Page 1 of 82

Incident ID	NAPP2125149254
District RP	
Facility ID	
Application ID	

# Closure

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

Closure Report Attachment Checklist: Each of the following ite	ems must be included in the closure report.
$\boxed{\mathbf{x}}$ A scaled site and sampling diagram as described in 19.15.29.11	NMAC
Photographs of the remediated site prior to backfill or photos of must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
x Laboratory analyses of final sampling (Note: appropriate ODC	District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a should their operations have failed to adequately investigate and rem human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regulat restore, reclaim, and re-vegetate the impacted surface area to the con accordance with 19.15.29.13 NMAC including notification to the OC Printed Name: Dale Woodall	cediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ions. The responsible party acknowledges they must substantially ditions that existed prior to the release or their final land use in
email: dale.woodall@dvn.com	Felephone: 575-748-1838
OCD Only Jocelyn Harimon	09/08/2022
Received by:	Date:
	of liability should their operations have failed to adequately investigate and vater, human health, or the environment nor does not relieve the responsible r regulations.
Closure Approved by: Robert Hamlet	Date: 12/7/2022
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

of New Mexico

Incident ID NAPP2125149254
District RP
Facility ID
Application ID

### **Site Assessment/Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)							
Did this release impact groundwater or surface water?								
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X No							
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?								
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?								
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Yes X No							
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?								
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?								
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No							
Are the lateral extents of the release overlying a subsurface mine?	Yes X No							
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes X No							
Are the lateral extents of the release within a 100-year floodplain?	Yes X No							
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	Yes No							
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil							
Characterization Report Checklist: Each of the following items must be included in the report.								
<ul> <li>Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li>Field data</li> <li>Data table of soil contaminant concentration data</li> <li>Depth to water determination</li> <li>Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> <li>Photographs including date and GIS information</li> <li>Topographic/Aerial maps</li> <li>Laboratory data including chain of custody</li> </ul>								

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

Received by:

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	_0	_	_	- 47	_

Incident ID	NAPP2125149254
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Dale Woodall Title: Env. Professional Date: 9/8/2022 Signature: Dale Woodall email: dale.woodall@dvn.com Telephone: 575-748-1838 **OCD Only** 09/08/2022 Jocelyn Harimon

Date:

Page 4 of 82

Incident ID NAPP2125149254
District RP
Facility ID
Application ID

# Closure

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

Closure Report Attachment Checklist: Each of the following	ng items must be included in the closure report.
$\boxed{\mathbf{x}}$ A scaled site and sampling diagram as described in 19.15.2	29.11 NMAC
X Photographs of the remediated site prior to backfill or phomust be notified 2 days prior to liner inspection)	otos of the liner integrity if applicable (Note: appropriate OCD District office
x Laboratory analyses of final sampling (Note: appropriate C	ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file ce may endanger public health or the environment. The acceptance should their operations have failed to adequately investigate and numan health or the environment. In addition, OCD acceptance compliance with any other federal, state, or local laws and/or regrestore, reclaim, and re-vegetate the impacted surface area to the accordance with 19.15.29.13 NMAC including notification to the	Title: Env. Professional
email: dale.woodall@dvn.com	Telephone: _575-748-1838
OCD Only Jocelyn Harimon	09/08/2022
Received by:	Date:
	arty of liability should their operations have failed to adequately investigate and ace water, human health, or the environment nor does not relieve the responsible and/or regulations.
Closure Approved by:	Date:
Printed Name:	



Pima Environmental Services 5614 N. Lovington Highway Hobbs, NM 88240 575-964-7740

August 30, 2022

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

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

Re: Site Assessment, Remediation, and Closure Report

Hackberry 19-1 Battery

API No. N/A

GPS: Latitude 32.647340 Longitude -103.910580

UL F, Sec. 19, T19S, R31E

**Eddy County, NM** 

NMOCD Ref. No. NAPP2125149254

Pima Environmental Services, LLC. (Pima) has been contracted by Devon Energy Production, LLC. (Devon) to perform a spill assessment, remediation, and submit this closure report for a produced water/crude oil mixed release that occurred at the Hackberry 19-1 Battery (Hackberry). The initial C-141 was submitted on September 23, 2022 (Appendix C). This incident was assigned Incident ID NAPP2125149254 by the New Mexico Oil Conservation Division (NMOCD).

#### **Site Characterization**

The Hackberry is located approximately twelve (12) miles South of Loco Hills, NM. This spill site is in Unit F, Section 19, Township 19S, Range 31E, Latitude 32.647340 Longitude -103.910580, Eddy County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is made up deposits of 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. May locally include uppermost Pliocene deposits. 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 (Appendix B). The drainage courses in this area are excessively drained. There is a high potential for karst geology to be present around the Hackberry (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 180 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 22 feet BGS. The closest waterway Salt Playa located approximately 5.99 miles to the Southwest of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29										
Depth to Groundwater	Constituent & Limits									
(Appendix A)	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene					
<50' (High Karst)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg					
51-100′	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg					
>100′	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg					

Reference Figure 2 for a Topographic Map.

#### **Release Information**

<u>NAPP2125149254:</u> On September 7, 2021, tubing from the wellhead caused fluid release, The released fluids were calculated to be approximately 10 barrels (bbls) of produced water and 10 barrels (bbls) of crude oil. A vacuum truck was able to recover approximately 18 bbls of total fluid from the impacted area.

#### **Site Assessment and Soil Sampling Results**

On July 21, 2022, Pima mobilized personnel to the site to assess the area. We sampled the impacted area. Laboratory results of this sampling event can be found in the following data table. A Site Map can be found in Figure 4.

7-21-22 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <100')												
DEVON ENERGY - HACKBERRY 19 FED 1												
Sample Date	: 7-21-22	NM Approved Laboratory Results										
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg				
NSW	6"	ND	ND	ND	ND	ND	0	ND				
ESW	6"	ND	ND	ND	ND	ND	0	ND				
SSW	6"	ND	ND	ND	ND	ND	0	ND				
	1'	ND	ND	ND	44.4	ND	44.4	3180				
S-1	2'	ND	ND	ND	ND	ND	0	167				
	3'	ND	ND	ND	ND	ND	0	ND				
S-2	1'	ND	ND	ND	128	72.5	200.5	4070				
3-2	2'	ND	ND	ND	ND	ND	0	ND				
BG-1	6"	ND	ND	ND	ND	ND	0	ND				
BG-2	6"	ND	ND	ND	ND	ND	0	ND				

ND- Analyte Not Detected

#### **Remediation Activities**

On August 22, 2022, Devon Construction Department mobilized personnel and equipment to conduct remedial activities. They excavated the area to various depths. Pima personnel collected samples to verify all contaminated soil had been removed. The contaminated soil was hauled to an approved, lined disposal facility and clean backfill material was brought in.

On August 24, 2022, after sending a 48-hour notification (Appendix C), Pima collected confirmation samples of the excavated areas. Laboratory results of this sampling event can be found in the following data table. A Confirmation Sample Map can be found in Figure 5.

8-24-22 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <100')												
DEVON ENERGY - HACKBERRY 19 FED 1												
Sample Date	: 8-24-22	NM Approved Laboratory Results										
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg				
NCSW	1'	ND	ND	ND	ND	ND	0	ND				
ECSW	3'	ND	ND	ND	ND	ND	0	ND				
SCSW	2'	ND	ND	ND	ND	ND	0	ND				
WCSW	2'	ND	ND	ND	ND	ND	0	ND				
CS-1	2'	ND	ND	ND	ND	ND	0	ND				
CS-2	3'	ND	ND	ND	ND	ND	0	ND				
CS-3	1'	ND	ND	ND	ND	ND	0	ND				
CS-4	2'	ND	ND	ND	ND	ND	0	ND				

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Based on the sample results, the bottom and sidewalls were below NMOCD Closure Criteria 19.15.29 NMAC. The contaminated material was transported to Lea Land, an NMOCD approved disposal site. The excavation was then backfilled with clean like material, machine compacted and contoured to match the surrounding terrain. See Appendix D for Photographic Documentation.

#### **Closure Request**

After careful review, Pima requests that this incident, NAPP2125149254 be closed. Devon has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Gio Gomez at 806-782-1151 or gio@pimaoil.com.

Respectfully,

Gio Gomez

Gio Gomez Project Manager Pima Environmental Services, LLC

#### **Attachments**

#### Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Site Map
- 5- Confirmation Sample Map

#### Appendices:

Appendix A – Referenced Water Surveys

Appendix B – Soil Survey and Geological Data

Appendix C – C-141 Form and 48-Hour Notification

Appendix D – Photographic Documentation

Appendix E – Laboratory Reports



### Figures:

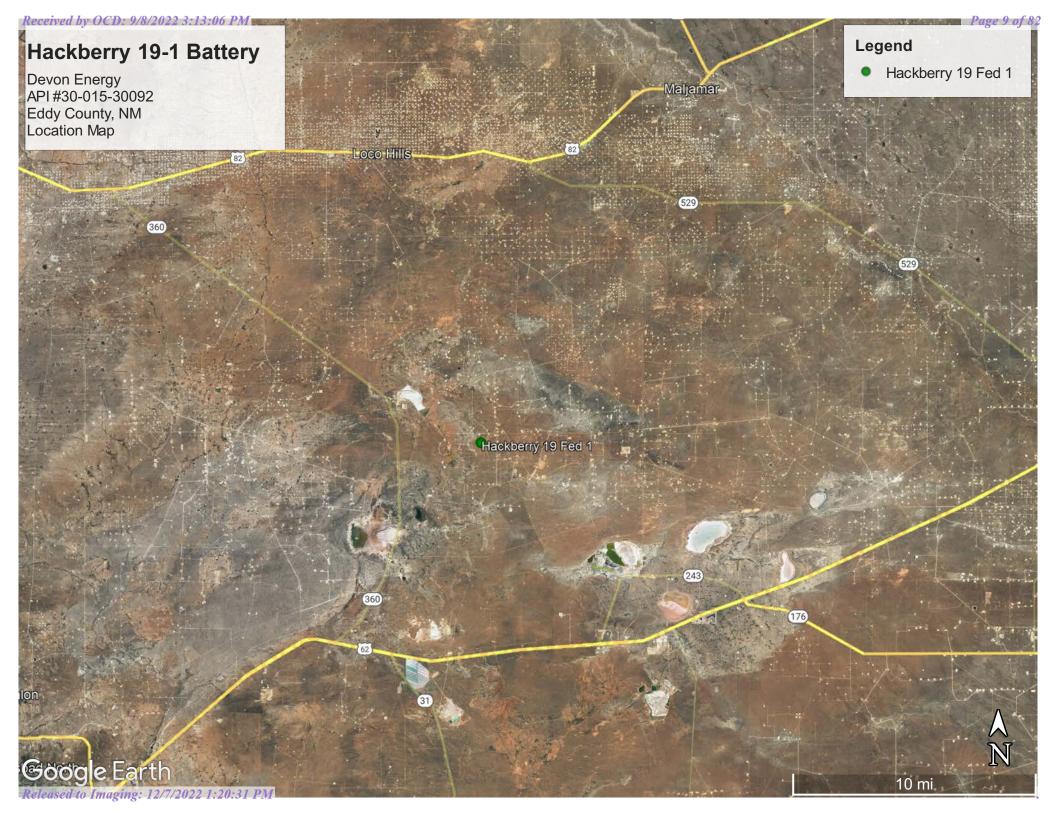
1-Location Map

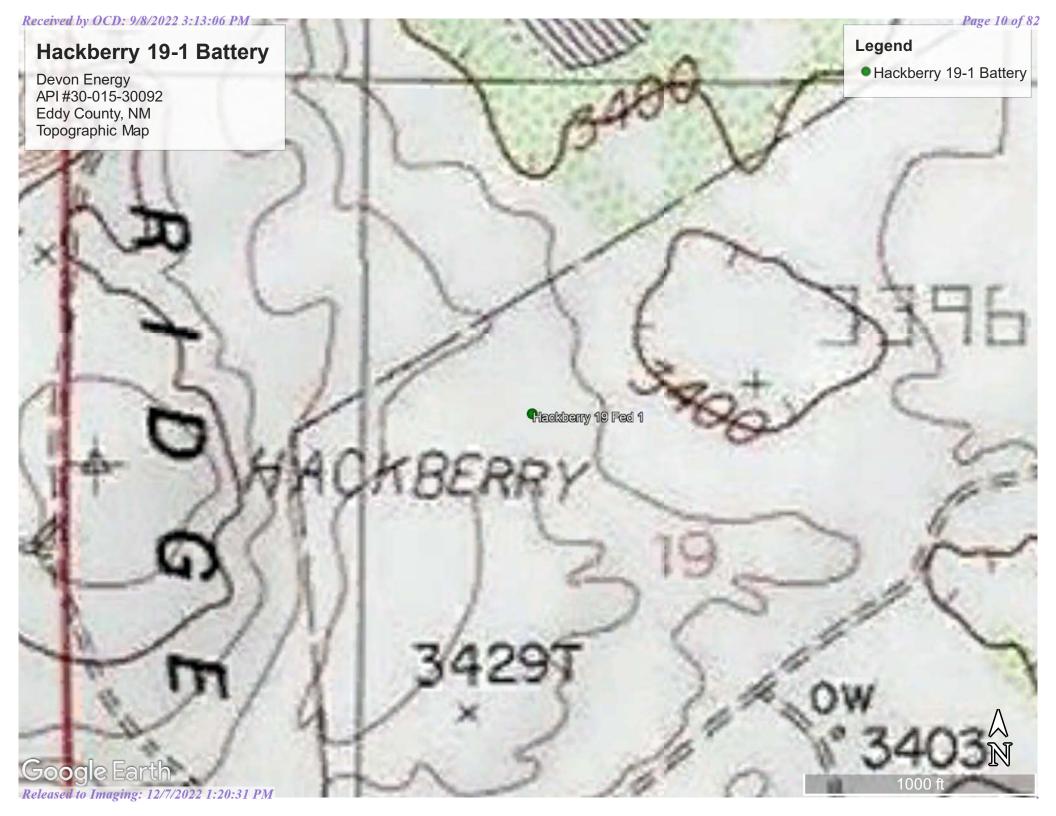
2-Topo Map

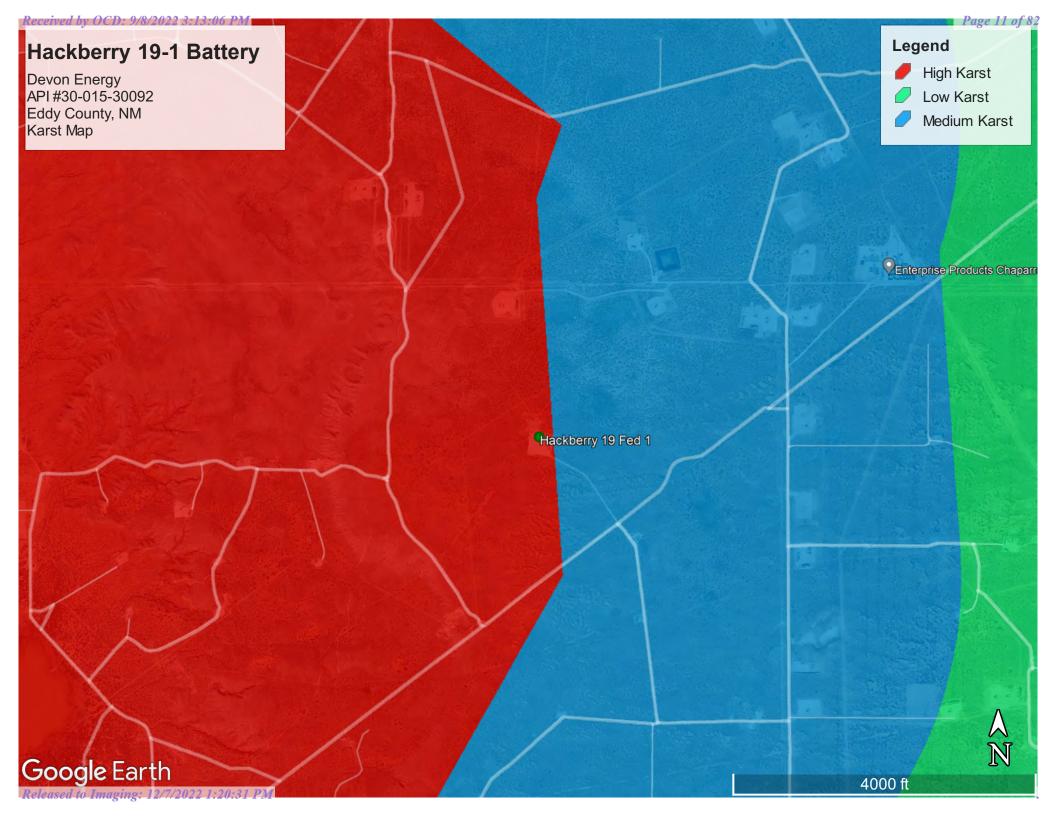
3-Karst Map

4-Site Map

5-Confirmation Site Map













# Appendix A

Water Surveys:

OSE

**USGS** 

Surface Water Map



# 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)

DOD

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

		POD													
		Sub-		Q	Q	Q									Water
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DistanceDep	thWellDe	othWater (	Column
<u>CP 00873 POD1</u>		CP	LE		1	1	19	19S	31E	601772	3613147*	590	340	180	160
<u>CP 00357 POD1</u>		CP	ED	4	4	1	24	19S	30E	600667	3612631*	1510	630		
<u>CP 00357 POD2</u>		CP	ED	4	3	1	24	19S	30E	600265	3612627*	1912	630		
<u>CP 00722 POD2</u>		CP	ED	2	1	1	25	19S	30E	600276	3611620*	2192	350	65	285
<u>CP 00725 POD1</u>		CP	ED	1	3	3	28	19S	31E	604906	3610473*	3533	231		
<u>CP 00722 POD1</u>		CP	LE	4	3	3	28	19S	31E	605106	3610273*	3814	200		
<u>CP 00722 POD1</u>	R	CP	LE	4	3	3	28	19S	31E	605106	3610273*	3814	200		
<u>CP 00723 POD1</u>		CP	ED	2	1	1	33	19S	31E	605111	3610071*	3951	139		
<u>CP 00822 POD1</u>		CP	LE		4	4	15	19S	30E	598148	3613516*	4106	90		
<u>CP 00829 POD1</u>		CP	LE		2	4	16	19S	31E	606165	3614009*	4193	120		
<u>CP 00647 POD1</u>	O	CP	ED	4	2	2	15	19S	30E	598235	3614621*	4376	200	92	108
<u>CP 00722 POD3</u>		CP	LE	2	4	1	33	19S	31E	605519	3609673*	4520	220	140	80
<u>CP 00828 POD1</u>		CP	LE		1	1	35	19S	30E	598585	3609900*	4562	90		

Average Depth to Water:

119 feet

Minimum Depth:

65 feet

Maximum Depth:

180 feet

Record Count: 13

**UTMNAD83 Radius Search (in meters):** 

**Easting (X):** 602175.48 **Northing (Y):** 3612715.59 **Radius:** 5000

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.

7/11/22 3:15 PM

WATER COLUMN/ AVERAGE DEPTH TO

<sup>\*</sup>UTM location was derived from PLSS - see Help



USGS Home Contact USGS Search USGS

### **National Water Information System: Web Interface**

**USGS** Water Resources

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

#### Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water <u>data</u> from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### Search Results -- 1 sites found

site\_no list =

323810103554201

#### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 323810103554201 19S.30E.25.12133

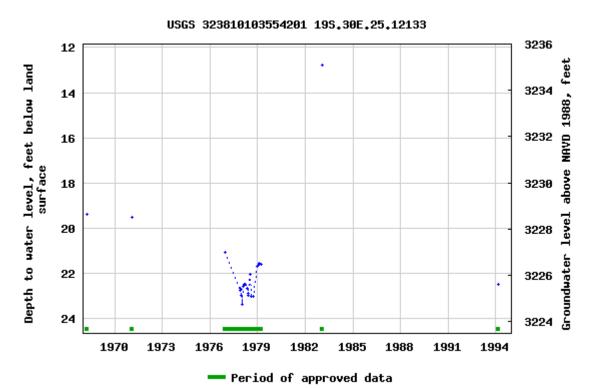
Available data for this site (	Groundwater:	Field measurements	~	GO
Eddy County, New Mexico				
Hydrologic Unit Code 13060	011			
Latitude 32°38'10", Longitu	ude 103°5	5'42" NAD27		
Land-surface elevation 3,24	8 feet abo	ve NAVD88		
The depth of the well is 42 f	feet below	land surface.		

This well is completed in the Other aguifers (N9999OTHER) national aguifer.

This well is completed in the Rustler Formation (312RSLR) 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. <u>Download a presentation-quality graph</u>

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility

FOIA

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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: <u>USGS Water Data Support Team</u>

Page Last Modified: 2022-07-11 17:17:15 EDT

0.72 0.65 nadww01





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### **National Water Information System: Web Interface**

**USGS** Water Resources

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

#### Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

### Search Results -- 1 sites found

site\_no list =

323734103523901

#### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 323734103523901 19S.31E.28.33124

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°37'34", Longitude 103°52'39" NAD27

Land-surface elevation 3,473 feet above NAVD88

The depth of the well is 230 feet below land surface.

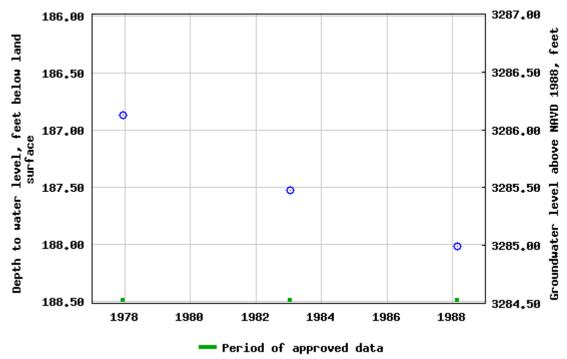
This well is completed in the Other aguifers (N9999OTHER) national aguifer.

This well is completed in the Rustler Formation (312RSLR) 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. <u>Download a presentation-quality graph</u>

Questions about sites/data?
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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels

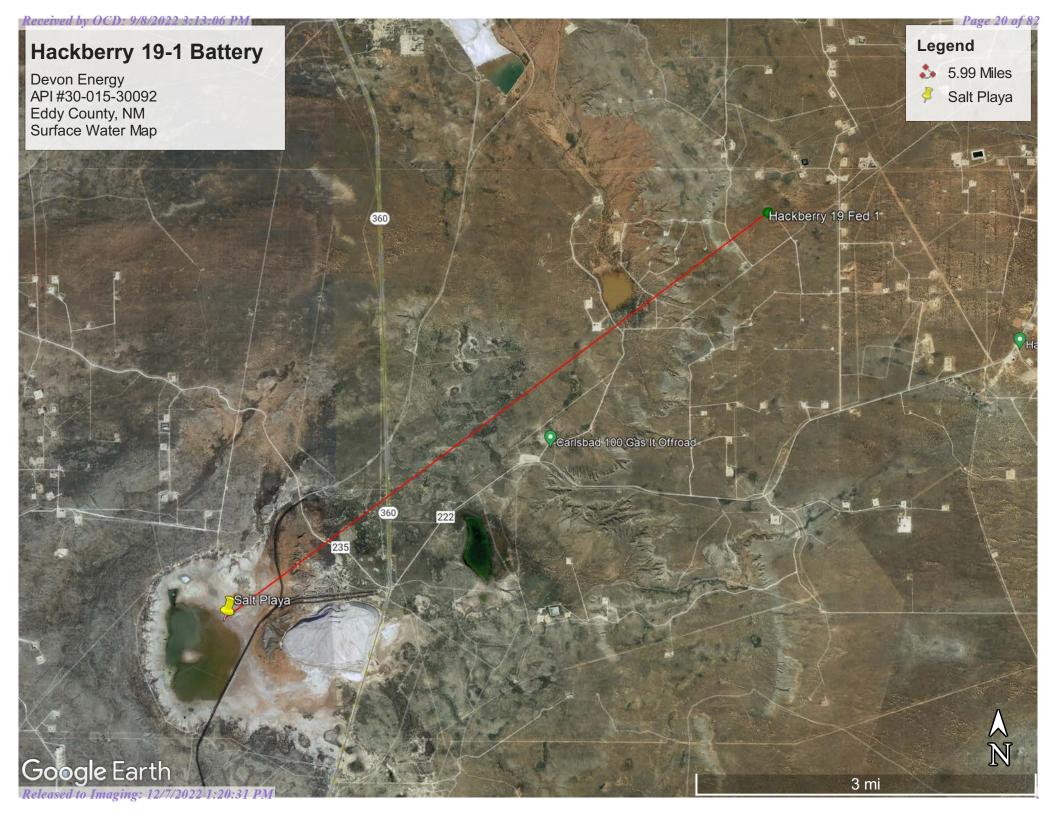
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u>

Page Last Modified: 2022-07-11 17:17:58 EDT

0.73 0.67 nadww01







# Appendix B

Soil Survey & Geological Data FEMA Flood Map

### **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

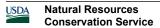
Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: R042XC005NM - Deep Sand

Hydric soil rating: No



#### **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: R042XC003NM - Loamy Sand

Hydric soil rating: No

#### **Minor Components**

#### Active dune land

Percent of map unit: 15 percent

Hydric soil rating: No

#### **Data Source Information**

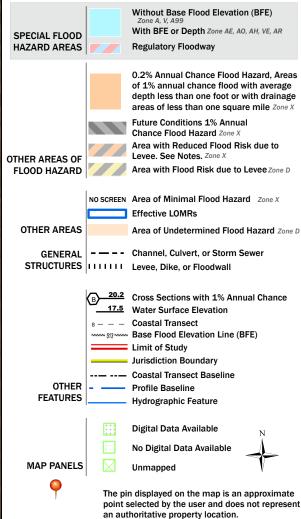
Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 17, Sep 12, 2021

# Received by OCD: 9/8/2022 3:13:06 PM National Flood Hazard Layer FIRMette





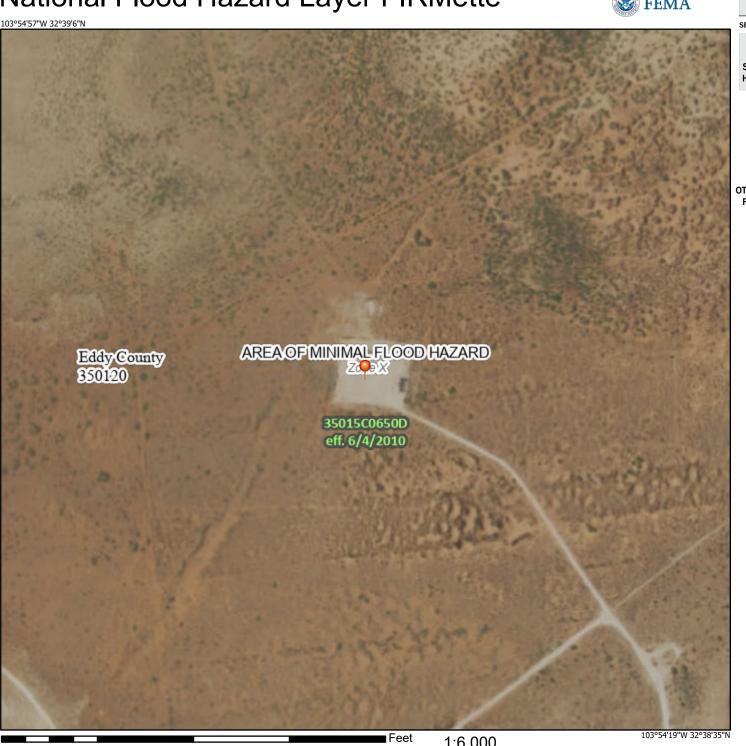
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/30/2022 at 9:34 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 C

C-141 Form

48-Hour Notification

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

# **Release Notification**

### **Responsible Party**

Responsible Party OGRID						
Contact Name Contact			Contact Te	Telephone		
Contact emai	1			Incident #	(assigned by OCD)	)
Contact mail	ing address			1		
			Location	of Release So	ource	
Latitude			(NAD 83 in dec	Longitude _cimal degrees to 5 decim	nal places)	
Site Name				Site Type		
Date Release	Discovered			API# (if app	licable)	
Unit Letter	Section	Township	Range	Coun	ity	
Crude Oil	Material	Federal Tr	Nature and	l Volume of I		e volumes provided below)
						, ,
	☐ Produced Water Volume Released (bbls)  Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?		Volume Recovered (bbls)  Yes No			
Condensa	te	Volume Release	d (bbls)		Volume Recovered (bbls)	
☐ Natural Gas Volume Released (Mcf)		Volume Recovered (Mcf)				
Other (des	scribe)	Volume/Weight	Released (provide	e units)	Volume/Weig	ght Recovered (provide units)
Cause of Rela	ease					

Received by OCD: 9/8/2022 8913:06 PM State of New Mexico Page 2 Oil Conservation Division

Pa	ige	27	<b>D</b> f	82
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Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respon	nsible party consider this a major release?
☐ Yes ☐ No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial Ro	esponse
The responsible	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.	
☐ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or o	ikes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been removed an	d managed appropriately.
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred clease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig	required to report and/or file certain release noti ment. The acceptance of a C-141 report by the C ate and remediate contamination that pose a thre	best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger oCD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name:		Title:
Signature: Kendra	De Hoyos	
email:		Telephone:
OCD Only		
Received by: Ramona M	1arcus	Date: 9/27/2021

### NAPP2125149254

Spill Volume(Bbls) Calculator			
Inputs in blue	, Outputs in red		
Contaminated S	Soil measurement		
Area (square feet)	Depth(inches)		
Cubic Feet of Soil Impacted	0.000		
Barrels of Soil Impacted	0.00		
Soil Type	Clay/Sand		
Barrels of Oil Assuming 100% Saturation	0.00		
Saturation Damp	no fluid when squeezed		
Estimated Barrels of Oil Released	0.00		
Free Stand	ing Fluid Only		
Area (square feet)  1660.631	Depth(inches) 0.250		
Standing fluid	6.167		
Total fluids spilled	<u>6.167</u>		

Spill Volume(B	bls) Calculator		
. Inputs in blue,	Outputs in red		
Contaminated Sc	oil measurement		
Area (square feet)	Depth(inches)		
Cubic Fact of Sail Improved	0.000		
Cubic Feet of Soil Impacted  Barrels of Soil Impacted	0.00		
Soil Type	Clay/Sand		
Barrels of Oil Assuming 100% Saturation	0.00		
Saturation Damp no fluid when squeezed			
Estimated Barrels of Oil Released	0.00		
Free Standin	g Fluid Only		
Area (square feet)	Depth(inches)		
3272.348	0.250		
Standing fluid	12.152		
Total fluids spilled	12.152		

Spill Volume(E	Bbls) Calculator		
Inputs in blue, Outputs in red			
Contaminated S	oil measurement		
Area (square feet)	Depth(inches)		
330.861	0.250		
Cubic Feet of Soil Impacted	6.893		
Barrels of Soil Impacted	1.23		
Soil Type	Clay/Sand		
Barrels of Oil Assuming 100% Saturation	0.18		
Saturation Damp	no fluid when squeezed		
Estimated Barrels of Oil Released	0.02		
Free Standing Fluid Only			
Area (square feet)	Depth(inches)		
624.629	0.250		
Standing fluid	2.320		
Total fluids spilled	2.504		

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

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 51738

#### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	51738
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	9/27/2021

New Mexico Incident ID NA PD2125140254

Incident ID	NAPP2125149254
District RP	
Facility ID	
Application ID	

### Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	340 (ft bgs)	
Did this release impact groundwater or surface water?	Yes X No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Yes X No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Yes X No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Yes X No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes X No	
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No	
Are the lateral extents of the release overlying a subsurface mine?	Yes X No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes X No	
Are the lateral extents of the release within a 100-year floodplain?	Yes X No	
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	Yes No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
<ul> <li>X Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li>X Field data</li> <li>X Data table of soil contaminant concentration data</li> <li>X Depth to water determination</li> <li>X Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>Boring or excavation logs</li> <li>X Photographs including date and GIS information</li> <li>X Topographic/Aerial maps</li> <li>X Laboratory data including chain of custody</li> </ul>		

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

Received by OCD: 9/8/2022 3:13:06 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Received by:

**OCD Only** 

Page	<i>32</i>	of	82
			1

Incident ID	NAPP2125149254
District RP	
Facility ID	
Application ID	

Date: \_\_\_\_\_

Released to Imaging	: 12/7/2022 1:20:31 P	4

New Mexico

Incident ID	NAPP2125149254
District RP	
Facility ID	
Application ID	

# Closure

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

Closure Report Attachment Checklist: Each of the following	g items must be included in the closure report.
x A scaled site and sampling diagram as described in 19.15.29	9.11 NMAC
x Photographs of the remediated site prior to backfill or photomust be notified 2 days prior to liner inspection)	os of the liner integrity if applicable (Note: appropriate OCD District office
■ Laboratory analyses of final sampling (Note: appropriate OI	DC District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certamay endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rehuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regulatestore, reclaim, and re-vegetate the impacted surface area to the caccordance with 19.15.29.13 NMAC including notification to the Printed Name:  Dale Woodall	
OCD Only	
Received by:	Date:
	ty of liability should their operations have failed to adequately investigate and se water, human health, or the environment nor does not relieve the responsible d/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

From: <u>Tom Bynum</u>

To: "OCDOnline@state.nm.us"; "ocdonline, emnrd, EMNRD"

 Cc:
 "Gio PimaOil"; "sebastian@pimaoil.com"

 Subject:
 48-Hour Notification - NAPP2125149254

 Date:
 Monday, August 22, 2022 4:11:00 PM

#### Good Afternoon,

Pima Environmental would like to notify you that we will be collecting confirmation samples at the Hackberry 19 Fed 1 for incident ID NAPP2125149254. Pima personnel are scheduled to be on site for this sampling event at approximately 4:30 p.m. on Wednesday, August 24, 2022. If you have any questions or concerns, please let me know. Thank you.

#### THANK YOU,

*Tom Bynum*Project Manager
Cell – 580-748-1613
Office – 575-964-7740



Pima Environmental Services, LLC.



# Appendix D

Photographic Documentation



# SITE PHOTOGRAPHS DEVON ENERGY

#### **HACKBERRY 19 FED 1**

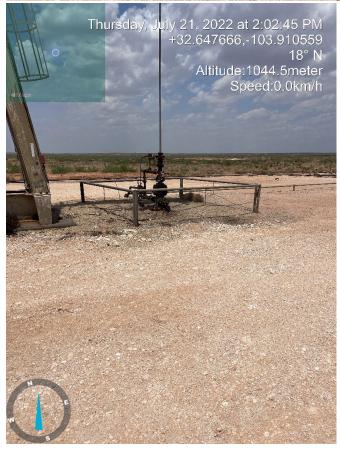
#### Assessment





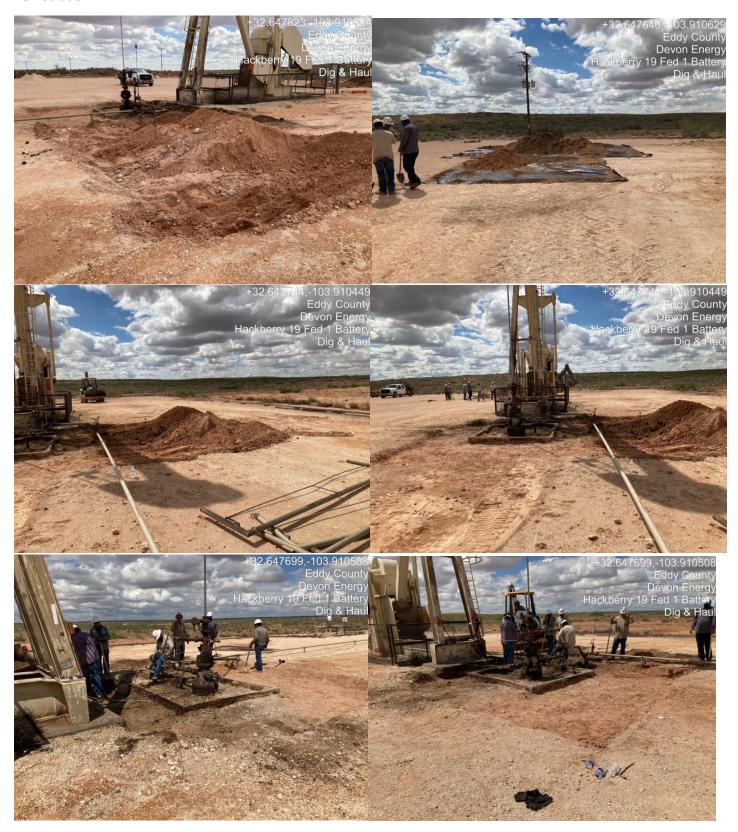






# P

#### Remediation







**Post Remediation** 







### Appendix E

**Laboratory Reports** 

Report to:
Tom Bynum







5796 U.S. Hwy 64 Farmington, NM 87401

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





# envirotech

Practical Solutions for a Better Tomorrow

# **Analytical Report**

### Pima Environmental Services-Carlsbad

Project Name: Hackberry 19-1

Work Order: E207167

Job Number: 01058-0007

Received: 7/25/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 7/29/22

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

Date Reported: 7/29/22

Tom Bynum PO Box 247

Plains, TX 79355-0247

Project Name: Hackberry 19-1

Workorder: E207167

Date Received: 7/25/2022 8:23:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/25/2022 8:23:00AM, under the Project Name: Hackberry 19-1.

The analytical test results summarized in this report with the Project Name: Hackberry 19-1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881

Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

**Alexa Michaels** 

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Field Offices:

**Southern New Mexico Area** Lynn Jarboe

Technical Representative/Client Services

Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Technical Representative

Rayny Hagan

West Texas Midland/Odessa Area

Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com



### **Table of Contents**

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
NSW	5
ESW	6
SSW	7
S.1 1'	8
S.1 2'	9
S.1 3'	10
S.2 1'	11
S.2 2'	12
BG1	13
BG2	14
QC Summary Data	15
QC - Volatile Organics by EPA 8021B	15
QC - Nonhalogenated Organics by EPA 8015D - GRO	16
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	17
QC - Anions by EPA 300.0/9056A	18
Definitions and Notes	19
Chain of Custody etc.	20

### **Sample Summary**

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	Reported:
PO Box 247	Project Number:	01058-0007	Keporteu:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	07/29/22 14:46

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
NSW	E207167-01A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
ESW	E207167-02A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
SSW	E207167-03A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
S.1 1'	E207167-04A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
S.1 2'	E207167-05A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
S.1 3'	E207167-06A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
S.2 1'	E207167-07A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
S.2 2'	E207167-08A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
BG1	E207167-09A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.
BG2	E207167-10A	Soil	07/21/22	07/25/22	Glass Jar, 4 oz.



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### NSW

		E20/10/-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		98.1 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.6 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	rst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		110 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: RAS		Batch: 2231071
Chloride	ND	20.0	1	07/28/22	07/28/22	

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### **ESW**

		D 4:				
Analysta	Result	Reporting Limit	Dilution	Duamanad	Amalyzad	Notes
Analyte	Resuit	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	yst: IY		Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		98.1 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	yst: IY		Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.8 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	yst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		111 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	yst: RAS		Batch: 2231071
		<u> </u>	<u> </u>			<u> </u>



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### SSW

		D '				
Analyse	Dagult	Reporting		Duamanad	A malvera d	Notes
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: IY		Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		97.3 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: IY		Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.6 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		116 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: RAS		Batch: 2231071
thions by Elite Could's Court						



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### S.1 1'

Notes Batch: 2231011
Batch: 2231011
Batch: 2231011
Batch: 2231051
Batch: 2231071

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### S.1 2' E207167-05

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	Analyst: IY			Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		98.2 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		95.3 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	rst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		111 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: RAS		Batch: 2231071



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### S.1 3' E207167-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	Analyst: IY			Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg mg/kg		Analyst: IY			Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.0 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	yst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		110 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	yst: RAS		Batch: 2231071
Chloride	ND	20.0	1	07/28/22	07/29/22	

Chloride

### **Sample Data**

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### S.2 1'

		E207167-07					
		Reporting					
Analyte	Result	Limit	Dilu	ıtion	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst:	IY		Batch: 2231011
Benzene	ND	0.0250	1	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		99.9 %	70-130		07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY			Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.4 %	70-130		07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	JL		Batch: 2231051
Diesel Range Organics (C10-C28)	128	25.0	1	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	72.5	50.0	1	1	07/27/22	07/28/22	
Surrogate: n-Nonane		113 %	50-200		07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	RAS		Batch: 2231071

40.0

4070

07/28/22

2

07/29/22



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

S.2 2'

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	Analyst: IY			Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
o,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		98.1 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg mg/kg		Ana	lyst: IY		Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.0 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	Analyst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		117 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: RAS		Batch: 2231071
		<u> </u>		07/28/22	07/29/22	



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### BG1

		D				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anaryti	Result	Liiiit	Dilution	Trepared	Allalyzeu	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	vst: IY		Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		96.6 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg mg/kg		Analy	vst: IY		Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.8 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	vst: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		114 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	vst: RAS		Batch: 2231071
1 HI OH S D J E 1 1 1 C 0 0 1 0 / 9 0 C 0 1 1						



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

#### BG2

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	Analyst: IY			Batch: 2231011
Benzene	ND	0.0250	1	07/25/22	07/28/22	
Ethylbenzene	ND	0.0250	1	07/25/22	07/28/22	
Toluene	ND	0.0250	1	07/25/22	07/28/22	
o-Xylene	ND	0.0250	1	07/25/22	07/28/22	
p,m-Xylene	ND	0.0500	1	07/25/22	07/28/22	
Total Xylenes	ND	0.0250	1	07/25/22	07/28/22	
Surrogate: 4-Bromochlorobenzene-PID		96.3 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg mg/kg		Analy	/st: IY		Batch: 2231011
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/25/22	07/28/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.6 %	70-130	07/25/22	07/28/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	/st: JL		Batch: 2231051
Diesel Range Organics (C10-C28)	ND	25.0	1	07/27/22	07/28/22	
Oil Range Organics (C28-C36)	ND	50.0	1	07/27/22	07/28/22	
Surrogate: n-Nonane		109 %	50-200	07/27/22	07/28/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: RAS		Batch: 2231071



				•					
Pima Environmental Services-Carlsbad PO Box 247		Project Name: Project Number:		Hackberry 19-1 01058-0007					Reported:
Plains TX, 79355-0247		Project Manager		Tom Bynum					7/29/2022 2:46:34PM
		Volatile O	rganic	s by EPA 802	21B				Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2231011-BLK1)							Prepared: 0	7/25/22 Analy	/zed: 07/28/22
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	7.77		8.00		97.1	70-130			
LCS (2231011-BS1)							Prepared: 0	7/25/22 Analy	zed: 07/28/22
Benzene	4.74	0.0250	5.00		94.8	70-130			
Ethylbenzene	4.12	0.0250	5.00		82.4	70-130			
Toluene	4.46	0.0250	5.00		89.2	70-130			
o-Xylene	4.42	0.0250	5.00		88.3	70-130			
p,m-Xylene	8.52	0.0500	10.0		85.2	70-130			
Total Xylenes	12.9	0.0250	15.0		86.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.91		8.00		98.9	70-130			
LCS Dup (2231011-BSD1)							Prepared: 0	7/25/22 Analy	zed: 07/28/22
Benzene	4.89	0.0250	5.00		97.9	70-130	3.15	20	
Ethylbenzene	4.26	0.0250	5.00		85.2	70-130	3.39	20	
Toluene	4.61	0.0250	5.00		92.2	70-130	3.32	20	
o-Xylene	4.56	0.0250	5.00		91.2	70-130	3.23	20	
p,m-Xylene	8.82	0.0500	10.0		88.2	70-130	3.36	20	
Total Xylenes	13.4	0.0250	15.0		89.2	70-130	3.31	20	
Surrogate: 4-Bromochlorobenzene-PID	7.97		8.00		99.6	70-130			



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

Plains TX, 79355-0247		Project Manager		m Bynum					7/29/2022 2:46:34PM
	Non	halogenated (	Organics l	oy EPA 801	15D - Gl	RO			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2231011-BLK1)							Prepared: 0	7/25/22 A	analyzed: 07/28/22
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.51		8.00		93.8	70-130			
LCS (2231011-BS2)							Prepared: 0	7/25/22 A	analyzed: 07/28/22
Gasoline Range Organics (C6-C10)	42.0	20.0	50.0		83.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.53		8.00		94.1	70-130			
LCS Dup (2231011-BSD2)							Prepared: 0	7/25/22 A	analyzed: 07/28/22
Gasoline Range Organics (C6-C10)	41.5	20.0	50.0		82.9	70-130	1.22	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.48		8.00		93.5	70-130			



Pima Environmental Services-Carlsbad	Project Name:	Hackberry 19-1	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	7/29/2022 2:46:34PM

Plains TX, 79355-0247		Project Manage	r: To	m Bynum					7/29/2022 2:46:34PN
	Nonhal	logenated Or	ganics by l	EPA 8015I	) - DRO	/ORO			Analyst: JL
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2231051-BLK1)							Prepared: 0	7/27/22 Aı	nalyzed: 07/28/22
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	46.2		50.0		92.4	50-200			
LCS (2231051-BS1)							Prepared: 0	7/27/22 Aı	nalyzed: 07/28/22
Diesel Range Organics (C10-C28)	260	25.0	250		104	38-132			
urrogate: n-Nonane	53.2		50.0		106	50-200			
Matrix Spike (2231051-MS1)				Source:	E207167-	08	Prepared: 0	7/27/22 Aı	nalyzed: 07/28/22
Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132			
urrogate: n-Nonane	56.9		50.0		114	50-200			
Matrix Spike Dup (2231051-MSD1)				Source:	E207167-	08	Prepared: 0	7/27/22 Aı	nalyzed: 07/28/22
Diesel Range Organics (C10-C28)	246	25.0	250	ND	98.4	38-132	7.80	20	
urrogate: n-Nonane	51.5		50.0		103	50-200			



Pima Environmental Services-Carlsbad PO Box 247		Project Name:		Iackberry 19-1 1058-0007					Reported:
Plains TX, 79355-0247		Project Number: Project Manager:		om Bynum					7/29/2022 2:46:34PM
		Anions	by EPA	300.0/9056A					Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2231071-BLK1)							Prepared: 0	7/28/22 A	nalyzed: 07/28/22
Chloride	ND	20.0							
LCS (2231071-BS1)							Prepared: 0	7/28/22 A	nalyzed: 07/28/22
Chloride	246	20.0	250		98.3	90-110			
Matrix Spike (2231071-MS1)				Source: 1	E207167-	01	Prepared: 0	7/28/22 A	nalyzed: 07/28/22
Chloride	247	20.0	250	ND	98.7	80-120			
Matrix Spike Dup (2231071-MSD1)				Source: 1	E207167-	01	Prepared: 0	7/28/22 A	nalyzed: 07/28/22
Chloride	247	20.0	250	ND	98.9	80-120	0.137	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:	Hackberry 19-1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	07/29/22 14:46

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Cliont: D	ma Envi	ronmert	al Sanii	200	1 1	, Bili To		T-		La	b Us	e Onl	γ.		Т		TA	T	EPA P	rogram
Project.	Inck Re	eell 10	-/	, <del>,,,,</del>		Attention: Devon Evergy		Lab	WO	;		A dot		ber	1D	2D	3D	Standard	CWA	SDWA
Project M	lanager:	Tom By	num			Address:		Eá	207	الق				£2000				X		
	5614 N.					City, State, Zip						Analy	sis ar	d Metho	d					RCRA
City, State	e, Zip Ho	bbs. NN	1, 88240			Phone:		-	1			1			1	1			1	I
Phone: 5	80-748-	<u> 1613 </u>				Email:		-  원	8015		1		_		1	1	1 1	21241 60	State	TVI
	om@pin	<u>naoil.con</u>	<u>n</u>			Pima Project # /4/3		8	æ Æ	120	8	읽	300.0		Ž	×		Y	UT AZ	'^
Report d	re pA:					7 ma 1 roject # 79 5	1 106	- 1 용	18	₩ ₹	× 8	8	de 3			1'	1 1	_ <del></del>		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Numb	DRO/ORO by 8015	GRO/DRO by	ВТЕХ Бу 8021	VOC by 8260	Metals 6010	Chloride		86000	BGDOC			Remarks	
11:00	1/21/22	3		NSW			1								X					
11:05		1		ESW			2													
11:10				SSM			3								$\parallel$					
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Additio	nal Instru				F	Billing # 20971967	7													
				nticity of this san may be grounds		ware that tampering with or intentionally mis- tion. Sampled by:	slabelling the sa	pple loca	ation,									eceived on ice the da 6 °C on subsequent		oled or received
Relipquis	ned by: (Sign	nature)	Dat		15:30 3:30		Date	10°		ڳال <sub>ِ</sub>		Rec	eive	d on ice	:		Use Oi N	nly	enteriorista e en espera	
Relinquis		(ature)	-19		Time	Beceived by: (Signature)	/ Date /	5/2	Z	:2	3	71			. T	_		13		
Relinquis	hed by: (Sign	nature)	Dat	e 100	Time /	Received by: (Signature)	Date		Tim	te		AVO	3 Te	mp °C	4					
Sample Ma	tric S - Soil)	Sd - Solid, Se	- Sludge, A -	Aqueous, O - Ot	her		Conta	iner Ty	/pe(g	- glas	) p -	poly/p	lasti	c, ag - an	iber g	lass, v	/ - VOA	\		
Note: Sar	nples are di	scarded 30	days after	results are repo	orted unle	ss other arrangements are made. Hazar	rdous samples	will be	return	ed to c	lient	or disp	osed	of at the o	lient (	xpens	e. The	report for the a	nalysis of th	e above
1	C <b>-</b> I-				a laborate	on with this COC. The liability of the labo	ratory is limit	d to th	e amo	unt pa	id for	on the	repo	rt.						



#### **Envirotech Analytical Laboratory**

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:	07/25/22	08:23		Work Order ID:	E207167
Phone:	(575) 631-6977	Date Logged In:	07/25/22	09:53		Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	07/29/22	17:00 (4 day TAT)			
	Custody (COC)		77				
	ne sample ID match the COC?	tab the COC	Yes				
	ne number of samples per sampling site location ma	ich the COC	Yes				
	amples dropped off by client or carrier?	. 1 1 0	Yes	Carrier: <u>U</u>	<u>JPS</u>		
	e COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes				
	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi		Yes	ı		Comment	s/Resolution
	Turn Around Time (TAT)						
	COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C 7. Was a s	Cooler cooler received?		Yes				
	was cooler received in good condition?		Yes				
9. Was the	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
	were custody/security seals intact?		NA				
•	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling		Yes				
13. If no v	visible ice, record the temperature.  Actual sample	temperature: 4°0	<u>C</u>				
Sample C	<u>Container</u>						
14. Are ac	queous VOC samples present?		No				
15. Are V	OC 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 no	on-VOC samples collected in the correct containers	?	Yes				
19. Is the a	appropriate volume/weight or number of sample contain	ners collected?	Yes				
Field Lab	<u>oel</u>						
	field sample labels filled out with the minimum info ample ID?	ormation:	Yes				
D	ate/Time Collected?		Yes	ı			
C	ollectors name?		No				
-	<u>reservation</u>						
	the COC or field labels indicate the samples were pr	reserved?	No				
	ample(s) correctly preserved?		NA				
24. Is lab	filteration required and/or requested for dissolved n	netals?	No				
	se Sample Matrix						
26. Does	the sample have more than one phase, i.e., multipha	se?	No				
27. If yes,	, does the COC specify which phase(s) is to be analy	yzed?	NA				
Subcontr	act Laboratory						
	amples required to get sent to a subcontract laborato	ry?	No				
29. Was a	subcontract laboratory specified by the client and it	f so who?	NA	Subcontract Lab	: NA		
Client In	astruction_						

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: Hack Berry 19 Fed 1 Batt.

Work Order: E208147

Job Number: 01058-0007

Received: 8/26/2022

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 8/29/22

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

Date Reported: 8/29/22

Tom Bynum PO Box 247

Plains, TX 79355-0247

Project Name: Hack Berry 19 Fed 1 Batt.

Workorder: E208147

Date Received: 8/26/2022 10:32:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/26/2022 10:32:00AM, under the Project Name: Hack Berry 19 Fed 1 Batt..

The analytical test results summarized in this report with the Project Name: Hack Berry 19 Fed 1 Batt. apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman

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### **Table of Contents**

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
CSW-1	5
CSW-2	6
CSW-3	7
CSW-4	8
CS-1	9
CS-2	10
CS-3	11
CS-4	12
QC Summary Data	13
QC - Volatile Organic Compounds by EPA 8260B	13
QC - Nonhalogenated Organics by EPA 8015D - GRO	14
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	15
QC - Anions by EPA 300.0/9056A	16
Definitions and Notes	17
Chain of Custody etc.	18

### **Sample Summary**

Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	Donoutoda
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	08/29/22 16:14

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CSW-1	E208147-01A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CSW-2	E208147-02A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CSW-3	E208147-03A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CSW-4	E208147-04A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CS-1	E208147-05A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CS-2	E208147-06A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CS-3	E208147-07A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.
CS-4	E208147-08A	Soil	08/24/22	08/26/22	Glass Jar, 4 oz.



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CSW-1 E208147-01

		1200147-01					
Analyte	Result	Reporting Limit		ution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	•		Batch: 2235066
Benzene	ND	0.0250		1	08/26/22	08/26/22	
Ethylbenzene	ND	0.0250		1	08/26/22	08/26/22	
Toluene	ND	0.0250		1	08/26/22	08/26/22	
o-Xylene	ND	0.0250		1	08/26/22	08/26/22	
p,m-Xylene	ND	0.0500		1	08/26/22	08/26/22	
Total Xylenes	ND	0.0250		1	08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		107 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		107 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	JL		Batch: 2235057
Diesel Range Organics (C10-C28)	ND	25.0		1	08/25/22	08/26/22	
Oil Range Organics (C28-C36)	ND	50.0		1	08/25/22	08/26/22	
Surrogate: n-Nonane		94.4 %	50-200		08/25/22	08/26/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	KL		Batch: 2235062
Chloride	ND	20.0		1	08/26/22	08/26/22	



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CSW-2

		E208147-02							
Reporting									
Analyte	Result	Limit	Dilı	ution	Prepared	Analyzed	Notes		
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	IY		Batch: 2235066		
Benzene	ND	0.0250		1	08/26/22	08/26/22			
Ethylbenzene	ND	0.0250		1	08/26/22	08/26/22			
Toluene	ND	0.0250		1	08/26/22	08/26/22			
o-Xylene	ND	0.0250		1	08/26/22	08/26/22			
p,m-Xylene	ND	0.0500		1	08/26/22	08/26/22			
Total Xylenes	ND	0.0250		1	08/26/22	08/26/22			
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/22	08/26/22			
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130		08/26/22	08/26/22			
Surrogate: Toluene-d8		104 %	70-130		08/26/22	08/26/22			
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	IY		Batch: 2235066		
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/22	08/26/22			
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/22	08/26/22			
Surrogate: 1,2-Dichloroethane-d4		94.5 %	70-130		08/26/22	08/26/22			
Surrogate: Toluene-d8		104 %	70-130		08/26/22	08/26/22			
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	JL		Batch: 2235057		
Diesel Range Organics (C10-C28)	ND	25.0		1	08/25/22	08/26/22			
Oil Range Organics (C28-C36)	ND	50.0		1	08/25/22	08/26/22			
Surrogate: n-Nonane		90.7 %	50-200		08/25/22	08/26/22			
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	KL		Batch: 2235062		

20.0

08/26/22

08/26/22

ND



Chloride

Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CSW-3

#### E208147-03

		Reporting					
Analyte	Result	Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
Benzene	ND	0.0250	1		08/26/22	08/26/22	
Ethylbenzene	ND	0.0250	1		08/26/22	08/26/22	
Toluene	ND	0.0250	1	l	08/26/22	08/26/22	
o-Xylene	ND	0.0250	1		08/26/22	08/26/22	
p,m-Xylene	ND	0.0500	1	l	08/26/22	08/26/22	
Total Xylenes	ND	0.0250	1		08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		97.4 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		104 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	-	Analyst:	IY		Batch: 2235066
Gasoline Range Organics (C6-C10)	ND	20.0	1		08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		97.4 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		104 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	Л		Batch: 2235057
Diesel Range Organics (C10-C28)	ND	25.0	1		08/25/22	08/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1		08/25/22	08/26/22	
Surrogate: n-Nonane		92.9 %	50-200		08/25/22	08/26/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	KL		Batch: 2235062



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CSW-4

#### E208147-04

		Reporting					
Analyte	Result	Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: Γ	Y		Batch: 2235066
Benzene	ND	0.0250	1		08/26/22	08/26/22	
Ethylbenzene	ND	0.0250	1		08/26/22	08/26/22	
Toluene	ND	0.0250	1		08/26/22	08/26/22	
o-Xylene	ND	0.0250	1		08/26/22	08/26/22	
p,m-Xylene	ND	0.0500	1		08/26/22	08/26/22	
Total Xylenes	ND	0.0250	1		08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		98.5 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		103 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	٠	Analyst: Γ	Y		Batch: 2235066
Gasoline Range Organics (C6-C10)	ND	20.0	1	ļ.	08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		101 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		98.5 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		103 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: J	L		Batch: 2235057
Diesel Range Organics (C10-C28)	ND	25.0	1		08/25/22	08/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1		08/25/22	08/26/22	
Surrogate: n-Nonane		92.8 %	50-200		08/25/22	08/26/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: K	KL .		Batch: 2235062
Allions by EFA 500.0/9030A							



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CS-1

E20		

	Reporting					
Result	Limit	Di	lution	Prepared	Analyzed	Notes
mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0500		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
	96.9 %	70-130		08/26/22	08/26/22	
	103 %	70-130		08/26/22	08/26/22	
	101 %	70-130		08/26/22	08/26/22	
mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
ND	20.0		1	08/26/22	08/26/22	
	96.9 %	70-130		08/26/22	08/26/22	
	103 %	70-130		08/26/22	08/26/22	
	101 %	70-130		08/26/22	08/26/22	
mg/kg	mg/kg		Analyst:	JL		Batch: 2235057
ND	25.0		1	08/25/22	08/26/22	
ND	50.0		1	08/25/22	08/26/22	
	93.4 %	50-200		08/25/22	08/26/22	
	93.4 %	20 200				
mg/kg	93.4 % mg/kg		Analyst:			Batch: 2235062
	mg/kg ND	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           ND         0.0250           MD         0.0250           MD         0.0250           mg/kg         mg/kg           MD         20.0           96.9 %         103 %           103 %         101 %           mg/kg         mg/kg           mg/kg         mg/kg           ND         25.0	Result         Limit         Discrete           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0500           ND         0.0250           96.9 %         70-130           103 %         70-130           101 %         70-130           103 %         70-130           103 %         70-130           101 %         70-130           mg/kg         mg/kg           ND         25.0	Result         Limit         Dilution           mg/kg         mg/kg         Analyst           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         70-130           103 %         70-130           101 %         70-130           mg/kg         mg/kg         Analyst:           103 %         70-130           103 %         70-130           101 %         70-130           mg/kg         mg/kg         Analyst:           mg/kg         mg/kg         Analyst:	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IV           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0500         1         08/26/22           ND         0.0500         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           103 %         70-130         08/26/22           103 %         70-130         08/26/22           mg/kg         mg/kg         Analyst: IV           ND         20.0         1         08/26/22           103 %         70-130         08/26/22           103 %         70-130         08/26/22           101 %         70-130         08/26/22           mg/kg         mg/kg         Analyst: JL           ND         25.0         1         08/25/22	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         08/26/22         08/26/22           ND         0.0500         1         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22           103 %         70-130         08/26/22         08/26/22           103 %         70-130         08/26/22         08/26/22           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         08/26/22         08/26/22           103 %         70-130         08/26/22         08/26/22           103 %         70-130         08/26/22         08/26/22           103 %



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CS-2 E208147-06

Result	Reporting	Dile	ıtion	Prepared	Analyzed	Notes
Result	Limit	Ditt	ation	Trepared	Anaryzed	Notes
mg/kg	ng/kg mg/kg Analyst: IY			Batch: 2235066		
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
ND	0.0500		1	08/26/22	08/26/22	
ND	0.0250		1	08/26/22	08/26/22	
	95.8 %	70-130		08/26/22	08/26/22	
	98.1 %	70-130		08/26/22	08/26/22	
	102 %	70-130		08/26/22	08/26/22	
mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
ND	20.0		1	08/26/22	08/26/22	
	95.8 %	70-130		08/26/22	08/26/22	
	98.1 %	70-130		08/26/22	08/26/22	
	102 %	70-130		08/26/22	08/26/22	
mg/kg	mg/kg		Analyst:	JL		Batch: 2235057
ND	25.0		1	08/25/22	08/26/22	
ND	50.0		1	08/25/22	08/26/22	
	96.7 %	50-200		08/25/22	08/26/22	
mg/kg	mg/kg		Analyst:	KL		Batch: 2235062
ND	20.0		1	08/26/22	08/26/22	
	ND Mg/kg ND Mg/kg	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           MD         0.0250           95.8 %         98.1 %           102 %         mg/kg           ND         20.0           95.8 %         98.1 %           102 %         mg/kg           Mg/kg         mg/kg           ND         25.0           ND         50.0           96.7 %         mg/kg           mg/kg         mg/kg	Result         Limit         Dilu           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           PM         0.0250           MD         0.0250           95.8 %         70-130           98.1 %         70-130           102 %         70-130           98.1 %         70-130           102 %         70-130           mg/kg         mg/kg           ND         25.0           ND         50.0           96.7 %         50-200           mg/kg         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analyst:           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           95.8 %         70-130           98.1 %         70-130           mg/kg         mg/kg         Analyst:           ND         20.0         1           95.8 %         70-130         1           95.8 %         70-130         1           mg/kg         mg/kg         Analyst:           ND         25.0         1           ND         50.0         1           96.7 %         50-200           mg/kg         Mg/kg         Analyst:	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0500         1         08/26/22           ND         0.0250         1         08/26/22           ND         0.0250         1         08/26/22           95.8 %         70-130         08/26/22           98.1 %         70-130         08/26/22           102 %         70-130         08/26/22           98.1 %         70-130         08/26/22           98.1 %         70-130         08/26/22           102 %         70-130         08/26/22           102 %         70-130         08/26/22           102 %         70-130         08/26/22           102 %         70-130         08/26/22           ND         25.0         1         08/25/22           ND         50.0         1         08/25/22           ND	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY         ND         0.0250         1         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22         08/26/22           ND         0.0500         1         08/26/22         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22         08/26/22           ND         0.0250         1         08/26/22         08/26/22         08/26/22           95.8 %         70-130         08/26/22         08/26/22         08/26/22           98.1 %         70-130         08/26/22         08/26/22         08/26/22           mg/kg         mg/kg         Analyst: JL         ND         25.0         1         08/26/22         08/26/22         08/26/22           mg/kg         mg/kg         Analyst: JL         ND         50.0         1         08/25/22         08/26/22 <td< td=""></td<>



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CS-3

E2081	47	$\Lambda_{7}$
H.ZUXI	4/-	

		Reporting					
Analyte	Result	Limit	Di	lution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
Benzene	ND	0.0250		1	08/26/22	08/26/22	
Ethylbenzene	ND	0.0250		1	08/26/22	08/26/22	
Toluene	ND	0.0250		1	08/26/22	08/26/22	
o-Xylene	ND	0.0250		1	08/26/22	08/26/22	
p,m-Xylene	ND	0.0500		1	08/26/22	08/26/22	
Total Xylenes	ND	0.0250		1	08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		97.3 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		105 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst:	IY		Batch: 2235066
Gasoline Range Organics (C6-C10)	ND	20.0		1	08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		102 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		97.3 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		105 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst:	JL		Batch: 2235057
Diesel Range Organics (C10-C28)	ND	25.0		1	08/25/22	08/26/22	
Oil Range Organics (C28-C36)	ND	50.0		1	08/25/22	08/26/22	
Surrogate: n-Nonane		88.3 %	50-200		08/25/22	08/26/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst:	KL		Batch: 2235062
Chloride	ND	20.0		1	08/26/22	08/26/22	



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

#### CS-4

#### E208147-08

		Reporting					
Analyte	Result	Limit	Dilu	tion	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg		Analyst: 1	IY		Batch: 2235066
Benzene	ND	0.0250	1		08/26/22	08/26/22	
Ethylbenzene	ND	0.0250	1		08/26/22	08/26/22	
Toluene	ND	0.0250	1		08/26/22	08/26/22	
o-Xylene	ND	0.0250	1		08/26/22	08/26/22	
p,m-Xylene	ND	0.0500	1		08/26/22	08/26/22	
Total Xylenes	ND	0.0250	1		08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		98.1 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		102 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: 1	IY		Batch: 2235066
Gasoline Range Organics (C6-C10)	ND	20.0	1		08/26/22	08/26/22	
Surrogate: Bromofluorobenzene		98.1 %	70-130		08/26/22	08/26/22	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130		08/26/22	08/26/22	
Surrogate: Toluene-d8		102 %	70-130		08/26/22	08/26/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: .	JL		Batch: 2235057
Diesel Range Organics (C10-C28)	ND	25.0	1		08/25/22	08/26/22	
Oil Range Organics (C28-C36)	ND	50.0	1		08/25/22	08/26/22	
Surrogate: n-Nonane		92.3 %	50-200		08/25/22	08/26/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: 1	KL		Batch: 2235062
Amons by ETA 300.0/7030A							



Pima Environmental Services-Carlsbad Project Name: Hack Berry 19 Fed 1 Batt.

PO Box 247 Poject Number: 01058-0007

Plains TX, 79355-0247 Project Manager: Tom Bynum 8/29/2022 4:14:48PM

Plains TX, 79355-0247		Project Manager	: To	om Bynum				8/2	29/2022 4:14:48PM
	V	olatile Organi	c Compo	unds by EI	PA 82601	В			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2235066-BLK1)							Prepared: 0	8/26/22 Anal	yzed: 08/26/22
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	0.476		0.500		95.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.488		0.500		97.5	70-130			
LCS (2235066-BS1)							Prepared: 0	8/26/22 Anal	yzed: 08/26/22
Benzene	2.25	0.0250	2.50		90.1	70-130			
Ethylbenzene	2.41	0.0250	2.50		96.6	70-130			
Toluene	2.27	0.0250	2.50		90.9	70-130			
o-Xylene	2.47	0.0250	2.50		98.7	70-130			
p,m-Xylene	4.85	0.0500	5.00		97.0	70-130			
Total Xylenes	7.32	0.0250	7.50		97.5	70-130			
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.508		0.500		102	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			
LCS Dup (2235066-BSD1)							Prepared: 0	8/26/22 Anal	yzed: 08/26/22
Benzene	2.31	0.0250	2.50		92.3	70-130	2.39	23	
Ethylbenzene	2.39	0.0250	2.50		95.5	70-130	1.10	27	
Toluene	2.25	0.0250	2.50		89.9	70-130	1.11	24	
o-Xylene	2.45	0.0250	2.50		98.0	70-130	0.671	27	
p,m-Xylene	4.76	0.0500	5.00		95.2	70-130	1.81	27	
Total Xylenes	7.21	0.0250	7.50		96.2	70-130	1.42	27	
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.1	70-130			

0.500

70-130

0.491



Surrogate: Toluene-d8

Pima Environmental Services-CarlsbadProject Name:Hack Berry 19 Fed 1 Batt.Reported:PO Box 247Project Number:01058-0007Plains TX, 79355-0247Project Manager:Tom Bynum8/29/2022 4:14:48PM

Nonhalogenated	Organice	hv	FDA QO15D	CPO
Monnaiogenateu	Organics	IJУ	ETA OUTSD	- GKO

Analyst: IY

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

Blank (2235066-BLK1)						Prepared: 08	/26/22 Analyzed	: 08/26/22
Gasoline Range Organics (C6-C10)	ND	20.0						
Surrogate: Bromofluorobenzene	0.476		0.500	95.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500	102	70-130			
Surrogate: Toluene-d8	0.488		0.500	97.5	70-130			
LCS (2235066-BS2)						Prepared: 08	/26/22 Analyzed	: 08/26/22
Gasoline Range Organics (C6-C10)	43.8	20.0	50.0	87.7	70-130			
Surrogate: Bromofluorobenzene	0.489		0.500	97.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.488		0.500	97.5	70-130			
Surrogate: Toluene-d8	0.501		0.500	100	70-130			
LCS Dup (2235066-BSD2)						Prepared: 08	/26/22 Analyzed	: 08/26/22
Gasoline Range Organics (C6-C10)	43.8	20.0	50.0	87.5	70-130	0.162	20	
Surrogate: Bromofluorobenzene	0.483		0.500	96.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.504		0.500	101	70-130			
Surrogate: Toluene-d8	0.500		0.500	99.9	70-130			



Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM

Plains TX, 79355-0247		Project Manage	r: To	m Bynum					8/29/2022 4:14:48PM
	Nonha	logenated Or		Analyst: JL					
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2235057-BLK1)							Prepared: 0	8/25/22 A1	nalyzed: 08/26/22
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	43.9		50.0		87.7	50-200			
LCS (2235057-BS1)							Prepared: 0	8/25/22 Aı	nalyzed: 08/26/22
Diesel Range Organics (C10-C28)	231	25.0	250		92.3	38-132			
Surrogate: n-Nonane	39.9		50.0		79.9	50-200			
Matrix Spike (2235057-MS1)				Source:	E208146-0	03	Prepared: 0	8/25/22 A1	nalyzed: 08/26/22
Diesel Range Organics (C10-C28)	234	25.0	250	ND	93.6	38-132			
Surrogate: n-Nonane	37.1		50.0		74.2	50-200			
Matrix Spike Dup (2235057-MSD1)				Source:	E208146-	03	Prepared: 0	8/25/22 At	nalyzed: 08/26/22
Diesel Range Organics (C10-C28)	226	25.0	250	ND	90.5	38-132	3.36	20	
Surrogate: n-Nonane	40.3		50.0		80.5	50-200			



Pima Environmental Services-Carlsbad PO Box 247	Project Name: Project Number:	Hack Berry 19 Fed 1 Batt. 01058-0007	Reported:		
Plains TX, 79355-0247	Project Manager:	Tom Bynum	8/29/2022 4:14:48PM		

Anions by EPA 300.0/9056A										
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit		
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes	
Blank (2235062-BLK1)							Prepared: 0	8/26/22 Anal	yzed: 08/26/22	
Chloride	ND	20.0								
LCS (2235062-BS1)							Prepared: 0	8/26/22 Anal	yzed: 08/26/22	
Chloride	246	20.0	250		98.5	90-110				
LCS Dun (2235062-BSD1)							Prepared: 0	8/26/22 Anal	vzed: 08/29/22	

250

20.0

108

90-110

8.97

#### 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**

ſ	Pima Environmental Services-Carlsbad	Project Name:	Hack Berry 19 Fed 1 Batt.	
l	PO Box 247	Project Number:	01058-0007	Reported:
l	Plains TX, 79355-0247	Project Manager:	Tom Bynum	08/29/22 16:14

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



Released to	Project Information
Imaging: 12/7/20	Client: Pima Envir Project: YACK BL Project Manager: 1 Address: 5614 N. I City, State, Zip Hol Phone: 580-748-1
22 1	Email: tom@pim Report due by:

**Chain of Custody** 

	Päge		of	- 1		Received by OCD: 9/8/2022
	EF	A Pr	ogra	m	Ì	$\mathcal{C}$
	CV	VA	SD	WA		D.
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)	5	AZ	TX			-
						3:0
	Rem	arks				3:13:06 PM
_					•	-

Client: P	ima Envi	ronment	al Servi	ces		Bill To		ī		ı i s	h Hs	e On	lv				т	AT		EPA Pr	ogram
Project:	HackBe	rru 10	1 Fea	Ball.	,	Attention: DEVON ENERGY	!	Lab	Lab WO# Job Number		1D	2D			andard	CWA	SDWA				
	lanager:					Address: 33		LE	<i>2</i> 08	14	7			- 6007	X						
	5614 N.					City, State, Zip						Analy	sis aı	nd Meth	od						RCRA
	e, Zip Ho		<u>/1, 8824(</u>	)		Phone:		ı													
	580 <u>-748-</u>					Email:	·	25	515				į				1	1		State	
	tom@pin	naoil.com	<u>n</u>		- 1	Pima Project # 1112		δ A	) A	12	8	0	0.0		Σ	1	1	1		UT AZ	TX
Report d	ue by:			<del></del>		Pima Project # 143		Į	8	8 8	/82	601	<u>ه</u> ع					1	LXL_		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	ВТЕХ by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC	BGDOC				Remarks	
<b>5:0</b> 0	8/24/22	S		CSW.	- \		1								X						
5:03	1	1		CSW-	. 2		2								1						
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Addition	al Instruc	tions:	_ t,	Rilling	# 1	20971967					•——			·							
I, (field sam	pler), attest to	the validity	and auther	ticity of this san	ple. I am	aware that tampering with or intentionally mislab	elling the sampl	e locat	ion,					-	•					they are sample	d or received
date or time	of collection	is considere	d fraud and	may be grounds	for legal a		gers					packed	in ice	at an avg te	mp abov	e O but	less than	6°C on	subsequent da	iys.	
//U-KA	ed by: (Signa	ande	Date of S	7-25-22	rime 9:4	Received Dy: (Signature)	Date	56	Time	7.0	JU <sub>k</sub>	Rece	ivec	l on ice	: //	$\overline{}$	Jse Oi N	nly			
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Relinquish	ed by: (Sign	ature)	Dat		Time	Received by: (Signature)	Date Z(g	2/1	Time			AVG	Ten	որ °C	4						
Sample Mar	trix: \$ - Soil. Se	d - Solid. Se -	- Sludge. A -	Aqueous, O - Oti	ner		Containe	rTVD	e: g - i	glass.					ber gi	ass. v	- VOA	·			
<u> </u>						ess other arrangements are made. Hazardo													t for the ana	lysis of the	above
	lote: 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 amples 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.																				



Printed: 8/26/2022 11:54:00AM

#### **Envirotech Analytical Laboratory**

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:	08/26/22	10:32		Work Order ID:	E208147
Phone:	(575) 631-6977	Date Logged In:	08/25/22	17:21		Logged In By:	Alexa Michaels
Email:	tom@pimaoil.com	Due Date:	08/26/22	17:00 (0 day TAT)			
1. Does th 2. Does th 3. Were sa 4. Was the 5. Were al	Custody (COC)  the sample ID match the COC?  the number of samples per sampling site location match the cocy of the number of samples per sampling site location match the cocy of the coc	ted analyses?	Yes Yes Yes Yes Yes	Carrier: <u>U</u>	I <u>PS</u>	<u>Comments</u>	s/Resolution
	urn Around Time (TAT) COC indicate standard TAT, or Expedited TAT?		Yes				
Sample C	•		103				
	ample cooler received?		Yes				
	was cooler received in good condition?		Yes				
9. Was the	e sample(s) received intact, i.e., not broken?		Yes				
	custody/security seals present?		No				
	were custody/security seals intact?						
12. Was the	e sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples are minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	NA Yes				
	· •	temperature. 4	<u> </u>				
Sample C	ueous VOC samples present?		No				
	OC samples collected in VOA Vials?		NA				
	head space less than 6-8 mm (pea sized or less)?		NA				
			NA				
	trip blank (TB) included for VOC analyses?	•					
	on-VOC samples collected in the correct containers?		Yes				
Field Lab 20. Were	uppropriate volume/weight or number of sample contain wel field sample labels filled out with the minimum info sample ID?		Yes Yes				
D	ate/Time Collected?  ollectors name?		Yes	L			
	reservation		No				
	the COC or field labels indicate the samples were pr	eserved?	No				
	ample(s) correctly preserved?	eserveu.	NA				
	filteration required and/or requested for dissolved m	etals?	No				
	•		110				
	se Sample Matrix_ the sample have more than one phase, i.e., multiphas	202	NI.				
	does the COC specify which phase(s) is to be analy		No				
		zeu?	NA				
	act Laboratory						
	imples required to get sent to a subcontract laborator	~	No				
29. Was a	subcontract laboratory specified by the client and if	so who?	NA	Subcontract Lab	: na		
Client In	struction						
						<u> </u>	

Date

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

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 141839

#### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
	Action Number:
Oklahoma City, OK 73102	141839
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	$^{\prime}$	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2125149254 HACKBERRY 19 FED 001, thank you. This closure is approved.	12/7/2022