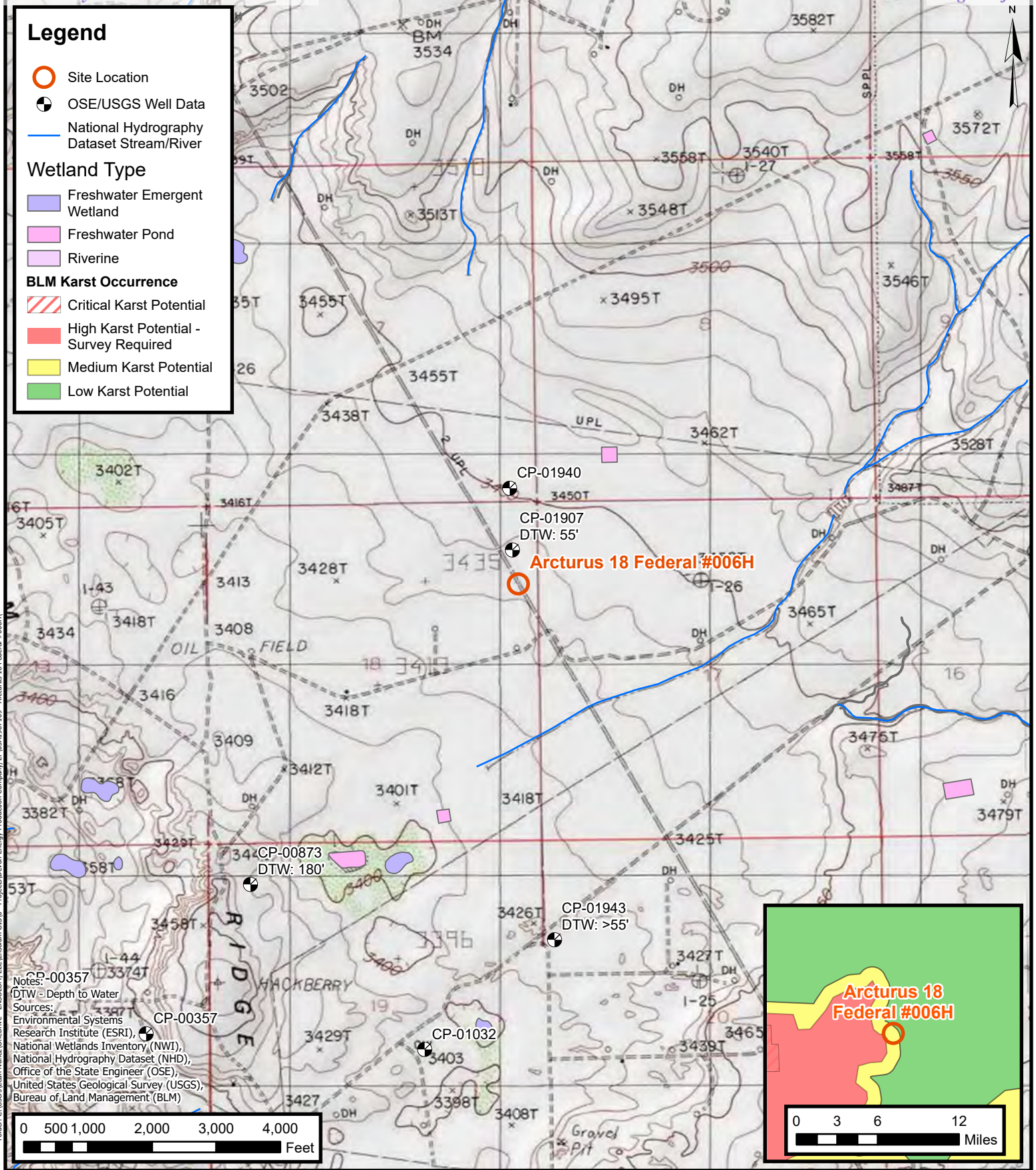
Table 1 Soil Sample Analytical Results (Delineation Soil Samples)  
Table 2 Soil Sample Analytical Results (Confirmation Soil Samples)  
Table 3 Soil Sample Analytical Results (Sidewall Soil Samples)  
Table 4 Soil Sample Analytical Results (Backfill Soil Samples)

Appendix A Well Log and Record  
Appendix B Environmental Karst Study Report  
Appendix C Lithologic Soil Sampling Logs  
Appendix D Photographic Log  
Appendix E Laboratory Analytical Reports & Chain-of-Custody Documentation  
Appendix F NMOCD Correspondence



FIGURES

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## Site Receptor Map

Devon Energy Production Company, LP  
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Incident Number: nAPP2508641982  
Unit A, Section 18, T 19S, R 31E  
Eddy County, New Mexico

FIGURE

1



## Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- Pooled Zone
- Overspray

SS01@0'  
SS01@1'

BH03@0'  
BH03@2'  
BH03@3'

BH06@0'  
BH06@0.5'

BH02@0'  
BH02@2'

SS02@0'  
SS02@1'

SS4@0'  
SS04@0.5'

BH05@0'  
BH05@0.5'

BH01@0'  
BH01@2'  
BH01@4'  
BH01@6'  
BH01@7'

BH04@0'  
BH04@0.5'

SS03@0'  
SS03@0.5'

Notes:  
Sample ID @ Depth Below Ground Surface.  
Samples in bold indicate sample exceeded applicable closure criteria.  
Grey text indicate soil sample was removed during excavation activities.

0 5 10 20 30 40  
Feet

Sources: Environmental Systems Research Institute (ESRI)



## Delineation Soil Sample Locations

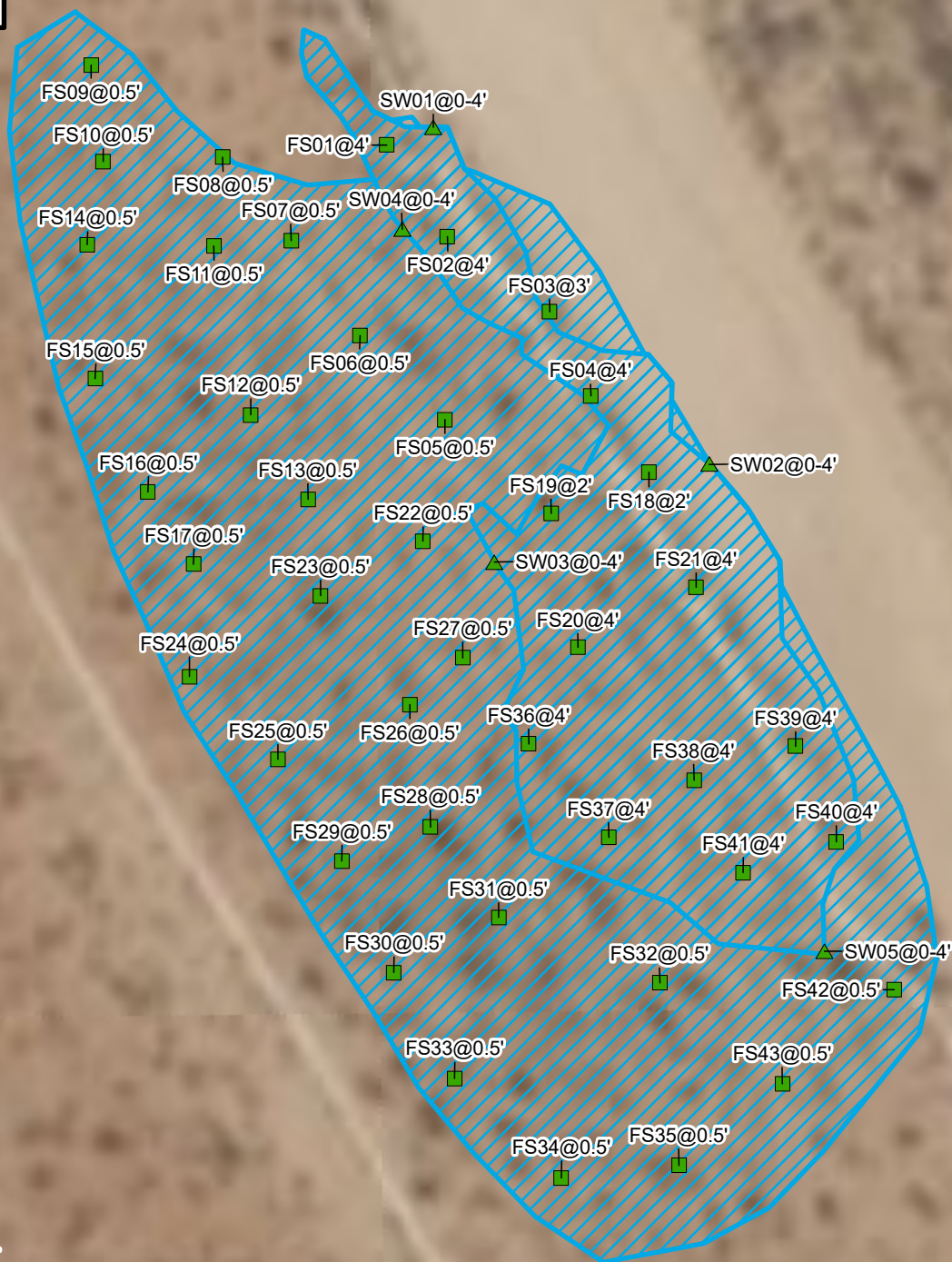
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Unit A, Section 18, T 19S, R 31E  
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FIGURE  
2



**Legend**

- Excavation Floor Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Sample in Compliance with Closure Criteria
- ▨ Excavation Extent



Notes:  
Sample ID @ Depth Below Ground Surface.

0 20 40  
Feet

Sources: Environmental Systems Research Institute (ESRI)



## Confirmation Soil Sample Location

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**FIGURE**

**3**





TABLES

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**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
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Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>Delineation Soil Samples</b>										
SS01	4/9/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS01	4/9/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS02	4/9/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	66.9
SS02	4/9/2025	1	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS03	4/9/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS03	4/9/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS04	4/9/2025	0	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
SS04	4/9/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH01	4/9/2025	0	0.837	4.5069	66.0	17,100	7,470	17,166	24,636	8,020
BH01	4/9/2025	2	<0.0250	<0.0500	<20.0	31.6	<50.0	31.6	32	6,250
BH01	4/9/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	9,180
BH01	4/9/2025	6	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	820
BH01	4/9/2025	7	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	156
BH02	4/9/2025	0	<0.0250	<0.0500	<20.0	15,500	6,650	15,500	22,150	16,900
BH02	4/9/2025	2	<0.0250	<0.0500	<50.0	<50.0	<50.0	<25.0	<50.0	43.3
BH03	4/9/2025	0	26.16	123.26	1,140	26,300	10,800	27,440	38,240	581
BH03	4/9/2025	2	<0.0250	<0.0500	<20.0	92.9	<50.0	92.9	93	2,550
BH03	4/9/2025	3	<0.0250	<0.0500	<50.0	31.2	<50.0	31.2	31.2	217
BH04	4/9/2025	0	<0.0250	<0.0500	449	314	<50.0	449	763	76.7
BH04	4/9/2025	0.5	<0.0250	<0.0500	<50.0	<50.0	<50.0	<25.0	<50.0	27.4
BH05	4/9/2025	0	<0.0250	<0.0500	<50.0	<50.0	<50.0	<25.0	<50.0	<20.0
BH05	4/9/2025	0.5	<0.0250	<0.0500	<50.0	<50.0	<50.0	<25.0	<50.0	21.6
BH06	4/9/2025	0	<0.0250	<0.0500	<50.0	<50.0	<50.0	<25.0	<50.0	<20.0
BH06	4/9/2025	0.5	<0.0250	<0.0500	<50.0	<50.0	<50.0	<25.0	<50.0	<20.0

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

&lt;: Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

\* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

**TABLE 2**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Arcturus 18 Fed 6H Flowline  
 Devon Energy Production Company, LP  
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>Excavation Floor Soil Samples</b>										
FS01	5/19/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	126
FS02	5/19/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	208
FS03	5/16/2025	3	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	95.8
FS04	5/19/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	65.6
FS05	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	46.6
FS06	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	48.0
FS07	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS08	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS09	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS10	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS11	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS12	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS13	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	31.8
FS14	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS15	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS16	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS17	5/20/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS18	5/20/2025	2	<0.0250	<0.0500	<20.0	66.3	<50.0	66.3	66.3	90.2
FS19	5/20/2025	2	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	70.1
FS20	5/20/2025	4	<0.0250	<0.0500	<20.0	29.5	<50.0	29.5	29.5	139
FS21	5/20/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,920
FS22	5/21/2025	0.5	<0.0250	<0.0500	<20.0	29.5	<50.0	29.5	29.5	128
FS23	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	74.2
FS24	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS25	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS26	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	96.6
FS27	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	382
FS28	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	138
FS29	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	68.4
FS30	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	114
FS31	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	379
FS32	5/21/2025	0.5	<0.0250	<0.0500	<20.0	32.5	<50.0	32.5	32.5	361
FS33	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	116



**TABLE 2 - CONT'D**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Arcturus 18 Fed 6H Flowline  
 Devon Energy Production Company, LP  
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>Excavation Floor Soil Samples</b>										
FS34	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS35	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	63.2
FS36	5/21/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	37.4
FS37	5/21/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	41.1
FS38	5/21/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	148
FS39	5/21/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	3,420
FS40	5/21/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,360
FS41	5/21/2025	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	40.6
FS42	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
FS43	5/21/2025	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	45.2

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

&lt;: Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

\* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

**TABLE 3**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
 Arcturus 18 Fed 6H Flowline  
 Devon Energy Production Company, LP  
 Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>Sidewall Soil Samples</b>										
SW01	5/21/2025	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	88.9
SW02	5/21/2025	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	266
SW03	5/21/2025	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	56.0
SW04	5/21/2025	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	132
SW05	5/21/2025	0-4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	30.7

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

&lt;: Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

\* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes





<b>TABLE 4</b> <b>SOIL SAMPLE ANALYTICAL RESULTS</b> Arcturus 18 Fed 6H Flowline Devon Energy Production Company, LP Eddy County, New Mexico										
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
<b>Backfill Soil Samples</b>										
BF01	5/16/2025	NA	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Grey text represents samples that have been excavated

&lt;: Laboratory Analytical result is less than reporting limit

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.

\* Indicates sample was collected in area to be reclaimed after remediation is complete; reclamation for chloride in the top 4 feet is 600 mg/kg and total TPH is 100 mg/kg.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

NA: Not Applicable



## APPENDIX A

### Well Log and Record

---



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). CP-1907			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 39	SECONDS 55.76	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 103	54	4.95	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NE NE Sec.18 T19S R31S NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 7/13/2022	DRILLING ENDED 7/13/2022	DEPTH OF COMPLETED WELL (FT) Temporary Well		BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 7/13/2022, 7/1/2022		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		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)
	FROM	TO						
	0	55	±6.5	Boring-HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. CP-1907-POD1 TW-1	POD NO. 1	TRN NO. 726167
LOCATION 19.31.18.422	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		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)
	FROM	TO				
	0	29	29	Sand, Medium/ Fine grained, poorly graded, Light brown	Y    ✓ N	
	29	44	15	Sand, Medium/ Fine grained, poorly graded, with caliche Light brown / white	Y    ✓ N	
	44	55	11	Sand, Medium/ Fine grained, poorly graded, Light brown	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
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					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):    0.00	

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: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.	
	<p>PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:</p> <p>Shane Eldridge, Cameron Pruitt</p>	

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:	
	<p><i>Jackie D. Atkins</i></p> <p>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</p>	<p>8/4/2022</p> <p>DATE</p>

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)

FILE NO. <u>CP-1907-P001 TW-1</u>	POD NO. <u>1</u>	TRN NO. <u>726167</u>
LOCATION <u>19.31.18.422</u>	WELL TAG ID NO. <u>                    </u>	PAGE 2 OF 2



## APPENDIX B

# Environmental Karst Study Report

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# **Aerial and Geophysical Cave and Karst Investigation: Arcturus 18 Fed 006H**

**Report Delivered: 07/15/2025**

**Prepared for:  
Ensolum, LLC  
3122 National Parks HWY  
Carlsbad, NM 88220**

**Prepared By:  
Advanced Geophysics, LLC  
2821 White Plains Dr.  
Midlothian, Texas 76065**



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# Executive summary

## Introduction

**Ensolum, LLC** requested an aerial and geophysical karst survey following a release near the Arcturus 18 Fed 006H site, located at 32.664030, -103.901092. The objective of the surveys was to assess the stability of the site by investigating surface and subsurface conditions for the presence of potential karst features.

## Findings

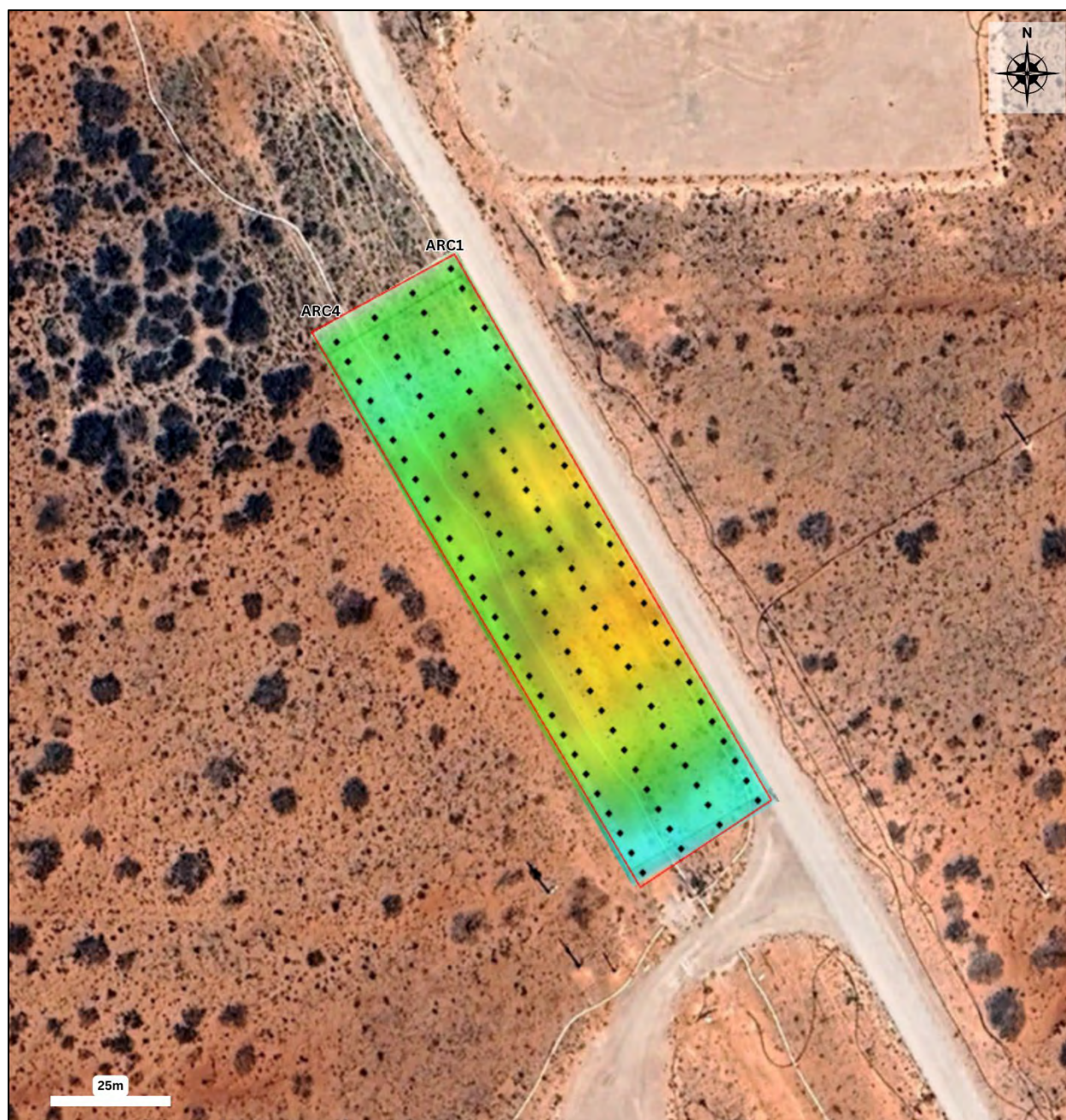
- The aerial survey revealed:
  - **No anomalies** were identified within the 200-meter (656 ft) buffer of the release.
- The geophysical survey revealed:
  - **No anomalies** that could be interpreted as areas of increased porosity or air-filled voids/conduits were identified.

## Recommendations

- **Mitigation Planning:**
  - Any subsurface voids encountered during construction, or any phase of the remediation process must be reported to the Bureau of Land Management Karst Division or the New Mexico State Lands Office Resource Division.
  - Mitigation measures should align with guidelines in the **Bureau of Land Management Cave and Karst Management Handbook (H-8380-1)** or the **Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment (Code 527)**.

## Conclusions

Aerial and geophysical surveys conducted near the Arcturus 18 Fed 006H site did not reveal any surface or subsurface anomalies indicative of karst features. In the absence of such features, both at and below the surface, the site is characterized as stable.



**Figure A.** Aerial view of the location of the release with integrated geophysical overlay, illustrating the results of the electrical resistivity survey.



## 1.0 INTRODUCTION

The following report has been prepared for Ensolum, LLC, to determine the presence or absence of surface and subsurface voids surrounding a release near the Arcturus 18 Fed 006H site, located at approximately 32.664030, -103.901092, within Eddy County, New Mexico (**Figure 1**). To delineate the subsurface features, a geophysical survey (electrical resistivity tomography) was conducted, processed, and interpreted by Kaleb Henry of Advanced Geophysics, LLC. The aerial karst survey was conducted and processed by SWCA Environmental Consultants. The aerial data was then reviewed and interpreted by Kaleb Henry of Advanced Geophysics, LLC.

The aerial and electrical resistivity surveys were requested by Ensolum, LLC on Jun 11, 2025. Upon the request, the client provided coordinates (listed above) for the well pad, as well as a Google Earth shape file (**Output.kmz**) to ensure the survey encompassed the entire release.

### 1.1 Summary of Results

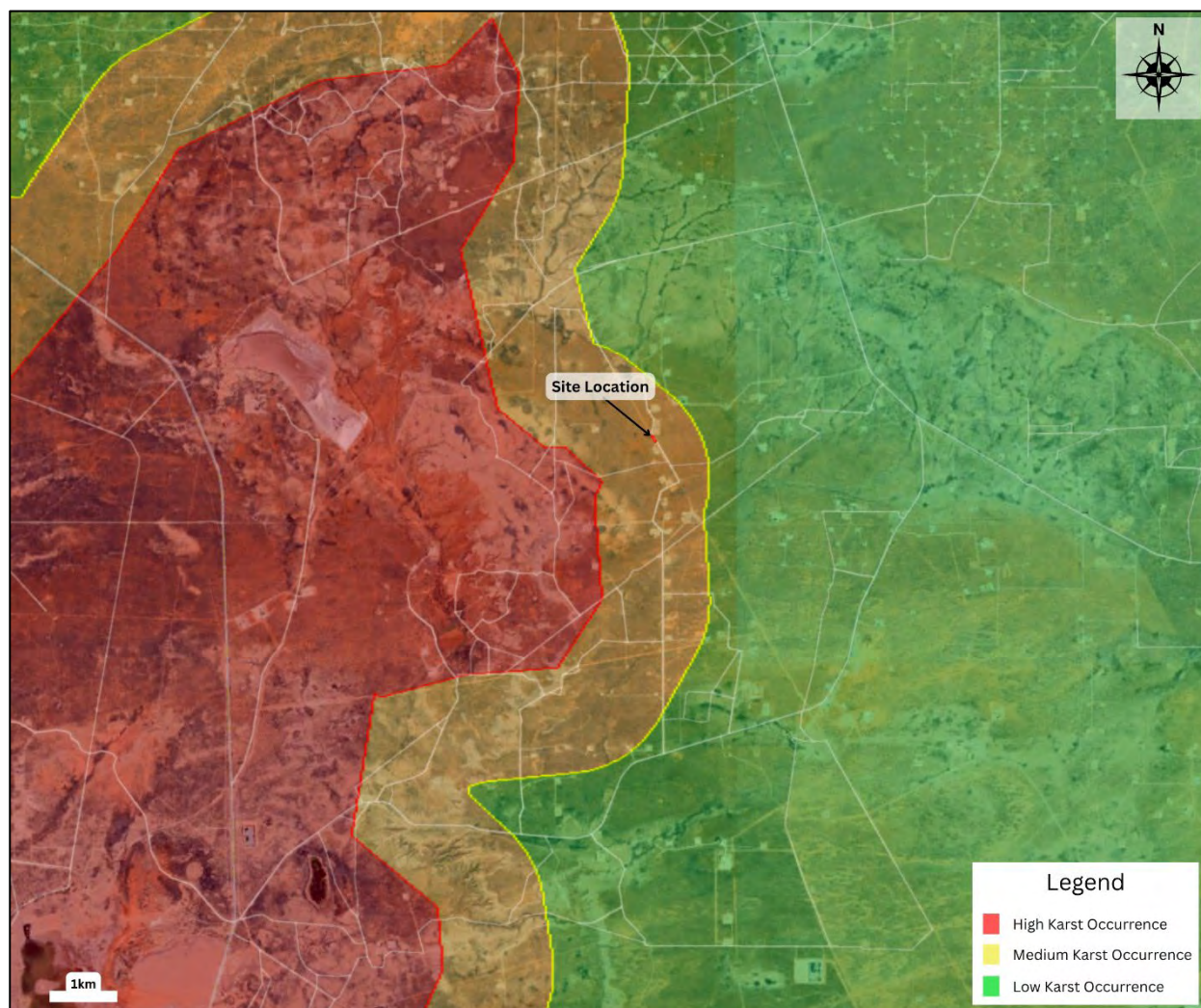
Aerial and geophysical surveys conducted at the location of a release near the Arcturus 18 Fed 006H site did not identify any surface or subsurface anomalies indicative of karst features. While the presence of smaller voids, fractures, or zones of increased porosity cannot be entirely ruled out, such features may have remained undetected due to the resolution limitations of the survey methods employed. Given the absence of definitive karst features in both the aerial and geophysical surveys, the site is characterized as stable.

### 1.2 Site Location

The site is located approximately 41.18 kilometers (25.59 miles) northeast of Carlsbad, New Mexico, and approximately 15.64 kilometers (9.72 miles) north of US Highway 62, within the NENE quarters of Section 18, Township 19 South, Range 31 East, in Eddy County, New Mexico. The release occurred on the Bureau of Land Management land.

### 1.3 Bureau of Land Management Characterization

The BLM have identified four divisions of karst potential: low, medium, high, and critical. These regions are characterized based on the known occurrence of karst features, underlying geologic formations, and potential impacts to freshwater aquifers. The survey was conducted within an area characterized as medium karst occurrence zone by the (BLM) – Carlsbad Office<sup>[1]</sup>.



**Figure 1.** Aerial overview of the site location, illustrating the surrounding karst occurrence zones. Map provided by Google Earth in datum WSG-84. Karst occurrence map provided by Bureau of Land Management – Carlsbad Office.

## 2.0 LOCAL GEOLOGY AND ENVIRONMENT

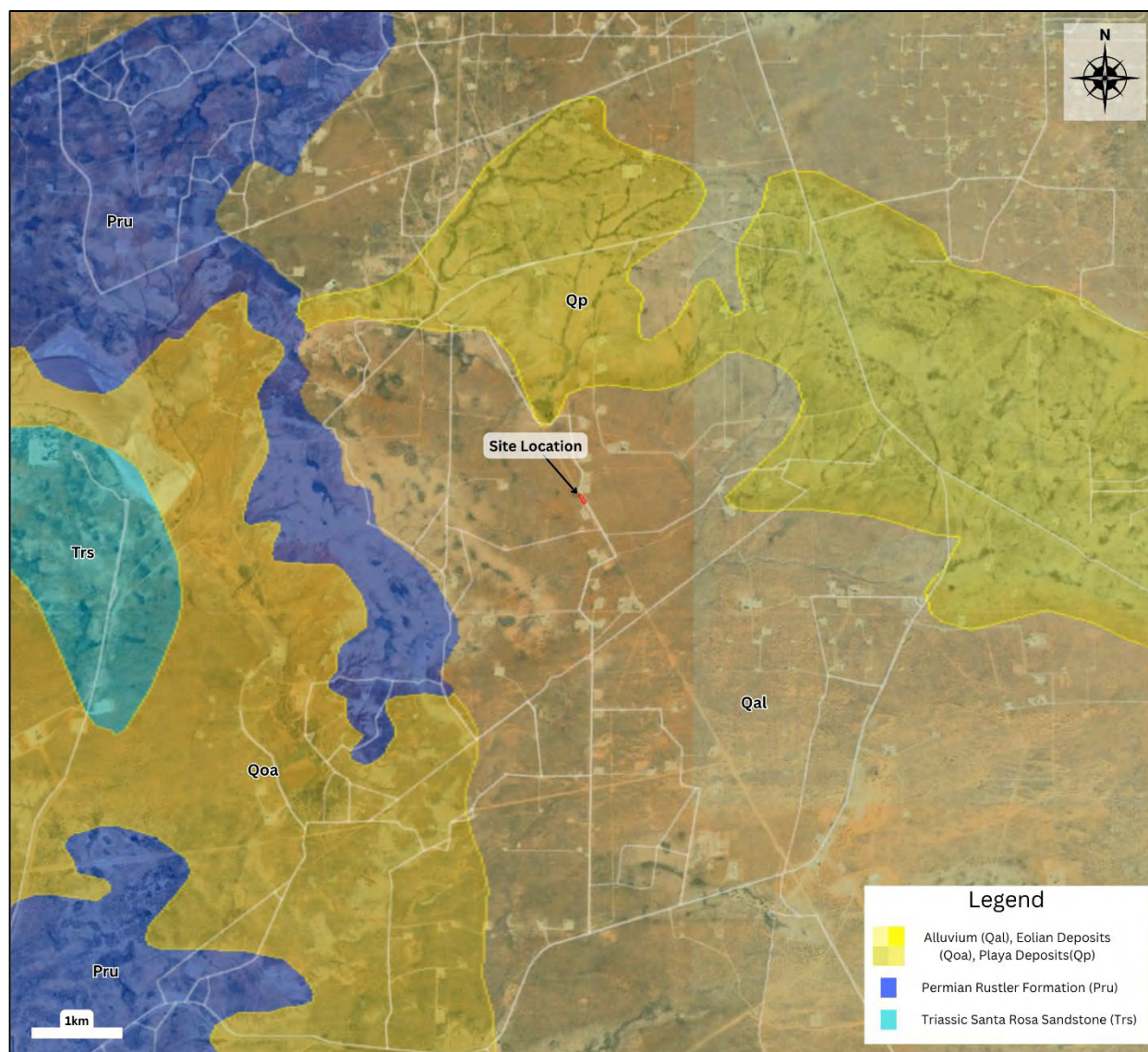
### 2.1 Geologic Setting

The site is situated along the northern edge of the Chihuahuan Desert, on the outskirts of a physiographic region known as the Gypsum Plain (**Figure 2**)<sup>[13]</sup>. The Gypsum Plain is composed of Permian-age evaporites, characterized by extensive cave and karst development in the Castile, Salado, and Rustler Formations<sup>[11]</sup>. Stratigraphically, the Rustler Formation overlies the Salado and Castile Formations within the Delaware Basin. The Rustler Formation was deposited during the mid-to-late Ochoan, as the Delaware Basin transitioned from a hypersaline sea to a terrestrial environment<sup>[3][6]</sup>. This transition led to a complex array of depositional environments, resulting in the formation of five distinct members within the Rustler Formation: Los Medaños, Culebra Dolomite, Tamarisk, Magenta Dolomite, and Forty-niner, listed in ascending order. The Tamarisk and Forty-niner Members, in particular, exhibit the most diverse salt pan to mudflat facies within the Rustler Formation, comprising mudstone, halite, and gypsum<sup>[16]</sup>. Due to their composition, these facies are highly susceptible to dissolution, leading to the formation of karst features.

Directly beneath the Rustler Formation lies the Salado Formation, deposited during the mid-Ochoan as the Delaware Basin became increasingly restricted, forming a density-stratified, hypersaline sea<sup>[17]</sup>. This depositional environment resulted in the Salado Formation being predominantly composed of halite (salt-NaCl) interbedded with anhydrite (gypsum)<sup>[18]</sup>. These evaporite facies are highly prone to dissolution by downward-migrating meteoric waters, which can create various karst features such as conduits, sinkholes, and cavernous porosity. Once initiated, these features can expand rapidly due to the high solubility of halite and gypsum/anhydrite. Halite, with a solubility rate of 360 g/L at 77°F, is approximately two orders of magnitude more soluble than gypsum<sup>[15]</sup>. Gypsum, in turn, has a solubility rate of approximately 2.531 g/L at 68°F, which is around four orders of magnitude higher than that of limestone (calcium carbonate)<sup>[9]</sup>.

The high solubility of these evaporite facies facilitates the rapid development of complex cave systems, which can form within days, weeks, or years, depending on the surrounding hydrogeologic conditions<sup>[13]</sup>. These cave systems serve as preferential flow paths for shallow groundwater recharge, creating a dynamic and continuously evolving karst-aquifer system<sup>[11]</sup>.





**Figure 2.** Geologic formations surrounding the site location. Permian Rustler Formation (Pr), Triassic Santa Rosa Sandstone (Trs), Quaternary alluvial, eolian, and playa deposits (Qal, Qoa, Qp). Background image provided by Google Earth in datum WSG-84. Geologic unit overlay provided by the United State Geologic Society (USGS) and the Bureau of Economic Geology, UT-Austin.

## 2.2 Environmental Setting

The site is located within an area known as the Chihuahuan Desert Thornscrub, where vegetation is sparse. Vegetation surrounding the surveyed location primarily consists of grass with and few creosote bushes. The site is mantled by a soil profile known as Berino, which is composed of a loamy fine sand that transitions to a sandy clay loam deeper in the soil profile<sup>[14]</sup>. These soils are typically well drained and stable<sup>[14]</sup>.

The environment surrounding the survey has been characterized as an evaporitic karst terrain, due to the underlying geologic formations. The Rustler Formation has many documented sinkholes, conduits, and caves, which are highly susceptible to enlargement by dissolution as surface water migrates downward through the formation. These conduits can facilitate the rapid recharge of the groundwater aquifers.

### 3.0 METHODOLOGY

#### 3.1 Description of Geophysical Survey

This project consisted of four parallel two-dimensional (2-D) direct current (DC) resistivity survey lines. These surveys were conducted using an Advanced Geosciences' Inc. (AGI) SuperSting™ (R8/IP) multi-electrode earth resistivity meter. All four lines were performed using a dipole-dipole array configuration consisting of 28 electrodes arranged northwest-to-southeast (electrodes 1 to 28), with a 5-meter (16.4 ft) electrode spacing and 10-meter (32.8 ft) line spacing oriented from northeast-to-southwest (lines 1 to 4). This set up was designed to ensure high accuracy and enhanced shallow depth resolution. Due to the electrode spacing and configuration, the near surface resolution is approximately 2.5 meters (8.2 ft), with the total depth of investigation ranging from 24.6 to 29.6 meters (80.6 to 97 ft) below ground surface (bgs). Each electrode location was recorded using an EMLID RS3 GPS unit with an estimated horizontal location error of 5 centimeters (2 in). The KML file (**Arcturus 18 Fed 006H.kml**) and the corresponding raw dataset (**Arcturus 18 Fed 006H \_Report.csv**) produced during the data collection were submitted to Ensolum, LLC upon submission of the report.

The electrical contact resistance between the ground and each electrode was maintained below 5,000  $\Omega$ m. If initial electrode contact resistance exceeded 5,000  $\Omega$ m, then electrodes would be wetted with well water prior to the survey to lower contact resistance below 5,000  $\Omega$ m. Each electrical resistivity line was conducted using time estimates of 800 ms and cycled twice per electrode pair. The SuperSting™ (R8/IP) was set to inject a 2,000 mA current for each survey measurement and was set to reach a maximum error threshold of 2% between measurement cycles. Recorded resistivity measurements were processed with EarthImager™ 2-D/3-D inversion modeling software, produced by AGI. To improve inverted resistivity models, data outliers which account for less than 10% of total data, were removed using data misfit histograms. Terrain correction was incorporated into resistivity sections to better constrain the relationship between topography and electrical resistivity analyses.

The surveyed lines (ARC1.stg – ARC4.stg) were completed by Kaleb Henry and Ralph Reyes between July 4, 2025, and July 5, 2024.

### 3.2 Description of Aerial Survey

An aerial karst survey near the Arcturus 18 Fed 006H site was conducted by a Federal Aviation Administration (FAA) –licensed drone pilot affiliated with SWCA Environmental Consultants. Survey parameters were developed by Kaleb Henry of Advanced Geophysics to ensure compliance with the stringent requirements established by the Bureau of Land Management – Carlsbad Field Office (BLM-CFO), which are recognized by the New Mexico Oil Conservation Division (NMOCD) and the New Mexico State Land Office (NMSLO).

The aerial survey utilized a preplanned flight path flown at low elevations, with aerial transects spaced to achieve an estimated 70–80% imagery overlap. This overlap minimizes errors during the image-stitching process and enhances the accuracy and resolution of the final imagery products. Following data collection, the images were stitched to produce an orthomosaic image, which was then processed to generate a highly accurate Digital Elevation Model (DEM). A Lower Relief Model (LRM) was subsequently derived from the DEM to highlight sharp changes in elevation (approximately 5 cm). The LRM, along with the DEM and orthomosaic imagery, was carefully examined and analyzed by an experienced cave and karst specialist.

The aerial imagery used in the survey has a resolution of approximately 5 cm (2 in), enabling a trained geologist to identify small-scale karst features with a high degree of detail. However, it is important to recognize the potential presence of artificial artifacts within the LRM, as shadowing and dense vegetation can result in the misrepresentation of topographic highs or lows.

### 3.3 Electrical Resistivity Theory

Electrical resistivity tomography is predicated on the response of electrical current flowing through subsurface material, from transmitter electrodes to potential electrodes. As the current migrates through the underlying media, a potential difference (apparent resistivity) in current is measured. There are three primary factors for determining the electrical resistivity of a subsurface material: Lithology, saturation, and porosity. As porosity increases, resistance to the flow of electrical current is increased, due to the theoretically infinite resistiveness of air. When an area of increased porosity/void is encountered within the subsurface a sharp contrast in electrical resistiveness to the surrounding material is

measured and recorded. This theory, coupled with knowledge of the underlying geology, allows an experienced geophysicist to develop an accurate interpretation of the subsurface features.

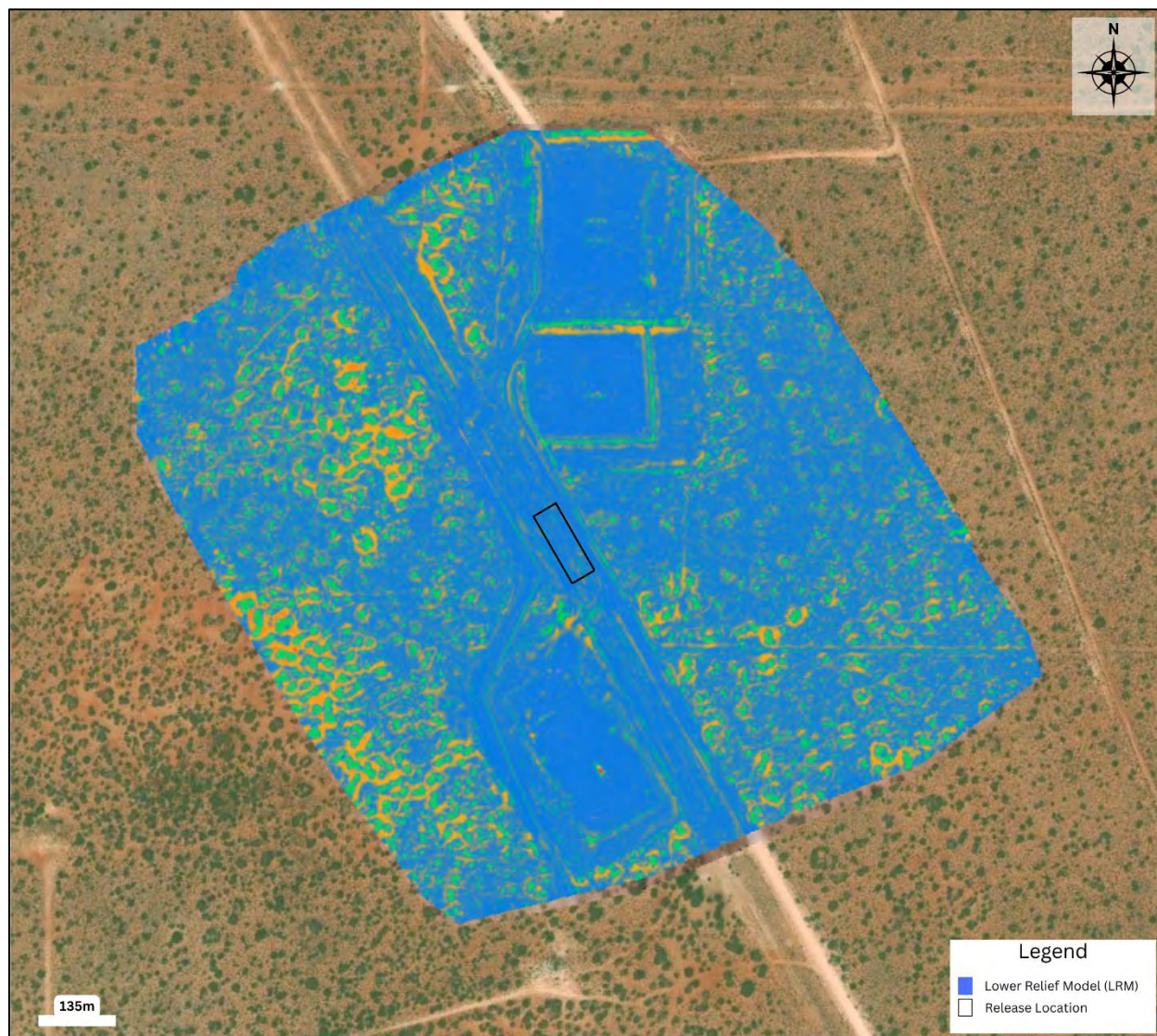
NOTE: Conducting electrical resistivity surveys in areas with known subsurface metallic structures can lead to inaccurate representations of subsurface conditions. Metallic elements tend to create preferential pathways for electrical current, resulting in non-uniform current distributions that may cause inversion algorithms to misinterpret the acquired data. Additionally, these structures can generate shadow zones due to electromagnetic shielding, which impedes current penetration into deeper subsurface layers. Consequently, this may lead to artificially elevated or reduced resistivity values in the final interpretation.

### 3.3 Survey Results

#### 3.3.1 Aerial Karst Survey

The aerial karst survey did not identify any anomalies exhibiting characteristics consistent with surficial karst features within the 200-meter (656-foot) buffer surrounding the release near the Arcturus 18 Fed 006H site (**Figure 3**).



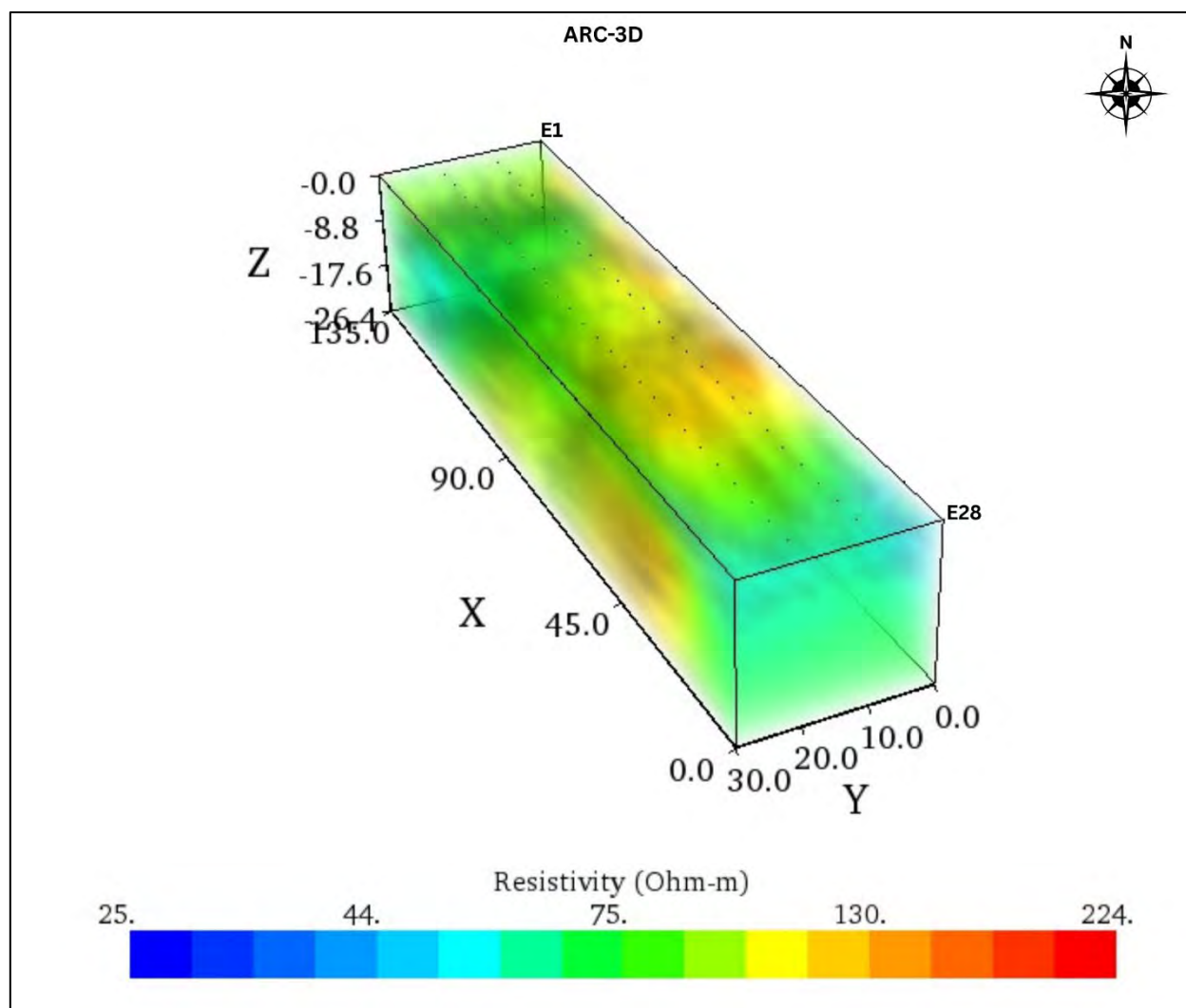


**Figure 3.** Lower Relief Model (LRM) of the area surrounding the release location near the Arcturus 18 Fed 006H site, delineated by the black block. The blue gradient represents variations in surface elevation, with green indicating areas of higher elevation and orange to red denoting areas of lower elevation.



### 3.3.2 Geophysical Karst Survey

The geophysical survey did not identify any subsurface anomalies that could be characterized as air-filled voids or areas of increased porosity (**Figure 4**). However, due to the resolution limitations, smaller fractures and voids/conduits may be present but went undetected.



**Figure 4.** 3-D image of the subsurface surrounding the release near the Arcturus 18 Fed 006H site. This model was created by combining the 2-D resistivity lines ARC1 through ARC4.

## 4.0 SUMMARY AND RECOMMENDATIONS

The aerial karst survey conducted near the Arcturus 18 Fed 006H site did not identify any areas exhibiting characteristics of surficial karst features. A geophysical survey was also conducted but revealed no subsurface anomalies indicative of air-filled voids or areas of elevated porosity. Nonetheless, the potential presence of smaller undetected fractures or conduits cannot be excluded due to resolution limitations.

The underlying geologic formation at the surveyed location is highly susceptible to dissolution, which facilitates the rapid development and expansion of subsurface voids and conduits, within a timescale ranging from days to a few months. The progression of these processes can be significantly accelerated in the absence of appropriate mitigation measures. Infrastructure systems that contain or transport fluids pose a heightened risk in such settings. In the event of a structural failure or unnoticed leakage, the unintended introduction of fluids into the subsurface can intensify dissolution processes, potentially triggering rapid subsidence or collapse.

Subsurface voids encountered during construction, drilling or remediation processes should be immediately reported to either the Surface Resources Division of the New Mexico State Land Office Resources Division, or the Bureau of Land Management Karst Division, in order to request a Cave and Karst Specialist. Any implemented procedures to mitigate a cave or karst feature should follow the **Bureau of Land Management Cave and Karst Management Handbook, H-8380-1**, or the **Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment, Code 527**.

## 5.0 DISCLAIMER AND LIMITATIONS OF USE

This report has been prepared exclusively for the use of Ensolum, LLC. It is not intended for use or reliance by any third party without the prior written consent of Advanced Geophysics, LLC. Any unauthorized use or reliance upon this report by third parties is strictly prohibited and shall be at the sole risk of the user.

The findings, analyses, and interpretations contained herein are based upon the professional judgment of qualified geoscientists at Advanced Geophysics, LLC, utilizing data acquired through recognized industry-standard geophysical methods. These interpretations are inherently non-definitive and are subject to verification through appropriate field investigations.

The geological and environmental conditions described reflect the state of the site during the time of the geophysical survey, conducted between July 4, 2025, and July 5, 2025. Advanced Geophysics, LLC assumes no responsibility for any changes to site conditions that may have occurred subsequent to this time period. It is acknowledged that subsurface conditions,

particularly within karst or evaporitic terrains, are inherently dynamic and subject to natural processes such as dissolution, which may result in rapid and unanticipated changes.

This report is further subject to limitations associated with the resolution capabilities of the geophysical methodologies employed. Certain subsurface features, including but not limited to minor voids or fractures, may exist below the detection threshold of the instruments used and, as such, may not have been identified herein. The absence of geophysical anomalies should not be construed as conclusive evidence of the absence of subsurface risks or hazards.

To the best of our knowledge and belief, the information presented in this report is accurate as of the date of issuance. No warranty, express or implied, is made as to the completeness or accuracy of the data, interpretations, or conclusions contained herein.

## 6.0 REFERENCES

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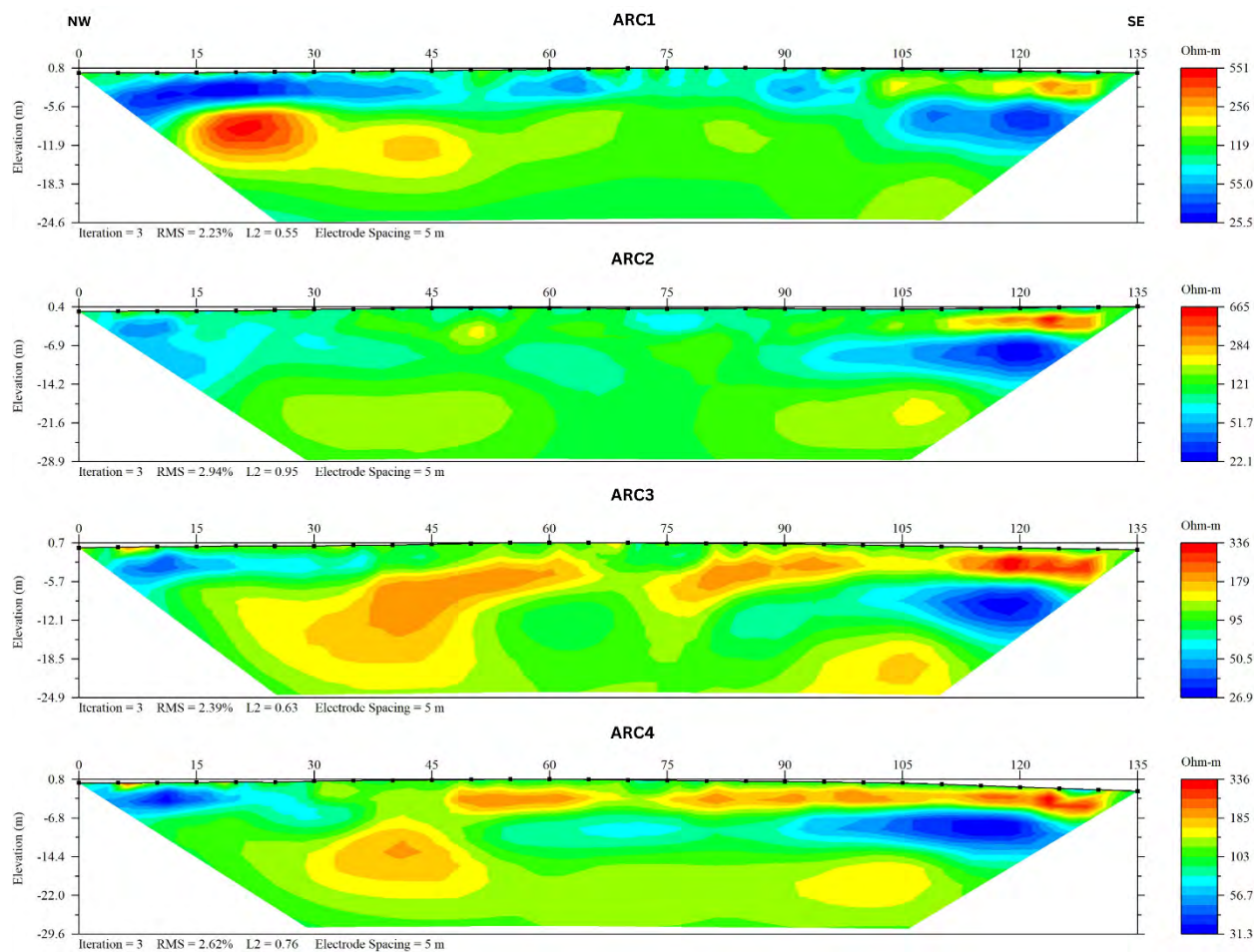
## 7.0 APPENDICES

### 7.1 Electrical Resistivity Data

The KML file (**Arcturus 18 Fed 006H.kml**) and the corresponding raw dataset (**Arcturus 18 Fed 006H\_Report.csv**), which document the precise locations of all electrodes, are also available upon request. The STG files were processed and modeled using EarthImager™ 2D/3D, provided by AGI. During the modeling process, data outliers which account for less than 10% of total data were removed using data misfit histograms. Terrain correction was incorporated into resistivity sections to better constrain the relationship between topography and electrical resistivity analyses.

The resistivity lines were collected from northeast-to-southwest, and the electrodes were oriented from northwest-to-southeast. The surveys reached a maximum depth ranging from approximately 24.6 to 29.6 meters (80.6 to 97 ft). Due to the resolution limitations, small fractures and voids/conduits may be present but went undetected.

## 7.2 Electrical Resistivity Images







## APPENDIX C


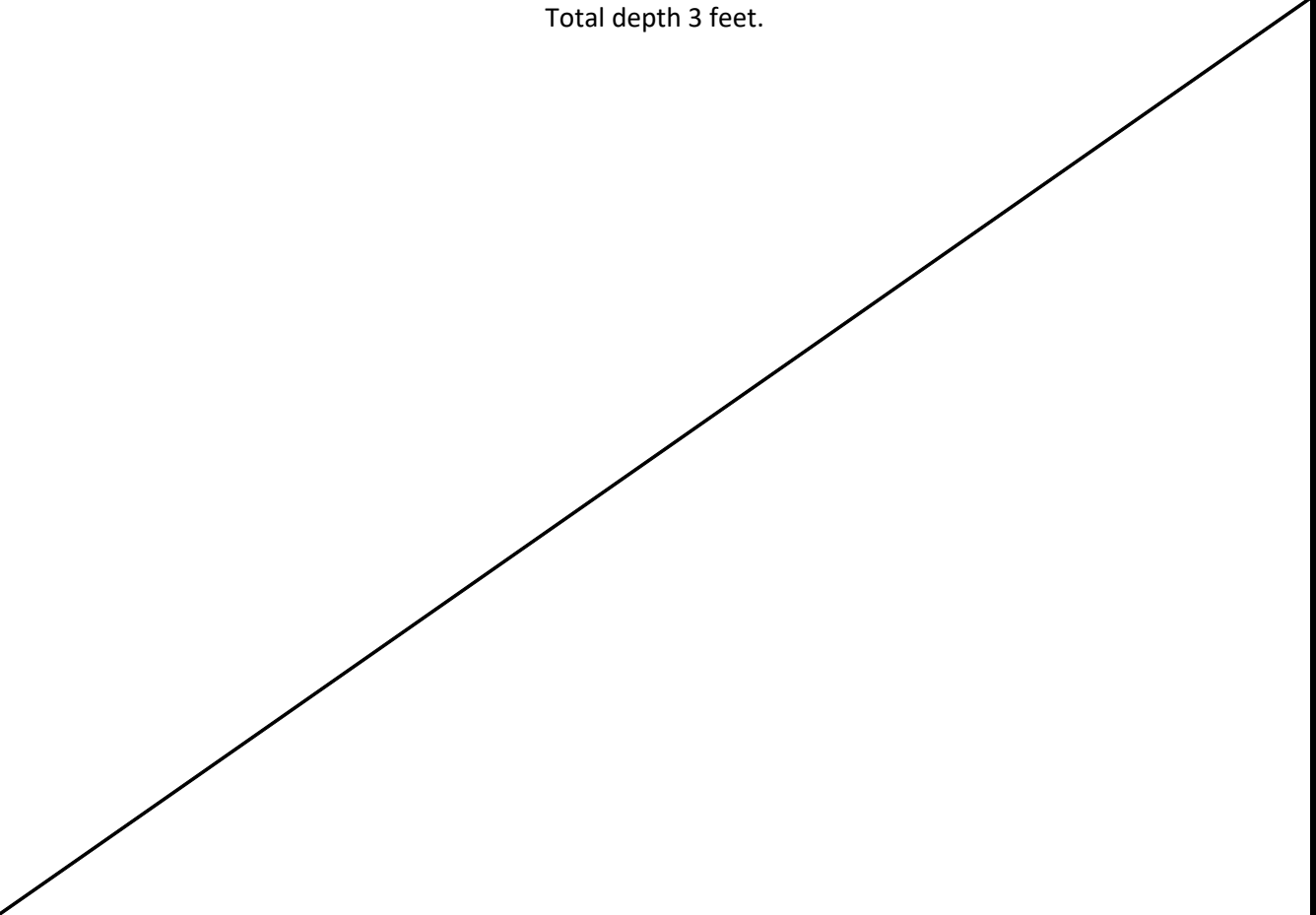
### Lithologic Soil Sampling Logs

---

 <b>ENSOLUM</b>		Sample Name: BH01		Date: 4/9/25				
		Site Name: Arcturus 18 Fed 6H Flowline						
		Incident Number: nAPP 25086411982						
		Job Number: 03A1987169						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: 32.66433, -103.900975			Logged By: Israel Estrella		Method: Hand Auger			
			Hole Diameter: 3"		Total Depth: 7 ft.			
Comments: Field screening conducted with HACH Chloride Test Strips and Petroflag® for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	>3,556		Y	BH01	0	0	SP-SM	Dry, stain, sand, non plastic.
					1	1		
					2	2		
					3	3		
	N		4		4	CCHE	Dry, no stain, sand, non plastic.	
			5		5			
			6		6			
	991				7	7		
	834							
	235	0						
Total Depth 7 ft.								



								Sample Name: BH02		Date: 4/9/25	
								Site Name: Arcturus 18 Fed 6H Flowline			
								Incident Number: nAPP2508641982			
								Job Number: 03A1987169			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: Aboubakar Kone		Method: Hand Auger	
Coordinates: 32.664416, -103.901069								Hole Diameter: 3"		Total Depth: 2 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and Petroflag® for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	162		Y	BH02	0	0	SP-SM	Dry, stain, sand, non plastic			
	ND	31	N		1	1					
					2	2					
								Dry, nonstain, sand, non plastic			
Total Depth 2 feet.											

 <b>ENSOLUM</b>		Sample Name: BH03		Date: 4/9/25				
		Site Name: Arcturus 18 Fed 6H Flowline						
		Incident Number: nAPP2508641982						
		Job Number: 03A1987169						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Coordinates: 32.664512, -103.901141			Logged By: Aboubakar Kone		Method: Hand Auger			
			Hole Diameter: 3"		Total Depth: 3 feet			
Comments: Field screening conducted with HACH Chloride Test Strips and Petroflag® for chloride and TPH, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	ND		Y	BH03	0	0	SP-SM	Dry, stain, sand, non plastic
					1	1		Dry, no stain, sand, non plastic
	N		2		2			
	2,632				3	3	CCHE	Dry, no stain, caliche, non plastic
Total depth 3 feet.								



## APPENDIX D

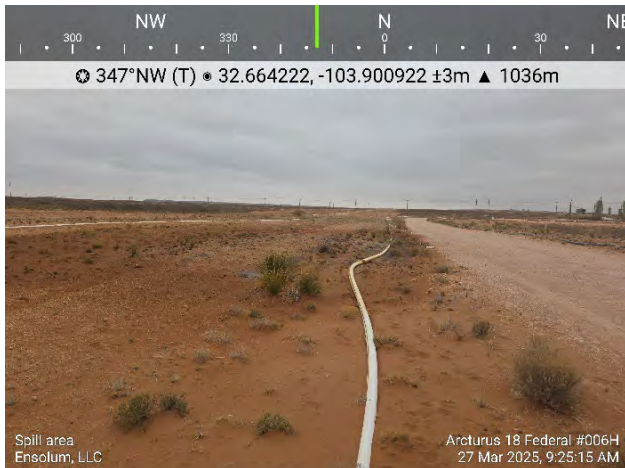
### Photographic Log

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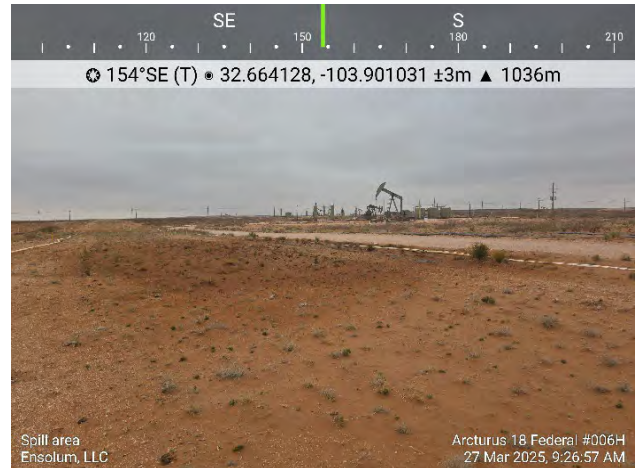
# Photographic Log

Devon Energy Production Company, LP  
Arcturus 18 Fed 6H Flowline  
nAPP2508641982



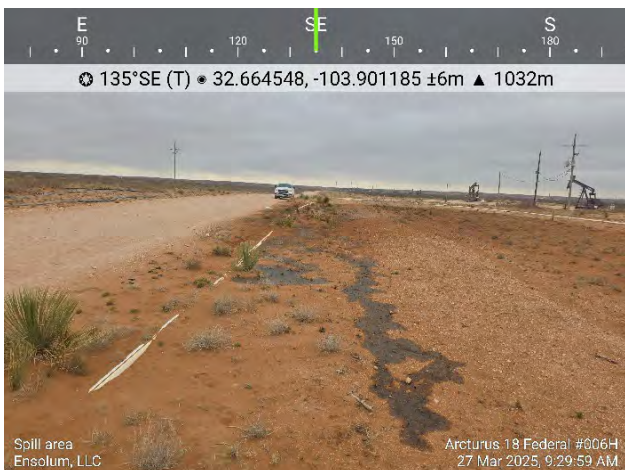
Photograph 1  
Description: Spill Area  
View: North

Date: 3/27/2025



Photograph 2  
Description: Spill Area  
View: Southeast

Date: 3/27/2025



Photograph 3  
Description: Spill Area  
View: Southeast

Date: 3/27/2025



Photograph 4  
Description: Spill Area  
View: South

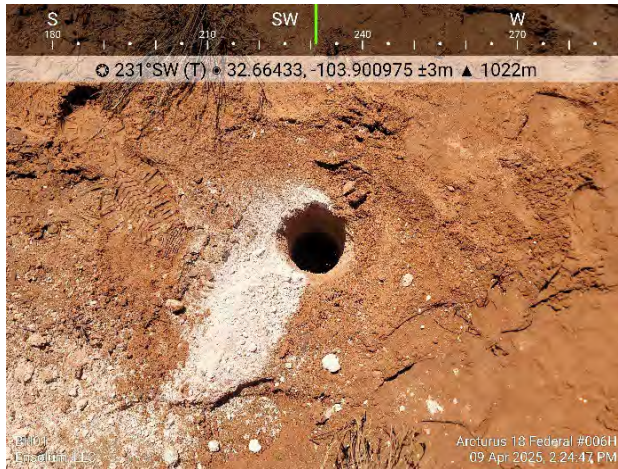
Date: 3/27/2025





# Photographic Log

Devon Energy Production Company, LP  
Arcturus 18 Fed 6H Flowline  
nAPP2508641982



Photograph 5  
Description: BH01  
View: Southwest

Date: 4/9/2025



Photograph 6  
Description: BH02  
View: Southwest

Date: 4/9/2025



Photograph 7  
Description: BH03  
View: South

Date: 4/9/2025



Photograph 8  
Description: BH04  
View: West

Date: 4/9/2025





# Photographic Log

Devon Energy Production Company, LP  
Arcturus 18 Fed 6H Flowline  
nAPP2508641982



Photograph 9  
Description: Hydro-vac  
View: North

Date: 5/15/2025



Photograph 10  
Description: Excavation  
View: Southeast

Date: 5/15/2025



Photograph 11  
Description: Excavation  
View: Southeast

Date: 5/15/2025



Photograph 12  
Description: Excavation  
View: North

Date: 5/16/2025



### Photographic Log

Devon Energy Production Company, LP  
Arcturus 18 Fed 6H Flowline  
nAPP2508641982



Photograph 13  
Description: Excavation  
View: Southeast

Date: 5/19/2025



Photograph 14  
Description: Excavation  
View: Northwest

Date: 5/19/2025



Photograph 15  
Description: Excavation  
View: East

Date: 5/20/2025



Photograph 16  
Description: Excavation  
View: South

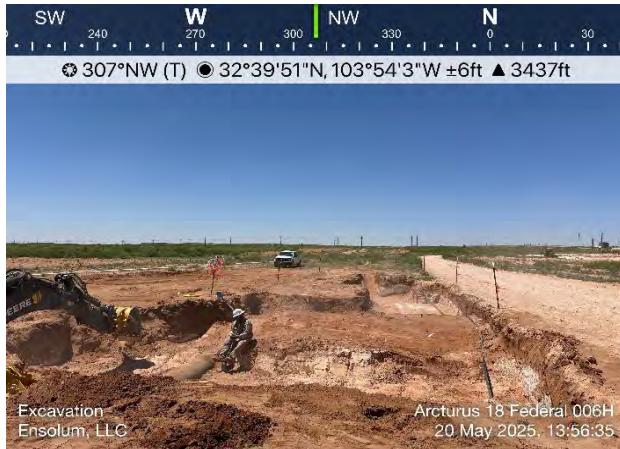
Date: 5/20/2025





# Photographic Log

Devon Energy Production Company, LP  
Arcturus 18 Fed 6H Flowline  
nAPP2508641982



Photograph 17  
Description: Excavation  
View: Northwest

Date: 5/20/2025



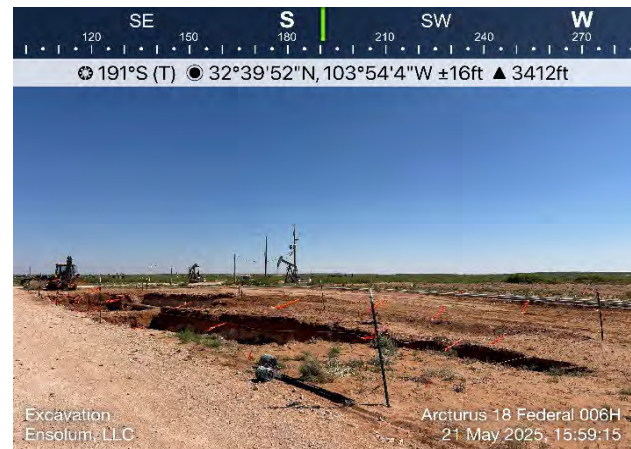
Photograph 18  
Description: Excavation  
View: Southeast

Date: 5/21/2025



Photograph 19  
Description: Excavation  
View: Northwest

Date: 5/21/2025



Photograph 20  
Description: Excavation  
View: South

Date: 5/21/2025



## APPENDIX E

### Laboratory Analytical Reports & Chain-of-Custody Documentation

---



Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Arcturus 18 Federal #006H

Work Order: E504093

Job Number: 01058-0007

Received: 4/10/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
4/17/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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.

Date Reported: 4/17/25

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: Arcturus 18 Federal #006H  
Workorder: E504093  
Date Received: 4/10/2025 11:30:00PM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/10/2025 11:30:00PM, under the Project Name: Arcturus 18 Federal #006H.

The analytical test results summarized in this report with the Project Name: Arcturus 18 Federal #006H 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 regarding 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  
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Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	04/17/25 10:39

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01-0'	E504093-01A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH01-2'	E504093-02A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH01-4'	E504093-03A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH01-6'	E504093-04A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH01-7'	E504093-05A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH02-0'	E504093-06A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH02-2'	E504093-07A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH03-0'	E504093-08A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH03-2'	E504093-09A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH03-3'	E504093-10A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH04-0'	E504093-11A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH04-0.5'	E504093-12A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH05-0'	E504093-13A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH05-0.5'	E504093-14A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH06-0'	E504093-15A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
BH06-0.5'	E504093-16A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS01-0'	E504093-17A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS01-1'	E504093-18A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS02-0'	E504093-19A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS02-1'	E504093-20A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS03-0'	E504093-21A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS03-0.5'	E504093-22A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS04-0'	E504093-23A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.
SS04-0.5'	E504093-24A	Soil	04/09/25	04/10/25	Glass Jar, 2 oz.





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH01-0'

E504093-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	<b>0.837</b>	0.0250	1	04/11/25	04/11/25	
Toluene	<b>0.0899</b>	0.0250	1	04/11/25	04/11/25	
o-Xylene	<b>1.19</b>	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	<b>2.38</b>	0.0500	1	04/11/25	04/11/25	
Total Xylenes	<b>3.58</b>	0.0250	1	04/11/25	04/11/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		98.0 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	<b>66.0</b>	20.0	1	04/11/25	04/11/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		98.1 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	<b>17100</b>	250	10	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	<b>7470</b>	500	10	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		119 %	61-141	04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	<b>8020</b>	100	5	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH01-2'

E504093-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		98.8 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	31.6	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		103 %	61-141	04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	6250	100	5	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH01-4'

E504093-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.9 %	70-130		04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	102 %	70-130		04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>	104 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	9180	200	10	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH01-6'

E504093-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/12/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/12/25	
Toluene	ND	0.0250	1	04/11/25	04/12/25	
o-Xylene	ND	0.0250	1	04/11/25	04/12/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/12/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/12/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.1 %	70-130		04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/12/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.8 %	70-130		04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	104 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	820	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH01-7'

E504093-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.5 %	70-130		04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	97.4 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	156	20.0	1	04/11/25	04/11/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH02-0'

E504093-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.125	5	04/11/25	04/12/25	
Ethylbenzene	ND	0.125	5	04/11/25	04/12/25	
Toluene	ND	0.125	5	04/11/25	04/12/25	
o-Xylene	ND	0.125	5	04/11/25	04/12/25	
p,m-Xylene	ND	0.250	5	04/11/25	04/12/25	
Total Xylenes	ND	0.125	5	04/11/25	04/12/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	100	5	04/11/25	04/12/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.5 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	15500	250	10	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	6650	500	10	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		96.9 %	61-141	04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	16900	200	10	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH02-2'

E504093-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/12/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/12/25	
Toluene	ND	0.0250	1	04/11/25	04/12/25	
o-Xylene	ND	0.0250	1	04/11/25	04/12/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/12/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/12/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		112 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/12/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.3 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		101 %	61-141	04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	43.3	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH03-0'

E504093-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	2.66	0.500	20	04/11/25	04/12/25	
Ethylbenzene	23.5	0.500	20	04/11/25	04/12/25	
Toluene	32.5	0.500	20	04/11/25	04/12/25	
o-Xylene	18.2	0.500	20	04/11/25	04/12/25	
p,m-Xylene	46.4	1.00	20	04/11/25	04/12/25	
Total Xylenes	64.6	0.500	20	04/11/25	04/12/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		103 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	1140	400	20	04/11/25	04/12/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		101 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	26300	250	10	04/11/25	04/15/25	T9
Oil Range Organics (C28-C36)	10800	500	10	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		276 %	61-141	04/11/25	04/15/25	S5
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	581	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH03-2'

E504093-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/12/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/12/25	
Toluene	ND	0.0250	1	04/11/25	04/12/25	
o-Xylene	ND	0.0250	1	04/11/25	04/12/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/12/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/12/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		107 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/12/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		99.1 %	70-130	04/11/25	04/12/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	92.9	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		98.9 %	61-141	04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	2550	40.0	2	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH03-3'

E504093-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.3 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	31.2	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	105 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	217	20.0	1	04/11/25	04/11/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH04-0'

E504093-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.9 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.4 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	449	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	314	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	106 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	76.7	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH04-0.5'

E504093-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.7 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.9 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	97.6 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	27.4	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH05-0'

E504093-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.1 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.4 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	97.2 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	ND	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH05-0.5'

E504093-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.3 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2515108
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.5 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515114
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	102 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2515117
Chloride	21.6	20.0	1	04/11/25	04/11/25	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Arcturus 18 Federal #006H Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 4/17/2025 10:39:11AM
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BH06-0'

E504093-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
Surrogate: 4-Bromochlorobenzene-PID	96.4 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.6 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
Surrogate: n-Nonane	97.9 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	ND	20.0	1	04/11/25	04/11/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

BH06-0.5'

E504093-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.1 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	98.7 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	ND	20.0	1	04/11/25	04/11/25	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Arcturus 18 Federal #006H Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 4/17/2025 10:39:11AM
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SS01-0'

E504093-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
Surrogate: 4-Bromochlorobenzene-PID	96.4 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.7 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
Surrogate: n-Nonane	102 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	ND	20.0	1	04/11/25	04/11/25	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Arcturus 18 Federal #006H Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 4/17/2025 10:39:11AM
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SS01-1'

E504093-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.9 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	102 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	ND	20.0	1	04/11/25	04/12/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

SS02-0'

E504093-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		93.6 %	70-130	04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
		109 %	61-141	04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	66.9	20.0	1	04/11/25	04/12/25	



Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Arcturus 18 Federal #006H Project Number: 01058-0007 Project Manager: Ashley Giovengo	Reported: 4/17/2025 10:39:11AM
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SS02-1'

E504093-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Benzene	ND	0.0250	1	04/11/25	04/14/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/14/25	
Toluene	ND	0.0250	1	04/11/25	04/14/25	
o-Xylene	ND	0.0250	1	04/11/25	04/14/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/14/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/14/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2515108	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/14/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.8 %	70-130		04/11/25	04/14/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: KH		Batch: 2515114	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/15/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/15/25	
<i>Surrogate: n-Nonane</i>						
	101 %	61-141		04/11/25	04/15/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2515117	
Chloride	ND	20.0	1	04/11/25	04/12/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

SS03-0'

E504093-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		103 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		106 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		103 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		106 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515116
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/14/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/14/25	
Surrogate: n-Nonane		99.2 %	61-141	04/11/25	04/14/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2515113
Chloride	ND	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

SS03-0.5'

E504093-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		105 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		106 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		105 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		106 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515116
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/14/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/14/25	
Surrogate: n-Nonane		101 %	61-141	04/11/25	04/14/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2515113
Chloride	ND	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

SS04-0'

E504093-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		102 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		98.1 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		105 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		102 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		98.1 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		105 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515116
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/14/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/14/25	
Surrogate: n-Nonane		96.2 %	61-141	04/11/25	04/14/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2515113
Chloride	ND	20.0	1	04/11/25	04/11/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
4/17/2025 10:39:11AM

SS04-0.5'

E504093-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Benzene	ND	0.0250	1	04/11/25	04/11/25	
Ethylbenzene	ND	0.0250	1	04/11/25	04/11/25	
Toluene	ND	0.0250	1	04/11/25	04/11/25	
o-Xylene	ND	0.0250	1	04/11/25	04/11/25	
p,m-Xylene	ND	0.0500	1	04/11/25	04/11/25	
Total Xylenes	ND	0.0250	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		102 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		106 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: BA		Batch: 2515109
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/25	04/11/25	
Surrogate: Bromofluorobenzene		102 %	70-130	04/11/25	04/11/25	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130	04/11/25	04/11/25	
Surrogate: Toluene-d8		106 %	70-130	04/11/25	04/11/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2515116
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/25	04/14/25	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/25	04/14/25	
Surrogate: n-Nonane		102 %	61-141	04/11/25	04/14/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2515113
Chloride	ND	20.0	1	04/11/25	04/11/25	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Volatile Organic Compounds by EPA 8260B

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 (2515109-BLK1)

Prepared: 04/11/25 Analyzed: 04/11/25

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	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.4	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

LCS (2515109-BS1)

Prepared: 04/11/25 Analyzed: 04/11/25

Benzene	2.48	0.0250	2.50		99.0	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.3	70-130			
Toluene	2.54	0.0250	2.50		102	70-130			
o-Xylene	2.70	0.0250	2.50		108	70-130			
p,m-Xylene	5.37	0.0500	5.00		107	70-130			
Total Xylenes	8.08	0.0250	7.50		108	70-130			
Surrogate: Bromofluorobenzene	0.527		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.525		0.500		105	70-130			

Matrix Spike (2515109-MS1)

Source: E504091-01

Prepared: 04/11/25 Analyzed: 04/11/25

Benzene	2.54	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.59	0.0250	2.50	ND	104	45-135			
Toluene	2.67	0.0250	2.50	ND	107	48-130			
o-Xylene	2.78	0.0250	2.50	ND	111	43-135			
p,m-Xylene	5.49	0.0500	5.00	ND	110	43-135			
Total Xylenes	8.26	0.0250	7.50	ND	110	43-135			
Surrogate: Bromofluorobenzene	0.524		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.7	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			

Matrix Spike Dup (2515109-MSD1)

Source: E504091-01

Prepared: 04/11/25 Analyzed: 04/11/25

Benzene	2.51	0.0250	2.50	ND	100	48-131	1.21	23	
Ethylbenzene	2.54	0.0250	2.50	ND	102	45-135	1.91	27	
Toluene	2.61	0.0250	2.50	ND	104	48-130	2.42	24	
o-Xylene	2.83	0.0250	2.50	ND	113	43-135	1.98	27	
p,m-Xylene	5.60	0.0500	5.00	ND	112	43-135	1.99	27	
Total Xylenes	8.43	0.0250	7.50	ND	112	43-135	1.98	27	
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.6	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			





QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2515108-BLK1) Prepared: 04/11/25 Analyzed: 04/11/25

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: 4-Bromochlorobenzene-PID	8.43		8.00		105	70-130			

LCS (2515108-BS1) Prepared: 04/11/25 Analyzed: 04/11/25

Benzene	3.85	0.0250	5.00		77.0	70-130			
Ethylbenzene	3.79	0.0250	5.00		75.8	70-130			
Toluene	3.84	0.0250	5.00		76.8	70-130			
o-Xylene	3.81	0.0250	5.00		76.2	70-130			
p,m-Xylene	7.57	0.0500	10.0		75.7	70-130			
Total Xylenes	11.4	0.0250	15.0		75.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.83		8.00		97.9	70-130			

Matrix Spike (2515108-MS1) Source: E504093-05 Prepared: 04/11/25 Analyzed: 04/11/25

Benzene	4.71	0.0250	5.00	ND	94.1	70-130			
Ethylbenzene	4.63	0.0250	5.00	ND	92.6	70-130			
Toluene	4.69	0.0250	5.00	ND	93.8	70-130			
o-Xylene	4.60	0.0250	5.00	ND	91.9	70-130			
p,m-Xylene	9.19	0.0500	10.0	ND	91.9	70-130			
Total Xylenes	13.8	0.0250	15.0	ND	91.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.79		8.00		97.3	70-130			

Matrix Spike Dup (2515108-MSD1) Source: E504093-05 Prepared: 04/11/25 Analyzed: 04/11/25

Benzene	4.11	0.0250	5.00	ND	82.2	70-130	13.6	27	
Ethylbenzene	4.06	0.0250	5.00	ND	81.2	70-130	13.2	26	
Toluene	4.10	0.0250	5.00	ND	82.0	70-130	13.3	20	
o-Xylene	4.04	0.0250	5.00	ND	80.8	70-130	12.8	25	
p,m-Xylene	8.09	0.0500	10.0	ND	80.9	70-130	12.8	23	
Total Xylenes	12.1	0.0250	15.0	ND	80.9	70-130	12.8	26	
Surrogate: 4-Bromochlorobenzene-PID	7.72		8.00		96.5	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2515108-BLK1) Prepared: 04/11/25 Analyzed: 04/11/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.53		8.00		94.2	70-130			

LCS (2515108-BS2) Prepared: 04/11/25 Analyzed: 04/11/25

Gasoline Range Organics (C6-C10)	44.5	20.0	50.0		89.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.78		8.00		97.3	70-130			

Matrix Spike (2515108-MS2) Source: E504093-05 Prepared: 04/11/25 Analyzed: 04/11/25

Gasoline Range Organics (C6-C10)	46.7	20.0	50.0	ND	93.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.92		8.00		99.0	70-130			

Matrix Spike Dup (2515108-MSD2) Source: E504093-05 Prepared: 04/11/25 Analyzed: 04/11/25

Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130	4.06	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.01		8.00		100	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2515109-BLK1)					Prepared: 04/11/25 Analyzed: 04/11/25				
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.515		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.477		0.500		95.4	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

LCS (2515109-BS2)					Prepared: 04/11/25 Analyzed: 04/11/25				
Gasoline Range Organics (C6-C10)	49.5	20.0	50.0		98.9	70-130			
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.1	70-130			
Surrogate: Toluene-d8	0.535		0.500		107	70-130			

Matrix Spike (2515109-MS2)					Source: E504091-01	Prepared: 04/11/25 Analyzed: 04/11/25			
Gasoline Range Organics (C6-C10)	53.0	20.0	50.0	ND	106	70-130			
Surrogate: Bromofluorobenzene	0.536		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			

Matrix Spike Dup (2515109-MSD2)					Source: E504091-01	Prepared: 04/11/25 Analyzed: 04/11/25			
Gasoline Range Organics (C6-C10)	53.1	20.0	50.0	ND	106	70-130	0.111	20	
Surrogate: Bromofluorobenzene	0.532		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.488		0.500		97.5	70-130			
Surrogate: Toluene-d8	0.545		0.500		109	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2515114-BLK1)					Prepared: 04/11/25 Analyzed: 04/15/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.4		50.0		107	61-141			

LCS (2515114-BS1)					Prepared: 04/11/25 Analyzed: 04/15/25				
Diesel Range Organics (C10-C28)	248	25.0	250		99.3	66-144			
Surrogate: n-Nonane	50.6		50.0		101	61-141			

Matrix Spike (2515114-MS1)				Source: E504093-06		Prepared: 04/11/25 Analyzed: 04/15/25			
Diesel Range Organics (C10-C28)	15100	250	250	15500	NR	56-156			M4
Surrogate: n-Nonane	44.8		50.0		89.6	61-141			

Matrix Spike Dup (2515114-MSD1)				Source: E504093-06		Prepared: 04/11/25 Analyzed: 04/15/25			
Diesel Range Organics (C10-C28)	15100	250	250	15500	NR	56-156	0.0906	20	M4
Surrogate: n-Nonane	48.3		50.0		96.6	61-141			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2515116-BLK1)					Prepared: 04/11/25 Analyzed: 04/14/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.2		50.0		98.3	61-141			

LCS (2515116-BS1)					Prepared: 04/11/25 Analyzed: 04/14/25				
Diesel Range Organics (C10-C28)	244	25.0	250		97.8	66-144			
Surrogate: n-Nonane	48.6		50.0		97.3	61-141			

Matrix Spike (2515116-MS1)					Source: E504093-21		Prepared: 04/11/25 Analyzed: 04/14/25		
Diesel Range Organics (C10-C28)	255	25.0	250	ND	102	56-156			
Surrogate: n-Nonane	48.7		50.0		97.5	61-141			

Matrix Spike Dup (2515116-MSD1)					Source: E504093-21		Prepared: 04/11/25 Analyzed: 04/14/25		
Diesel Range Organics (C10-C28)	247	25.0	250	ND	98.8	56-156	3.17	20	
Surrogate: n-Nonane	48.2		50.0		96.4	61-141			





QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Anions by EPA 300.0/9056A

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 (2515113-BLK1)					Prepared: 04/11/25 Analyzed: 04/11/25				
Chloride	ND	20.0							
LCS (2515113-BS1)					Prepared: 04/11/25 Analyzed: 04/11/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2515113-MS1)					Source: E504091-06		Prepared: 04/11/25 Analyzed: 04/11/25		
Chloride	257	20.0	250	ND	103	80-120			
Matrix Spike Dup (2515113-MSD1)					Source: E504091-06		Prepared: 04/11/25 Analyzed: 04/11/25		
Chloride	254	20.0	250	ND	102	80-120	1.23	20	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	4/17/2025 10:39:11AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2515117-BLK1)					Prepared: 04/11/25 Analyzed: 04/11/25				
Chloride	ND	20.0							
LCS (2515117-BS1)					Prepared: 04/11/25 Analyzed: 04/11/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2515117-MS1)					Source: E504093-05		Prepared: 04/11/25 Analyzed: 04/11/25		
Chloride	407	20.0	250	156	100	80-120			
Matrix Spike Dup (2515117-MSD1)					Source: E504093-05		Prepared: 04/11/25 Analyzed: 04/11/25		
Chloride	399	20.0	250	156	96.9	80-120	1.91	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

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	
6488 7 Rivers Hwy	Project Number:	01058-0007	<b>Reported:</b>
Artesia NM, 88210	Project Manager:	Ashley Giovengo	04/17/25 10:39

M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.

S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.

T9 DRO includes undifferentiated early eluting analytes characteristic of GRO.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

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

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



## Chain of Custody

Page 1 of 3

Page 39 of 42

Page 88 of 224

Client Information				Invoice Information		Lab Use Only		TAT				State											
Client: Devon				Company: Devon		Lab WO# E504093		Job Number 01058-0057				<table border="1"> <tr> <td>1D</td> <td>2D</td> <td>3D</td> <td>Std</td> </tr> <tr> <td></td> <td></td> <td></td> <td>x</td> </tr> </table>				1D	2D	3D	Std				x
1D	2D	3D	Std																				
			x																				
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr								<table border="1"> <tr> <td>NM</td> <td>CO</td> <td>UT</td> <td>TX</td> </tr> <tr> <td>x</td> <td></td> <td></td> <td></td> </tr> </table>				NM	CO	UT	TX	x			
NM	CO	UT	TX																				
x																							
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220																			
Address: 3122 National Parks Hwy				Phone: (575)689-7597																			
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dvn.com																			
Phone: 575-988-0055				Miscellaneous: Jim Raley																			
Email: agiovengo@ensolum.com																							
Sample Information										Analysis and Method				EPA Program									
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA						
952	4/9/25	Soil	1	BH01-01		1						x											
955				-2'		2						x											
1221				-4'		3						x											
1227				-6'		4						x											
1229				-7'		5						x											
958				BH02-01		6						x											
1001				-2'		7						x											
1004				BH03-01		8						x											
1007				-2'		9						x											
1008				-3		10						x											
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com, chamilton@ensolum.com, iestrella@ensolum.com																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																							
Sampled by: Israel Estrella																							
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	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. Lab Use Only Received on ice: (Y) N T1 _____ T2 _____ T3 _____ AVG Temp °C 4															
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																
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 14 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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Received by OCD: 7/31/2025 1:54:29 PM

Released to Imaging: 8/19/2025 7:15:51 AM



## Chain of Custody

Page 2 of 2

Client Information				Invoice Information		Lab Use Only		TAT				State					
Client: Devon				Company: Devon		Lab WO#		1D 2D 3D Std				NM CO UT TX					
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr		E: 504093		Job Number				0058-0007					
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220													
Address: 3122 National Parks Hwy				Phone: (575)689-7597													
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dnv.com													
Phone: 575-988-0055				Miscellaneous: Jim Raley													
Email: agiovengo@ensolum.com																	
Sample Information						Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA
1014	4/9/25	soil	1	BH04-01		11						X					
1015				↓ -0.5'		12						X					
1017				BH05-01		13						X					
1017				↓ -0.5'		14						X					
1018				BH06-01		15						X					
1019				↓ 0.5'		16						X					
1242				SS01-01		17						X					
1244				↓ -1'		18						X					
1245				SS02-01		19						X					
1248				↓ -1'		20						X					
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dnv.com, chamilton@ensolum.com, iestrella@ensolum.com																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																	
Sampled by: _Israel Estrella																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	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 5 °C on subsequent days. Lab Use Only Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
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 14 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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## Chain of Custody

Page 3 of 3

Client Information				Invoice Information		Lab Use Only		TAT				State					
Client: Devon				Company: Devon		Lab WO#		1D 2D 3D Std				NM CO UT TX					
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr		E504093		Job Number				01058-0007					
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220													
Address: 3122 National Parks Hwy				Phone: (575)689-7597													
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dv.com													
Phone: 575-988-0055				Miscellaneous: Jim Raley													
Email: agiovengo@ensolum.com																	
Sample Information						Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA
1249	4/9/25	Soil	1	SS03-01		21						X					
1253	↓	↓	↓	↓ -0.5'		22						X					
1255	↓	↓	↓	SS04-01		23						X					
1256	↓	↓	↓	↓ -0.5'		24						X					
												X					
												X					
												X					
												X					
												X					
												X					
												X					
												X					
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dv.com, chamilton@ensolum.com, iestrella@ensolum.com																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																	
Sampled by: Israel Estrella																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	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. Lab Use Only Received on ice: <u>Y</u> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>									
Michelle Gonzales		4-10-25	7:11	Michelle Gonzales		4-10-25	0711										
Michelle Gonzales		4-10-25	1615	Michelle J.		4-10-25	1645										
Michelle J.		4-10-25	2300	Caitlin Mar		4-10-25	2330										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time										
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 14 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: 4/11/2025 8:49:20AM

## 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:	Devon Energy - Carlsbad	Date Received:	04/10/25 23:30	Work Order ID:	E504093
Phone:	(505) 382-1211	Date Logged In:	04/10/25 15:27	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	04/17/25 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

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 filtration 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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Arcturus 18 Federal #006H

Work Order: E505215

Job Number: 01058-0007

Received: 5/20/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/27/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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.

Date Reported: 5/27/25



Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210

Project Name: Arcturus 18 Federal #006H  
Workorder: E505215  
Date Received: 5/20/2025 7:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/20/2025 7:45:00AM, under the Project Name: Arcturus 18 Federal #006H.

The analytical test results summarized in this report with the Project Name: Arcturus 18 Federal #006H 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 regarding 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
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[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/27/25 14:34

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS03-3'	E505215-01A	Soil	05/16/25	05/20/25	Glass Jar, 2 oz.





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/27/2025 2:34:01PM

FS03-3'

E505215-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521043	
Benzene	ND	0.0250	1	05/20/25	05/22/25	
Ethylbenzene	ND	0.0250	1	05/20/25	05/22/25	
Toluene	ND	0.0250	1	05/20/25	05/22/25	
o-Xylene	ND	0.0250	1	05/20/25	05/22/25	
p,m-Xylene	ND	0.0500	1	05/20/25	05/22/25	
Total Xylenes	ND	0.0250	1	05/20/25	05/22/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	05/20/25	05/22/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/20/25	05/22/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		107 %	70-130	05/20/25	05/22/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521073	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/21/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/21/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
		103 %	61-141	05/21/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2521069	
Chloride	95.8	20.0	1	05/20/25	05/21/25	



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:34:01PM

## Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

## Blank (2521043-BLK1)

Prepared: 05/20/25 Analyzed: 05/22/25

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: 4-Bromochlorobenzene-PID	8.01		8.00		100	70-130			

## LCS (2521043-BS1)

Prepared: 05/20/25 Analyzed: 05/22/25

Benzene	4.93	0.0250	5.00		98.5	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.90	0.0250	5.00		98.1	70-130			
o-Xylene	4.85	0.0250	5.00		97.0	70-130			
p,m-Xylene	9.93	0.0500	10.0		99.3	70-130			
Total Xylenes	14.8	0.0250	15.0		98.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.01		8.00		100	70-130			

## Matrix Spike (2521043-MS1)

Source: E505212-26

Prepared: 05/20/25 Analyzed: 05/22/25

Benzene	4.96	0.0250	5.00	ND	99.1	70-130			
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	70-130			
Toluene	4.93	0.0250	5.00	ND	98.5	70-130			
o-Xylene	4.88	0.0250	5.00	ND	97.5	70-130			
p,m-Xylene	9.93	0.0500	10.0	ND	99.3	70-130			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.92		8.00		99.0	70-130			

## Matrix Spike Dup (2521043-MSD1)

Source: E505212-26

Prepared: 05/20/25 Analyzed: 05/22/25

Benzene	4.99	0.0250	5.00	ND	99.8	70-130	0.743	27	
Ethylbenzene	4.97	0.0250	5.00	ND	99.5	70-130	1.31	26	
Toluene	4.97	0.0250	5.00	ND	99.5	70-130	0.946	20	
o-Xylene	4.93	0.0250	5.00	ND	98.6	70-130	1.08	25	
p,m-Xylene	10.1	0.0500	10.0	ND	101	70-130	1.39	23	
Total Xylenes	15.0	0.0250	15.0	ND	100	70-130	1.28	26	
Surrogate: 4-Bromochlorobenzene-PID	7.69		8.00		96.1	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:34:01PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521043-BLK1) Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.70		8.00		109	70-130			

LCS (2521043-BS2) Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	50.0	20.0	50.0		100	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.71		8.00		109	70-130			

Matrix Spike (2521043-MS2) Source: E505212-26 Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	49.7	20.0	50.0	ND	99.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.92		8.00		111	70-130			

Matrix Spike Dup (2521043-MSD2) Source: E505212-26 Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	50.5	20.0	50.0	ND	101	70-130	1.52	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.12		8.00		114	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:34:01PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521073-BLK1)					Prepared: 05/21/25 Analyzed: 05/23/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.2		50.0		102	61-141			

LCS (2521073-BS1)					Prepared: 05/21/25 Analyzed: 05/23/25				
Diesel Range Organics (C10-C28)	274	25.0	250		110	66-144			
Surrogate: n-Nonane	50.3		50.0		101	61-141			

Matrix Spike (2521073-MS1)					Source: E505212-24		Prepared: 05/21/25 Analyzed: 05/23/25		
Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	56-156			
Surrogate: n-Nonane	52.6		50.0		105	61-141			

Matrix Spike Dup (2521073-MSD1)					Source: E505212-24		Prepared: 05/21/25 Analyzed: 05/23/25		
Diesel Range Organics (C10-C28)	281	25.0	250	ND	112	56-156	0.588	20	
Surrogate: n-Nonane	51.7		50.0		103	61-141			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:34:01PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521069-BLK1)					Prepared: 05/20/25 Analyzed: 05/21/25				
Chloride	ND	20.0							
LCS (2521069-BS1)					Prepared: 05/20/25 Analyzed: 05/21/25				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2521069-MS1)					Source: E505212-22		Prepared: 05/20/25 Analyzed: 05/21/25		
Chloride	1330	20.0	250	1090	94.6	80-120			
Matrix Spike Dup (2521069-MSD1)					Source: E505212-22		Prepared: 05/20/25 Analyzed: 05/21/25		
Chloride	1310	20.0	250	1090	87.9	80-120	1.27	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

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/27/25 14:34

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.





Client Information				Invoice Information		Lab Use Only		TAT		State									
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX				
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr		E505215	01058-0007				x	x							
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: (575)689-7597															
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dmv.com															
Phone: 575-988-0055				Miscellaneous: Jim Raley															
Email: agiovengo@ensolum.com																			
Sample Information						Analysis and Method						EPA Program							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTX by 8021	VOC by 8260	Chloride 300.0	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA	
10:58	5/16/2025	1	1	FS03 - 3'		1													
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dmv.com, iestrella@ensolum.com, chamilton@ensolum.com, oaderinto@ensolum.com, bmoir@ensolum.com																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																			
Sampled by: Oluwale Aderinto																			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days. Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N											
Oluwale Aderinto		5/19/25	08:15	[Signature]		5/19/25	11:45												
[Signature]		5.19.25	1600	[Signature]		5.19.25	1600												
[Signature]		5.19.25	2230	[Signature]		5.20.25	745												
[Signature]				[Signature]															
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time												
[Signature]				[Signature]															
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 14 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 Analytical Laboratory

Printed: 5/20/2025 9:48:51AM

## 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:	Devon Energy - Carlsbad	Date Received:	05/20/25 07:45	Work Order ID:	E505215
Phone:	(505) 382-1211	Date Logged In:	05/19/25 14:16	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	05/26/25 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

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 filtration 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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Arcturus 18 Federal #006H

Work Order: E505216

Job Number: 01058-0007

Received: 5/20/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/27/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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.

Date Reported: 5/27/25

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: Arcturus 18 Federal #006H  
Workorder: E505216  
Date Received: 5/20/2025 7:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/20/2025 7:45:00AM, under the Project Name: Arcturus 18 Federal #006H.

The analytical test results summarized in this report with the Project Name: Arcturus 18 Federal #006H 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 regarding 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

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[mgonzaless@envirotech-inc.com](mailto:mgonzaless@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/27/25 14:35

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BF01	E505216-01A	Soil	05/16/25	05/20/25	Glass Jar, 2 oz.





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/27/2025 2:35:04PM

## BF01

## E505216-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521043	
Benzene	ND	0.0250	1	05/20/25	05/22/25	
Ethylbenzene	ND	0.0250	1	05/20/25	05/22/25	
Toluene	ND	0.0250	1	05/20/25	05/22/25	
o-Xylene	ND	0.0250	1	05/20/25	05/22/25	
p,m-Xylene	ND	0.0500	1	05/20/25	05/22/25	
Total Xylenes	ND	0.0250	1	05/20/25	05/22/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	05/20/25	05/22/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/20/25	05/22/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		103 %	70-130	05/20/25	05/22/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521073	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/21/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/21/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
		99.3 %	61-141	05/21/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2521069	
Chloride	ND	20.0	1	05/20/25	05/21/25	



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:35:04PM

## Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521043-BLK1)

Prepared: 05/20/25 Analyzed: 05/22/25

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: 4-Bromochlorobenzene-PID	8.01		8.00		100	70-130			

## LCS (2521043-BS1)

Prepared: 05/20/25 Analyzed: 05/22/25

Benzene	4.93	0.0250	5.00		98.5	70-130			
Ethylbenzene	4.90	0.0250	5.00		98.0	70-130			
Toluene	4.90	0.0250	5.00		98.1	70-130			
o-Xylene	4.85	0.0250	5.00		97.0	70-130			
p,m-Xylene	9.93	0.0500	10.0		99.3	70-130			
Total Xylenes	14.8	0.0250	15.0		98.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.01		8.00		100	70-130			

## Matrix Spike (2521043-MS1)

Source: E505212-26

Prepared: 05/20/25 Analyzed: 05/22/25

Benzene	4.96	0.0250	5.00	ND	99.1	70-130			
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	70-130			
Toluene	4.93	0.0250	5.00	ND	98.5	70-130			
o-Xylene	4.88	0.0250	5.00	ND	97.5	70-130			
p,m-Xylene	9.93	0.0500	10.0	ND	99.3	70-130			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.92		8.00		99.0	70-130			

## Matrix Spike Dup (2521043-MSD1)

Source: E505212-26

Prepared: 05/20/25 Analyzed: 05/22/25

Benzene	4.99	0.0250	5.00	ND	99.8	70-130	0.743	27	
Ethylbenzene	4.97	0.0250	5.00	ND	99.5	70-130	1.31	26	
Toluene	4.97	0.0250	5.00	ND	99.5	70-130	0.946	20	
o-Xylene	4.93	0.0250	5.00	ND	98.6	70-130	1.08	25	
p,m-Xylene	10.1	0.0500	10.0	ND	101	70-130	1.39	23	
Total Xylenes	15.0	0.0250	15.0	ND	100	70-130	1.28	26	
Surrogate: 4-Bromochlorobenzene-PID	7.69		8.00		96.1	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:35:04PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521043-BLK1) Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.70		8.00		109	70-130			

LCS (2521043-BS2) Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	50.0	20.0	50.0		100	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.71		8.00		109	70-130			

Matrix Spike (2521043-MS2) Source: E505212-26 Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	49.7	20.0	50.0	ND	99.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.92		8.00		111	70-130			

Matrix Spike Dup (2521043-MSD2) Source: E505212-26 Prepared: 05/20/25 Analyzed: 05/22/25

Gasoline Range Organics (C6-C10)	50.5	20.0	50.0	ND	101	70-130	1.52	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.12		8.00		114	70-130			



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:35:04PM

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

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521073-BLK1)

Prepared: 05/21/25 Analyzed: 05/23/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.2		50.0		102	61-141			

## LCS (2521073-BS1)

Prepared: 05/21/25 Analyzed: 05/23/25

Diesel Range Organics (C10-C28)	274	25.0	250		110	66-144			
Surrogate: n-Nonane	50.3		50.0		101	61-141			

## Matrix Spike (2521073-MS1)

Source: E505212-24

Prepared: 05/21/25 Analyzed: 05/23/25

Diesel Range Organics (C10-C28)	283	25.0	250	ND	113	56-156			
Surrogate: n-Nonane	52.6		50.0		105	61-141			

## Matrix Spike Dup (2521073-MSD1)

Source: E505212-24

Prepared: 05/21/25 Analyzed: 05/23/25

Diesel Range Organics (C10-C28)	281	25.0	250	ND	112	56-156	0.588	20	
Surrogate: n-Nonane	51.7		50.0		103	61-141			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/27/2025 2:35:04PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521069-BLK1)					Prepared: 05/20/25 Analyzed: 05/21/25				
Chloride	ND	20.0							
LCS (2521069-BS1)					Prepared: 05/20/25 Analyzed: 05/21/25				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2521069-MS1)					Source: E505212-22		Prepared: 05/20/25 Analyzed: 05/21/25		
Chloride	1330	20.0	250	1090	94.6	80-120			
Matrix Spike Dup (2521069-MSD1)					Source: E505212-22		Prepared: 05/20/25 Analyzed: 05/21/25		
Chloride	1310	20.0	250	1090	87.9	80-120	1.27	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

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/27/25 14:35

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client Information				Invoice Information		Lab Use Only		TAT		State									
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX				
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr		E505216	01058-007				x	x							
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: (575)689-7597															
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dv.com															
Phone: 575-988-0055				Miscellaneous: Jim Raley															
Email: agiovengo@ensolum.com																			
Sample Information						Analysis and Method								EPA Program					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA	
12:32	5/16/2025	1	1	BF01		1													
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dv.com, iestrella@ensolum.com, chamilton@ensolum.com, oaderinto@ensolum.com, bmoir@ensolum.com																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																			
Sampled by: Oluwale Aderinto																			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days. Lab Use Only Received on ice: <input checked="" type="radio"/> N													
Oluwale Aderinto	05/19/25	08:15	Arcturus 18 Federal #006H	5-19-25	1145														
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time														
Arcturus 18 Federal #006H	5-19-25	1600	Jim M.	5-19-25	1600														
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time														
Jim M.	5-19-25	2230	Carlin M.	5-20-25	745														
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time														
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 14 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 Analytical Laboratory

Printed: 5/20/2025 9:51:12AM

## 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:	Devon Energy - Carlsbad	Date Received:	05/20/25 07:45	Work Order ID:	E505216
Phone:	(505) 382-1211	Date Logged In:	05/19/25 14:19	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	05/26/25 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

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 filtration 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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Arcturus 18 Federal #006H

Work Order: E505235

Job Number: 01058-0007

Received: 5/21/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/28/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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.

Date Reported: 5/28/25

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: Arcturus 18 Federal #006H  
Workorder: E505235  
Date Received: 5/21/2025 8:00:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/21/2025 8:00:00AM, under the Project Name: Arcturus 18 Federal #006H.

The analytical test results summarized in this report with the Project Name: Arcturus 18 Federal #006H 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 regarding 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**  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)



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Sample Summary

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/28/25 09:43

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS01-4'	E505235-01A	Soil	05/19/25	05/21/25	Glass Jar, 2 oz.
FS02-4'	E505235-02A	Soil	05/19/25	05/21/25	Glass Jar, 2 oz.
FS04-4'	E505235-03A	Soil	05/19/25	05/21/25	Glass Jar, 2 oz.





## Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Arcturus 18 Federal #006H Project Number: 01058-0007 Project Manager: Ashley Giovengo	<b>Reported:</b> 5/28/2025 9:43:36AM
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**FS01-4'**

**E505235-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521088	
Benzene	ND	0.0250	1	05/21/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/21/25	05/23/25	
Toluene	ND	0.0250	1	05/21/25	05/23/25	
o-Xylene	ND	0.0250	1	05/21/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/21/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/21/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	05/21/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		101 %	70-130	05/21/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521077	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/21/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/21/25	05/27/25	
<i>Surrogate: n-Nonane</i>		119 %	61-141	05/21/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2521124	
Chloride	126	20.0	1	05/22/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/28/2025 9:43:36AM

FS02-4'

E505235-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521088	
Benzene	ND	0.0250	1	05/21/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/21/25	05/23/25	
Toluene	ND	0.0250	1	05/21/25	05/23/25	
o-Xylene	ND	0.0250	1	05/21/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/21/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/21/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		109 %	70-130	05/21/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		102 %	70-130	05/21/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521077	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/21/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/21/25	05/27/25	
<i>Surrogate: n-Nonane</i>		110 %	61-141	05/21/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2521124	
Chloride	208	20.0	1	05/22/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/28/2025 9:43:36AM

FS04-4'

E505235-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521088	
Benzene	ND	0.0250	1	05/21/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/21/25	05/23/25	
Toluene	ND	0.0250	1	05/21/25	05/23/25	
o-Xylene	ND	0.0250	1	05/21/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/21/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/21/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		110 %	70-130	05/21/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521088	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		100 %	70-130	05/21/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521077	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/21/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/21/25	05/27/25	
<i>Surrogate: n-Nonane</i>		114 %	61-141	05/21/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: RAS		Batch: 2521124	
Chloride	65.6	20.0	1	05/22/25	05/23/25	



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/28/2025 9:43:36AM

## Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521088-BLK1)

Prepared: 05/21/25 Analyzed: 05/23/25

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: 4-Bromochlorobenzene-PID	8.35		8.00		104	70-130			

## LCS (2521088-BS1)

Prepared: 05/21/25 Analyzed: 05/23/25

Benzene	4.81	0.0250	5.00		96.3	70-130			
Ethylbenzene	4.76	0.0250	5.00		95.2	70-130			
Toluene	4.81	0.0250	5.00		96.2	70-130			
o-Xylene	4.68	0.0250	5.00		93.7	70-130			
p,m-Xylene	9.59	0.0500	10.0		95.9	70-130			
Total Xylenes	14.3	0.0250	15.0		95.2	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.65		8.00		108	70-130			

## Matrix Spike (2521088-MS1)

Source: E505233-06

Prepared: 05/21/25 Analyzed: 05/23/25

Benzene	5.32	0.0250	5.00	ND	106	70-130			
Ethylbenzene	5.23	0.0250	5.00	ND	105	70-130			
Toluene	5.30	0.0250	5.00	ND	106	70-130			
o-Xylene	5.16	0.0250	5.00	ND	103	70-130			
p,m-Xylene	10.5	0.0500	10.0	ND	105	70-130			
Total Xylenes	15.7	0.0250	15.0	ND	104	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.62		8.00		108	70-130			

## Matrix Spike Dup (2521088-MSD1)

Source: E505233-06

Prepared: 05/21/25 Analyzed: 05/23/25

Benzene	5.55	0.0250	5.00	ND	111	70-130	4.31	27	
Ethylbenzene	5.47	0.0250	5.00	ND	109	70-130	4.41	26	
Toluene	5.54	0.0250	5.00	ND	111	70-130	4.38	20	
o-Xylene	5.40	0.0250	5.00	ND	108	70-130	4.43	25	
p,m-Xylene	11.0	0.0500	10.0	ND	110	70-130	4.42	23	
Total Xylenes	16.4	0.0250	15.0	ND	109	70-130	4.42	26	
Surrogate: 4-Bromochlorobenzene-PID	8.62		8.00		108	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/28/2025 9:43:36AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521088-BLK1) Prepared: 05/21/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.02		8.00		100	70-130			

LCS (2521088-BS2) Prepared: 05/21/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	44.3	20.0	50.0		88.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.21		8.00		103	70-130			

Matrix Spike (2521088-MS2) Source: E505233-06 Prepared: 05/21/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	47.1	20.0	50.0	ND	94.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.20		8.00		103	70-130			

Matrix Spike Dup (2521088-MSD2) Source: E505233-06 Prepared: 05/21/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	45.5	20.0	50.0	ND	90.9	70-130	3.54	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.19		8.00		102	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/28/2025 9:43:36AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521077-BLK1)					Prepared: 05/21/25 Analyzed: 05/27/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.2		50.0		110	61-141			

LCS (2521077-BS1)					Prepared: 05/21/25 Analyzed: 05/27/25				
Diesel Range Organics (C10-C28)	291	25.0	250		116	66-144			
Surrogate: n-Nonane	51.3		50.0		103	61-141			

Matrix Spike (2521077-MS1)					Source: E505238-02		Prepared: 05/21/25 Analyzed: 05/27/25		
Diesel Range Organics (C10-C28)	298	25.0	250	ND	119	56-156			
Surrogate: n-Nonane	55.5		50.0		111	61-141			

Matrix Spike Dup (2521077-MSD1)					Source: E505238-02		Prepared: 05/21/25 Analyzed: 05/27/25		
Diesel Range Organics (C10-C28)	308	25.0	250	ND	123	56-156	3.33	20	
Surrogate: n-Nonane	56.5		50.0		113	61-141			





QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/28/2025 9:43:36AM

Anions by EPA 300.0/9056A

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 (2521124-BLK1)					Prepared: 05/22/25 Analyzed: 05/23/25				
Chloride	ND	20.0							
LCS (2521124-BS1)					Prepared: 05/22/25 Analyzed: 05/23/25				
Chloride	258	20.0	250		103	90-110			
Matrix Spike (2521124-MS1)					Source: E505229-04		Prepared: 05/22/25 Analyzed: 05/23/25		
Chloride	282	20.0	250	29.0	101	80-120			
Matrix Spike Dup (2521124-MSD1)					Source: E505229-04		Prepared: 05/22/25 Analyzed: 05/23/25		
Chloride	285	20.0	250	29.0	102	80-120	0.838	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

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/28/25 09:43

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client Information				Invoice Information		Lab Use Only		TAT				State						
Client: Devon				Company: Devon Energy		Lab WO#		1D 2D 3D Std				NM CO UT TX						
Project: Arcturus 18 Federal 006H				Address: 5315 Buena Vista Dr		E505235		01058-0007				x						
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220														
Address: 3122 National Parks Hwy				Phone: (575)689-7597														
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@envirotech.com														
Phone: 575-988-0055				Miscellaneous: Jim Raley														
Email: agiovengo@ensolum.com																		
Sample Information						Analysis and Method								EPA Program				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TEEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA
11:20	5/19/2025	S	1	FS01 - 4'		1												
11:21	5/19/2025	S	1	FS02 - 4'		2												
11:23	5/19/2025	S	1	FS04 - 4'		3												
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@envirotech.com, iestrella@ensolum.com, chamilton@ensolum.com, oaderinto@ensolum.com, bmoir@ensolum.com																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																		
Sampled by: Oluwale Aderinto																		
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days.						
Oluwale Aderinto		5/20/25		08:15		[Signature]		5/20/25		1045								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time								
[Signature]		5/20/25		1700		[Signature]		5/20/25		1600								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only Received on ice: Y/N						
[Signature]		5/20/25		2230		[Signature]		5/21/25		800								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time								
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 14 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 Analytical Laboratory

Printed: 5/21/2025 9:30:41AM

## 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:	Devon Energy - Carlsbad	Date Received:	05/21/25 08:00	Work Order ID:	E505235
Phone:	(505) 382-1211	Date Logged In:	05/20/25 15:25	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	05/28/25 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

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 filtration 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

Client Instruction

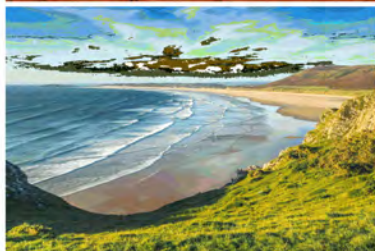
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Arcturus 18 Federal #006H

Work Order: E505245

Job Number: 01058-0007

Received: 5/22/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/29/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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.



Date Reported: 5/29/25



Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210

Project Name: Arcturus 18 Federal #006H  
Workorder: E505245  
Date Received: 5/22/2025 6:45:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/22/2025 6:45:00AM, under the Project Name: Arcturus 18 Federal #006H.

The analytical test results summarized in this report with the Project Name: Arcturus 18 Federal #006H 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 regarding 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**  
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## Sample Summary

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/29/25 08:44

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS05-0.5'	E505245-01A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS06-0.5'	E505245-02A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS07-0.5'	E505245-03A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS08-0.5'	E505245-04A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS09-0.5'	E505245-05A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS10-0.5'	E505245-06A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS11-0.5'	E505245-07A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS12-0.5'	E505245-08A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS13-0.5'	E505245-09A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS14-0.5'	E505245-10A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS15-0.5'	E505245-11A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS16-0.5'	E505245-12A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS17-0.5'	E505245-13A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS18-2'	E505245-14A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS19-2'	E505245-15A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS20-4'	E505245-16A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.
FS21-4'	E505245-17A	Soil	05/20/25	05/22/25	Glass Jar, 2 oz.



## Sample Data

Devon Energy - Carlsbad 6488 7 Rivers Hwy Artesia NM, 88210	Project Name: Arcturus 18 Federal #006H Project Number: 01058-0007 Project Manager: Ashley Giovengo	<b>Reported:</b> 5/29/2025 8:44:29AM
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**FS05-0.5'**

**E505245-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	89.9 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	97.0 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>	103 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	46.6	20.0	1	05/23/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS06-0.5'

E505245-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		90.1 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.2 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>		114 %	61-141	05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	48.0	20.0	1	05/23/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS07-0.5'

E505245-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		91.8 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.5 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
		112 %	61-141	05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	ND	20.0	1	05/23/25	05/23/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS08-0.5'

E505245-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.3 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	107 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	ND	20.0	1	05/23/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS09-0.5'

E505245-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.4 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.0 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	104 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	ND	20.0	1	05/23/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS10-0.5'

E505245-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.2 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.5 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	105 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	ND	20.0	1	05/23/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS11-0.5'

E505245-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.9 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.0 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	106 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	ND	20.0	1	05/23/25	05/23/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS12-0.5'

E505245-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.8 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	106 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	ND	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS13-0.5'

E505245-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		91.6 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.2 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
		107 %	61-141	05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	61.8	20.0	1	05/23/25	05/24/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS14-0.5'

E505245-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.5 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.4 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	111 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	ND	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS15-0.5'

E505245-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	90.0 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.9 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	104 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	ND	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS16-0.5'

E505245-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.1 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	103 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	ND	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS17-0.5'

E505245-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.4 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.7 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	101 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	ND	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS18-2'

E505245-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		91.0 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.6 %	70-130	05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	66.3	25.0	1	05/23/25	05/23/25	T17
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
		104 %	61-141	05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	90.2	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS19-2'

E505245-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Benzene	ND	0.0250	1	05/22/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/23/25	
Toluene	ND	0.0250	1	05/22/25	05/23/25	
o-Xylene	ND	0.0250	1	05/22/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/23/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	89.7 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: SL		Batch: 2521109	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/23/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.2 %	70-130		05/22/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2521131	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>	105 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2521135	
Chloride	70.1	20.0	1	05/23/25	05/24/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS20-4'

E505245-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/24/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/24/25	
Toluene	ND	0.0250	1	05/22/25	05/24/25	
o-Xylene	ND	0.0250	1	05/22/25	05/24/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/24/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/24/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.5 %	70-130		05/22/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/24/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.6 %	70-130		05/22/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	29.5	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	105 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	139	20.0	1	05/23/25	05/24/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/29/2025 8:44:29AM

FS21-4'

E505245-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Benzene	ND	0.0250	1	05/22/25	05/24/25	
Ethylbenzene	ND	0.0250	1	05/22/25	05/24/25	
Toluene	ND	0.0250	1	05/22/25	05/24/25	
o-Xylene	ND	0.0250	1	05/22/25	05/24/25	
p,m-Xylene	ND	0.0500	1	05/22/25	05/24/25	
Total Xylenes	ND	0.0250	1	05/22/25	05/24/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.5 %	70-130		05/22/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521109
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/22/25	05/24/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.4 %	70-130		05/22/25	05/24/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2521131
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/25	05/23/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/25	05/23/25	
<i>Surrogate: n-Nonane</i>						
	104 %	61-141		05/23/25	05/23/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2521135
Chloride	1920	20.0	1	05/23/25	05/24/25	



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/29/2025 8:44:29AM

## Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521109-BLK1)

Prepared: 05/22/25 Analyzed: 05/23/25

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: 4-Bromochlorobenzene-PID	7.06		8.00		88.2	70-130			

## LCS (2521109-BS1)

Prepared: 05/22/25 Analyzed: 05/23/25

Benzene	5.03	0.0250	5.00		101	70-130			
Ethylbenzene	4.98	0.0250	5.00		99.6	70-130			
Toluene	5.03	0.0250	5.00		101	70-130			
o-Xylene	4.93	0.0250	5.00		98.5	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.0	0.0250	15.0		99.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.13		8.00		89.1	70-130			

## Matrix Spike (2521109-MS1)

Source: E505245-05

Prepared: 05/22/25 Analyzed: 05/23/25

Benzene	3.76	0.0250	5.00	ND	75.2	70-130			
Ethylbenzene	3.70	0.0250	5.00	ND	73.9	70-130			
Toluene	3.75	0.0250	5.00	ND	75.0	70-130			
o-Xylene	3.66	0.0250	5.00	ND	73.2	70-130			
p,m-Xylene	7.49	0.0500	10.0	ND	74.9	70-130			
Total Xylenes	11.1	0.0250	15.0	ND	74.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.06		8.00		88.2	70-130			

## Matrix Spike Dup (2521109-MSD1)

Source: E505245-05

Prepared: 05/22/25 Analyzed: 05/23/25

Benzene	4.06	0.0250	5.00	ND	81.2	70-130	7.74	27	
Ethylbenzene	4.02	0.0250	5.00	ND	80.4	70-130	8.37	26	
Toluene	4.06	0.0250	5.00	ND	81.1	70-130	7.91	20	
o-Xylene	3.98	0.0250	5.00	ND	79.5	70-130	8.37	25	
p,m-Xylene	8.13	0.0500	10.0	ND	81.3	70-130	8.26	23	
Total Xylenes	12.1	0.0250	15.0	ND	80.7	70-130	8.29	26	
Surrogate: 4-Bromochlorobenzene-PID	7.15		8.00		89.3	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/29/2025 8:44:29AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521109-BLK1) Prepared: 05/22/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.77		8.00		97.1	70-130			

LCS (2521109-BS2) Prepared: 05/22/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	40.0	20.0	50.0		80.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.82		8.00		97.8	70-130			

Matrix Spike (2521109-MS2) Source: E505245-05 Prepared: 05/22/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	43.5	20.0	50.0	ND	87.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		8.00		98.8	70-130			

Matrix Spike Dup (2521109-MSD2) Source: E505245-05 Prepared: 05/22/25 Analyzed: 05/23/25

Gasoline Range Organics (C6-C10)	45.5	20.0	50.0	ND	90.9	70-130	4.39	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.97		8.00		99.6	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/29/2025 8:44:29AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521131-BLK1)					Prepared: 05/23/25 Analyzed: 05/23/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.0		50.0		106	61-141			

LCS (2521131-BS1)					Prepared: 05/23/25 Analyzed: 05/23/25				
Diesel Range Organics (C10-C28)	309	25.0	250		124	66-144			
Surrogate: n-Nonane	52.3		50.0		105	61-141			

Matrix Spike (2521131-MS1)					Source: E505245-02		Prepared: 05/23/25 Analyzed: 05/23/25		
Diesel Range Organics (C10-C28)	319	25.0	250	ND	128	56-156			
Surrogate: n-Nonane	55.6		50.0		111	61-141			

Matrix Spike Dup (2521131-MSD1)					Source: E505245-02		Prepared: 05/23/25 Analyzed: 05/23/25		
Diesel Range Organics (C10-C28)	348	25.0	250	ND	139	56-156	8.52	20	
Surrogate: n-Nonane	58.5		50.0		117	61-141			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/29/2025 8:44:29AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521135-BLK1)					Prepared: 05/23/25 Analyzed: 05/23/25				
Chloride	ND	20.0							
LCS (2521135-BS1)					Prepared: 05/23/25 Analyzed: 05/23/25				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2521135-MS1)					Source: E505245-05		Prepared: 05/23/25 Analyzed: 05/23/25		
Chloride	255	20.0	250	ND	102	80-120			
Matrix Spike Dup (2521135-MSD1)					Source: E505245-05		Prepared: 05/23/25 Analyzed: 05/23/25		
Chloride	255	20.0	250	ND	102	80-120	0.218	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

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/29/25 08:44

- T17      The sample chromatographic pattern does not resemble the typical fuel standard used for quantitation.
- ND      Analyte NOT DETECTED at or above the reporting limit
- NR      Not Reported
- RPD      Relative Percent Difference
- DNI      Did Not Ignite
- DNR      Did not react with the addition of acid or base.

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

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



Client Information				Invoice Information		Lab Use Only		TAT		State								
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX			
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr		E505245	01058-0057				x	x						
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220														
Address: 3122 National Parks Hwy				Phone: (575)689-7597														
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dnv.com														
Phone: 575-988-0055				Miscellaneous: Jim Raley														
Email: agiovengo@ensolum.com																		
Sample Information						Analysis and Method						EPA Program						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TCCQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA
10:17	5/20/2025	S	1	FS05 - 0.5'		1								x		1.2		
10:16	5/20/2025	S	1	FS06 - 0.5'		2								x		1.1		
10:14	5/20/2025	S	1	FS07 - 0.5'		3								x		1.2		
10:12	5/20/2025	S	1	FS08 - 0.5'		4								x		1.1		
10:27	5/20/2025	S	1	FS09 - 0.5'		5								x		2.8		
10:25	5/20/2025	S	1	FS10 - 0.5'		6								x		0.9		
10:23	5/20/2025	S	1	FS11 - 0.5'		7								x		1.0		
10:22	5/20/2025	S	1	FS12 - 0.5'		8								x		2.1		
10:20	5/20/2025	S	1	FS13 - 0.5'		9								x		1.5		
10:28	5/20/2025	S	1	FS14 - 0.5'		10								x		1.8		
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dnv.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@ensolum.com																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																		
Sampled by: <u>Oluwale Aderinto</u>																		
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days.  Lab Use Only Received on ice: O / N						
<u>Oluwale Aderinto</u>		5/21/25		08:15		<u>Michelle Gonzales</u>		5-21-25		0815								
<u>Michelle Gonzales</u>		5-21-25		1615		<u>John M.</u>		5-21-25		1645								
<u>John M.</u>		5-21-25		2300		<u>Cathy Mars</u>		5-22-25		645								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time								
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 14 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.																		



Client Information				Invoice Information		Lab Use Only		TAT				State						
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX			
Project: Arcturus 18 Federal #006H				Address: 5315 Buena Vista Dr		E505245	010580007				X	X						
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220														
Address: 3122 National Parks Hwy				Phone: (575)689-7597														
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dmv.com														
Phone: 575-988-0055				Miscellaneous: Jim Raley														
Email: agiovengo@ensolum.com																		
Sample Information						Analysis and Method								EPA Program				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TEEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA
10:30	5/20/2025	S	1	FS15 - 0.5'		11								X				
10:31	5/20/2025	S	1	FS16 - 0.5'		12								X				
10:33	5/20/2025	S	1	FS17 - 0.5'		13								X				
12:54	5/20/2025	S	1	FS18 - 2'		14								X				
12:52	5/20/2025	S	1	FS19 - 2'		15								X				
12:50	5/20/2025	S	1	FS20 - 4'		16								X				
12:48	5/20/2025	S	1	FS21 - 4'		17								X				
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dmv.com, iestrella@ensolum.com, chamilton@ensolum.com, bmoir@ensolum.com																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																		
Sampled by: Oluwale Aderinto																		
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days. Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / <input type="checkbox"/> N						
Oluwale Aderinto		5/21/25		08:15		Michelle Gonzales		5-21-25		0815								
Michelle Gonzales		5-21-25		1615		Andrew H.		5-21-25		1645								
Andrew H.		5-21-25		2300		Caitlin Mar		5-22-25		1645								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time								
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time								
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 14 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 Analytical Laboratory

Printed: 5/22/2025 7:31:18AM

## 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:	Devon Energy - Carlsbad	Date Received:	05/22/25 06:45	Work Order ID:	E505245
Phone:	(505) 382-1211	Date Logged In:	05/21/25 14:21	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	05/29/25 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

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 filtration 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

Client Instruction

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

Date



envirotech Inc.

Report to:  
Ashley Giovengo



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Devon Energy - Carlsbad

Project Name: Arcturus 18 Federal #006H

Work Order: E505259

Job Number: 01058-0007

Received: 5/23/2025

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
5/30/25

5796 U.S. Hwy 64  
Farmington, NM 87401

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



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.



Date Reported: 5/30/25

Ashley Giovengo  
6488 7 Rivers Hwy  
Artesia, NM 88210



Project Name: Arcturus 18 Federal #006H  
Workorder: E505259  
Date Received: 5/23/2025 7:30:00AM

Ashley Giovengo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/23/2025 7:30:00AM, under the Project Name: Arcturus 18 Federal #006H.

The analytical test results summarized in this report with the Project Name: Arcturus 18 Federal #006H 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 regarding 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](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

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**Michelle Gonzales**  
Client Representative  
Office: 505-421-LABS(5227)  
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[mgonzaless@envirotech-inc.com](mailto:mgonzaless@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
05/30/25 11:17

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS22-0.5'	E505259-01A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS23-0.5'	E505259-02A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS24-0.5'	E505259-03A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS25-0.5'	E505259-04A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS26-0.5'	E505259-05A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS27-0.5'	E505259-06A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS28-0.5'	E505259-07A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS29-0.5'	E505259-08A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS30-0.5'	E505259-09A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS31-0.5'	E505259-10A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS32-0.5'	E505259-11A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS33-0.5'	E505259-12A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS34-0.5'	E505259-13A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS35-0.5'	E505259-14A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS36-4'	E505259-15A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS37-4'	E505259-16A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS38-4'	E505259-17A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS39-4'	E505259-18A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS40-4'	E505259-19A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS41-4'	E505259-20A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS42-0.5'	E505259-21A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
FS43-0.5'	E505259-22A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
SW01-0-4	E505259-23A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
SW02-0-4'	E505259-24A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
SW03-0-4'	E505259-25A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
SW04-0-4'	E505259-26A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.
SW05-0-4'	E505259-27A	Soil	05/21/25	05/23/25	Glass Jar, 2 oz.



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS22-0.5'

E505259-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/27/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/27/25	
Toluene	ND	0.0250	1	05/23/25	05/27/25	
o-Xylene	ND	0.0250	1	05/23/25	05/27/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/27/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		95.9 %	70-130	05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.1 %	70-130	05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	29.5	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>		99.6 %	61-141	05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	128	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS23-0.5'

E505259-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/27/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/27/25	
Toluene	ND	0.0250	1	05/23/25	05/27/25	
o-Xylene	ND	0.0250	1	05/23/25	05/27/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/27/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.5 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	98.4 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	74.2	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS24-0.5'

E505259-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/27/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/27/25	
Toluene	ND	0.0250	1	05/23/25	05/27/25	
o-Xylene	ND	0.0250	1	05/23/25	05/27/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/27/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.7 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.9 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	101 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	ND	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS25-0.5'

E505259-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/27/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/27/25	
Toluene	ND	0.0250	1	05/23/25	05/27/25	
o-Xylene	ND	0.0250	1	05/23/25	05/27/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/27/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.0 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.9 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	99.4 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	ND	20.0	1	05/27/25	05/27/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS26-0.5'

E505259-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/27/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/27/25	
Toluene	ND	0.0250	1	05/23/25	05/27/25	
o-Xylene	ND	0.0250	1	05/23/25	05/27/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/27/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.3 %	70-130	05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		84.1 %	70-130	05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>		101 %	61-141	05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	96.6	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS27-0.5'

E505259-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/27/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/27/25	
Toluene	ND	0.0250	1	05/23/25	05/27/25	
o-Xylene	ND	0.0250	1	05/23/25	05/27/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/27/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/27/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.2 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/27/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.2 %	70-130		05/23/25	05/27/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	97.6 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	382	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS28-0.5'

E505259-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.4 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.2 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	102 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	138	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS29-0.5'

E505259-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.4 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.3 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	100 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	68.4	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS30-0.5'

E505259-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		97.7 %	70-130	05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		89.2 %	70-130	05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>		101 %	61-141	05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	114	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS31-0.5'

E505259-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.9 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	83.9 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
<i>Surrogate: n-Nonane</i>						
	99.2 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	379	20.0	1	05/27/25	05/27/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS32-0.5'

E505259-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.2 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	85.4 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	32.5	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>	99.9 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	361	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS33-0.5'

E505259-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.2 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.7 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>						
	101 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	116	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS34-0.5'

E505259-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		94.3 %	70-130	05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		89.2 %	70-130	05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>		102 %	61-141	05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	ND	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS35-0.5'

E505259-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.8 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.8 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>						
	101 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	63.2	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS36-4'

E505259-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.6 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.6 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>						
	101 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	37.4	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS37-4'

E505259-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.6 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	88.0 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>	104 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	41.1	20.0	1	05/27/25	05/27/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS38-4'

E505259-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.6 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	93.2 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>	102 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	148	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS39-4'

E505259-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.1 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.6 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>						
	103 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	3420	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS40-4'

E505259-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.7 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.2 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>						
	102 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	1360	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS41-4'

E505259-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Benzene	ND	0.0250	1	05/23/25	05/28/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/28/25	
Toluene	ND	0.0250	1	05/23/25	05/28/25	
o-Xylene	ND	0.0250	1	05/23/25	05/28/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/28/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/28/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.4 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: BA		Batch: 2521140	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/28/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	88.4 %	70-130		05/23/25	05/28/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2522022	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
<i>Surrogate: n-Nonane</i>	103 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2522014	
Chloride	40.6	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS42-0.5'

E505259-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/23/25	
Toluene	ND	0.0250	1	05/23/25	05/23/25	
o-Xylene	ND	0.0250	1	05/23/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.1 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	101 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.1 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	101 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
Surrogate: n-Nonane	112 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522013
Chloride	ND	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

FS43-0.5'

E505259-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521128	
Benzene	ND	0.0250	1	05/23/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/23/25	
Toluene	ND	0.0250	1	05/23/25	05/23/25	
o-Xylene	ND	0.0250	1	05/23/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.7 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	99.7 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg	Analyst: SL		Batch: 2521128	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.7 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	99.7 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg	Analyst: HM		Batch: 2522007	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/27/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/27/25	
Surrogate: n-Nonane	113 %	61-141		05/27/25	05/27/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg	Analyst: JM		Batch: 2522013	
Chloride	45.2	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

SW01-0-4

E505259-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/23/25	
Toluene	ND	0.0250	1	05/23/25	05/23/25	
o-Xylene	ND	0.0250	1	05/23/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	98.8 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	100 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	98.8 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	100 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
Surrogate: n-Nonane	112 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522013
Chloride	88.9	20.0	1	05/27/25	05/27/25	





## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

SW02-0-4'

E505259-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/23/25	
Toluene	ND	0.0250	1	05/23/25	05/23/25	
o-Xylene	ND	0.0250	1	05/23/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.2 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	103 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.2 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	103 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
Surrogate: n-Nonane	112 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522013
Chloride	266	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

SW03-0-4'

E505259-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/29/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/29/25	
Toluene	ND	0.0250	1	05/23/25	05/29/25	
o-Xylene	ND	0.0250	1	05/23/25	05/29/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/29/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/29/25	
Surrogate: Bromofluorobenzene		101 %	70-130	05/23/25	05/29/25	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	05/23/25	05/29/25	
Surrogate: Toluene-d8		96.3 %	70-130	05/23/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/29/25	
Surrogate: Bromofluorobenzene		101 %	70-130	05/23/25	05/29/25	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	05/23/25	05/29/25	
Surrogate: Toluene-d8		96.3 %	70-130	05/23/25	05/29/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
Surrogate: n-Nonane		111 %	61-141	05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522013
Chloride	56.0	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

SW04-0-4'

E505259-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/23/25	
Toluene	ND	0.0250	1	05/23/25	05/23/25	
o-Xylene	ND	0.0250	1	05/23/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.7 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	99.4 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	99.7 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	99.4 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
Surrogate: n-Nonane	112 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522013
Chloride	132	20.0	1	05/27/25	05/27/25	



## Sample Data

Devon Energy - Carlsbad  
6488 7 Rivers Hwy  
Artesia NM, 88210

Project Name: Arcturus 18 Federal #006H  
Project Number: 01058-0007  
Project Manager: Ashley Giovengo

**Reported:**  
5/30/2025 11:17:02AM

SW05-0-4'

E505259-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Benzene	ND	0.0250	1	05/23/25	05/23/25	
Ethylbenzene	ND	0.0250	1	05/23/25	05/23/25	
Toluene	ND	0.0250	1	05/23/25	05/23/25	
o-Xylene	ND	0.0250	1	05/23/25	05/23/25	
p,m-Xylene	ND	0.0500	1	05/23/25	05/23/25	
Total Xylenes	ND	0.0250	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	98.3 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	99.1 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: SL		Batch: 2521128
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/23/25	05/23/25	
Surrogate: Bromofluorobenzene	98.3 %	70-130		05/23/25	05/23/25	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		05/23/25	05/23/25	
Surrogate: Toluene-d8	99.1 %	70-130		05/23/25	05/23/25	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: HM		Batch: 2522007
Diesel Range Organics (C10-C28)	ND	25.0	1	05/27/25	05/28/25	
Oil Range Organics (C28-C36)	ND	50.0	1	05/27/25	05/28/25	
Surrogate: n-Nonane	113 %	61-141		05/27/25	05/28/25	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: JM		Batch: 2522013
Chloride	30.7	20.0	1	05/27/25	05/27/25	



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

## Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

## Blank (2521128-BLK1)

Prepared: 05/23/25 Analyzed: 05/29/25

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	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

## LCS (2521128-BS1)

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	2.52	0.0250	2.50		101	70-130			
Ethylbenzene	2.48	0.0250	2.50		99.1	70-130			
Toluene	2.38	0.0250	2.50		95.3	70-130			
o-Xylene	2.25	0.0250	2.50		89.9	70-130			
p,m-Xylene	4.56	0.0500	5.00		91.1	70-130			
Total Xylenes	6.81	0.0250	7.50		90.7	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.499		0.500		99.7	70-130			

## Matrix Spike (2521128-MS1)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	2.49	0.0250	2.50	ND	99.7	48-131			
Ethylbenzene	2.54	0.0250	2.50	ND	101	45-135			
Toluene	2.43	0.0250	2.50	ND	97.3	48-130			
o-Xylene	2.39	0.0250	2.50	ND	95.5	43-135			
p,m-Xylene	4.80	0.0500	5.00	ND	96.0	43-135			
Total Xylenes	7.19	0.0250	7.50	ND	95.8	43-135			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.5	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			

## Matrix Spike Dup (2521128-MSD1)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Benzene	2.50	0.0250	2.50	ND	100	48-131	0.440	23	
Ethylbenzene	2.54	0.0250	2.50	ND	101	45-135	0.0197	27	
Toluene	2.45	0.0250	2.50	ND	98.0	48-130	0.696	24	
o-Xylene	2.46	0.0250	2.50	ND	98.3	43-135	2.91	27	
p,m-Xylene	4.95	0.0500	5.00	ND	98.9	43-135	3.00	27	
Total Xylenes	7.40	0.0250	7.50	ND	98.7	43-135	2.97	27	
Surrogate: Bromofluorobenzene	0.512		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.496		0.500		99.1	70-130			



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

## Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521140-BLK1)

Prepared: 05/23/25 Analyzed: 05/27/25

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: 4-Bromochlorobenzene-PID	7.92		8.00		98.9	70-130			

## LCS (2521140-BS1)

Prepared: 05/23/25 Analyzed: 05/27/25

Benzene	5.01	0.0250	5.00		100	70-130			
Ethylbenzene	5.05	0.0250	5.00		101	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.97	0.0250	5.00		99.5	70-130			
p,m-Xylene	9.85	0.0500	10.0		98.5	70-130			
Total Xylenes	14.8	0.0250	15.0		98.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.00		8.00		99.9	70-130			

## Matrix Spike (2521140-MS1)

Source: E505259-03

Prepared: 05/23/25 Analyzed: 05/27/25

Benzene	5.00	0.0250	5.00	ND	99.9	70-130			
Ethylbenzene	5.03	0.0250	5.00	ND	101	70-130			
Toluene	4.98	0.0250	5.00	ND	99.6	70-130			
o-Xylene	4.95	0.0250	5.00	ND	99.0	70-130			
p,m-Xylene	9.80	0.0500	10.0	ND	98.0	70-130			
Total Xylenes	14.7	0.0250	15.0	ND	98.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.99		8.00		99.9	70-130			

## Matrix Spike Dup (2521140-MSD1)

Source: E505259-03

Prepared: 05/23/25 Analyzed: 05/27/25

Benzene	5.23	0.0250	5.00	ND	105	70-130	4.54	27	
Ethylbenzene	5.27	0.0250	5.00	ND	105	70-130	4.77	26	
Toluene	5.22	0.0250	5.00	ND	104	70-130	4.67	20	
o-Xylene	5.19	0.0250	5.00	ND	104	70-130	4.66	25	
p,m-Xylene	10.2	0.0500	10.0	ND	102	70-130	4.52	23	
Total Xylenes	15.4	0.0250	15.0	ND	103	70-130	4.57	26	
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			



## QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2521128-BLK1)

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.502		0.500		100	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.8	70-130			

## LCS (2521128-BS2)

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	45.8	20.0	50.0		91.6	70-130			
Surrogate: Bromofluorobenzene	0.500		0.500		99.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500		101	70-130			
Surrogate: Toluene-d8	0.508		0.500		102	70-130			

## Matrix Spike (2521128-MS2)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	50.7	20.0	50.0	ND	101	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.516		0.500		103	70-130			

## Matrix Spike Dup (2521128-MSD2)

Source: E505259-25

Prepared: 05/23/25 Analyzed: 05/29/25

Gasoline Range Organics (C6-C10)	54.8	20.0	50.0	ND	110	70-130	7.80	20	
Surrogate: Bromofluorobenzene	0.510		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			





QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2521140-BLK1) Prepared: 05/23/25 Analyzed: 05/27/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.40		8.00		92.4	70-130			

LCS (2521140-BS2) Prepared: 05/23/25 Analyzed: 05/27/25

Gasoline Range Organics (C6-C10)	50.8	20.0	50.0		102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			

Matrix Spike (2521140-MS2) Source: E505259-03 Prepared: 05/23/25 Analyzed: 05/27/25

Gasoline Range Organics (C6-C10)	53.2	20.0	50.0	ND	106	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.71		8.00		96.4	70-130			

Matrix Spike Dup (2521140-MSD2) Source: E505259-03 Prepared: 05/23/25 Analyzed: 05/27/25

Gasoline Range Organics (C6-C10)	51.1	20.0	50.0	ND	102	70-130	4.18	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.55		8.00		94.3	70-130			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: HM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522007-BLK1) Prepared: 05/27/25 Analyzed: 05/27/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.5		50.0		113	61-141			

LCS (2522007-BS1) Prepared: 05/27/25 Analyzed: 05/27/25

Diesel Range Organics (C10-C28)	286	25.0	250		114	66-144			
Surrogate: n-Nonane	55.2		50.0		110	61-141			

Matrix Spike (2522007-MS1) Source: E505259-22 Prepared: 05/27/25 Analyzed: 05/27/25

Diesel Range Organics (C10-C28)	297	25.0	250	ND	119	56-156			
Surrogate: n-Nonane	55.6		50.0		111	61-141			

Matrix Spike Dup (2522007-MSD1) Source: E505259-22 Prepared: 05/27/25 Analyzed: 05/27/25

Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	56-156	2.11	20	
Surrogate: n-Nonane	55.0		50.0		110	61-141			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2522022-BLK1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.9		50.0		99.8	61-141			

LCS (2522022-BS1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Diesel Range Organics (C10-C28)	255	25.0	250		102	66-144			
Surrogate: n-Nonane	50.3		50.0		101	61-141			

Matrix Spike (2522022-MS1)					Source: E505259-12		Prepared: 05/27/25 Analyzed: 05/27/25		
Diesel Range Organics (C10-C28)	256	25.0	250	ND	103	56-156			
Surrogate: n-Nonane	51.6		50.0		103	61-141			

Matrix Spike Dup (2522022-MSD1)					Source: E505259-12		Prepared: 05/27/25 Analyzed: 05/27/25		
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	56-156	0.811	20	
Surrogate: n-Nonane	50.5		50.0		101	61-141			



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2522013-BLK1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Chloride	ND	20.0							
LCS (2522013-BS1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2522013-MS1)					Source: E505249-03		Prepared: 05/27/25 Analyzed: 05/27/25		
Chloride	287	20.0	250	31.4	102	80-120			
Matrix Spike Dup (2522013-MSD1)					Source: E505249-03		Prepared: 05/27/25 Analyzed: 05/27/25		
Chloride	286	20.0	250	31.4	102	80-120	0.447	20	



QC Summary Data

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	Reported:
6488 7 Rivers Hwy	Project Number:	01058-0007	
Artesia NM, 88210	Project Manager:	Ashley Giovengo	5/30/2025 11:17:02AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2522014-BLK1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Chloride	ND	20.0							
LCS (2522014-BS1)					Prepared: 05/27/25 Analyzed: 05/27/25				
Chloride	254	20.0	250		101	90-110			
Matrix Spike (2522014-MS1)					Source: E505259-04		Prepared: 05/27/25 Analyzed: 05/27/25		
Chloride	270	20.0	250	ND	108	80-120			
Matrix Spike Dup (2522014-MSD1)					Source: E505259-04		Prepared: 05/27/25 Analyzed: 05/27/25		
Chloride	270	20.0	250	ND	108	80-120	0.134	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

Devon Energy - Carlsbad	Project Name:	Arcturus 18 Federal #006H	
6488 7 Rivers Hwy	Project Number:	01058-0007	Reported:
Artesia NM, 88210	Project Manager:	Ashley Giovengo	05/30/25 11:17

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client Information				Invoice Information		Lab Use Only		TAT		State									
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX				
Project: Arcturus 18 Federal 006H				Address: 5315 Buena Vista Dr		E505259	01057-0007				x	x							
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: (575)689-7597															
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dvn.com															
Phone: 575-988-0055				Miscellaneous: Jim Raley															
Email: agiovengo@ensolum.com																			
Sample Information						Analysis and Method						EPA Program							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/QRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TCEQ 1005 - TX	RCRA 8 Metals	RGDOC - NM	RGDOC - TX	SDWA	CWA	RCRA	
9:29	5/21/2025	S	1	FS22 - 0.5'		1								x					
9:30	5/21/2025	S	1	FS23 - 0.5'		2								x					
9:32	5/21/2025	S	1	FS24 - 0.5'		3								x					
9:34	5/21/2025	S	1	FS25 - 0.5'		4								x					
9:25	5/21/2025	S	1	FS26 - 0.5'		5								x					
9:27	5/21/2025	S	1	FS27 - 0.5'		6								x					
9:21	5/21/2025	S	1	FS28 - 0.5'		7								x					
9:23	5/21/2025	S	1	FS29 - 0.5'		8								x					
14:17	5/21/2025	S	1	FS30 - 0.5'		9								x					
14:18	5/21/2025	S	1	FS31 - 0.5'		10								x					
<b>Additional Instructions:</b> Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com, iestrella@ensolum.com, chamilton@ensolum.com, oaderinto@ensolum.com, bmoir@ensolum.com I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Oluwale Aderinto																			
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days.  Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N											
Oluwale Aderinto		5/22/25	08:15	Michelle Gonzales		5-22-25	0815												
Michelle Gonzales		5-22-25	1530	K. J.		5-22-25	1530												
K. J.		5-22-25	2145	Caitlyn Mann		5-23-25	730												
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time												
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 14 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.																			



Client Information				Invoice Information		Lab Use Only		TAT		State								
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX			
Project: Arcturus 18 Federal 006H				Address: 5315 Buena Vista Dr		E505259	01058-0007				x	x						
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220														
Address: 3122 National Parks Hwy				Phone: (575)689-7597														
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dvn.com														
Phone: 575-988-0055				Miscellaneous: Jim Raley														
Email: agiovengo@ensolum.com																		
Sample Information						Analysis and Method								EPA Program				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA
14:20	5/21/2025	S	1	FS32 - 0.5'		11								x		3.8		
14:21	5/21/2025	S	1	FS33 - 0.5'		12								x		3.4		
14:23	5/21/2025	S	1	FS34 - 0.5'		13								x		1.9		
14:48	5/21/2025	S	1	FS35 - 0.5'		14								x		2.1		
13:28	5/21/2025	S	1	FS36 - 4'		15								x		2.4		
13:29	5/21/2025	S	1	FS37 - 4'		16								x		1.8		
13:30	5/21/2025	S	1	FS38 - 4'		17								x		3.6		
13:32	5/21/2025	S	1	FS39 - 4'		18								x		2.9		
13:34	5/21/2025	S	1	FS40 - 4'		19								x		3.0		
13:34	5/21/2025	S	1	FS41 - 4'		20								x		4.3		
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com, iestrella@ensolum.com, chamilton@ensolum.com, oaderinto@ensolum.com, bmoir@ensolum.com																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																		
Sampled by: Oluwale Aderinto																		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	<p>Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days.</p> <p>Lab Use Only</p> <p>Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N</p>										
Oluwale Aderinto		5/22/25	08:15	Michelle Gonzales		5-22-25	0815											
Michelle Gonzales		5-22-25	1530	[Signature]		5-22-25	1530											
[Signature]		5-22-25	2145	Cristina Mauer		5-23-25	730											
[Signature]				[Signature]														
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 14 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.																		



Client Information				Invoice Information		Lab Use Only		TAT		State									
Client: Devon				Company: Devon Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX				
Project: Arcturus 18 Federal 006H				Address: 5315 Buena Vista Dr		E505259	01058-0007				x	x							
Project Manager: Ashley Giovengo				City, State, Zip: Carlsbad NM, 88220															
Address: 3122 National Parks Hwy				Phone: (575)689-7597															
City, State, Zip: Carlsbad NM, 88220				Email: jim.raley@dvn.com															
Phone: 575-988-0055				Miscellaneous: Jim Raley															
Email: agiovengo@ensolum.com																			
Sample Information						Analysis and Method								EPA Program					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	TCEQ 1005 - TX	RCRA 8 Metals	BGDOC - NM	BGDOC - TX	SDWA	CWA	RCRA	
14:24	5/21/2025	S	1	FS42 - 0.5'		21								x					
14:26	5/21/2025	S	1	FS43 - 0.5'		22								x					
10:04	5/21/2025	S	1	SW01 - 0 - 4'		23								x					
10:07	5/21/2025	S	1	SW02 - 0 - 4'		24								x					
10:11	5/21/2025	S	1	SW03 - 0 - 4'		25								x					
10:13	5/21/2025	S	1	SW04 - 0 - 4'		26								x					
13:20	5/21/2025	S	1	SW05 - 0 - 4'		27								x					
Additional Instructions: Please CC: cburton@ensolum.com, agiovengo@ensolum.com, jim.raley@dvn.com, iestrella@ensolum.com, chamilton@ensolum.com, oaderinto@ensolum.com, bmoir@ensolum.com																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																			
Sampled by: Oluwale Aderinto																			
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Samples requiring thermal preservation must be received on ice the day they are sampled or received packed on ice at a temp above 0 but less than 6°C on subsequent days.  Lab Use Only Received on ice: O/N							
Oluwale Aderinto		5/22/25		08:15		Michelle Gonzales		5-22-25		0815									
Michelle Gonzales		5-22-25		1530		JLH		5-22-25		1530									
JLH		5-22-25		2145		Caitlin Mann		5-23-25		730									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time									
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time									
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 14 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 Analytical Laboratory

Printed: 5/23/2025 8:36:39AM

## 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:	Devon Energy - Carlsbad	Date Received:	05/23/25 07:30	Work Order ID:	E505259
Phone:	(505) 382-1211	Date Logged In:	05/22/25 15:16	Logged In By:	Caitlin Mars
Email:	agiovento@ensolum.com	Due Date:	05/30/25 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
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample 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? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

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 filtration 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

Client Instruction

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

Date



envirotech Inc.



## APPENDIX F

### NMOCD Correspondence

---

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 460069

## QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460069
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

## QUESTIONS

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2508641982
Incident Name	NAPP2508641982 ARCTURUS 18 FED 6H FLOWLINE @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

<b>Location of Release Source</b>	
Site Name	Arcturus 18 FED 6H Flowline
Date Release Discovered	03/27/2025
Surface Owner	Private

<b>Sampling Event General Information</b>	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	8,597
What is the estimated number of samples that will be gathered	45
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/15/2025
Time sampling will commence	09:30 AM
Please provide any information necessary for observers to contact samplers	Please Contact Oluwale Aderinto 575-617-1363
Please provide any information necessary for navigation to sampling site	32.664030, -103.901092

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 460069

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460069
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/8/2025

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
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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

Action 460072

**QUESTIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460072
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2508641982
Incident Name	NAPP2508641982 ARCTURUS 18 FED 6H FLOWLINE @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

<b>Location of Release Source</b>	
Site Name	Arcturus 18 FED 6H Flowline
Date Release Discovered	03/27/2025
Surface Owner	Private

<b>Sampling Event General Information</b>	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	8,597
What is the estimated number of samples that will be gathered	45
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/16/2025
Time sampling will commence	09:30 AM
Please provide any information necessary for observers to contact samplers	Please Contact Oluwale Aderinto @ 575-617-1363
Please provide any information necessary for navigation to sampling site	32.664030, -103.901092



Sante Fe Main Office  
Phone: (505) 476-3441

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

CONDITIONS

Action 460072

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460072
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/8/2025

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

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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

Action 460073

## QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460073
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

## QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2508641982
Incident Name	NAPP2508641982 ARCTURUS 18 FED 6H FLOWLINE @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	Arcturus 18 FED 6H Flowline
Date Release Discovered	03/27/2025
Surface Owner	Private

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	8,597
What is the estimated number of samples that will be gathered	45
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/19/2025
Time sampling will commence	09:30 AM
Please provide any information necessary for observers to contact samplers	Please contact Oluwale Aderinto @ 575-617-1363
Please provide any information necessary for navigation to sampling site	32.664030, -103.901092

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

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

CONDITIONS

Action 460073

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460073
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/8/2025

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 460076

## QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460076
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

## QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2508641982
Incident Name	NAPP2508641982 ARCTURUS 18 FED 6H FLOWLINE @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	Arcturus 18 FED 6H Flowline
Date Release Discovered	03/27/2025
Surface Owner	Private

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	8,597
What is the estimated number of samples that will be gathered	45
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/20/2025
Time sampling will commence	09:03 AM
Please provide any information necessary for observers to contact samplers	Please contact Oluwale Aderinto @ 575-617-1363
Please provide any information necessary for navigation to sampling site	32.664030, -103.901092

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Santa Fe, NM 87505

CONDITIONS

Action 460076

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460076
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/8/2025

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QUESTIONS

Action 460078

**QUESTIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460078
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2508641982
Incident Name	NAPP2508641982 ARCTURUS 18 FED 6H FLOWLINE @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved

Location of Release Source	
Site Name	Arcturus 18 FED 6H Flowline
Date Release Discovered	03/27/2025
Surface Owner	Private

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	8,597
What is the estimated number of samples that will be gathered	45
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/21/2025
Time sampling will commence	09:30 AM
Please provide any information necessary for observers to contact samplers	Please contact Oluwale Aderinto @ 575-617-1363
Please provide any information necessary for navigation to sampling site	32.664030, -103.901092

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CONDITIONS

Action 460078

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 460078
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	5/8/2025



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QUESTIONS

Action 490944

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2508641982
Incident Name	NAPP2508641982 ARCTURUS 18 FED 6H FLOWLINE @ 0
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	ARCTURUS 18 FED 6H FLOWLINE
Date Release Discovered	03/27/2025
Surface Owner	Private

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	Cause: Equipment Failure   Flow Line - Production   Crude Oil   Released: 3 BBL   Recovered: 0 BBL   Lost: 3 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Flow Line - Production   Produced Water   Released: 12 BBL   Recovered: 0 BBL   Lost: 12 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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QUESTIONS, Page 2

Action 490944

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
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	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 07/31/2025
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QUESTIONS, Page 3

Action 490944

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**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 51 and 75 (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
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1 and 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
<i>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.</i>	
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)	16900
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	38240
GRO+DRO (EPA SW-846 Method 8015M)	27440
BTEX (EPA SW-846 Method 8021B or 8260B)	123
Benzene (EPA SW-846 Method 8021B or 8260B)	26

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	05/15/2025
On what date will (or did) the final sampling or liner inspection occur	05/21/2025
On what date will (or was) the remediation complete(d)	05/21/2025
What is the estimated surface area (in square feet) that will be reclaimed	8597
What is the estimated volume (in cubic yards) that will be reclaimed	455
What is the estimated surface area (in square feet) that will be remediated	8597
What is the estimated volume (in cubic yards) that will be remediated	455

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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QUESTIONS, Page 4

Action 490944

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>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.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> 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.
<i>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>	
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: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 07/31/2025
<i>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.</i>	

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QUESTIONS, Page 5  
  
Action 490944

QUESTIONS (continued)

Operator:  DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:  6137
	Action Number:  490944
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
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, Page 6

Action 490944

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	460078
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/21/2025
What was the (estimated) number of samples that were to be gathered	45
What was the sampling surface area in square feet	8597

**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	8597
What was the total volume (cubic yards) remediated	455
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	8597
What was the total volume (in cubic yards) reclaimed	455
Summarize any additional remediation activities not included by answers (above)	Remediation Complete

*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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 07/31/2025
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QUESTIONS, Page 7

Action 490944

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	8597
What was the total volume of replacement material (in cubic yards) for this site	455
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a 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.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	09/25/2026
Summarize any additional reclamation activities not included by answers (above)	Reclamation Complete
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
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: James Raley Title: EHS Professional Email: jim.ralej@dmn.com Date: 07/31/2025



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QUESTIONS, Page 8  
  
Action 490944

QUESTIONS (continued)

Operator:  DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:  6137
	Action Number:  490944
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

<b>Revegetation Report</b>	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 490944

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 490944
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
nvez	None	8/19/2025