



BETELGEUSE 19 FEDERAL #6H

Incident ID nAPP2427725929

PREPARED BY:
PIMA ENVIRONMENTAL SERVICES, LLC

PREPARED FOR:
DEVON ENERGY PRODUCTION CO, LP

Remediation Plan Report

November 20, 2024

NMOCD District 2
811 S. First Street
Artesia, NM 88210

Bureau of Land Management
620 E Green St.
Carlsbad, NM 88220

Re: Remediation Plan Report
Betelgeuse 19 Federal #6H
API # 30-015-42031
NMOCD Incident ID nAPP2427725929
ULSTR - E - 20 - 19S - 31E 1699 FNL 265 FWL Eddy County, NM
GPS Coordinates: Latitude 32.6484909 Longitude -103.8992157

This crude oil release was discovered by the operator on October 2, 2024. The initial notification of release was submitted and approved on October 3, 2024 (OCD Online: Permitting - Application ID 389478). The initial C-141 form was submitted and approved on October 9, 2024 (OCD Online: Permitting - Application ID 391130). This incident was assigned Incident ID nAPP2427725929 by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Betelgeuse 19 Federal #6H (Betelgeuse) is located approximately twelve (12) miles southeast of Loco Hills, NM. This release area is in Unit E, Section 20, Township 19S, Range 31E, Latitude 32.6484909 Longitude -103.8992157, Eddy County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology in this area is Eolian and piedmont deposits. Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits (Appendix B). The soil in this area is made up of Kermit-Berino fine sands, 0 to 3 percent slopes, according to the United States Department of Agriculture Natural Resources Conservation Service soil survey. The drainage class in this area is excessively drained (Appendix B). There is a medium potential for karst geology to be present around the Betelgeuse (Figure 3). Reference Figure 2 for a Topographic Map.

Based on the well water data from the New Mexico Office of the State Engineer, the depth to the nearest groundwater in this vicinity measures greater than 55 feet below grade surface (bgs). This information is based on OSE CP-01943-POD1 which was drilled April 6, 2023, and is located approximately 120 feet northwest of this release area. Conversely, as per the United States Geological Survey well water data the nearest groundwater depth in this region is recorded at 119 feet bgs, from well USGS 3233730103524701 19S.31E.28.334133 with the last gauge being conducted in 1994. This well is situated approximately 1.9 miles southwest of the Betelgeuse release area. The nearest surface water body is Hackberry Lake approximately 2 miles southwest of this release area. For detailed references to Water Surveys and Water-Related Maps, please refer to Appendix A. The closure criteria for this area will be classified under the 51-100-foot depth to groundwater section of Table 1 19.15.29.12 NMAC due to CP-01943-POD1.

Release Information

nAPP2427725929: On October 2, 2024, Tubing flowline cracked at wellhead. 11 bbls oil spilled onto pad. Recovered volumes not available at notification.

Site Assessment and Delineation Activities

On October 11 & 12, 2024, Pima Environmental mobilized personnel to the site to collect soil samples from within and around the edges of the release area for vertical and horizontal delineation. Forty (40) discrete samples were collected from 8 different sample points within the release area for vertical delineation. These samples were collected from depth intervals of surface, 1', 2', 3', and 4' bgs. Twenty-five (25) discrete samples were collected from 5 different sample points from around the edges of the release area for the purpose of horizontal delineation. These samples were collected from depths of surface, 1', 2', 3', and 4' bgs from each sample point. Two (2) samples were collected from 2 different points in the pasture to serve as background samples.

A total of sixty-seven (67) samples were put on ice, jarred, and delivered to Envirotech Analytical Laboratories for official analysis of all constituents listed in Table 1 19.15.29.12 NMAC. A 48-Hour Sampling Notification was submitted by Devon

on October 9, 2024, and can be referenced in Appendix C (OCD Online: Permitting – Application ID 391388).

On October 23, 2024, Pima personnel returned to the site to complete vertical delineation of all sample points except S6 which has been delineated. A total of seven (7) discrete samples were collected from the S1, S2, S3, S4, S5, S7, and S8 sample points from a depth of 5' bgs. All samples were placed on ice, jarred, then delivered to Envirotech Analytical Laboratories for official analysis of all constituents listed in Table 1 19.15.29.12 NMAC.

All sample results can be found in the Data Tables in Figure 5. A corresponding Delineation Map can be found in Figure 4. Complete laboratory reports can be found in Appendix E. Photographic Documentation can be referenced in Appendix D.

Remediation Activities

On October 31, 2024, the Devon construction department and Pima Environmental mobilized personnel and equipment to the site to begin remediation activities. A 200-square-foot area was excavated around the S4 sample point to a depth of 1.5' bgs. This yielded approximately 11 cubic yards of contaminated soil. The remainder of the release area was back dragged and blended with the surrounding pad surface. The contaminated soil was disposed of at an NMOCD-approved disposal facility. Clean, like material was brought to the location to be used for backfilling. An Excavation Map can be referenced in Figure 6.

On November 4, 2024, Pima returned to the site to collect confirmation samples of the excavated area after Devon had submitted a 48-hour notification of sampling event to the NMOCD. One (1) 5-point composite sample was collected from the base of the excavation, and one (1) 5-point composite sample was collected from the walls of the excavation. These samples were put on ice, jarred, then delivered to Envirotech Analytical Laboratories for official analysis of all constituents listed in Table 1 19.15.29.12 NMAC. The results of this sampling event can be seen in the Data Tables in Figure 5. A Confirmation Sample Map is included for reference in Figure 7.

Based on the laboratory reports provided, the contamination levels are under the regulatory limits as per the 51-100-foot depth to groundwater section of Table 1 19.15.29.12 NMAC.

Remediation Closure Report Denied

Summary:

jburdine (11/19/2024), Remediation closure report denied. The responsible party shall remediate the impacted surface area of a release not occurring on a lined, bermed or otherwise contained exploration, development, production or storage site to meet the standards of Table I of 19.15.29.12 NMAC or other applicable remediation standards and restore and reclaim the area pursuant to 19.15.29.13 NMAC

jburdine (11/19/2024), Operator failed to remediate following a division approved remediation plan. Blending of impacted soils is not an approved method.

jburdine (11/19/2024), Operator did not collect confirmation closure samples of the release/impacted area "to include" any areas that are wet or discolored. Delineation samples are not confirmation samples. Alternately, without division approval, the responsible party may elect to perform a composite and grab sample plan of the remediated area where each composite sample is not representative of more than 200 square feet per NMAC 19.15.29.12.D.1.c. Per this requirement Operator failed to submit the required amount of samples for the impacted area footprint.

jburdine (11/19/2024), Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and the OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC. C-141 sampling notification stated sampling would take place after 11am however sampling was completed at 8am.

jburdine (11/19/2024), Operator must submit a remediation plan to OCD permitting that includes all the required attachments pursuant to 19.15.29.12 NMAC. To include a remediation sampling plan. The remediation plan is due to the division no later than January 3, 2025.

Countermeasures to Denial

Devon proposes the following remediation plan to counter the previous denial:

1. Perform a scrape of all wet, discolored areas outside of the S4 area that has already been remediated. The area should be scraped to a depth of approximately 6-8" bgs or until all wet, discolored soil areas have been removed.
2. The area of concern measures approximately 2,295 square feet and will be scraped to a depth of approximately 8" bgs. The volume of soil to be scraped calculates to approximately 60 cubic yards.
3. A 48-Hour notification of sampling event will be submitted for the confirmation sampling of the scraped area. 5-point composite samples will be collected from the base and wall of the scraped area. Twelve samples will be collected from the base and 4 samples will be collected from the walls of the scraped area.
4. All samples will be put on ice, prepared for delivery, then delivered to Envirotech Analytical Laboratories for official analysis of all constituents listed in Table 1 19.15.29.12 NMAC. A Proposed Sampling-Excavation Map can be found in Figure 8.
5. If all sample results are reported to be under the regulatory limits of the 51-100-foot depth to groundwater section of Table 1, the scraped area will be backfilled and repacked for normal day-to-day traffic.
6. If sample results show that contamination above the regulatory limits of the 51-100-foot depth to groundwater section of Table 1 still exists, the area(s) of concern will be further remediated then steps 3 and 4 will be repeated.
7. After all samples have been reported to be under the regulatory limits of Table 1, a final remediation closure report will be drafted and submitted to the Portal for review/approval.

Devon has complied with the applicable requirements set forth in 19.15.29.12 NMAC and requests that this remediation plan report for incident ID nAPP2427725929 be approved.

For questions or additional information, please feel free to contact:

Devon Energy Production – Jim Raley at 575-689-7597 or jim.raley@devon.com.

Pima Environmental Services – Tom Bynum at 580-748-1613 or tom@pimaoil.com.

Attachments

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Delineation Map
- 5- Data Tables
- 6- Excavation Map
- 7- Confirmation Sample Map
- 8- Proposed Sampling-Excavation Map

Appendices:

- Appendix A – Referenced Water Surveys & Water-Related Maps
- Appendix B – Soil Survey & Geological Data
- Appendix C – 48-Hour Notifications
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Reports

Figures:

Location Map

Topographic Map

Karst Map

Delineation Map

Data Tables

Excavation Map

Confirmation Sample Map

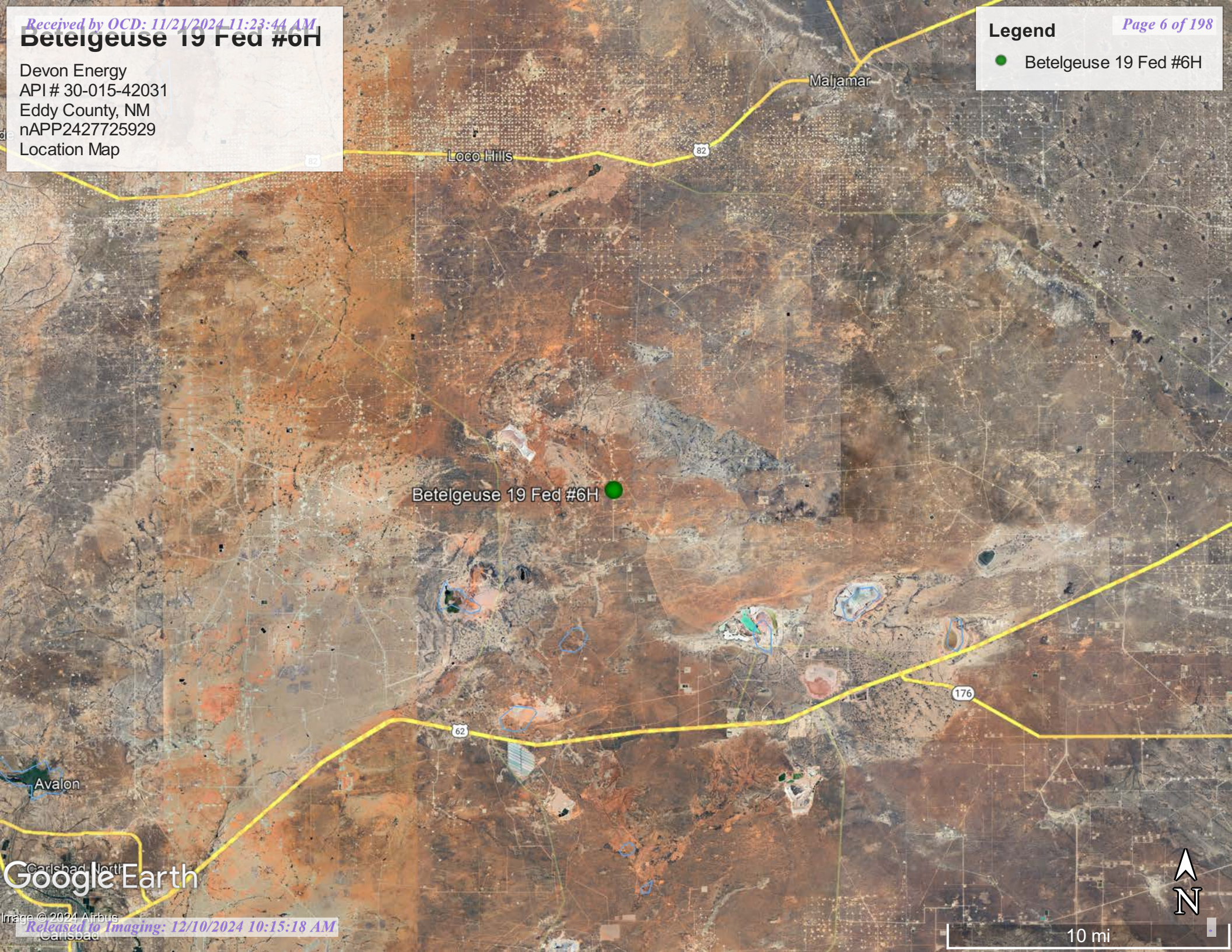
Proposed Sampling-Excavation Map

Betelgeuse 19 Fed #6H

Devon Energy
API # 30-015-42031
Eddy County, NM
nAPP2427725929
Location Map

Legend

● Betelgeuse 19 Fed #6H



Betelgeuse 19 Fed #6H

Avalon

Google Earth



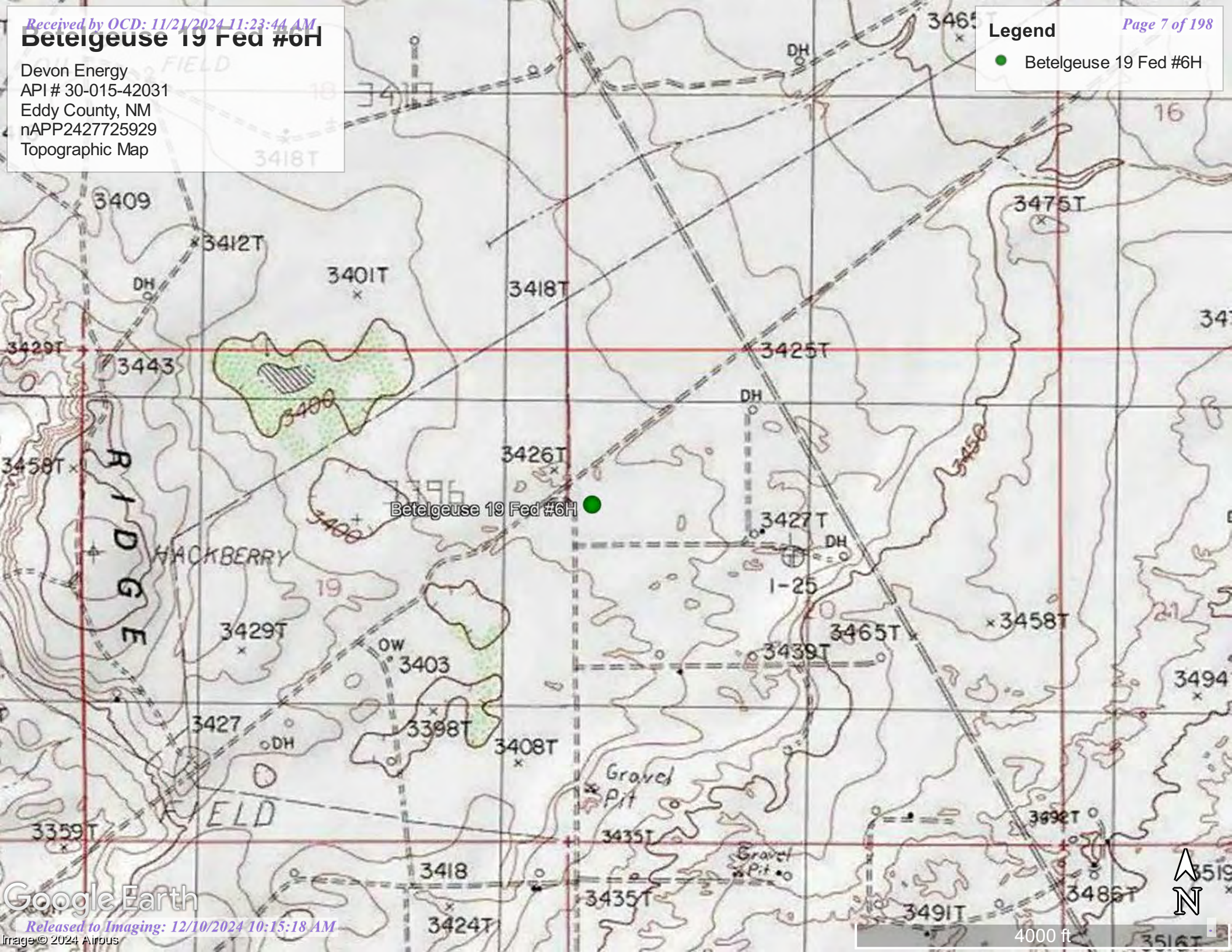
10 mi

Betelgeuse 19 Fed #6H

Devon Energy
API # 30-015-42031
Eddy County, NM
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Topographic Map

Legend

● Betelgeuse 19 Fed #6H



Betelgeuse 19 Fed #6H

Devon Energy
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Eddy County, NM
nAPP2427725929
Karst Map

Legend

- High Karst
- Low Karst
- Medium Karst

Betelgeuse 19 Fed #6H



Betelgeuse 19 Federal #6H

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Eddy County, NM
nAPP2427725929
Delineation Map

Legend

- Horizontal delineation samples
- Release area - 2,495 sqft
- Vertical delineation samples

32.648543, -103.899147

QH1

CS1

Betelgeuse 19 Fed #6H

CS2

QH2

QH5

S3

S4

CS5

CS6

CS7

QH4

CS8

QH3

←BG1 - 10 feet off pad

←BG2 - 10 feet off pad

Google Earth

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Image © 2024 Airbus



40 ft

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 51-100')									
DEVON ENERGY - Betelgeuse 19 Federal #6H - nAPP2427725929									
NM Approved Laboratory Results									
Sample ID	Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	CI mg/kg
S1-Surface	10/11/2024	0'	ND	ND	ND	ND	ND	ND	4630
S1-1'	10/11/2024	1'	ND	ND	ND	ND	ND	ND	4470
S1-2'	10/11/2024	2'	ND	ND	ND	37.2	ND	37.2	1310
S1-3'	10/11/2024	3'	ND	ND	ND	ND	ND	ND	319
S1-4'	10/11/2024	4'	ND	ND	ND	ND	ND	ND	5800
S2-Surface	10/11/2024	0'	ND	ND	ND	ND	ND	ND	4990
S2-1'	10/11/2024	1'	ND	ND	ND	ND	ND	ND	533
S2-2'	10/11/2024	2'	ND	ND	ND	ND	ND	ND	1070
S2-3'	10/11/2024	3'	ND	ND	ND	ND	ND	ND	668
S2-4'	10/11/2024	4'	ND	ND	ND	ND	ND	ND	2470
S3-Surface	10/11/2024	0'	ND	ND	ND	ND	ND	ND	5710
S3-1'	10/11/2024	1'	ND	ND	ND	ND	ND	ND	5680
S3-2'	10/11/2024	2'	ND	ND	ND	108	59.9	167.9	1170
S3-3'	10/11/2024	3'	ND	ND	ND	ND	ND	ND	535
S3-4'	10/11/2024	4'	ND	ND	ND	ND	ND	ND	673
S4-Surface	10/11/2024	0'	ND	ND	ND	ND	ND	ND	4830
S4-1'	10/11/2024	1'	ND	ND	ND	171	98.1	269.1	15500
S4-2'	10/11/2024	2'	ND	ND	ND	ND	ND	ND	267
S4-3'	10/11/2024	3'	ND	ND	ND	ND	ND	ND	611
S4-4'	10/11/2024	4'	ND	ND	ND	ND	ND	ND	679
S5-Surface	10/12/2024	0'	ND	ND	ND	ND	ND	ND	5130
S5-1'	10/12/2024	1'	ND	ND	ND	78.2	ND	78.2	7740
S5-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	581
S5-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	583
S5-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	691
S6-Surface	10/12/2024	0'	ND	ND	ND	241	136	377	8750
S6-1'	10/12/2024	1'	ND	ND	ND	339	182	521	6670
S6-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	1140
S6-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	1680
S6-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	427
S7-Surface	10/12/2024	0'	ND	ND	ND	156	88.1	244.1	9060
S7-1'	10/12/2024	1'	ND	ND	ND	179	104	283	8970
S7-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	1110
S7-3'	10/12/2024	3'	ND	ND	ND	34.9	59.1	94	5650
S7-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	5700
S8-Surface	10/12/2024	0'	ND	ND	ND	250	139	389	8680
S8-1'	10/12/2024	1'	ND	ND	ND	233	136	369	8980
S8-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	1170
S8-3'	10/12/2024	3'	ND	ND	ND	29.2	ND	29.2	4360
S8-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	5660

Sample ID	Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	CI mg/kg
H1-Surface	10/12/2024	0'	ND	ND	ND	ND	ND	ND	ND
H1-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND
H1-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	ND
H1-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	ND
H1-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	ND
H2-Surface	10/12/2024	0'	ND	ND	ND	ND	ND	ND	ND
H2-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND
H2-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	ND
H2-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	ND
H2-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	ND
H3-Surface	10/12/2024	0'	ND	ND	ND	ND	ND	ND	ND
H3-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND
H3-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	ND
H3-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	ND
H3-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	ND
H4-Surface	10/12/2024	0'	ND	ND	ND	ND	ND	ND	ND
H4-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND
H4-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	ND
H4-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	ND
H4-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	ND
H5-Surface	10/12/2024	0'	ND	ND	ND	ND	ND	ND	ND
H5-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND
H5-2'	10/12/2024	2'	ND	ND	ND	ND	ND	ND	ND
H5-3'	10/12/2024	3'	ND	ND	ND	ND	ND	ND	ND
H5-4'	10/12/2024	4'	ND	ND	ND	ND	ND	ND	ND
BG1-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND
BG2-1'	10/12/2024	1'	ND	ND	ND	ND	ND	ND	ND





NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 51-100')									
DEVON ENERGY - Betelgeuse 19 Federal #6H - nAPP2427725929									
NM Approved Laboratory Results									
Sample ID	Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S1-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S2-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S3-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S4-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S5-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S6-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S7-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND
S8-5'	10/23/2024	5'	ND	ND	ND	ND	ND	ND	ND

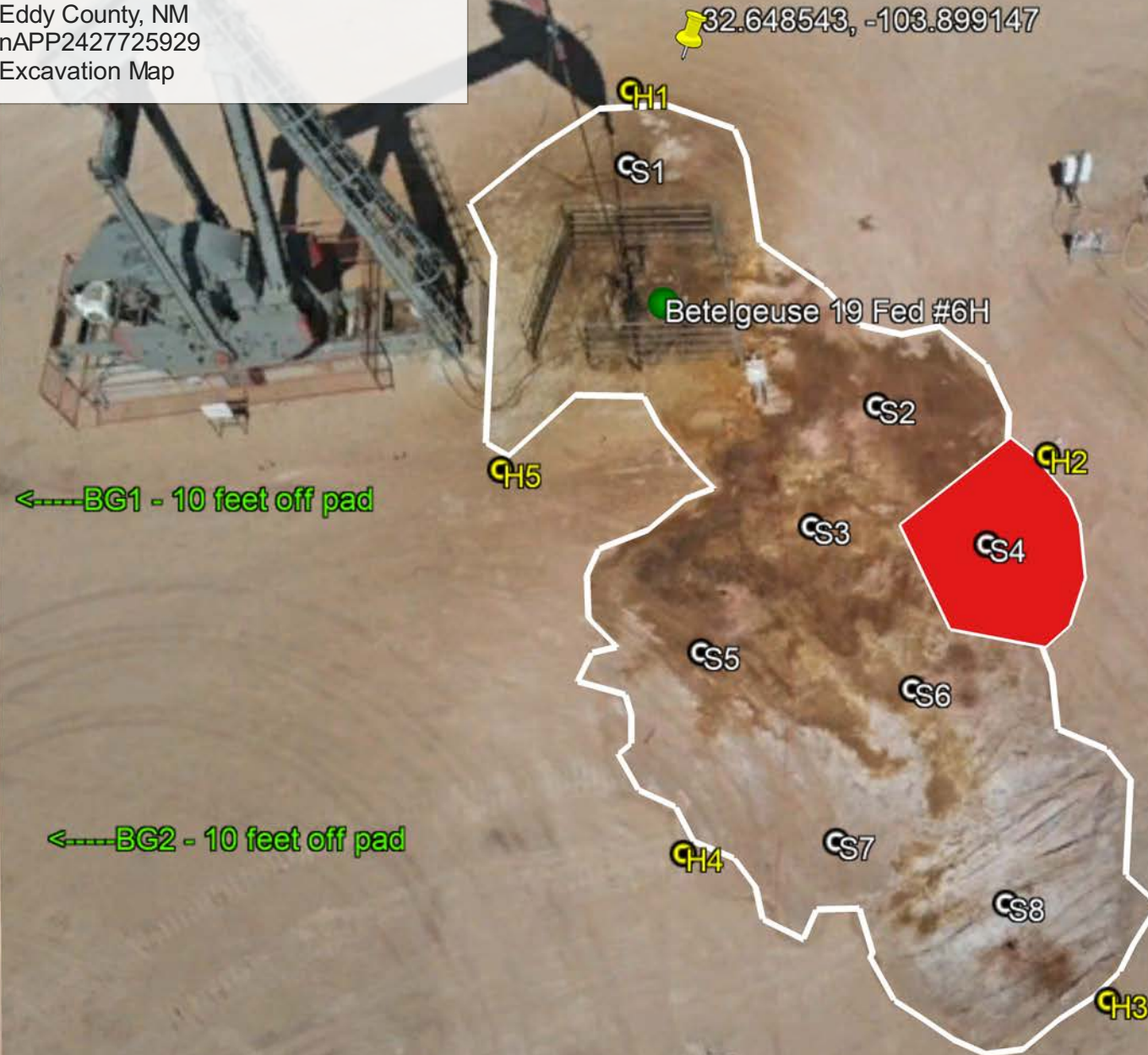
NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 51-100')									
DEVON ENERGY - Betelgeuse 19 Federal #6H - nAPP2427725929									
NM Approved Laboratory Results									
Sample ID	Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
C1-1.5'	11/4/2024	1.5'	ND	ND	ND	736	434	1170	1590
W1-1.5'	11/4/2024	1.5'	ND	ND	ND	ND	ND	ND	614

Betelgeuse 19 Fed #6H

Devon Energy
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Eddy County, NM
nAPP2427725929
Excavation Map

Legend

-  Excavation area - 200 sqft
-  Horizontal delineation samples
-  Release area - 2,495 sqft
-  Vertical delineation samples



Google Earth



Betelgeuse 19 Federal #6H

Devon Energy
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Eddy County, NM
nAPP2427725929
Confirmation Sample Map

Legend

- Confirmation base sample
- Confirmation wall sample
- Excavation area - 200 sqft

Betelgeuse 19 Fed #6H

C1

W1

Google Earth

40 ft

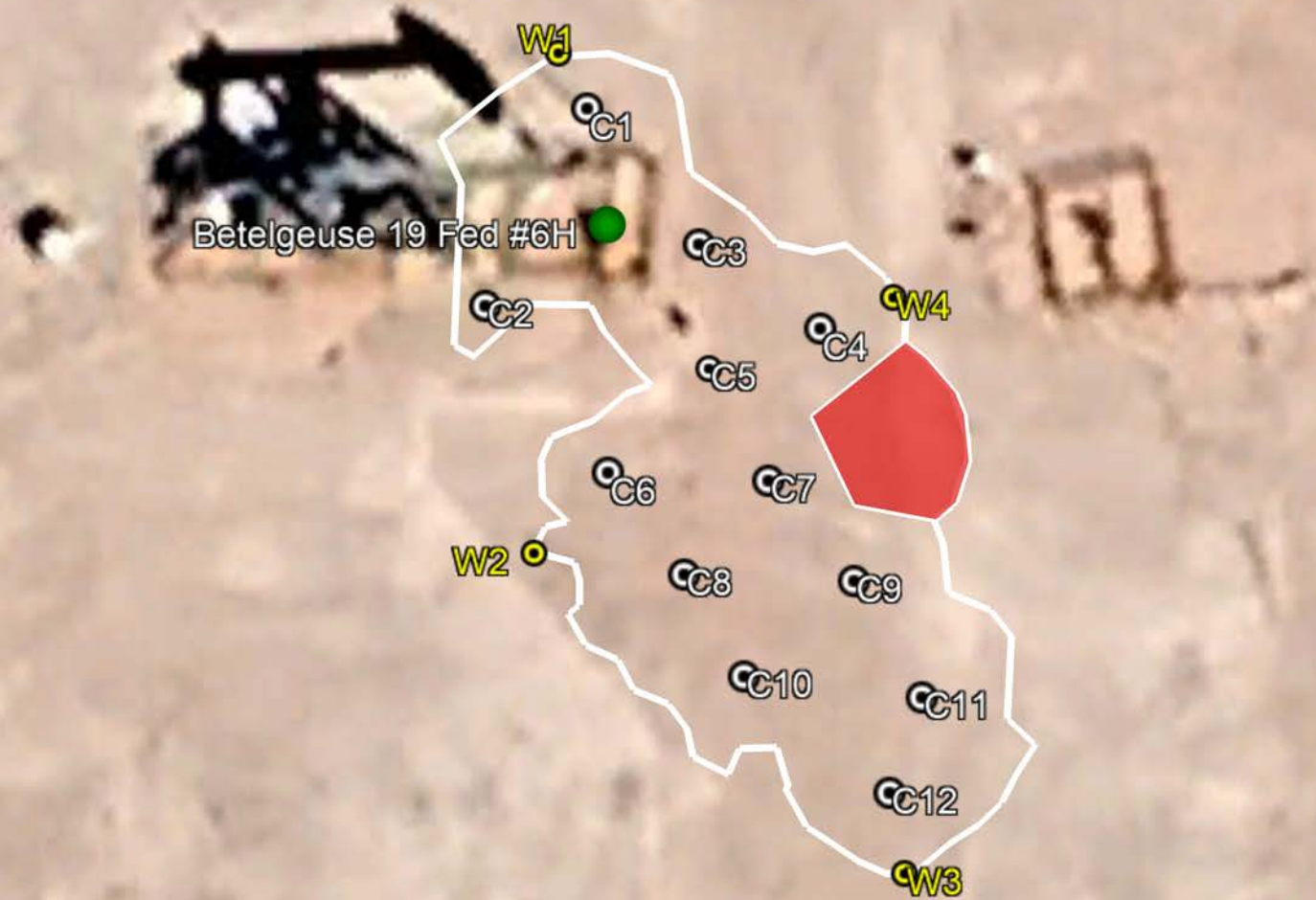


Betelgeuse 19 Fed #6H

Devon Energy
API #30-015-42031
Eddy County, NM
nAPP2427725929
Proposed Sampling-Excavation Map

Legend

- Composite base samples
- Composite wall samples
- Excavation area - 200 sqft
- Release area - 2,495 sqft



Appendix A

Water Surveys

Water Related Maps



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(quarters are smallest to largest)

(meters)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
CP 01943 POD1		CP	ED	NW	SW	NW	20	19S	31E	603217.4	3612883.9		37	55		
CP 01941 POD1		CP	ED	SW	NE	NE	29	19S	31E	604524.2	3611512.8		1856	55	54	1
CP 01907 POD1		CP	ED	SE	NE	NE	18	19S	31E	603017.2	3614737.1		1896			
CP 01985 POD1		CP	ED	NE	SE	NE	17	19S	31E	604666.5	3614438.3		2131	55		
CP 00357 POD1		CP	ED	SE	SE	NW	24	19S	30E	600667.0	3612631.0 *		2582	630		
CP 00725 POD1		CP	ED	NW	SW	SW	28	19S	31E	604906.0	3610473.0 *		2906	231		
CP 00357 POD2		CP	ED	SE	SW	NW	24	19S	30E	600265.0	3612627.0 *		2983	630		

Average Depth to Water: 54 feet

Minimum Depth: 54 feet

Maximum Depth: 54 feet

Record Count: 7

Basin/County Search:

County: ED

UTM Filters (in meters):

Easting: 603240.04

Northing: 3612854.18

Radius: 03000

* UTM location was derived from PLSS - see Help

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



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). CP-1943			
	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 32	MINUTES 38	SECONDS 55.52	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	53	58.0	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW SW NW Sec.20 T19S R31E 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 4/6/2023		DRILLING ENDED 4/9/2023		DEPTH OF COMPLETED WELL (FT) Temporary Well Material	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 4/18/23	
	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	±6.25	Soil Boring	--	--	--	--
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						
				N/A				

FOR OSE INTERNAL USE

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

FILE NO. CP-1943	POD NO. 1	TRN NO. 7410394
LOCATION 19S. 31E. 20 1 31	WELL TAG ID NO. MA	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	4	4	Sand, fine-grained, poorly graded, unconsolidated Brown	Y ✓ N	
	4	25	21	Caliche, with very fine- grained sand, Tan off white	Y ✓ N	
	25	50	25	Sand, fine-grained, poorly graded, consolidated, Brown	Y ✓ N	
	50	55	5	Sand, fine-grained, poorly graded, unconsolidated, Tan	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						

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. 5 Rigel 20 Fed Com 2H	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt	

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:	
 SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Jackie D. Atkins DATE	4/26/23

FOR USE INTERNAL USE

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

FILE NO. CP- 1943	POD NO. 1	TRN NO. 740394
LOCATION 195-31E-20 131	WELL TAG ID NO. M4	PAGE 2 OF 2

OSE POD Location Map



10/9/2024, 5:19:04 PM

GIS WATERS PODs



OSE District Boundary

Connector

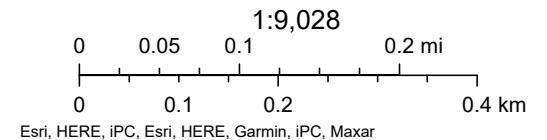


Plugged

NHD Flowlines



Artificial Path





[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- How are we doing? We want to hear from you. Take our quick [survey](#) to tell us what you think.

Groundwater levels for the Nation

i Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

site_no list =

- 323730103524701

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 323730103524701 19S.31E.28.334133

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°37'30", Longitude 103°52'47" NAD27

Land-surface elevation 3,445 feet above NGVD29

The depth of the well is 204.00 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Dockum Group (231DCKM) local aquifer.

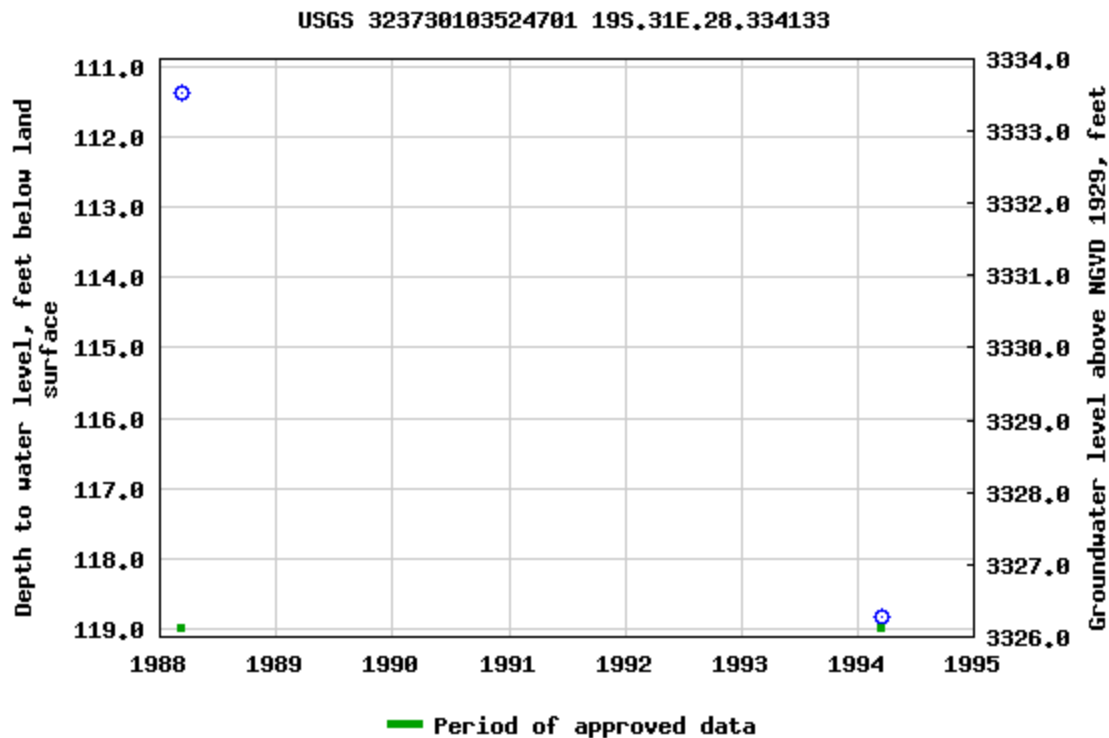
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

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[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



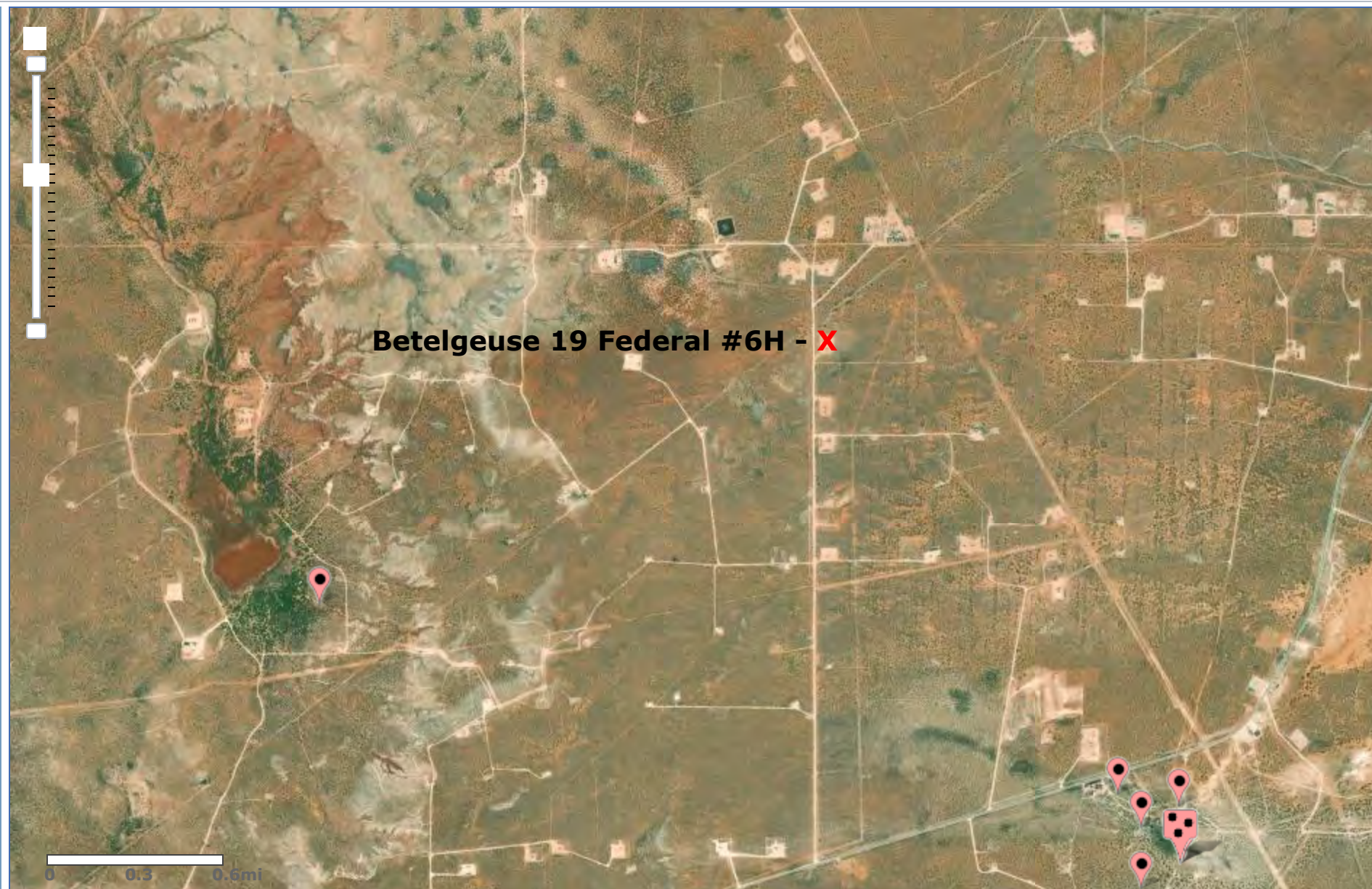
Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2024-10-09 18:26:22 EDT

0.63 0.47 nadww01





National Water Information System: Mapper



Betelgeuse 19 Fed #6H

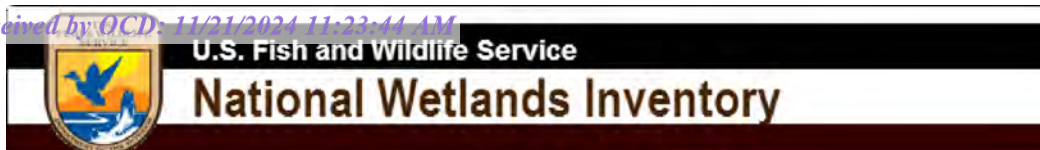
Devon Energy
API # 30-015-42031
Eddy County, NM
nAPP2427725929
Surface Water Map

-  2 Miles
-  Hackberry Lake

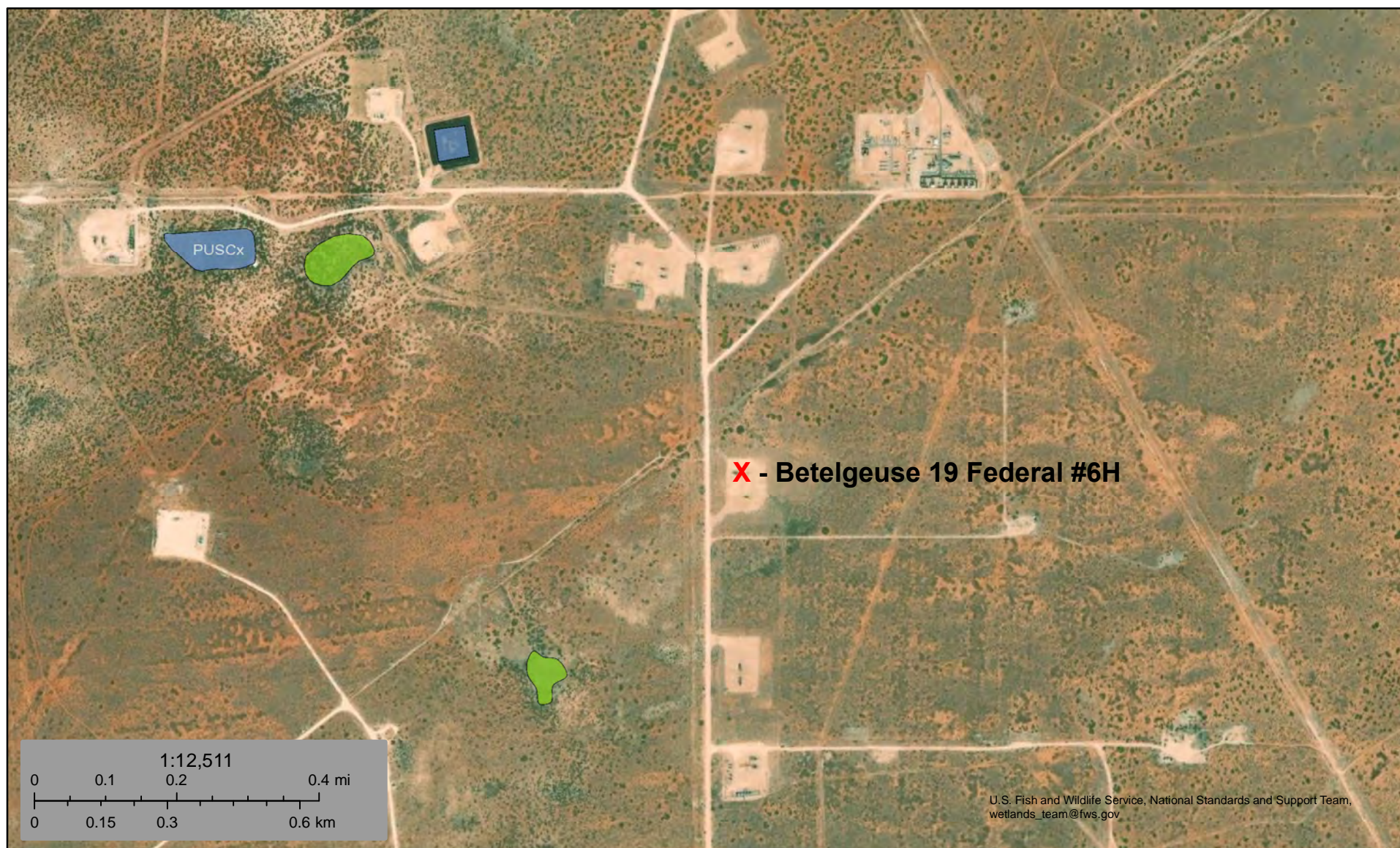
Betelgeuse 19 Fed #6H

Hackberry Lake





Wetlands Map



October 9, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

National Flood Hazard Layer FIRMette



103°54'15"W 32°39'10"N



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

1:6,000

103°53'38"W 32°38'39"N

Released to Imaging: 12/10/2024 10:15:18 AM

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/9/2024 at 6:29 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Appendix B

Soil Survey

Soil Map

Geologic Unit Map

Map Unit Description: Kermit-Berino fine sands, 0 to 3 percent slopes---Eddy Area, New Mexico

Eddy Area, New Mexico

KM—Kermit-Berino fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4q

Elevation: 3,100 to 4,200 feet

Mean annual precipitation: 10 to 14 inches

Mean annual air temperature: 60 to 64 degrees F

Frost-free period: 190 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 50 percent

Berino and similar soils: 35 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kermit

Setting

Landform: Plains, alluvial fans

Landform position (three-dimensional): Talf, rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 7 inches: fine sand

H2 - 7 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: R070BD005NM - Deep Sand

Hydric soil rating: No

Map Unit Description: Kermit-Berino fine sands, 0 to 3 percent slopes---Eddy Area, New Mexico

Description of Berino

Setting

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

Typical profile

H1 - 0 to 17 inches: fine sand
H2 - 17 to 50 inches: fine sandy loam
H3 - 50 to 58 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Active dune land

Percent of map unit: 15 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 20, Sep 3, 2024

Soil Map—Eddy Area, New Mexico



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

10/9/2024
Page 1 of 3

Soil Map—Eddy Area, New Mexico

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 20, Sep 3, 2024

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

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

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




Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KM	Kermit-Berino fine sands, 0 to 3 percent slopes	2.6	100.0%
Totals for Area of Interest		2.6	100.0%

Betelgeuse 19 Fed #6H

Devon Energy
API # 30-015-42031
Eddy County, NM
nAPP2427725929
Geologic Unit Map

Legend

-  Eolian and piedmont deposits
-  Older alluvial deposits of upland plains, piedmont areas, calcic soils, eolian...
-  Quartermaster and Rustler Formations

Betelgeuse 19 Fed #6H



Google Earth



1 mi

Appendix C

48-Hour Notifications

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 391388

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 391388
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2427725929
Incident Name	NAPP2427725929 BETELGEUSE 19 FEDERAL #006H @ 30-015-42031
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Well	[30-015-42031] BETELGEUSE 19 FEDERAL #006H

Location of Release Source	
Site Name	BETELGEUSE 19 FEDERAL #006H
Date Release Discovered	10/02/2024
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	1,488
What is the estimated number of samples that will be gathered	67
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/11/2024
Time sampling will commence	05:00 PM
Please provide any information necessary for observers to contact samplers	Maris Loya (575) 416-0639
Please provide any information necessary for navigation to sampling site	From the intersection of Shugart Road and Lusk Plant Road in Eddy county, travel south/southwest on Shugart Rd for 4.4 miles, turn north on lease road for 1.75 miles, turn northwest into location.

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

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

CONDITIONS

Action 391388

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 391388
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
wdale	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.	10/9/2024

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 397951

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 397951
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2427725929
Incident Name	NAPP2427725929 BETELGEUSE 19 FEDERAL #006H @ 30-015-42031
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Well	[30-015-42031] BETELGEUSE 19 FEDERAL #006H

Location of Release Source

Site Name	BETELGEUSE 19 FEDERAL #006H
Date Release Discovered	10/02/2024
Surface Owner	Federal

Sampling Event General Information*Please answer all the questions in this group.*

What is the sampling surface area in square feet	200
What is the estimated number of samples that will be gathered	2
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/04/2024
Time sampling will commence	11:30 AM
Please provide any information necessary for observers to contact samplers	Maris Loya (575) 416-0639
Please provide any information necessary for navigation to sampling site	32.648543, -103.899147

District I
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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 397951

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 397951
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jraleay	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.	10/31/2024

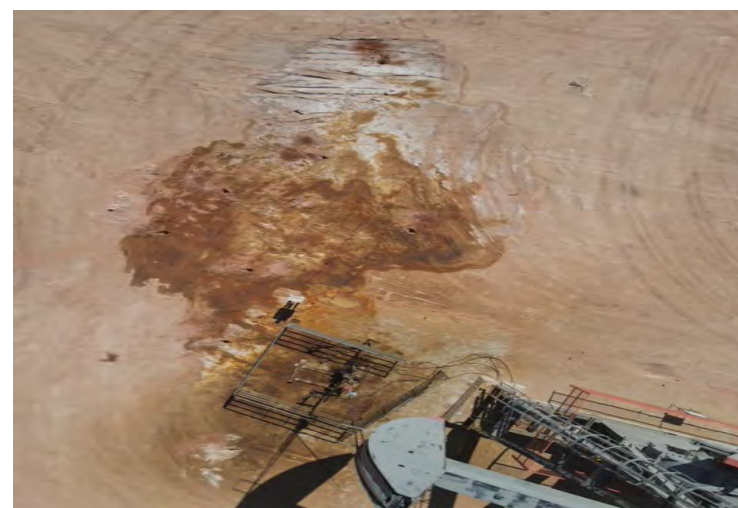
Appendix D

Photographic Documentation

Devon Energy Production, LP Photographic Documentation Betelgeuse 19 Federal #6H – nAPP2427725929



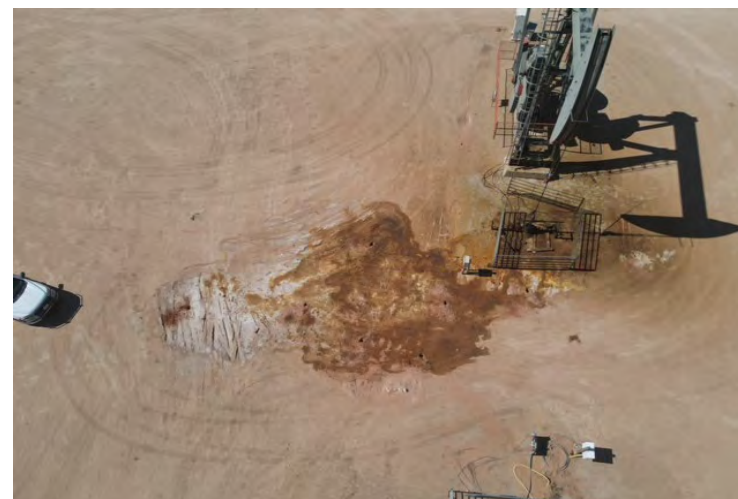
Sign



Release area aerial 1



Release area aerial 2

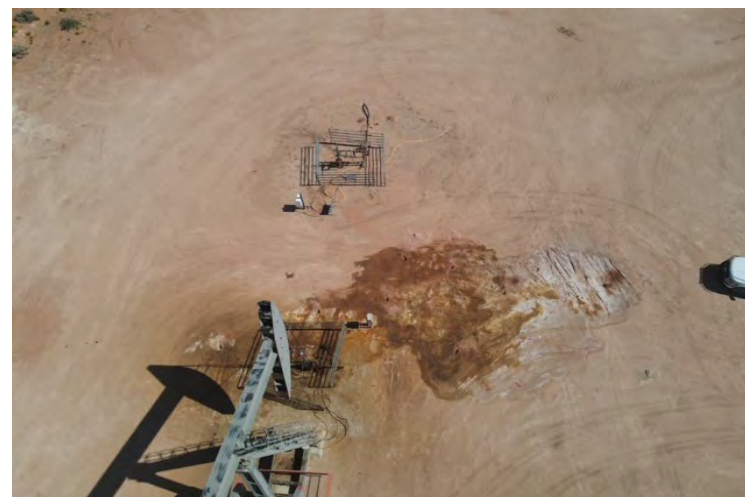


Release area aerial 3

Devon Energy Production, LP
Photographic Documentation
Betelgeuse 19 Federal #6H – nAPP2427725929



Release area aerial 4



Release area aerial 5



Assessment 1



Assessment 2

Devon Energy Production, LP
Photographic Documentation
Betelgeuse 19 Federal #6H – nAPP2427725929



Assessment 3



Assessment 4



Assessment 5



Assessment 6

Devon Energy Production, LP
Photographic Documentation
Betelgeuse 19 Federal #6H – nAPP2427725929



Assessment 7



Assessment 8



Assessment 9



Assessment 10

Devon Energy Production, LP
Photographic Documentation
Betelgeuse 19 Federal #6H – nAPP2427725929



Assessment 11



Assessment 12

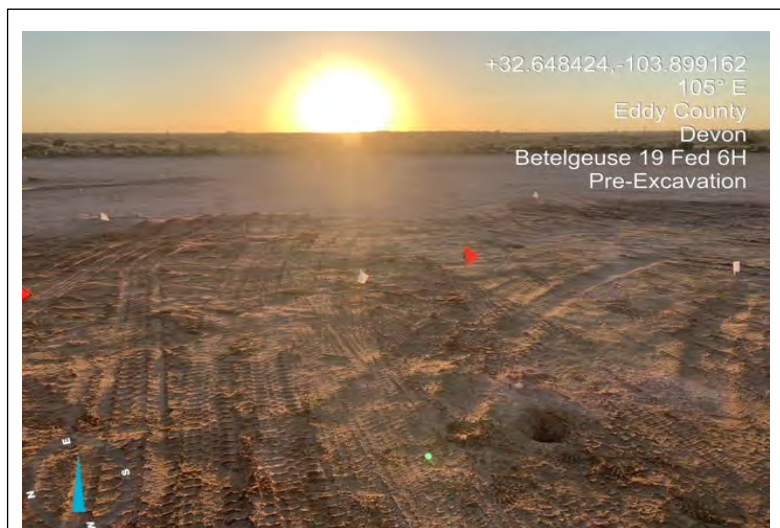


Assessment 13

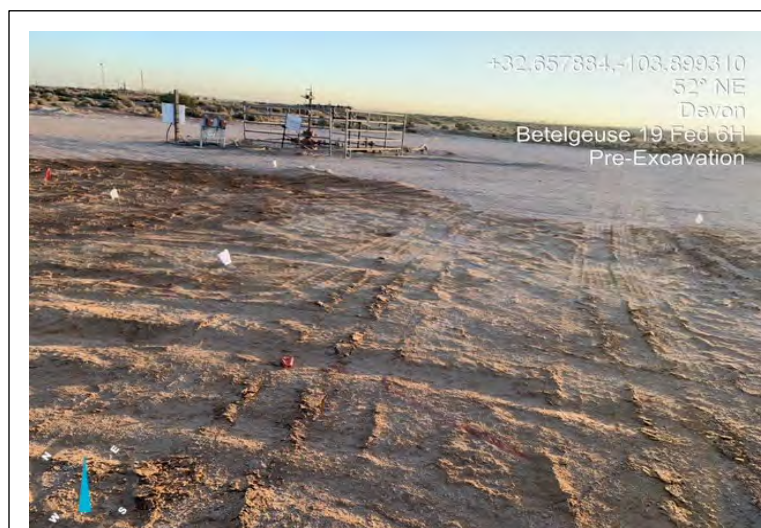
Devon Energy Production, LP

Photographic Documentation

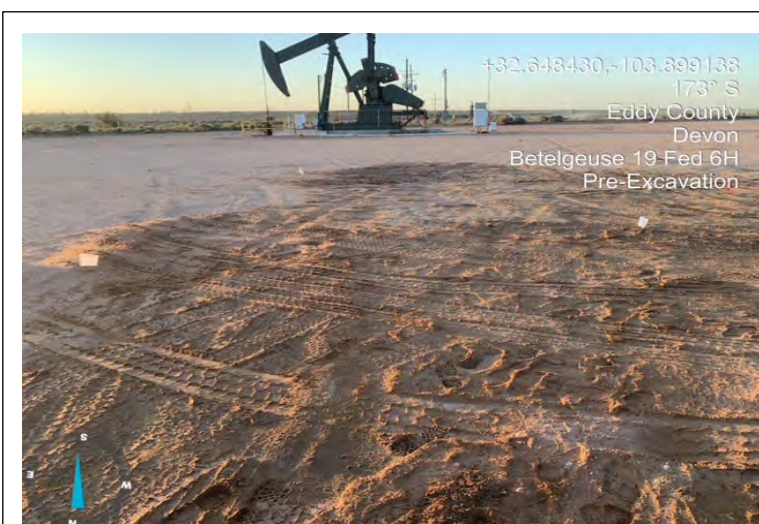
Betelgeuse 19 Federal #6H – nAPP2427725929



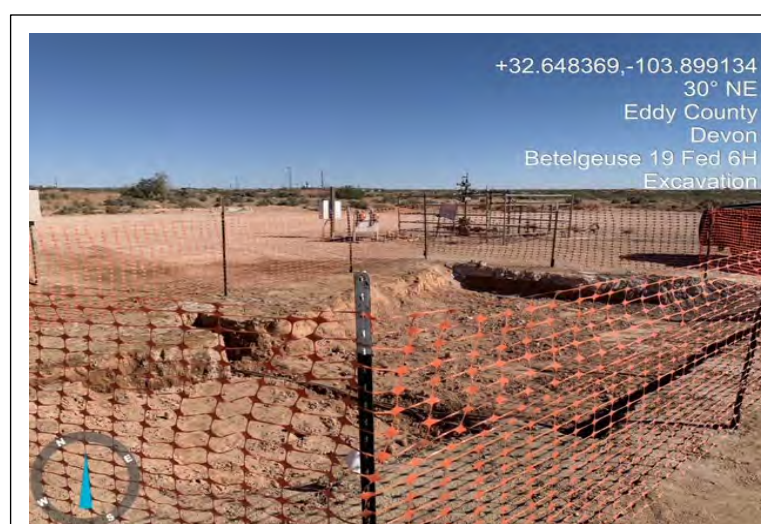
Flagging/Marking 1



Flagging/Marking 2



Flagging/Marking 3



Excavation 1

Devon Energy Production, LP

Photographic Documentation

Betelgeuse 19 Federal #6H – nAPP2427725929



Excavation 2

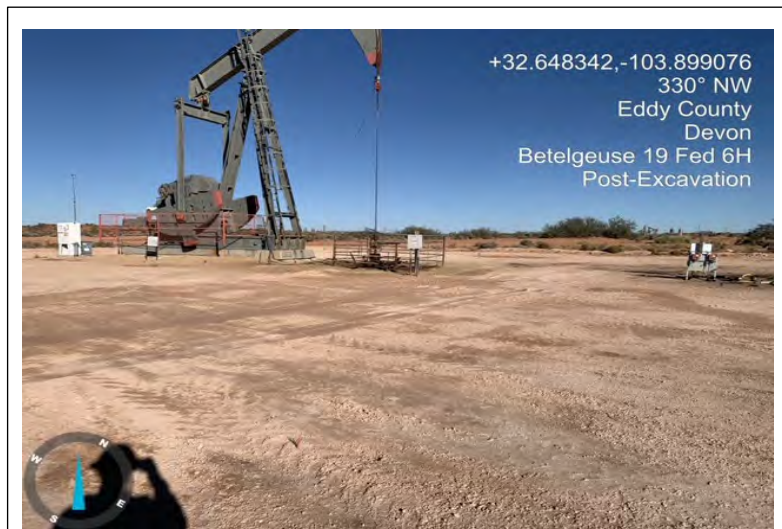


Excavation 3

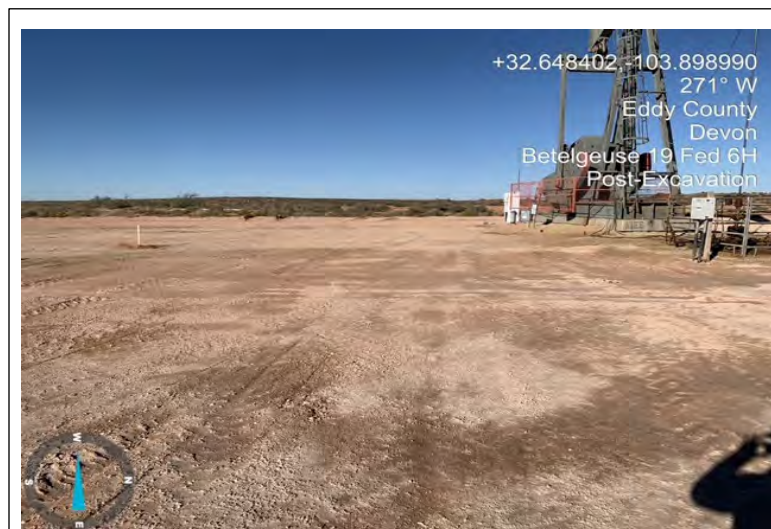


Excavation 4

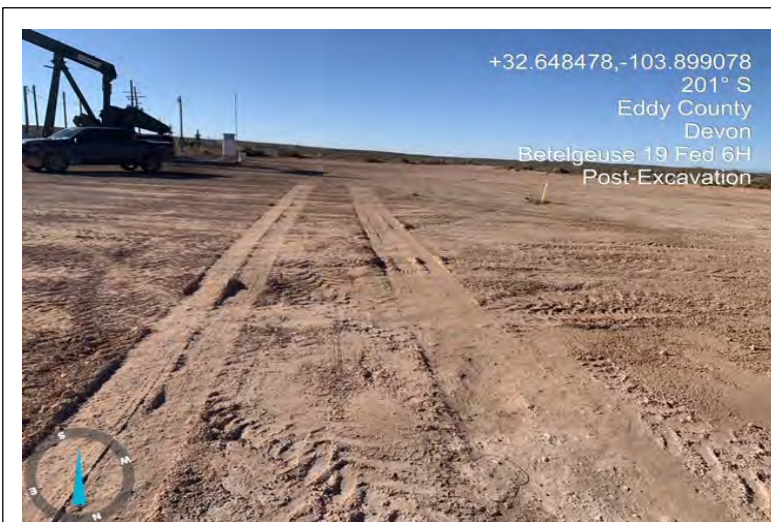
Devon Energy Production, LP
Photographic Documentation
Betelgeuse 19 Federal #6H – nAPP2427725929



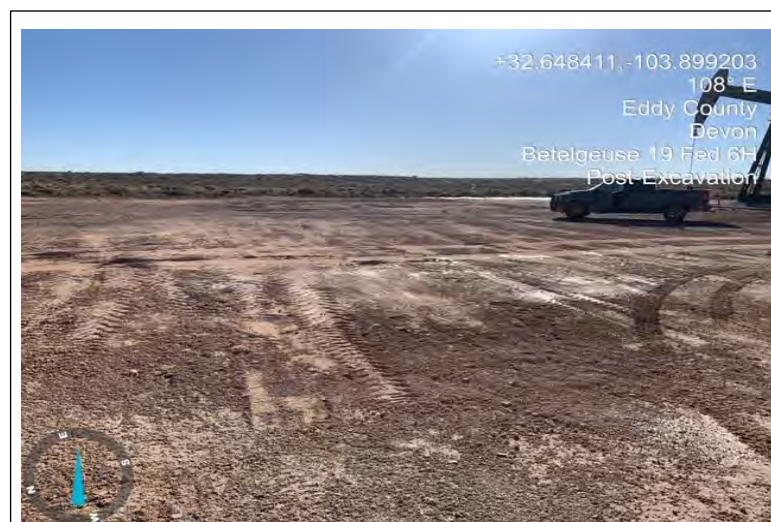
Backfill 1



Backfill 2



Backfill/Backdrag 3



Backfill/Backdrag 4

Appendix E

Laboratory Reports

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Betelgeuse 19 Federal #6H

Work Order: E410159

Job Number: 01058-0007

Received: 10/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/22/24

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.
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Date Reported: 10/22/24



Tom Bynum
PO Box 247
Plains, TX 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Workorder: E410159
Date Received: 10/16/2024 8:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/16/2024 8:00:00AM, under the Project Name: Betelgeuse 19 Federal #6H.

The analytical test results summarized in this report with the Project Name: Betelgeuse 19 Federal #6H 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,

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/24 12:21

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1-Surface	E410159-01A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S1-1'	E410159-02A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S1-2'	E410159-03A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S1-3'	E410159-04A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S1-4'	E410159-05A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S2-Surface	E410159-06A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S2-1'	E410159-07A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S2-2'	E410159-08A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S3-3'	E410159-09A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S2-4'	E410159-10A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S3-Surface	E410159-11A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S3-1'	E410159-12A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S3-2'	E410159-13A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S3-3'	E410159-14A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S3-4'	E410159-15A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S4-Surface	E410159-16A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S4-1'	E410159-17A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S4-2'	E410159-18A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S4-3'	E410159-19A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.
S4-4'	E410159-20A	Soil	10/11/24	10/16/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S1-Surface

E410159-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.6 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	93.4 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>	83.7 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	4630	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S1-1'

E410159-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.3 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.3 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	89.7 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	4470	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S1-2'

E410159-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.2 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.7 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	37.2	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	93.7 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	1310	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S1-3'

E410159-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	86.4 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	319	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/22/2024 12:21:31PM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S1-4'

E410159-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.1 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.4 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	92.0 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	5800	100	5	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S2-Surface

E410159-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.1 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	86.8 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	4990	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S2-1'

E410159-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	98.1 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	533	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 12:21:31PM
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S2-2'

E410159-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.2 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.8 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	98.4 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	1070	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/22/2024 12:21:31PM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S3-3'

E410159-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: 4-Bromochlorobenzene-PID	93.6 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.7 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
Surrogate: n-Nonane	95.2 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	668	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S2-4'

E410159-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.6 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	92.8 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	5470	100	5	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S3-Surface

E410159-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.8 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.1 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>	92.7 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	5710	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 12:21:31PM
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S3-1'

E410159-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	92.3 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	5680	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S3-2'

E410159-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.1 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.4 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	108	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	59.9	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	84.1 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	1170	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S3-3'

E410159-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.5 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.6 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	77.9 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	535	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S3-4'

E410159-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.5 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.9 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	80.9 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	673	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 12:21:31PM
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S4-Surface
E410159-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.9 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	80.3 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	4830	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S4-1'

E410159-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.1 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.3 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	171	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	98.1	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	83.3 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	15500	400	20	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S4-2'

E410159-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	80.0 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	267	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S4-3'

E410159-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	91.4 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.8 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
	89.5 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	611	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 12:21:31PM

S4-4'

E410159-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.5 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: CG		Batch: 2442100	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442109	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
	78.8 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442115	
Chloride	679	20.0	1	10/16/24	10/18/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 12:21:31PM

Volatile Organics by EPA 8021B

Analyst: CG

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 (2442100-BLK1)Prepared: 10/16/24 Analyzed: 10/20/24

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	7.27		8.00		90.8	70-130			

LCS (2442100-BS1)Prepared: 10/16/24 Analyzed: 10/20/24

Benzene	5.15	0.0250	5.00		103	70-130			
Ethylbenzene	4.99	0.0250	5.00		99.8	70-130			
Toluene	5.10	0.0250	5.00		102	70-130			
o-Xylene	4.99	0.0250	5.00		99.8	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.22		8.00		90.2	70-130			

Matrix Spike (2442100-MS1)Source: E410159-04Prepared: 10/16/24 Analyzed: 10/20/24

Benzene	5.05	0.0250	5.00	ND	101	54-133			
Ethylbenzene	4.92	0.0250	5.00	ND	98.4	61-133			
Toluene	5.00	0.0250	5.00	ND	100	61-130			
o-Xylene	4.94	0.0250	5.00	ND	98.8	63-131			
p,m-Xylene	9.99	0.0500	10.0	ND	99.9	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.28		8.00		90.9	70-130			

Matrix Spike Dup (2442100-MSD1)Source: E410159-04Prepared: 10/16/24 Analyzed: 10/20/24

Benzene	5.09	0.0250	5.00	ND	102	54-133	0.806	20	
Ethylbenzene	4.93	0.0250	5.00	ND	98.5	61-133	0.0965	20	
Toluene	5.03	0.0250	5.00	ND	101	61-130	0.558	20	
o-Xylene	4.93	0.0250	5.00	ND	98.7	63-131	0.0932	20	
p,m-Xylene	9.99	0.0500	10.0	ND	99.8	63-131	0.0851	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.5	63-131	0.0878	20	
Surrogate: 4-Bromochlorobenzene-PID	7.34		8.00		91.8	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 12:21:31PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

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 (2442100-BLK1) Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.43		8.00		92.9	70-130			

LCS (2442100-BS2) Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	42.6	20.0	50.0		85.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.56		8.00		94.5	70-130			

Matrix Spike (2442100-MS2) Source: E410159-04 Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	41.0	20.0	50.0	ND	81.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		8.00		94.9	70-130			

Matrix Spike Dup (2442100-MSD2) Source: E410159-04 Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	40.6	20.0	50.0	ND	81.2	70-130	0.852	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.53		8.00		94.1	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 12:21:31PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

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 (2442109-BLK1)					Prepared: 10/16/24 Analyzed: 10/17/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	40.8		50.0		81.7	50-200			

LCS (2442109-BS1)					Prepared: 10/16/24 Analyzed: 10/17/24				
Diesel Range Organics (C10-C28)	244	25.0	250		97.6	38-132			
Surrogate: n-Nonane	43.7		50.0		87.3	50-200			

Matrix Spike (2442109-MS1)					Source: E410159-19		Prepared: 10/16/24 Analyzed: 10/17/24		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	44.4		50.0		88.9	50-200			

Matrix Spike Dup (2442109-MSD1)					Source: E410159-19		Prepared: 10/16/24 Analyzed: 10/17/24		
Diesel Range Organics (C10-C28)	247	25.0	250	ND	98.9	38-132	6.31	20	
Surrogate: n-Nonane	42.9		50.0		85.8	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 12:21:31PM

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 (2442115-BLK1)					Prepared: 10/16/24 Analyzed: 10/18/24				
Chloride	ND	20.0							
LCS (2442115-BS1)					Prepared: 10/16/24 Analyzed: 10/18/24				
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2442115-MS1)					Source: E410159-09		Prepared: 10/16/24 Analyzed: 10/18/24		
Chloride	927	20.0	250	668	104	80-120			
Matrix Spike Dup (2442115-MSD1)					Source: E410159-09		Prepared: 10/16/24 Analyzed: 10/18/24		
Chloride	963	20.0	250	668	118	80-120	3.80	20	

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



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/24 12:21

- 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.



Project Information

Chain of Custody

Page 1 of 7

Client: Pima Environmental Services Project: <u>Betelgeuse 19 Federal #6H</u> Project Manager: <u>Tom Bynum</u> Address: <u>5614 N. Lovington Hwy.</u> City, State, Zip: <u>Hobbs, NM, 88240</u> Phone: <u>806-782-1151</u> Email: <u>tom@pimaoil.com</u> Report due by: _____				Bill To Attention: <u>Devon Energy</u> Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Pima Project # <u>1-379 (nAPP2427725929)</u>				Lab Use Only Lab WO# <u>E410159</u> Job Number <u>01058-0007</u> Analysis and Method DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BGDOC NM BGDOC TX				TAT 1D 2D 3D Standard X State NM CO UT AZ TX X Remarks				EPA Program CWA SDWA RCRA								
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																			
5:00	10/15/24	S	1	S1-Surface	1										X									
5:16				S1-1'	2																			
5:23				S1-2'	3																			
5:29				S1-3'	4																			
5:31				S1-4'	5																			
5:38				S2-Surface	6																			
5:46				S2-1'	7																			
5:51				S2-2'	8																			
5:59				S2-3'	9																			
6:00				S2-4'	10																			
Additional Instructions: Work Order/Billing: 21421826																								
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.														
Relinquished by: (Signature) <u>Karime Adams</u>					Date <u>10/15/24</u> Time <u>2:10</u>					Received by: (Signature) <u>Michelle Gonzales</u>					Date <u>10-15-24</u> Time <u>1410</u>					Lab Use Only Received on ice: <u>Y</u> N T1 T2 T3 AVG Temp °C <u>4</u>				
Relinquished by: (Signature) <u>Michelle Gonzales</u>					Date <u>10-15-24</u> Time <u>1615</u>					Received by: (Signature) <u>[Signature]</u>					Date <u>10-15-24</u> Time <u>1615</u>									
Relinquished by: (Signature) <u>[Signature]</u>					Date <u>10-15-24</u> Time <u>2230</u>					Received by: (Signature) <u>[Signature]</u>					Date <u>10-16-24</u> Time <u>0800</u>									
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA														
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																								



Envirotech Analytical Laboratory

Printed: 10/16/2024 9:19:46AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	10/16/24 08:00	Work Order ID:	E410159
Phone:	(575) 631-6977	Date Logged In:	10/15/24 16:33	Logged In By:	Noe Soto
Email:	tom@pimaoil.com	Due Date:	10/22/24 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: CourrierComments/Resolution

Sampled by is missing on COC by client. Project Betelgeuse 19 Federal 6H has been separated into multiple WOs due to high sample volume, WOs are E410159-E410161.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C 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? No

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:
Tom Bynum



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Betelgeuse 19 Federal #6H

Work Order: E410160

Job Number: 01058-0007

Received: 10/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/23/24

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: 10/23/24



Tom Bynum
PO Box 247
Plains, TX 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Workorder: E410160
Date Received: 10/16/2024 8:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/16/2024 8:00:00AM, under the Project Name: Betelgeuse 19 Federal #6H.

The analytical test results summarized in this report with the Project Name: Betelgeuse 19 Federal #6H 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

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/23/24 11:06

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S5-Surface	E410160-01A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S5-1'	E410160-02A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S5-2'	E410160-03A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S5-3'	E410160-04A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S5-4'	E410160-05A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S6-Surface	E410160-06A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S6-1'	E410160-07A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S6-2'	E410160-08A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S6-3'	E410160-09A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S6-4'	E410160-10A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S7-Surface	E410160-11A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S7-1'	E410160-12A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S7-2'	E410160-13A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S7-3'	E410160-14A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S7-4'	E410160-15A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S8-Surface	E410160-16A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S8-1'	E410160-17A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S8-2'	E410160-18A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S8-3'	E410160-19A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
S8-4'	E410160-20A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S5-Surface

E410160-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
Surrogate: Bromofluorobenzene		92.3 %	70-130	10/16/24	10/19/24	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	10/16/24	10/19/24	
Surrogate: Toluene-d8		104 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
Surrogate: Bromofluorobenzene		92.3 %	70-130	10/16/24	10/19/24	
Surrogate: 1,2-Dichloroethane-d4		99.7 %	70-130	10/16/24	10/19/24	
Surrogate: Toluene-d8		104 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane		106 %	50-200	10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	5130	40.0	2	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S5-1'

E410160-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.3 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.4 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.3 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.4 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	78.2	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	108 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	7740	100	5	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/23/2024 11:06:23AM
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S5-2'

E410160-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.4 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.0 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.4 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.0 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442108	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	110 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442114	
Chloride	581	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S5-3'

E410160-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.2 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	93.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.2 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	93.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	107 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	583	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S5-4'

E410160-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
Surrogate: Bromofluorobenzene	95.1 %	70-130		10/16/24	10/19/24	
Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130		10/16/24	10/19/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
Surrogate: Bromofluorobenzene	95.1 %	70-130		10/16/24	10/19/24	
Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130		10/16/24	10/19/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	104 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	691	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S6-Surface

E410160-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.0 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	96.4 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.0 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	96.4 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	241	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	136	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	108 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	8750	200	10	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S6-1'

E410160-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.5 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.5 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	339	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	182	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	107 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	6670	100	5	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S6-2'

E410160-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	92.2 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	92.2 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	109 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	1140	20.0	1	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S6-3'

E410160-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	91.7 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	97.5 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	91.7 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	97.5 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	109 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	1680	20.0	1	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/23/2024 11:06:23AM
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S6-4'

E410160-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442108	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	105 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442114	
Chloride	427	20.0	1	10/16/24	10/18/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S7-Surface

E410160-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.5 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	93.6 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.5 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	93.6 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	156	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	88.1	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	102 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	9060	200	10	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/23/2024 11:06:23AM
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S7-1'

E410160-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.3 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.3 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442108	
Diesel Range Organics (C10-C28)	179	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	104	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	105 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442114	
Chloride	8970	200	10	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/23/2024 11:06:23AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S7-2'

E410160-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.3 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.2 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.3 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.2 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	103 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	110 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	1110	20.0	1	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/23/2024 11:06:23AM
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S7-3'

E410160-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.3 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	98.1 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.3 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	98.1 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442108	
Diesel Range Organics (C10-C28)	34.9	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	59.1	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	104 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442114	
Chloride	5650	100	5	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S7-4'

E410160-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	93.6 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	93.6 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/22/24	
Surrogate: n-Nonane	102 %	50-200		10/16/24	10/22/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	5700	100	5	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S8-Surface

E410160-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	250	25.0	1	10/16/24	10/23/24	
Oil Range Organics (C28-C36)	139	50.0	1	10/16/24	10/23/24	
Surrogate: n-Nonane	107 %	50-200		10/16/24	10/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	8680	200	10	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S8-1'

E410160-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	91.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	91.9 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	101 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	233	25.0	1	10/16/24	10/23/24	
Oil Range Organics (C28-C36)	136	50.0	1	10/16/24	10/23/24	
Surrogate: n-Nonane	104 %	50-200		10/16/24	10/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	8980	200	10	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/23/2024 11:06:23AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S8-2'

E410160-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	96.0 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442101	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	96.0 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.9 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442108	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/23/24	
Surrogate: n-Nonane	112 %	50-200		10/16/24	10/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442114	
Chloride	1170	20.0	1	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S8-3'

E410160-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	92.4 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.3 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	92.4 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	95.3 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	29.2	25.0	1	10/16/24	10/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/23/24	
Surrogate: n-Nonane	106 %	50-200		10/16/24	10/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	4360	40.0	2	10/16/24	10/19/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/23/2024 11:06:23AM

S8-4'

E410160-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.4 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2442101
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: Bromofluorobenzene	95.4 %	70-130		10/16/24	10/20/24	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		10/16/24	10/20/24	
Surrogate: Toluene-d8	104 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2442108
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/23/24	
Surrogate: n-Nonane	104 %	50-200		10/16/24	10/23/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2442114
Chloride	5660	100	5	10/16/24	10/19/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/23/2024 11:06:23AM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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

Blank (2442101-BLK1) Prepared: 10/16/24 Analyzed: 10/19/24

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	0.478		0.500		95.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.459		0.500		91.7	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

LCS (2442101-BS1) Prepared: 10/16/24 Analyzed: 10/19/24

Benzene	2.31	0.0250	2.50		92.3	70-130			
Ethylbenzene	2.51	0.0250	2.50		100	70-130			
Toluene	2.45	0.0250	2.50		98.0	70-130			
o-Xylene	2.59	0.0250	2.50		104	70-130			
p,m-Xylene	5.22	0.0500	5.00		104	70-130			
Total Xylenes	7.81	0.0250	7.50		104	70-130			
Surrogate: Bromofluorobenzene	0.483		0.500		96.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.482		0.500		96.3	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike (2442101-MS1) Source: E410160-05 Prepared: 10/16/24 Analyzed: 10/19/24

Benzene	2.46	0.0250	2.50	ND	98.3	48-131			
Ethylbenzene	2.64	0.0250	2.50	ND	105	45-135			
Toluene	2.55	0.0250	2.50	ND	102	48-130			
o-Xylene	2.69	0.0250	2.50	ND	108	43-135			
p,m-Xylene	5.38	0.0500	5.00	ND	108	43-135			
Total Xylenes	8.07	0.0250	7.50	ND	108	43-135			
Surrogate: Bromofluorobenzene	0.477		0.500		95.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

Matrix Spike Dup (2442101-MSD1) Source: E410160-05 Prepared: 10/16/24 Analyzed: 10/19/24

Benzene	2.43	0.0250	2.50	ND	97.3	48-131	0.961	23	
Ethylbenzene	2.67	0.0250	2.50	ND	107	45-135	1.34	27	
Toluene	2.61	0.0250	2.50	ND	104	48-130	2.17	24	
o-Xylene	2.72	0.0250	2.50	ND	109	43-135	1.29	27	
p,m-Xylene	5.38	0.0500	5.00	ND	108	43-135	0.0465	27	
Total Xylenes	8.11	0.0250	7.50	ND	108	43-135	0.464	27	
Surrogate: Bromofluorobenzene	0.477		0.500		95.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.7	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/23/2024 11:06:23AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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 (2442101-BLK1)					Prepared: 10/16/24 Analyzed: 10/19/24				
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.478		0.500		95.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.459		0.500		91.7	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

LCS (2442101-BS2)					Prepared: 10/16/24 Analyzed: 10/19/24				
Gasoline Range Organics (C6-C10)	49.8	20.0	50.0		99.5	70-130			
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

Matrix Spike (2442101-MS2)					Source: E410160-05	Prepared: 10/16/24 Analyzed: 10/19/24			
Gasoline Range Organics (C6-C10)	55.6	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	0.497		0.500		99.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.525		0.500		105	70-130			

Matrix Spike Dup (2442101-MSD2)					Source: E410160-05	Prepared: 10/16/24 Analyzed: 10/19/24			
Gasoline Range Organics (C6-C10)	51.7	20.0	50.0	ND	103	70-130	7.27	20	
Surrogate: Bromofluorobenzene	0.486		0.500		97.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.488		0.500		97.6	70-130			
Surrogate: Toluene-d8	0.531		0.500		106	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/23/2024 11:06:23AM

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
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2442108-BLK1)					Prepared: 10/16/24 Analyzed: 10/22/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.2		50.0		90.4	50-200			

LCS (2442108-BS1)					Prepared: 10/16/24 Analyzed: 10/22/24				
Diesel Range Organics (C10-C28)	253	25.0	250		101	38-132			
Surrogate: n-Nonane	52.3		50.0		105	50-200			

Matrix Spike (2442108-MS1)					Source: E410160-11		Prepared: 10/16/24 Analyzed: 10/22/24		
Diesel Range Organics (C10-C28)	473	25.0	250	156	127	38-132			
Surrogate: n-Nonane	53.6		50.0		107	50-200			

Matrix Spike Dup (2442108-MSD1)					Source: E410160-11		Prepared: 10/16/24 Analyzed: 10/22/24		
Diesel Range Organics (C10-C28)	428	25.0	250	156	109	38-132	9.83	20	
Surrogate: n-Nonane	52.7		50.0		105	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/23/2024 11:06:23AM

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 (2442114-BLK1)					Prepared: 10/16/24 Analyzed: 10/18/24				
Chloride	ND	20.0							
LCS (2442114-BS1)					Prepared: 10/16/24 Analyzed: 10/18/24				
Chloride	261	20.0	250		104	90-110			
Matrix Spike (2442114-MS1)					Source: E410160-10		Prepared: 10/16/24 Analyzed: 10/18/24		
Chloride	715	20.0	250	427	115	80-120			
Matrix Spike Dup (2442114-MSD1)					Source: E410160-10		Prepared: 10/16/24 Analyzed: 10/18/24		
Chloride	691	20.0	250	427	106	80-120	3.39	20	

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



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/23/24 11:06

- 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.



Project Information

Chain of Custody

Page 3 of 7

Client: Pima Environmental Services Project: Betelgeuse 19 Federal #6H Project Manager: Tom Bynum Address: 5614 N. Lovington Hwy. City, State, Zip: Hobbs, NM. 88240 Phone: 806-782-1151 Email: tom@pimaoil.com Report due by:					Bill To Attention: Devon Energy Address: City, State, Zip Phone: Email: Pima Project # 1-379 (nAPP2427725929)					Lab Use Only Lab WO# E410160 Job Number 01058-0007					TAT 1D 2D 3D Standard X				EPA Program CWA SDWA RCRA	
					Analysis and Method										State NM CO UT AZ TX X		Remarks			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC	BGDOC TX							
7:03 AM	10/12	S	1	S5-Surface	1							X								
7:12				S5-1'	2															
7:18				S5-2'	3															
7:24				S5-3'	4															
7:36				S5-4'	5															
7:44				S6-Surface	6															
7:49				S6-1'	7															
7:56				S6-2'	8															
8:11				S6-3'	9															
8:20				S6-4'	10															
Additional Instructions: Work Order/Billing: 21421826																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												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.								
Sampled by:																				
Relinquished by: (Signature) <i>Carime Adame</i>		Date 10/15/24		Time 2:10		Received by: (Signature) <i>Michelle Gonzales</i>		Date 10-15-24		Time 1410		Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N								
Relinquished by: (Signature) <i>Michelle Gonzales</i>		Date 10-15-24		Time 1615		Received by: (Signature) <i>[Signature]</i>		Date 10-15-24		Time 1615		T1 T2 T3								
Relinquished by: (Signature) <i>[Signature]</i>		Date 10-15-24		Time 2230		Received by: (Signature) <i>[Signature]</i>		Date 10-16-24		Time 0800		AVG Temp °C 4								
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA								
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				

Project Information

Chain of Custody

Page 4 of 7

Client: Pima Environmental Services					Bill To					Lab Use Only					TAT					EPA Program																																							
Project: Betelgeuse 19 Federal #6H					Attention: Devon Energy					Lab WO# E410160					Job Number 01058-0007					1D 2D 3D Standard			CWA SDWA																																				
Project Manager: Tom Bynum					Address:					Analysis and Method					X					RCRA																																							
Address: 5614 N. Lovington Hwy.					City, State, Zip																																																						
City, State, Zip: Hobbs, NM. 88240					Phone:					DRO/ORO by 8015					GRO/DRO by 8015					BTX by 8021					VOC by 8260					Metals 6010					Chloride 300.0					NM					BGDOC					TX					State				
Phone: 806-782-1151					Email:																																																						
Email: tom@pimaoil.com					Pima Project # 1-379 (nAPP2427725929)					BGDOC					TX					State																																							
Report due by:																																																											
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Remarks																																																					
8:25	10/12	S	1	S7-Surface	11																																																						
8:37				S7-1'	12																																																						
8:44				S7-2'	13																																																						
8:56				S7-3'	14																																																						
9:20				S7-4'	15																																																						
9:28				S8-Surface	16																																																						
9:31				S8-1'	17																																																						
9:38				S8-2'	18																																																						
9:47				S8-3'	19																																																						
9:51				S8-4'	20																																																						
Additional Instructions: Work Order/Billing: 21421826																																																											
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.															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.																																												
Sampled by:															Lab Use Only																																												
Relinquished by: (Signature) Karine Adame					Date 10/15/24					Time 2:10					Received by: (Signature) Michelle Gonzalez					Date 10/15/24					Time 1410					Received on ice: (Y) / N																													
Relinquished by: (Signature) Michelle Gonzalez					Date 10/15/24					Time 1615					Received by: (Signature) [Signature]					Date 10-15-24					Time 1615					T1 T2 T3																													
Relinquished by: (Signature) [Signature]					Date 10-15-24					Time 1230					Received by: (Signature) [Signature]					Date 10-16-24					Time 0800					AVG Temp °C 4																													
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other															Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																																												
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																																																											

Envirotech Analytical Laboratory

Printed: 10/16/2024 9:22:58AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	10/16/24 08:00	Work Order ID:	E410160
Phone:	(575) 631-6977	Date Logged In:	10/15/24 16:34	Logged In By:	Noe Soto
Email:	tom@pimaoil.com	Due Date:	10/22/24 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/Resolution

Sampled by is missing on COC by client. Project Betelgeuse 19 Federal 6H has been separated into multiple WOs due to high sample volume, WOs are E410159-E410161.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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? No

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:
Tom Bynum



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Betelgeuse 19 Federal #6H

Work Order: E410161

Job Number: 01058-0007

Received: 10/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/22/24

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: 10/22/24

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Betelgeuse 19 Federal #6H
Workorder: E410161
Date Received: 10/16/2024 8:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/16/2024 8:00:00AM, under the Project Name: Betelgeuse 19 Federal #6H.

The analytical test results summarized in this report with the Project Name: Betelgeuse 19 Federal #6H 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

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/24 09:03

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
H1-Surface	E410161-01A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H1-1'	E410161-02A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H1-2'	E410161-03A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H1-3'	E410161-04A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H1-4'	E410161-05A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H2-Surface	E410161-06A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H2-1'	E410161-07A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H2-2'	E410161-08A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H2-3'	E410161-09A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H2-4'	E410161-10A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H3-Surface	E410161-11A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H3-1'	E410161-12A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H3-2'	E410161-13A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H3-3'	E410161-14A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H3-4'	E410161-15A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H4-Surface	E410161-16A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H4-1'	E410161-17A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H4-2'	E410161-18A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H4-3'	E410161-19A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H4-4'	E410161-20A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H5-Surface	E410161-21A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H5-1'	E410161-22A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H5-2'	E410161-23A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H5-3'	E410161-24A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
H5-4'	E410161-25A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
BG1-1'	E410161-26A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.
BG2-1'	E410161-27A	Soil	10/12/24	10/16/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H1-Surface

E410161-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.8 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		83.1 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
---	---	-----------------------------------

H1-1'

E410161-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.2 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		83.0 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H1-2'

E410161-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.7 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		85.3 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H1-3'

E410161-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.0 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		85.8 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H1-4'
E410161-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.7 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		84.3 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/22/2024 9:03:51AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

H2-Surface
E410161-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
Surrogate: 4-Bromochlorobenzene-PID	101 %	70-130		10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	88.8 %	70-130		10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
Surrogate: n-Nonane	83.2 %	50-200		10/16/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H2-1'

E410161-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.9 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		84.4 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H2-2'

E410161-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.0 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		87.2 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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H2-3'

E410161-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.5 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		73.9 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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H2-4'

E410161-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.0 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		80.3 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/22/2024 9:03:51AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

H3-Surface

E410161-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.9 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
Surrogate: n-Nonane		57.3 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H3-1'

E410161-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.3 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		61.7 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H3-2'

E410161-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.9 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		84.3 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H3-3'

E410161-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/19/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/19/24	
Toluene	ND	0.0250	1	10/16/24	10/19/24	
o-Xylene	ND	0.0250	1	10/16/24	10/19/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/19/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/19/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/19/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.3 %	70-130	10/16/24	10/19/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		81.6 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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H3-4'

E410161-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.1 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		83.1 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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H4-Surface
E410161-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.1 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		87.3 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H4-1'

E410161-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.5 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		80.7 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H4-2'

E410161-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.4 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		87.7 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H4-3'
E410161-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.3 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		88.1 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H4-4'

E410161-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442103	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.0 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2442107	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/18/24	
<i>Surrogate: n-Nonane</i>						
		93.6 %	50-200	10/16/24	10/18/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2442113	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H5-Surface

E410161-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.6 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
		97.1 %	50-200	10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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H5-1'

E410161-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: 4-Bromochlorobenzene-PID	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.5 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	101 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H5-2'

E410161-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.9 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
		97.8 %	50-200	10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

H5-3'

E410161-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		89.4 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
		100 %	50-200	10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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H5-4'

E410161-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: 4-Bromochlorobenzene-PID	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.0 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	96.1 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Betelgeuse 19 Federal #6H Project Number: 01058-0007 Project Manager: Tom Bynum	Reported: 10/22/2024 9:03:51AM
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BG1-1'
E410161-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
Surrogate: 4-Bromochlorobenzene-PID	102 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.4 %	70-130		10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
Surrogate: n-Nonane	95.8 %	50-200		10/16/24	10/17/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
10/22/2024 9:03:51AM

BG2-1'

E410161-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Benzene	ND	0.0250	1	10/16/24	10/20/24	
Ethylbenzene	ND	0.0250	1	10/16/24	10/20/24	
Toluene	ND	0.0250	1	10/16/24	10/20/24	
o-Xylene	ND	0.0250	1	10/16/24	10/20/24	
p,m-Xylene	ND	0.0500	1	10/16/24	10/20/24	
Total Xylenes	ND	0.0250	1	10/16/24	10/20/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2442116	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/16/24	10/20/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.1 %	70-130	10/16/24	10/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2442106	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/16/24	10/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/16/24	10/17/24	
<i>Surrogate: n-Nonane</i>						
		98.0 %	50-200	10/16/24	10/17/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2442095	
Chloride	ND	20.0	1	10/16/24	10/17/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 9:03:51AM

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 (2442103-BLK1) Prepared: 10/16/24 Analyzed: 10/19/24

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	8.19		8.00		102	70-130			

LCS (2442103-BS1) Prepared: 10/16/24 Analyzed: 10/19/24

Benzene	5.63	0.0250	5.00		113	70-130			
Ethylbenzene	5.43	0.0250	5.00		109	70-130			
Toluene	5.56	0.0250	5.00		111	70-130			
o-Xylene	5.45	0.0250	5.00		109	70-130			
p,m-Xylene	11.0	0.0500	10.0		110	70-130			
Total Xylenes	16.5	0.0250	15.0		110	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.17		8.00		102	70-130			

Matrix Spike (2442103-MS1) Source: E410161-05 Prepared: 10/16/24 Analyzed: 10/19/24

Benzene	5.51	0.0250	5.00	ND	110	54-133			
Ethylbenzene	5.34	0.0250	5.00	ND	107	61-133			
Toluene	5.45	0.0250	5.00	ND	109	61-130			
o-Xylene	5.36	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.9	0.0500	10.0	ND	109	63-131			
Total Xylenes	16.2	0.0250	15.0	ND	108	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.21		8.00		103	70-130			

Matrix Spike Dup (2442103-MSD1) Source: E410161-05 Prepared: 10/16/24 Analyzed: 10/19/24

Benzene	5.66	0.0250	5.00	ND	113	54-133	2.63	20	
Ethylbenzene	5.48	0.0250	5.00	ND	110	61-133	2.60	20	
Toluene	5.59	0.0250	5.00	ND	112	61-130	2.52	20	
o-Xylene	5.52	0.0250	5.00	ND	110	63-131	2.80	20	
p,m-Xylene	11.1	0.0500	10.0	ND	111	63-131	2.65	20	
Total Xylenes	16.7	0.0250	15.0	ND	111	63-131	2.70	20	
Surrogate: 4-Bromochlorobenzene-PID	8.20		8.00		102	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 9:03:51AM

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 (2442116-BLK1) Prepared: 10/16/24 Analyzed: 10/20/24

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	8.14		8.00		102	70-130			

LCS (2442116-BS1) Prepared: 10/16/24 Analyzed: 10/20/24

Benzene	5.15	0.0250	5.00		103	70-130			
Ethylbenzene	4.91	0.0250	5.00		98.1	70-130			
Toluene	5.06	0.0250	5.00		101	70-130			
o-Xylene	4.96	0.0250	5.00		99.3	70-130			
p,m-Xylene	9.94	0.0500	10.0		99.4	70-130			
Total Xylenes	14.9	0.0250	15.0		99.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.20		8.00		102	70-130			

Matrix Spike (2442116-MS1) Source: E410161-25 Prepared: 10/16/24 Analyzed: 10/20/24

Benzene	5.52	0.0250	5.00	ND	110	54-133			
Ethylbenzene	5.32	0.0250	5.00	ND	106	61-133			
Toluene	5.45	0.0250	5.00	ND	109	61-130			
o-Xylene	5.37	0.0250	5.00	ND	107	63-131			
p,m-Xylene	10.8	0.0500	10.0	ND	108	63-131			
Total Xylenes	16.1	0.0250	15.0	ND	108	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.24		8.00		103	70-130			

Matrix Spike Dup (2442116-MSD1) Source: E410161-25 Prepared: 10/16/24 Analyzed: 10/21/24

Benzene	5.33	0.0250	5.00	ND	107	54-133	3.47	20	
Ethylbenzene	5.20	0.0250	5.00	ND	104	61-133	2.28	20	
Toluene	5.29	0.0250	5.00	ND	106	61-130	3.05	20	
o-Xylene	5.21	0.0250	5.00	ND	104	63-131	2.94	20	
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131	1.71	20	
Total Xylenes	15.8	0.0250	15.0	ND	105	63-131	2.12	20	
Surrogate: 4-Bromochlorobenzene-PID	8.10		8.00		101	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/22/2024 9:03:51AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

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 (2442103-BLK1) Prepared: 10/16/24 Analyzed: 10/19/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.07		8.00		88.3	70-130			

LCS (2442103-BS2) Prepared: 10/16/24 Analyzed: 10/19/24

Gasoline Range Organics (C6-C10)	38.8	20.0	50.0		77.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.5	70-130			

Matrix Spike (2442103-MS2) Source: E410161-05 Prepared: 10/16/24 Analyzed: 10/19/24

Gasoline Range Organics (C6-C10)	40.5	20.0	50.0	ND	81.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			

Matrix Spike Dup (2442103-MSD2) Source: E410161-05 Prepared: 10/16/24 Analyzed: 10/19/24

Gasoline Range Organics (C6-C10)	38.7	20.0	50.0	ND	77.4	70-130	4.66	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.27		8.00		90.9	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 10/22/2024 9:03:51AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

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 (2442116-BLK1) Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.18		8.00		89.7	70-130			

LCS (2442116-BS2) Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	42.6	20.0	50.0		85.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

Matrix Spike (2442116-MS2) Source: E410161-25 Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	44.9	20.0	50.0	ND	89.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.24		8.00		90.5	70-130			

Matrix Spike Dup (2442116-MSD2) Source: E410161-25 Prepared: 10/16/24 Analyzed: 10/20/24

Gasoline Range Organics (C6-C10)	40.4	20.0	50.0	ND	80.9	70-130	10.5	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.5	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 9:03:51AM

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 (2442106-BLK1)					Prepared: 10/16/24 Analyzed: 10/17/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.7		50.0		101	50-200			

LCS (2442106-BS1)					Prepared: 10/16/24 Analyzed: 10/17/24				
Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	52.2		50.0		104	50-200			

Matrix Spike (2442106-MS1)					Source: E410161-24		Prepared: 10/16/24 Analyzed: 10/17/24		
Diesel Range Organics (C10-C28)	261	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	53.8		50.0		108	50-200			

Matrix Spike Dup (2442106-MSD1)					Source: E410161-24		Prepared: 10/16/24 Analyzed: 10/17/24		
Diesel Range Organics (C10-C28)	254	25.0	250	ND	102	38-132	2.70	20	
Surrogate: n-Nonane	51.4		50.0		103	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 9:03:51AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

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 (2442107-BLK1)					Prepared: 10/16/24 Analyzed: 10/18/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	43.5		50.0		87.0	50-200			

LCS (2442107-BS1)					Prepared: 10/16/24 Analyzed: 10/18/24				
Diesel Range Organics (C10-C28)	275	25.0	250		110	38-132			
Surrogate: n-Nonane	47.9		50.0		95.9	50-200			

Matrix Spike (2442107-MS1)					Source: E410161-10		Prepared: 10/16/24 Analyzed: 10/18/24		
Diesel Range Organics (C10-C28)	247	25.0	250	ND	98.8	38-132			
Surrogate: n-Nonane	43.9		50.0		87.8	50-200			

Matrix Spike Dup (2442107-MSD1)					Source: E410161-10		Prepared: 10/16/24 Analyzed: 10/18/24		
Diesel Range Organics (C10-C28)	256	25.0	250	ND	102	38-132	3.41	20	
Surrogate: n-Nonane	44.8		50.0		89.6	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 9:03:51AM

Anions by EPA 300.0/9056A

Analyst: IY

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

Blank (2442095-BLK1)					Prepared: 10/16/24 Analyzed: 10/16/24				
Chloride	ND	20.0							
LCS (2442095-BS1)					Prepared: 10/16/24 Analyzed: 10/16/24				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2442095-MS1)					Source: E410154-04		Prepared: 10/16/24 Analyzed: 10/16/24		
Chloride	298	20.0	250	41.7	102	80-120			
Matrix Spike Dup (2442095-MSD1)					Source: E410154-04		Prepared: 10/16/24 Analyzed: 10/16/24		
Chloride	306	20.0	250	41.7	106	80-120	2.56	20	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/2024 9:03:51AM

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 (2442113-BLK1)					Prepared: 10/16/24 Analyzed: 10/17/24				
Chloride	ND	20.0							
LCS (2442113-BS1)					Prepared: 10/16/24 Analyzed: 10/17/24				
Chloride	258	20.0	250		103	90-110			
Matrix Spike (2442113-MS1)					Source: E410161-01		Prepared: 10/16/24 Analyzed: 10/17/24		
Chloride	259	20.0	250	ND	104	80-120			
Matrix Spike Dup (2442113-MSD1)					Source: E410161-01		Prepared: 10/16/24 Analyzed: 10/17/24		
Chloride	259	20.0	250	ND	104	80-120	0.0193	20	

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



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/22/24 09:03

- 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.



Project Information

Chain of Custody

Page 5 of 7

Client: Pima Environmental Services				Bill To		Lab Use Only		TAT				EPA Program			
Project: Betelgeuse 19 Federal #6H				Attention: Devon Energy		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum				Address:		E 410161		01058-0007					X		
Address: 5614 N. Lovington Hwy.				City, State, Zip		Analysis and Method								RCRA	
City, State, Zip Hobbs, NM, 88240				Phone:											
Phone: 806-782-1151				Email:											
Email: tom@pimaoil.com				Pima Project # 1-379 (nAPP2427725929)											
Report due by:															
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM	BGDOC TX	Remarks
10:17	10/12	S	1	H1-Surface	1								X		
10:23				H1-1'	2										
10:29				H1-2'	3										
10:35				H1-3'	4										
10:41				H1-4'	5										
10:47				H2-Surface	6										
10:54				H2-1'	7										
11:17				H2-2'	8										
11:23				H2-3'	9										
11:36				H2-4'	10										

Additional Instructions: Work Order/Billing: 21421826

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

Sampled by: _____

Relinquished by: (Signature) Carime Adame Date 10/15/24 Time 2:10 Received by: (Signature) Michelle Gonzales Date 10-15-24 Time 1410

Relinquished by: (Signature) Michelle Gonzales Date 10-15-24 Time 1615 Received by: (Signature) [Signature] Date 10-15-24 Time 1615

Relinquished by: (Signature) [Signature] Date 10-15-24 Time 2230 Received by: (Signature) [Signature] Date 10-16-24 Time 0800

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

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

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

Project Information

Chain of Custody

Page 6 of 7

Client: Pima Environmental Services				Bill To				Lab Use Only				TAT				EPA Program	
Project: <u>Betelgeuse 19 Federal #6H</u>				Attention: <u>Devon Energy</u>				Lab WO# <u>E4D 161</u>		Job Number <u>01058-0007</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: <u>Tom Bynum</u>				Address:				Analysis and Method									
Address: <u>5614 N. Lovington Hwy.</u>				City, State, Zip				DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0				
City, State, Zip <u>Hobbs, NM. 88240</u>				Phone:													
Phone: <u>806-782-1151</u>				Email:													
Email: <u>tom@pimaoil.com</u>				Pima Project # <u>1-379 (nAPP2427725929)</u>													
Report due by:																	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number												
11:44	10/12	S	1	H3-Surface	11										X		
11:56				H3-1'	12												
12:04				H3-2'	13												
12:16				H3-3'	14												
12:21				H3-4'	15												
12:34				H4-Surface	16												
12:44				H4-1'	17												
12:56				H4-2'	18												
1:03				H4-3'	19												
1:16				H4-4'	20												
Additional Instructions: Work Order/Billing: 21421826																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												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.					
Sampled by:												Lab Use Only					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Received on ice: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
<u>Kurime Adame</u>		<u>10/15/24</u>		<u>2:10</u>		<u>Michelle Gonzales</u>		<u>10/15/24</u>		<u>1410</u>							
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 _____ T2 _____ T3 _____					
<u>Michelle Gonzales</u>		<u>10/15/24</u>		<u>1615</u>		<u>Andrew Mero</u>		<u>10/15/24</u>		<u>1615</u>							
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>					
<u>Andrew Mero</u>		<u>10/15/24</u>		<u>2230</u>		<u>[Signature]</u>		<u>10/16/24</u>		<u>0800</u>							
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																	



Envirotech Analytical Laboratory

Printed: 10/16/2024 9:27:49AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	10/16/24 08:00	Work Order ID:	E410161
Phone:	(575) 631-6977	Date Logged In:	10/15/24 16:35	Logged In By:	Noe Soto
Email:	tom@pimaoil.com	Due Date:	10/22/24 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/Resolution

Sampled by is missing on COC by client. Project Betelgeuse 19 Federal 6H has been separated into multiple WOs due to high sample volume, WOs are E410159-E410161.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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? No

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:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Betelgeuse 19 Federal #6H

Work Order: E410332

Job Number: 01058-0007

Received: 10/28/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/1/24

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: 11/1/24

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Betelgeuse 19 Federal #6H
Workorder: E410332
Date Received: 10/28/2024 8:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/28/2024 8:00:00AM, under the Project Name: Betelgeuse 19 Federal #6H.

The analytical test results summarized in this report with the Project Name: Betelgeuse 19 Federal #6H 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

Raina Schwanz
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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 11/01/24 12:35
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1-5'	E410332-01A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.
S2-5'	E410332-02A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.
S3-5'	E410332-03A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.
S4-5'	E410332-04A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.
S5-5'	E410332-05A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.
S7-5'	E410332-06A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.
S8-5'	E410332-07A	Soil	10/23/24	10/28/24	Glass Jar, 2 oz.

Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S1-5'

E410332-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Benzene	ND	0.0250	1	10/26/24	10/29/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/29/24	
Toluene	ND	0.0250	1	10/26/24	10/29/24	
o-Xylene	ND	0.0250	1	10/26/24	10/29/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/29/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/29/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10/26/24	10/29/24	
Surrogate: 1,2-Dichloroethane-d4		95.5 %	70-130	10/26/24	10/29/24	
Surrogate: Toluene-d8		110 %	70-130	10/26/24	10/29/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/29/24	
Surrogate: Bromofluorobenzene		116 %	70-130	10/26/24	10/29/24	
Surrogate: 1,2-Dichloroethane-d4		95.5 %	70-130	10/26/24	10/29/24	
Surrogate: Toluene-d8		110 %	70-130	10/26/24	10/29/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2444008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		97.7 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2444058
Chloride	ND	20.0	1	10/29/24	10/30/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S2-5'

E410332-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Benzene	ND	0.0250	1	10/26/24	10/30/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/30/24	
Toluene	ND	0.0250	1	10/26/24	10/30/24	
o-Xylene	ND	0.0250	1	10/26/24	10/30/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/30/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		94.9 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		111 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		94.9 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		111 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2444008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		99.6 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2444058
Chloride	ND	20.0	1	10/29/24	10/30/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S3-5'

E410332-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Benzene	ND	0.0250	1	10/26/24	10/30/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/30/24	
Toluene	ND	0.0250	1	10/26/24	10/30/24	
o-Xylene	ND	0.0250	1	10/26/24	10/30/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/30/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		114 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		111 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		114 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		111 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2444008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		97.3 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2444058
Chloride	ND	20.0	1	10/29/24	10/30/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S4-5'

E410332-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Benzene	ND	0.0250	1	10/26/24	10/30/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/30/24	
Toluene	ND	0.0250	1	10/26/24	10/30/24	
o-Xylene	ND	0.0250	1	10/26/24	10/30/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/30/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		114 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		111 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		114 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		93.7 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		111 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2444008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		101 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2444058
Chloride	ND	20.0	1	10/29/24	10/30/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S5-5'

E410332-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Benzene	ND	0.0250	1	10/26/24	10/30/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/30/24	
Toluene	ND	0.0250	1	10/26/24	10/30/24	
o-Xylene	ND	0.0250	1	10/26/24	10/30/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/30/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		113 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		113 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2444008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		100 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2444058
Chloride	ND	20.0	1	10/29/24	10/30/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S7-5'

E410332-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Benzene	ND	0.0250	1	10/26/24	10/30/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/30/24	
Toluene	ND	0.0250	1	10/26/24	10/30/24	
o-Xylene	ND	0.0250	1	10/26/24	10/30/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/30/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		99.8 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		110 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2443219
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		99.8 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		110 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2444008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		103 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2444058
Chloride	ND	20.0	1	10/29/24	10/30/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/1/2024 12:35:23PM

S8-5'

E410332-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2443219	
Benzene	ND	0.0250	1	10/26/24	10/30/24	
Ethylbenzene	ND	0.0250	1	10/26/24	10/30/24	
Toluene	ND	0.0250	1	10/26/24	10/30/24	
o-Xylene	ND	0.0250	1	10/26/24	10/30/24	
p,m-Xylene	ND	0.0500	1	10/26/24	10/30/24	
Total Xylenes	ND	0.0250	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		95.6 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		109 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2443219	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/24	10/30/24	
Surrogate: Bromofluorobenzene		115 %	70-130	10/26/24	10/30/24	
Surrogate: 1,2-Dichloroethane-d4		95.6 %	70-130	10/26/24	10/30/24	
Surrogate: Toluene-d8		109 %	70-130	10/26/24	10/30/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2444008	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/28/24	10/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/28/24	10/29/24	
Surrogate: n-Nonane		99.2 %	50-200	10/28/24	10/29/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2444058	
Chloride	ND	20.0	1	10/29/24	10/30/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/1/2024 12:35:23PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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 (2443219-BLK1)

Prepared: 10/26/24 Analyzed: 10/29/24

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	0.578		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		93.0	70-130			
Surrogate: Toluene-d8	0.553		0.500		111	70-130			

LCS (2443219-BS1)

Prepared: 10/26/24 Analyzed: 10/29/24

Benzene	2.53	0.0250	2.50		101	70-130			
Ethylbenzene	2.53	0.0250	2.50		101	70-130			
Toluene	2.55	0.0250	2.50		102	70-130			
o-Xylene	2.66	0.0250	2.50		106	70-130			
p,m-Xylene	5.34	0.0500	5.00		107	70-130			
Total Xylenes	7.99	0.0250	7.50		107	70-130			
Surrogate: Bromofluorobenzene	0.593		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			

LCS Dup (2443219-BSD1)

Prepared: 10/26/24 Analyzed: 10/29/24

Benzene	2.54	0.0250	2.50		102	70-130	0.691	23	
Ethylbenzene	2.56	0.0250	2.50		103	70-130	1.45	27	
Toluene	2.59	0.0250	2.50		104	70-130	1.79	24	
o-Xylene	2.69	0.0250	2.50		108	70-130	1.46	27	
p,m-Xylene	5.37	0.0500	5.00		107	70-130	0.617	27	
Total Xylenes	8.06	0.0250	7.50		108	70-130	0.897	27	
Surrogate: Bromofluorobenzene	0.596		0.500		119	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.6	70-130			
Surrogate: Toluene-d8	0.555		0.500		111	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 11/1/2024 12:35:23PM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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 (2443219-BLK1) Prepared: 10/26/24 Analyzed: 10/29/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.578		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.465		0.500		93.0	70-130			
Surrogate: Toluene-d8	0.553		0.500		111	70-130			

LCS (2443219-BS2) Prepared: 10/26/24 Analyzed: 10/29/24

Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.9	70-130			
Surrogate: Bromofluorobenzene	0.588		0.500		118	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.482		0.500		96.4	70-130			
Surrogate: Toluene-d8	0.567		0.500		113	70-130			

LCS Dup (2443219-BSD2) Prepared: 10/26/24 Analyzed: 10/29/24

Gasoline Range Organics (C6-C10)	42.5	20.0	50.0		85.1	70-130	3.25	20	
Surrogate: Bromofluorobenzene	0.599		0.500		120	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		95.9	70-130			
Surrogate: Toluene-d8	0.573		0.500		115	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/1/2024 12:35:23PM

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 (2444008-BLK1) Prepared: 10/28/24 Analyzed: 10/28/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.2		50.0		104	50-200			

LCS (2444008-BS1) Prepared: 10/28/24 Analyzed: 10/28/24

Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	50.4		50.0		101	50-200			

LCS Dup (2444008-BSD1) Prepared: 10/28/24 Analyzed: 10/28/24

Diesel Range Organics (C10-C28)	248	25.0	250		99.0	38-132	3.80	20	
Surrogate: n-Nonane	48.3		50.0		96.6	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/1/2024 12:35:23PM

Anions by EPA 300.0/9056A

Analyst: IY

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

Blank (2444058-BLK1)					Prepared: 10/29/24 Analyzed: 10/30/24				
Chloride	ND	20.0							
LCS (2444058-BS1)					Prepared: 10/29/24 Analyzed: 10/30/24				
Chloride	254	20.0	250		102	90-110			
LCS Dup (2444058-BSD1)					Prepared: 10/29/24 Analyzed: 10/30/24				
Chloride	253	20.0	250		101	90-110	0.348	20	

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



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/01/24 12:35

- 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.



Project Information

Chain of Custody

Page 1 of 1

Client: Pima Environmental Services				Bill To				Lab Use Only				TAT				EPA Program							
Project: <u>Betelgeuse 19 Federal #6H</u>				Attention: <u>Devon Energy</u>				Lab WO# <u>E410332</u>				Job Number <u>01058-0057</u>				1D <u> </u> 2D <u> </u> 3D <u> </u> Standard <u>X</u>				CWA <u> </u> SDWA <u> </u>			
Project Manager: <u>Tom Bynum</u>				Address: <u> </u>				Analysis and Method				RCRA				State							
Address: <u>5614 N. Lovington Hwy.</u>				City, State, Zip <u> </u>																			
City, State, Zip <u>Hobbs, NM. 88240</u>				Phone: <u> </u>				DRO/ORO by 8015				GRO/DRO by 8015				BTEX by 8021							
Phone: <u>806-782-1151</u>				Email: <u> </u>				VOC by 8260				Metals 6010				Chloride 300.0							
Email: <u>tom@pimaoil.com</u>				Pima Project # <u>1-379 (nAPP2427725929)</u>				BGDOC NM				BGDOC TX				Remarks							
Report due by: <u> </u>																							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																		
8:03	10/23	S	1	S1-5'	1																		
8:17				S2-5'	2																		
8:24				S3-5'	3																		
8:37				S4-5'	4																		
8:42				S5-5'	5																		
8:56				S7-5'	6																		
8:59				S8-5'	7																		
Additional Instructions: Work Order/Billing: 21421826																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.													
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only											
<u>[Signature]</u>		10/25/24		1435		<u>[Signature]</u>		10/25/24		1435		Received on ice: <u>Y</u> N											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 <u> </u> T2 <u> </u> T3 <u> </u>											
<u>[Signature]</u>		10/25/24		1615		<u>[Signature]</u>		10/25/24		1615													
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>											
<u>[Signature]</u>		10/25/24		2230		<u>[Signature]</u>		10/28/24		8:00													
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other										Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA													
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																							

Envirotech Analytical Laboratory

Printed: 10/28/2024 12:29:18PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	10/28/24 08:00	Work Order ID:	E410332
Phone:	(575) 631-6977	Date Logged In:	10/25/24 15:24	Logged In By:	Caitlin Mars
Email:	tom@pimaoil.com	Due Date:	11/01/24 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? No
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/Resolution

Sampled by not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C 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? No

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.

Envirotech Analytical Laboratory

Printed: 10/28/2024 12:58:05PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	10/28/24 08:00	Work Order ID:	E410333
Phone:	(575) 631-6977	Date Logged In:	10/25/24 15:32	Logged In By:	Caitlin Mars
Email:	gio@pimaoil.com	Due Date:	11/01/24 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? No
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/Resolution

No of containers and sampled by missing on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C 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? No

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:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Betelgeuse 19 Federal #6H

Work Order: E411040

Job Number: 01058-0007

Received: 11/6/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/6/24

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: 11/6/24

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Betelgeuse 19 Federal #6H
Workorder: E411040
Date Received: 11/6/2024 7:30:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/6/2024 7:30:00AM, under the Project Name: Betelgeuse 19 Federal #6H.

The analytical test results summarized in this report with the Project Name: Betelgeuse 19 Federal #6H 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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported: 11/06/24 15:35
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
C1-1.5'	E411040-01A	Soil	11/04/24	11/06/24	Glass Jar, 2 oz.
W1-1.5'	E411040-02A	Soil	11/04/24	11/06/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/6/2024 3:35:26PM

C1-1.5'

E411040-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2445057	
Benzene	ND	0.0250	1	11/06/24	11/06/24	
Ethylbenzene	ND	0.0250	1	11/06/24	11/06/24	
Toluene	ND	0.0250	1	11/06/24	11/06/24	
o-Xylene	ND	0.0250	1	11/06/24	11/06/24	
p,m-Xylene	ND	0.0500	1	11/06/24	11/06/24	
Total Xylenes	ND	0.0250	1	11/06/24	11/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.4 %	70-130		11/06/24	11/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2445057	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/06/24	11/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	92.7 %	70-130		11/06/24	11/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2445058	
Diesel Range Organics (C10-C28)	736	50.0	2	11/06/24	11/06/24	
Oil Range Organics (C28-C36)	434	100	2	11/06/24	11/06/24	
<i>Surrogate: n-Nonane</i>	83.7 %	50-200		11/06/24	11/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2445061	
Chloride	1590	20.0	1	11/06/24	11/06/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Betelgeuse 19 Federal #6H
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
11/6/2024 3:35:26PM

W1-1.5'

E411040-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2445057	
Benzene	ND	0.0250	1	11/06/24	11/06/24	
Ethylbenzene	ND	0.0250	1	11/06/24	11/06/24	
Toluene	ND	0.0250	1	11/06/24	11/06/24	
o-Xylene	ND	0.0250	1	11/06/24	11/06/24	
p,m-Xylene	ND	0.0500	1	11/06/24	11/06/24	
Total Xylenes	ND	0.0250	1	11/06/24	11/06/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	90.0 %	70-130		11/06/24	11/06/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2445057	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/06/24	11/06/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	93.2 %	70-130		11/06/24	11/06/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2445058	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/06/24	11/06/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/06/24	11/06/24	
<i>Surrogate: n-Nonane</i>	95.6 %	50-200		11/06/24	11/06/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2445061	
Chloride	614	20.0	1	11/06/24	11/06/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/6/2024 3:35:26PM

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 (2445057-BLK1)

Prepared: 11/06/24 Analyzed: 11/06/24

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	7.28		8.00		91.0	70-130			

LCS (2445057-BS1)

Prepared: 11/06/24 Analyzed: 11/06/24

Benzene	4.32	0.0250	5.00		86.3	70-130			
Ethylbenzene	4.61	0.0250	5.00		92.2	70-130			
Toluene	4.57	0.0250	5.00		91.4	70-130			
o-Xylene	4.64	0.0250	5.00		92.8	70-130			
p,m-Xylene	9.38	0.0500	10.0		93.8	70-130			
Total Xylenes	14.0	0.0250	15.0		93.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.18		8.00		89.7	70-130			

LCS Dup (2445057-BSD1)

Prepared: 11/06/24 Analyzed: 11/06/24

Benzene	4.42	0.0250	5.00		88.4	70-130	2.38	20	
Ethylbenzene	4.78	0.0250	5.00		95.5	70-130	3.54	20	
Toluene	4.71	0.0250	5.00		94.2	70-130	3.06	20	
o-Xylene	4.79	0.0250	5.00		95.9	70-130	3.27	20	
p,m-Xylene	9.73	0.0500	10.0		97.3	70-130	3.60	20	
Total Xylenes	14.5	0.0250	15.0		96.8	70-130	3.49	20	
Surrogate: 4-Bromochlorobenzene-PID	7.25		8.00		90.6	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/6/2024 3:35:26PM

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 (2445057-BLK1) Prepared: 11/06/24 Analyzed: 11/06/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.60		8.00		95.0	70-130			

LCS (2445057-BS2) Prepared: 11/06/24 Analyzed: 11/06/24

Gasoline Range Organics (C6-C10)	43.6	20.0	50.0		87.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.67		8.00		95.8	70-130			

LCS Dup (2445057-BSD2) Prepared: 11/06/24 Analyzed: 11/06/24

Gasoline Range Organics (C6-C10)	43.1	20.0	50.0		86.1	70-130	1.33	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.62		8.00		95.2	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/6/2024 3:35:26PM

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 (2445058-BLK1)					Prepared: 11/06/24 Analyzed: 11/06/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	44.5		50.0		89.0	50-200			

LCS (2445058-BS1)					Prepared: 11/06/24 Analyzed: 11/06/24				
Diesel Range Organics (C10-C28)	232	25.0	250		92.8	38-132			
Surrogate: n-Nonane	47.1		50.0		94.2	50-200			

LCS Dup (2445058-BSD1)					Prepared: 11/06/24 Analyzed: 11/06/24				
Diesel Range Organics (C10-C28)	245	25.0	250		97.8	38-132	5.28	20	
Surrogate: n-Nonane	48.0		50.0		96.0	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/6/2024 3:35:26PM

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 (2445061-BLK1)					Prepared: 11/06/24 Analyzed: 11/06/24				
Chloride	ND	20.0							
LCS (2445061-BS1)					Prepared: 11/06/24 Analyzed: 11/06/24				
Chloride	252	20.0	250		101	90-110			
LCS Dup (2445061-BSD1)					Prepared: 11/06/24 Analyzed: 11/06/24				
Chloride	250	20.0	250		100	90-110	1.01	20	

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



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Betelgeuse 19 Federal #6H	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	11/06/24 15:35

- 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.





Envirotech Analytical Laboratory

Printed: 11/6/2024 9:27:14AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	11/06/24 07:30	Work Order ID:	E411040
Phone:	(575) 631-6977	Date Logged In:	11/05/24 14:40	Logged In By:	Caitlin Mars
Email:	tom@pimaoil.com	Due Date:	11/06/24 17:00 (0 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? No
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/Resolution

Sampled by not provided on COC.

Sample Turn Around Time (TAT)

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

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? 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.

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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 405518

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2427725929
Incident Name	NAPP2427725929 BETELGEUSE 19 FEDERAL #006H @ 30-015-42031
Incident Type	Oil Release
Incident Status	Remediation Plan Received
Incident Well	[30-015-42031] BETELGEUSE 19 FEDERAL #006H

Location of Release Source	
Please answer all the questions in this group.	
Site Name	BETELGEUSE 19 FEDERAL #006H
Date Release Discovered	10/02/2024
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil 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: 11 BBL Recovered: 0 BBL Lost: 11 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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)	Tubing flow line cracked at wellhead. 11 bbls oil spilled onto pad. Recovered volumes not available at notification.

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QUESTIONS, Page 2

Action 405518

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	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@dvni.com Date: 11/21/2024
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QUESTIONS, Page 3

Action 405518

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
<i>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.</i>	
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
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (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 1000 (ft.) and ½ (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<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>	
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)	15500
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	1170
GRO+DRO (EPA SW-846 Method 8015M)	736
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<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>	
On what estimated date will the remediation commence	01/15/2025
On what date will (or did) the final sampling or liner inspection occur	02/01/2025
On what date will (or was) the remediation complete(d)	02/28/2025
What is the estimated surface area (in square feet) that will be reclaimed	200
What is the estimated volume (in cubic yards) that will be reclaimed	11
What is the estimated surface area (in square feet) that will be remediated	200
What is the estimated volume (in cubic yards) that will be remediated	11
<i>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.</i>	
<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 4

Action 405518

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
<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>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [FEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<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: 11/21/2024
<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 405518

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 405518

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	397951
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/04/2024
What was the (estimated) number of samples that were to be gathered	2
What was the sampling surface area in square feet	200

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	No

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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 405518

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405518
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	App ID 405518: The remediation plan is approved as written. Devon has 90-days (March 10, 2025) to submit to OCD its appropriate or final remediation closure report.	12/10/2024