

Incident ID	nkmw1108338334
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?	<u>51-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

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

Printed Name: Dale Woodall Title: EHS ProfessionalSignature: Dale Woodall Date: 3/1/2023email: dale.woodall@dn.com Telephone: 575-748-1838**OCD Only**Received by: Jocelyn Harimon Date: 03/01/2023

Incident ID	nkmw1108338334
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Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Dale Woodall Title: EHS Professional

Signature: Dale Woodall Date: 3/1/2023

email: dale.woodall@dm.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 03/01/2023

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

Closure Approved by: Ashley Maxwell Date: 3/6/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist



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

February 22nd, 2023

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

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

Re: Site Assessment, Remediation, and Closure Report
Hackberry 19 Federal #002
API No. 30-015-30551
GPS: Latitude 32.6658363 Longitude -103.9105835
UL "C", Sec. 18, T19S, R31E
Eddy County, NM
NMOCD Ref. No. NKMW1108338334

Pima Environmental Services, LLC. (Pima) has been contracted by Devon Energy Production Company, LP (Devon) to perform a spill assessment, remediation activities, and submit this closure report for a crude oil and produced water release that occurred at the Hackberry 19 Federal #002 (Hackberry). The initial C-141 was submitted on April 8th, 2009 (Appendix C). This incident was assigned Incident ID NKMW1108338334 by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Hackberry is located approximately twenty-five (25) miles northeast of Carlsbad, NM. This spill site is in Unit C, Section 18, Township 19S, Range 31E, Latitude 32.6658363 Longitude -103.9105835, Eddy County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation- Eolian and piedmont deposits (Holocene to middle Pleistocene) interlayered eolian sands and piedmont-slope deposits (QEP). The soil in this area is made up of Berino loamy 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 well-drained. There is a medium potential for karst geology to be present in the area of the Hackberry (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest defined groundwater in this area is between 51 to 100 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 167 BGS. The closest waterway and is an unnamed playa, located approximately 2.1 miles to the west of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50'	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

NJMW1319349423: On March 9th, 2009, a lease operator discovered the heater treater leaking fluid. Upon investigation it was revealed that the heater's fire tube had developed a pin hole due to corrosion, which caused fluid to release onto the ground. The released fluids were calculated to be approximately 5 barrels (bbls) of oil and 5 barrels (bbls) of produced water. No fluids were recovered from the area.

Remediation Activities, Site Assessment, and Soil Sampling Results

On July 29th, 2020, Pima Environmental mobilized personnel to the Hackberry in order to assess the area and try to determine the horizontal and vertical extent of the release. We sampled the areas around the heater treater vessel. Laboratory results of this sampling event can be found in the following data table. An initial site map can be found in Figure 4.

7-29-2020 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')								
Devon Energy - Hackberry 18 Fed 2								
Sample Date 7-29-20		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	CI mg/kg
S-1	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-2	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-3	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-4	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-5	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-6	0-6"	ND	ND	ND	ND	ND	ND	80
S-7	0-6"	ND	ND	ND	ND	ND	ND	5000
	1'	ND	ND	ND	ND	ND	ND	1200
	2'	ND	ND	ND	ND	ND	ND	390
	3'	ND	ND	ND	ND	ND	ND	240
S-8	0-6"	ND	ND	ND	1300	2300	3600	ND
	1'	ND	ND	ND	660	1200	1860	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	55	96	151	ND

S-9	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-10	0-6"	ND	ND	ND	ND	ND	ND	140
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	23	ND	23	66
	3'	ND	ND	ND	ND	ND	ND	ND
S-11	0-6"	ND	ND	ND	17000	9100	26100	ND
	1'	ND	ND	ND	940	980	1920	ND
	2'	ND	ND	ND	4300	3200	7500	ND
	3'	ND	ND	ND	250	270	520	ND
S-12	0-6"	ND	ND	ND	ND	ND	ND	100
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Remediation Activities:

On April 1st, 2021, Pima mobilized personnel and equipment to conduct remedial activities. We excavated the areas around S-7, S-8, and S-11. Confirmation samples were obtained from the bottoms and sidewalls of these excavations. The laboratory results of this sampling event can be found in the following data table. A confirmation site map can be found in Figure 5.

4-1-2021 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')								
DEVON ENERGY - HACKBERRY 18 FED 2								
Sample Date 4-1-2021		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
S-7	4'	ND	ND	ND	ND	ND	ND	ND
	Wall	ND	ND	ND	ND	ND	ND	ND
S-8	2'	ND	ND	ND	ND	ND	ND	ND
	Wall	ND	ND	ND	ND	ND	ND	ND
S-11	3'	ND	ND	ND	ND	ND	ND	ND
	Wall	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

On April 13th, 2021, Pima returned to the site to backfill the excavated areas with clean backfill material. Please see Appendix D for photographic documentation.

Countermeasures due to Rejection:

On January 17th and 30th, 2023, Pima personnel returned to the Hackberry to achieve full delineation of the affected area. A total of two soil samples were collected for areas overlapping sample points S8 and S11, down to 4' bgs, and four composite side wall samples were collected surrounding the release area. Laboratory results of this sampling event can be found in the following data table. The previous rejected work plan report can be found in Appendix F.

1-17-2023, 1-30-2023 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')									
Devon Energy - Hackberry 18 Fed 2									
NM Approved Laboratory Results									
Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-8	1/17/2023	4'	ND	ND	ND	ND	ND	ND	ND
S-11	1/17/2023	4'	ND	ND	ND	ND	ND	ND	ND
SW 1	1/30/2023	Surface	ND	ND	ND	ND	ND	ND	ND
SW 2			ND	ND	ND	ND	ND	ND	ND
SW 3			ND	ND	ND	ND	ND	ND	ND
SW 4			ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Pima Environmental believes groundwater levels have been adequately characterized to be between 51-100' bgs. Also, horizontal and vertical delineation has been successfully determined.

Based on the sample results, the bottoms and sidewalls were below NMOCD Closure Criteria 19.15.29 NMAC. In combination with the previous excavation affected area, we believe the impacted area has been adequately remediated. See Appendix D for Photographic Documentation.

Closure Request

Due to analytical levels falling below NMOCD closure criteria, no further action is required.

After careful review, Pima requests that this incident, NKMW1108338334 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 Sebastian Orozco at 619-721-4813 or Sebastian@pimaoil.com.

Respectfully,



Sebastian Orozco
Environmental Professional
Pima Environment Services, LLC

Attachments

Figures:

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

Appendices:

- Appendix A – Referenced Water Surveys
- Appendix B – Soil Survey and Geological Data
- Appendix C – C-141 Form and Correspondence
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Reports
- Appendix F – Rejected Closure Report



Pima Environmental Services

Figures:

1-Location Map

2-TOPO Map

3-Karst Map

4-Initial Site Map

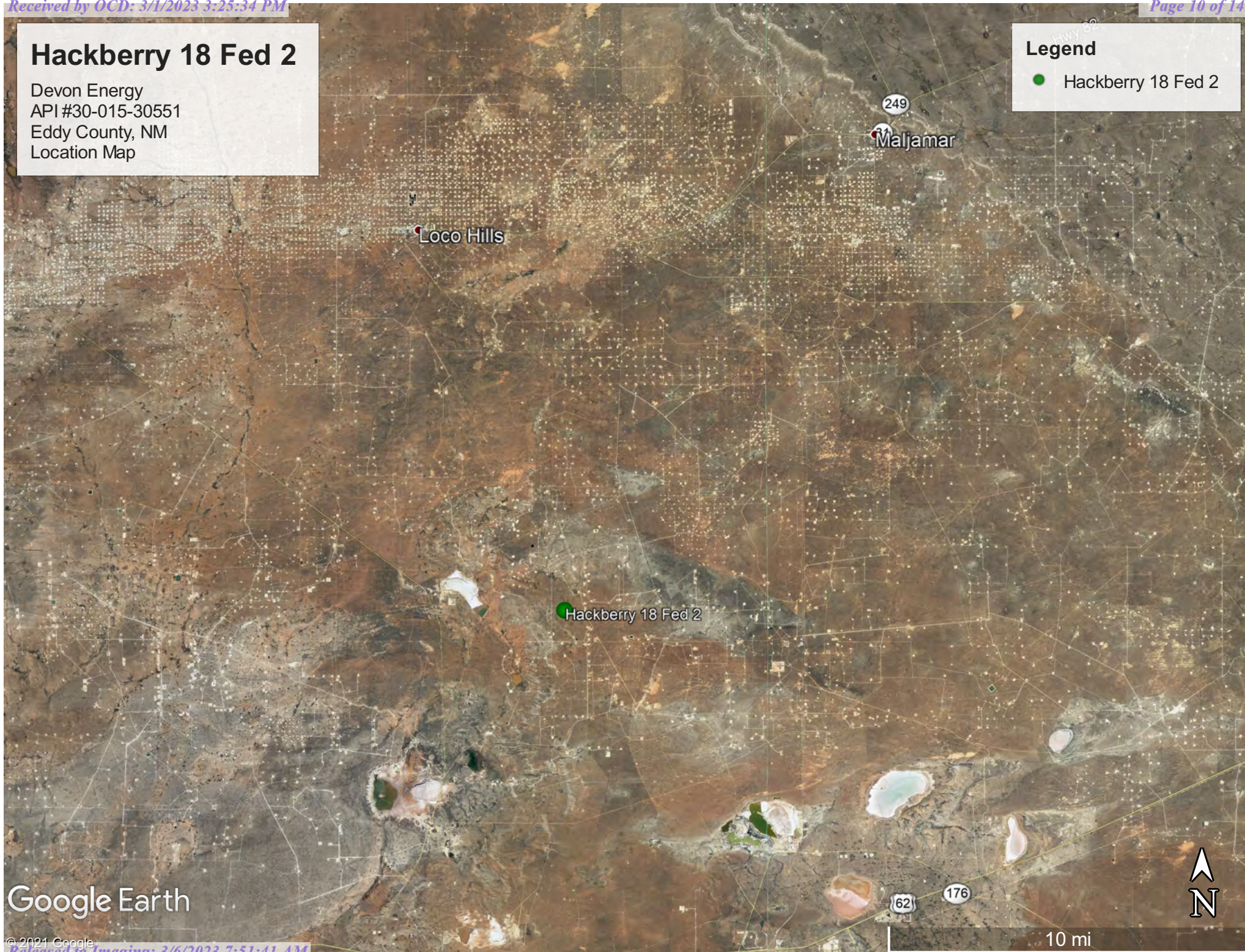
5-Confirmation Map

Hackberry 18 Fed 2

Devon Energy
API #30-015-30551
Eddy County, NM
Location Map

Legend

● Hackberry 18 Fed 2



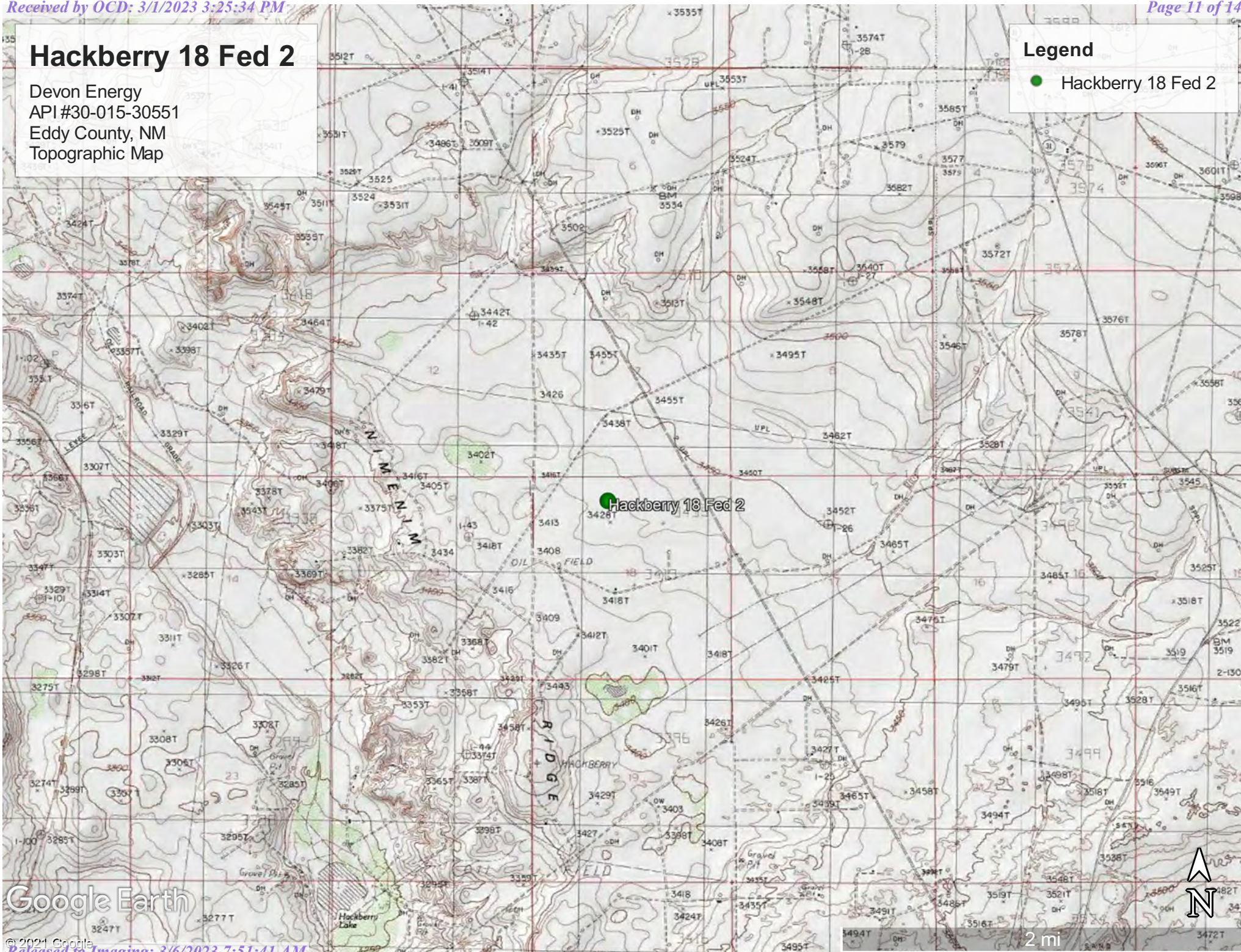
Google Earth

Hackberry 18 Fed 2

Devon Energy
API #30-015-30551
Eddy County, NM
Topographic Map

Legend




● Hackberry 18 Fed 2



Hackberry 18 Fed 2

Devon Energy
API #30-015-30551
Eddy County, NM
Karst Map

Legend

-  High Karst
-  Low Karst
-  Medium Karst

Hackberry 18 Fed 2

Google Earth

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Hackberry 18 Fed 2

Devon Energy
API: 30-015-30551
Eddy County, NM
Initial Site Map

Legend





- 2' Excavation
- 4' Excavation
- Feature 1
- SW2 Composite Side Wall Sample
- SW3 Composite Side Wall Sample
- SW4 Composite Side Wall Sample



Hackberry 18 Feb 2

Devon Energy
API: 30-015-30551
Eddy County, NM
Confirmation Map

Legend

-  Excavated Area
-  S11 Composite Side Wall Sample
-  S7 Composite Side Wall Sample
-  S8 Composite Side Wall Sample





Pima Environmental Services

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)

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

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

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 01907 POD1		CP	ED	4	2	2	18	19S	31E	603017	3614737	863			
CP 00873 POD1		CP	LE		1	1	19	19S	31E	601772	3613147*	1663	340	180	160
CP 00357 POD1		CP	ED	4	4	1	24	19S	30E	600667	3612631*	2601	630		
CP 00357 POD2		CP	ED	4	3	1	24	19S	30E	600265	3612627*	2853	630		
CP 00722 POD2		CP	ED	2	1	1	25	19S	30E	600276	3611620*	3664	350	65	285
CP 00647 POD1	O	CP	ED	4	2	2	15	19S	30E	598235	3614621*	3921	200	92	108
CP 00829 POD1		CP	LE		2	4	16	19S	31E	606165	3614009*	4081	120		
CP 00822 POD1		CP	LE		4	4	15	19S	30E	598148	3613516*	4196	90		

Average Depth to Water: **112 feet**

Minimum Depth: **65 feet**

Maximum Depth: **180 feet**

Record Count: 8

UTM NAD83 Radius Search (in meters):

Easting (X): 602154.11

Northing (Y): 3614766.13

Radius: 5000

*UTM location was derived from PLSS - see Help

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

1/24/23 10:46 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
 (quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	CP 01907 POD1	4	2	2	18	19S	31E	603017	3614737

x

Driller License: 1249 **Driller Company:** ATKINS ENGINEERING ASSOC. INC.

Driller Name: JACKIE ATKINS

Drill Start Date: 07/13/2022 **Drill Finish Date:** 07/13/2022 **Plug Date:**

Log File Date: 08/11/2022 **PCW Rev Date:** **Source:**

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: **Depth Well:** **Depth Water:**

x

Casing Perforations:	Top	Bottom
	0	55

x

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.

2/22/23 9:18 AM

POINT OF DIVERSION SUMMARY



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[Contact USGS](#)
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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

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- Explore the **NEW** [USGS National Water Dashboard](#) to access real-time data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for the Nation

* IMPORTANT: [Next Generation Station Page](#)

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 aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

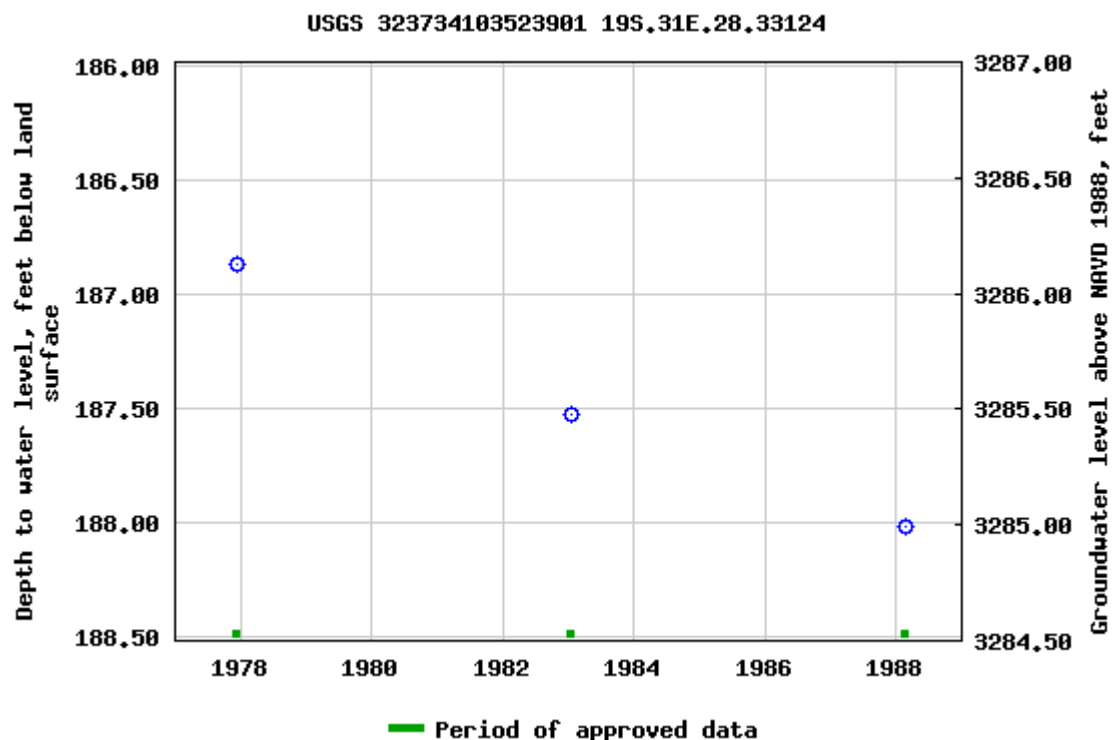
Output formats

[Table of data](#)

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

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Title: Groundwater for USA: Water Levels

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

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

Page Last Modified: 2021-04-13 09:19:20 EDT

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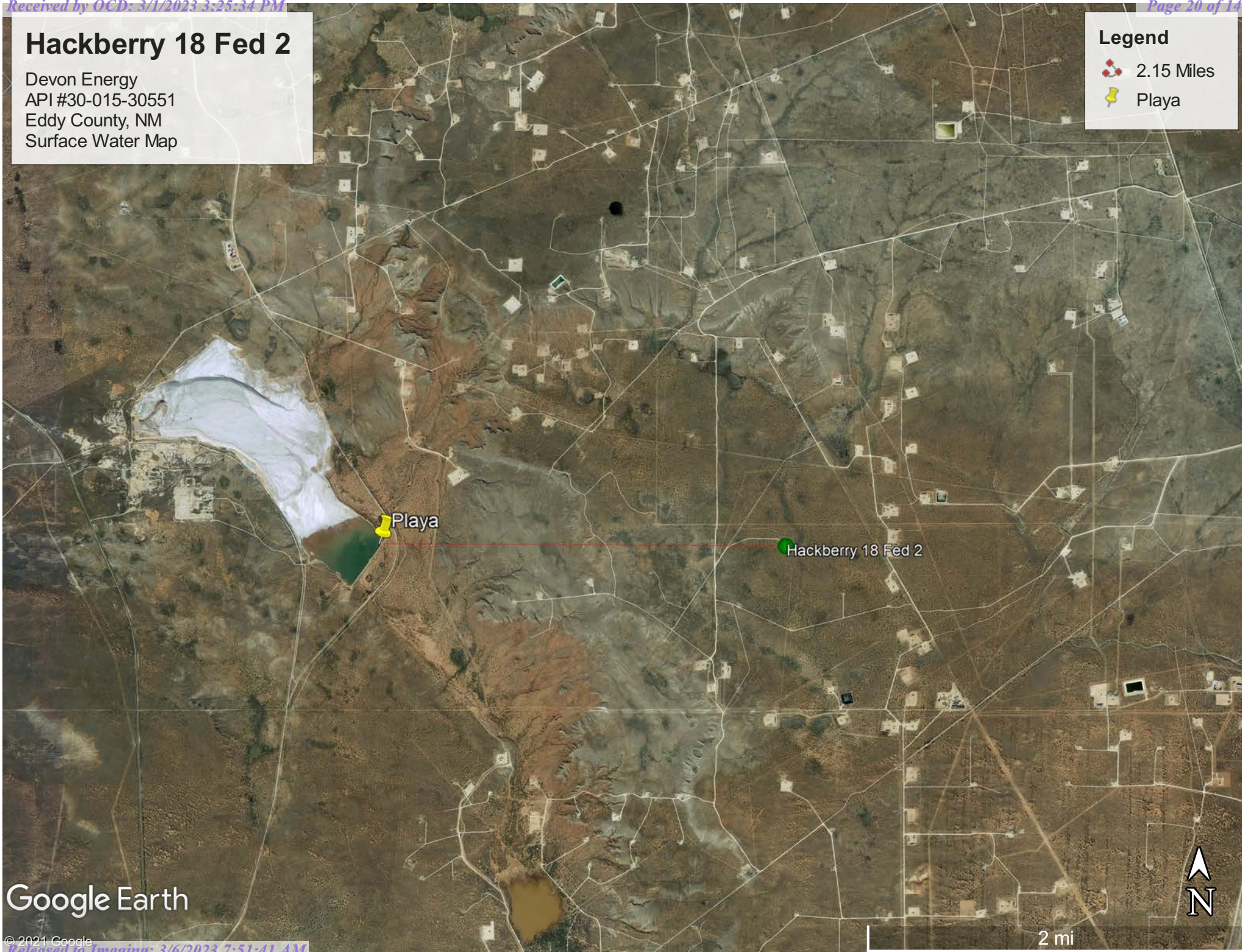


Hackberry 18 Fed 2

Devon Energy
API #30-015-30551
Eddy County, NM
Surface Water Map

Legend

- 2.15 Miles
- Playa



Google Earth



Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

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

Eddy Area, New Mexico

BA—Berino loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w42

Elevation: 2,000 to 5,700 feet

Mean annual precipitation: 6 to 14 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 180 to 260 days

Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 99 percent

Minor components: 1 percent

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

Description of Berino

Setting

Landform: Fan piedmonts, plains

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 12 inches: loamy fine sand

H2 - 12 to 58 inches: sandy clay loam

H3 - 58 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 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 capacity: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

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

Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Minor Components

Pajarito

Percent of map unit: 1 percent
Ecological site: R042XC003NM - Loamy Sand
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 16, Jun 8, 2020

National Flood Hazard Layer FIRMMette



103°54'57"W 32°40'12"N



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

1:6,000

103°54'19"W 32°39'42"N

Released to Imaging: 3/6/2023 7:31:41 AM

Legend

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

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

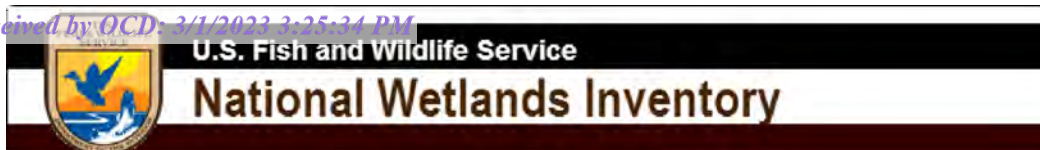


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

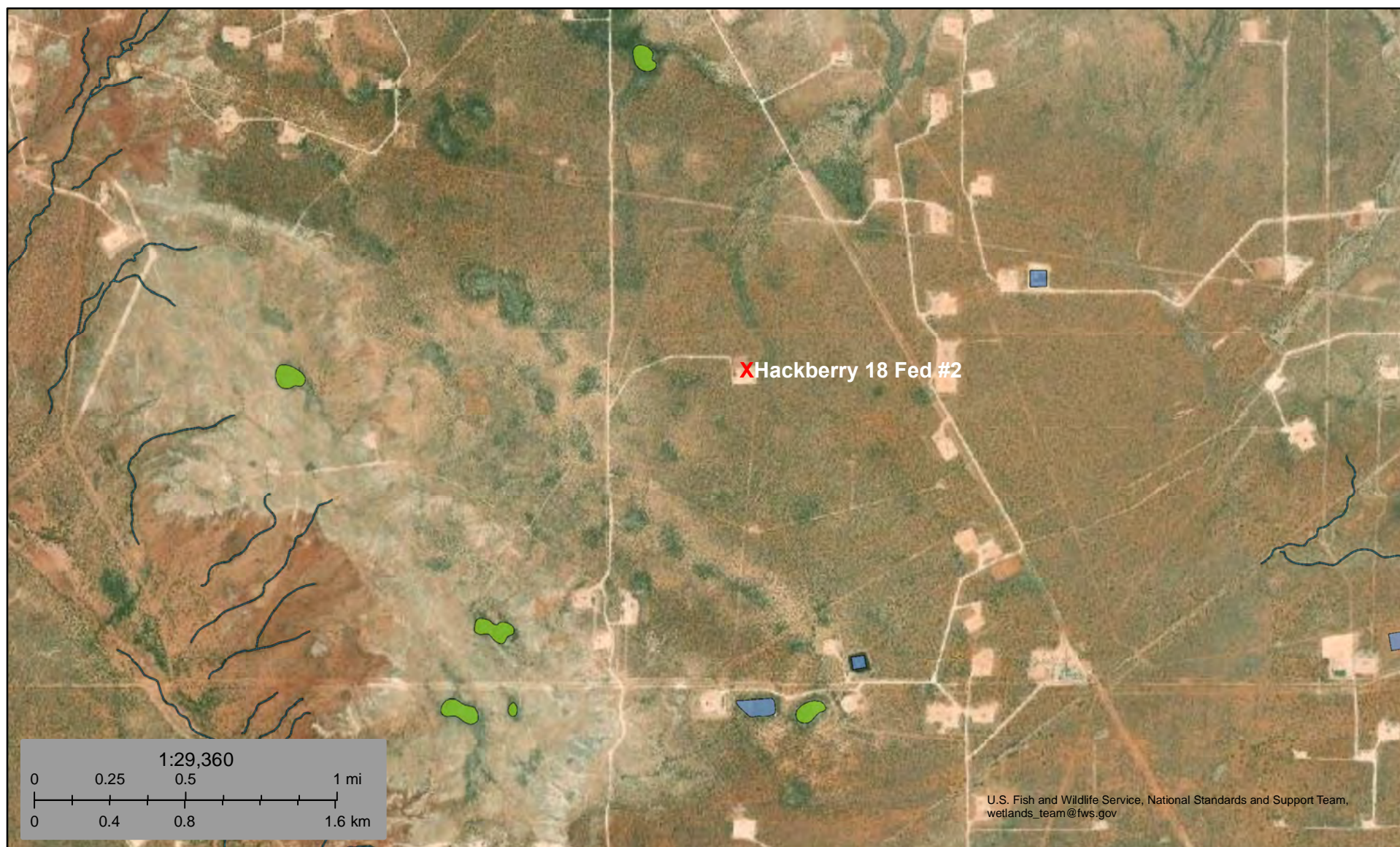
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/19/2020 at 10:45 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



Wetlands Map



January 24, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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



Pima Environmental Services

Appendix C

C-141's:

48-Hour Notification

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

APR - 8 2009

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

30-015-30551

Release Notification and Corrective Action

AKMLW/108328334

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company Devon Energy	Contact <input type="checkbox"/> Roger Hernandez
Address P. O. Box 250 Artesia, NM 88211	Telephone No. <input type="checkbox"/> 575-748-5238
Facility Name Hackberry 18 Fed #2	Facility Type <input type="checkbox"/> Gas Well

Surface Owner	Mineral Owner	Lease No. <input type="checkbox"/>
---------------	---------------	------------------------------------

LOCATION OF RELEASE

Unit Letter	Section 18	Township 19S	Range 31E	Feet from the 660	North/South Line North	Feet from the 1980	East/West Line West	County Eddy
-------------	---------------	-----------------	--------------	----------------------	---------------------------	-----------------------	------------------------	----------------

NATURE OF RELEASE

Type of Release Produced 5 BO, 5 BPW	Volume of Release 10	Volume Recovered <input type="checkbox"/> 0
Source of Release Hole in fire tube	Date and Hour of Occurrence 3-09-2009	Date and Hour of Discovery <input type="checkbox"/> 3-9-2009 10:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jim Amos, BLM - Carlsbad Office	
By Whom? <input type="checkbox"/> Ernie Duran	Date and Hour <input type="checkbox"/> 3-9-2009 3:15 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Arriving on location the lease operator discovered the heater treater leaking fluid. Upon investigation it was revealed that the heater's fire tube had developed a pin hole due to corrosion, which released approximately 5 bbls of oil and 5 bbls of produced water. There was no standing fluid; therefore, no product was recovered.

Describe Area Affected and Cleanup Action Taken.*

Let aerate, rototill, fertilize to reduce hydrocarbons, and blend in new material to reduce contamination. Will repeat procedure as needed.

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

Signature: <i>Adrienne Verkler</i>	OIL CONSERVATION DIVISION	
Printed Name: Adrienne Verkler	Accepted for record NMOCD	
Title: Field Tech II	Approved by <input type="checkbox"/> District Supervisor:	Approval Date:
Date: 3-13-2009 Phone: 575-748-0174	Expiration Date:	Attached <input type="checkbox"/>
Conditions of Approval:		

* Attach Additional Sheets If Necessary

Witnessed samples are to be obtained
from release area and lab analyses
submitted to OCD for closure
consideration.

2RP-660

Incident ID	nkmw1108338334
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?	<u>51-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nkmw1108338334
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: EHS ProfessionalSignature: Dale Woodall Date: 3/1/2023email: dale.woodall@dn.com Telephone: 575-748-1838**OCD Only**

Received by: _____ Date: _____

Incident ID	nkmw1108338334
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Dale Woodall Title: EHS Professional

Signature: Dale Woodall Date: 3/1/2023

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



Pima Environmental Services

Appendix D

Photographic Documentation



DEVON ENERGY - HACKBERRY 18 FED #2















Pima Environmental Services

Appendix E

Laboratory Reports



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

August 11, 2020

Chris Jones

Pima Environmental Services LLC
1601 N. Turner Ste 500
Hobbs, NM 88240
TEL: (575) 631-6977
FAX:

RE: Hackberry 18 Fed 2 Battery

OrderNo.: 2007F82

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 45 sample(s) on 7/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:00:00 AM

Lab ID: 2007F82-001

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 2:45:59 AM	54162
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 7:11:05 AM	54093
Surr: BFB	102	70-130		%Rec	1	8/2/2020 7:11:05 AM	54093
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 1:41:50 PM	54143
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 1:41:50 PM	54143
Surr: DNOP	91.1	30.4-154		%Rec	1	8/6/2020 1:41:50 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 7:11:05 AM	54093
Toluene	ND	0.050		mg/Kg	1	8/2/2020 7:11:05 AM	54093
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 7:11:05 AM	54093
Xylenes, Total	ND	0.099		mg/Kg	1	8/2/2020 7:11:05 AM	54093
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%Rec	1	8/2/2020 7:11:05 AM	54093
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	8/2/2020 7:11:05 AM	54093
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/2/2020 7:11:05 AM	54093
Surr: Toluene-d8	100	70-130		%Rec	1	8/2/2020 7:11:05 AM	54093

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 54

Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:03:00 AM

Lab ID: 2007F82-002

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 2:58:20 AM	54162
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 7:40:28 AM	54093
Surr: BFB	106	70-130		%Rec	1	8/2/2020 7:40:28 AM	54093
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/6/2020 1:51:49 PM	54143
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 1:51:49 PM	54143
Surr: DNOP	98.0	30.4-154		%Rec	1	8/6/2020 1:51:49 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 7:40:28 AM	54093
Toluene	ND	0.050		mg/Kg	1	8/2/2020 7:40:28 AM	54093
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 7:40:28 AM	54093
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 7:40:28 AM	54093
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	8/2/2020 7:40:28 AM	54093
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	8/2/2020 7:40:28 AM	54093
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/2/2020 7:40:28 AM	54093
Surr: Toluene-d8	104	70-130		%Rec	1	8/2/2020 7:40:28 AM	54093

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:06:00 AM

Lab ID: 2007F82-003

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 3:10:41 AM	54162
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 8:10:08 AM	54093
Surr: BFB	104	70-130		%Rec	1	8/2/2020 8:10:08 AM	54093
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/6/2020 2:01:47 PM	54143
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 2:01:47 PM	54143
Surr: DNOP	97.9	30.4-154		%Rec	1	8/6/2020 2:01:47 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/2/2020 8:10:08 AM	54093
Toluene	ND	0.049		mg/Kg	1	8/2/2020 8:10:08 AM	54093
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 8:10:08 AM	54093
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 8:10:08 AM	54093
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%Rec	1	8/2/2020 8:10:08 AM	54093
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	8/2/2020 8:10:08 AM	54093
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/2/2020 8:10:08 AM	54093
Surr: Toluene-d8	103	70-130		%Rec	1	8/2/2020 8:10:08 AM	54093

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:09:00 AM

Lab ID: 2007F82-004

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 8:20:10 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 12:37:13 PM	54093
Surr: BFB	106	70-130		%Rec	1	8/2/2020 12:37:13 PM	54093
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 2:11:42 PM	54143
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 2:11:42 PM	54143
Surr: DNOP	105	30.4-154		%Rec	1	8/6/2020 2:11:42 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 12:37:13 PM	54093
Toluene	ND	0.050		mg/Kg	1	8/2/2020 12:37:13 PM	54093
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 12:37:13 PM	54093
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 12:37:13 PM	54093
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	8/2/2020 12:37:13 PM	54093
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	8/2/2020 12:37:13 PM	54093
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	8/2/2020 12:37:13 PM	54093
Surr: Toluene-d8	102	70-130		%Rec	1	8/2/2020 12:37:13 PM	54093

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:11:00 AM

Lab ID: 2007F82-005

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 9:22:11 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 1:07:00 PM	54093
Surr: BFB	108	70-130		%Rec	1	8/2/2020 1:07:00 PM	54093
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/6/2020 2:21:39 PM	54143
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 2:21:39 PM	54143
Surr: DNOP	89.6	30.4-154		%Rec	1	8/6/2020 2:21:39 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 1:07:00 PM	54093
Toluene	ND	0.050		mg/Kg	1	8/2/2020 1:07:00 PM	54093
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 1:07:00 PM	54093
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 1:07:00 PM	54093
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%Rec	1	8/2/2020 1:07:00 PM	54093
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	8/2/2020 1:07:00 PM	54093
Surr: Dibromofluoromethane	96.6	70-130		%Rec	1	8/2/2020 1:07:00 PM	54093
Surr: Toluene-d8	104	70-130		%Rec	1	8/2/2020 1:07:00 PM	54093

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:14:00 AM

Lab ID: 2007F82-006

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 9:59:25 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 1:36:51 PM	54099
Surr: BFB	105	70-130		%Rec	1	8/2/2020 1:36:51 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/6/2020 2:31:36 PM	54143
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 2:31:36 PM	54143
Surr: DNOP	96.4	30.4-154		%Rec	1	8/6/2020 2:31:36 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 1:36:51 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 1:36:51 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 1:36:51 PM	54099
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 1:36:51 PM	54099
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	1	8/2/2020 1:36:51 PM	54099
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	8/2/2020 1:36:51 PM	54099
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	8/2/2020 1:36:51 PM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/2/2020 1:36:51 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:17:00 AM

Lab ID: 2007F82-007

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 10:11:49 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 3:06:24 PM	54099
Surr: BFB	103	70-130		%Rec	1	8/2/2020 3:06:24 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 2:41:32 PM	54143
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 2:41:32 PM	54143
Surr: DNOP	107	30.4-154		%Rec	1	8/6/2020 2:41:32 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 3:06:24 PM	54099
Toluene	ND	0.050		mg/Kg	1	8/2/2020 3:06:24 PM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 3:06:24 PM	54099
Xylenes, Total	ND	0.099		mg/Kg	1	8/2/2020 3:06:24 PM	54099
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%Rec	1	8/2/2020 3:06:24 PM	54099
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	8/2/2020 3:06:24 PM	54099
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	8/2/2020 3:06:24 PM	54099
Surr: Toluene-d8	105	70-130		%Rec	1	8/2/2020 3:06:24 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:20:00 AM

Lab ID: 2007F82-008

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 10:24:14 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 4:35:54 PM	54099
Surr: BFB	104	70-130		%Rec	1	8/2/2020 4:35:54 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/6/2020 2:51:29 PM	54143
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 2:51:29 PM	54143
Surr: DNOP	126	30.4-154		%Rec	1	8/6/2020 2:51:29 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 4:35:54 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 4:35:54 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 4:35:54 PM	54099
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 4:35:54 PM	54099
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	8/2/2020 4:35:54 PM	54099
Surr: 4-Bromofluorobenzene	90.2	70-130		%Rec	1	8/2/2020 4:35:54 PM	54099
Surr: Dibromofluoromethane	99.4	70-130		%Rec	1	8/2/2020 4:35:54 PM	54099
Surr: Toluene-d8	103	70-130		%Rec	1	8/2/2020 4:35:54 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:23:00 AM

Lab ID: 2007F82-009

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 10:36:38 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 5:05:40 PM	54099
Surr: BFB	107	70-130		%Rec	1	8/2/2020 5:05:40 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 3:01:23 PM	54143
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 3:01:23 PM	54143
Surr: DNOP	117	30.4-154		%Rec	1	8/6/2020 3:01:23 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/2/2020 5:05:40 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 5:05:40 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 5:05:40 PM	54099
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 5:05:40 PM	54099
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	8/2/2020 5:05:40 PM	54099
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	8/2/2020 5:05:40 PM	54099
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/2/2020 5:05:40 PM	54099
Surr: Toluene-d8	104	70-130		%Rec	1	8/2/2020 5:05:40 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:26:00 AM

Lab ID: 2007F82-010

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 10:49:03 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 5:35:17 PM	54099
Surr: BFB	102	70-130		%Rec	1	8/2/2020 5:35:17 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/6/2020 3:11:16 PM	54143
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 3:11:16 PM	54143
Surr: DNOP	105	30.4-154		%Rec	1	8/6/2020 3:11:16 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 5:35:17 PM	54099
Toluene	ND	0.050		mg/Kg	1	8/2/2020 5:35:17 PM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 5:35:17 PM	54099
Xylenes, Total	ND	0.099		mg/Kg	1	8/2/2020 5:35:17 PM	54099
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%Rec	1	8/2/2020 5:35:17 PM	54099
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	8/2/2020 5:35:17 PM	54099
Surr: Dibromofluoromethane	98.3	70-130		%Rec	1	8/2/2020 5:35:17 PM	54099
Surr: Toluene-d8	99.4	70-130		%Rec	1	8/2/2020 5:35:17 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:29:00 AM

Lab ID: 2007F82-011

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 11:26:16 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/2/2020 6:04:59 PM	54099
Surr: BFB	107	70-130		%Rec	1	8/2/2020 6:04:59 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/6/2020 3:21:10 PM	54143
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 3:21:10 PM	54143
Surr: DNOP	92.2	30.4-154		%Rec	1	8/6/2020 3:21:10 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/2/2020 6:04:59 PM	54099
Toluene	ND	0.048		mg/Kg	1	8/2/2020 6:04:59 PM	54099
Ethylbenzene	ND	0.048		mg/Kg	1	8/2/2020 6:04:59 PM	54099
Xylenes, Total	ND	0.096		mg/Kg	1	8/2/2020 6:04:59 PM	54099
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	8/2/2020 6:04:59 PM	54099
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	8/2/2020 6:04:59 PM	54099
Surr: Dibromofluoromethane	99.7	70-130		%Rec	1	8/2/2020 6:04:59 PM	54099
Surr: Toluene-d8	102	70-130		%Rec	1	8/2/2020 6:04:59 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:32:00 AM

Lab ID: 2007F82-012

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 11:38:41 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 6:34:30 PM	54099
Surr: BFB	106	70-130		%Rec	1	8/2/2020 6:34:30 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/6/2020 3:31:01 PM	54143
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 3:31:01 PM	54143
Surr: DNOP	95.8	30.4-154		%Rec	1	8/6/2020 3:31:01 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 6:34:30 PM	54099
Toluene	ND	0.050		mg/Kg	1	8/2/2020 6:34:30 PM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 6:34:30 PM	54099
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 6:34:30 PM	54099
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%Rec	1	8/2/2020 6:34:30 PM	54099
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	8/2/2020 6:34:30 PM	54099
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/2/2020 6:34:30 PM	54099
Surr: Toluene-d8	98.7	70-130		%Rec	1	8/2/2020 6:34:30 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:35:00 AM

Lab ID: 2007F82-013

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/4/2020 11:51:05 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 7:03:58 PM	54099
Surr: BFB	104	70-130		%Rec	1	8/2/2020 7:03:58 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/6/2020 3:40:53 PM	54143
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 3:40:53 PM	54143
Surr: DNOP	90.2	30.4-154		%Rec	1	8/6/2020 3:40:53 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/2/2020 7:03:58 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 7:03:58 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 7:03:58 PM	54099
Xylenes, Total	ND	0.097		mg/Kg	1	8/2/2020 7:03:58 PM	54099
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	8/2/2020 7:03:58 PM	54099
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	8/2/2020 7:03:58 PM	54099
Surr: Dibromofluoromethane	97.9	70-130		%Rec	1	8/2/2020 7:03:58 PM	54099
Surr: Toluene-d8	102	70-130		%Rec	1	8/2/2020 7:03:58 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:38:00 AM

Lab ID: 2007F82-014

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 12:03:29 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 7:33:22 PM	54099
Surr: BFB	107	70-130		%Rec	1	8/2/2020 7:33:22 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/6/2020 3:50:44 PM	54143
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 3:50:44 PM	54143
Surr: DNOP	87.5	30.4-154		%Rec	1	8/6/2020 3:50:44 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 7:33:22 PM	54099
Toluene	ND	0.050		mg/Kg	1	8/2/2020 7:33:22 PM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 7:33:22 PM	54099
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 7:33:22 PM	54099
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	8/2/2020 7:33:22 PM	54099
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	8/2/2020 7:33:22 PM	54099
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/2/2020 7:33:22 PM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/2/2020 7:33:22 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:41:00 AM

Lab ID: 2007F82-015

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 12:15:53 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 8:02:46 PM	54099
Surr: BFB	104	70-130		%Rec	1	8/2/2020 8:02:46 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 4:00:32 PM	54143
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 4:00:32 PM	54143
Surr: DNOP	95.9	30.4-154		%Rec	1	8/6/2020 4:00:32 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/2/2020 8:02:46 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 8:02:46 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 8:02:46 PM	54099
Xylenes, Total	ND	0.097		mg/Kg	1	8/2/2020 8:02:46 PM	54099
Surr: 1,2-Dichloroethane-d4	93.3	70-130		%Rec	1	8/2/2020 8:02:46 PM	54099
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	8/2/2020 8:02:46 PM	54099
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	8/2/2020 8:02:46 PM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/2/2020 8:02:46 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:44:00 AM

Lab ID: 2007F82-016

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 12:28:18 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 8:32:23 PM	54099
Surr: BFB	103	70-130		%Rec	1	8/2/2020 8:32:23 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/6/2020 4:10:22 PM	54143
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/6/2020 4:10:22 PM	54143
Surr: DNOP	88.9	30.4-154		%Rec	1	8/6/2020 4:10:22 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 8:32:23 PM	54099
Toluene	ND	0.050		mg/Kg	1	8/2/2020 8:32:23 PM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 8:32:23 PM	54099
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 8:32:23 PM	54099
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	8/2/2020 8:32:23 PM	54099
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	8/2/2020 8:32:23 PM	54099
Surr: Dibromofluoromethane	99.0	70-130		%Rec	1	8/2/2020 8:32:23 PM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/2/2020 8:32:23 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:47:00 AM

Lab ID: 2007F82-017

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 12:40:42 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 9:01:59 PM	54099
Surr: BFB	107	70-130		%Rec	1	8/2/2020 9:01:59 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/6/2020 4:20:11 PM	54143
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 4:20:11 PM	54143
Surr: DNOP	89.4	30.4-154		%Rec	1	8/6/2020 4:20:11 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 9:01:59 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 9:01:59 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 9:01:59 PM	54099
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 9:01:59 PM	54099
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	8/2/2020 9:01:59 PM	54099
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	8/2/2020 9:01:59 PM	54099
Surr: Dibromofluoromethane	98.7	70-130		%Rec	1	8/2/2020 9:01:59 PM	54099
Surr: Toluene-d8	102	70-130		%Rec	1	8/2/2020 9:01:59 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:50:00 AM

Lab ID: 2007F82-018

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 12:53:07 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/2/2020 9:31:37 PM	54099
Surr: BFB	102	70-130		%Rec	1	8/2/2020 9:31:37 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/6/2020 4:29:59 PM	54143
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 4:29:59 PM	54143
Surr: DNOP	111	30.4-154		%Rec	1	8/6/2020 4:29:59 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/2/2020 9:31:37 PM	54099
Toluene	ND	0.049		mg/Kg	1	8/2/2020 9:31:37 PM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/2/2020 9:31:37 PM	54099
Xylenes, Total	ND	0.098		mg/Kg	1	8/2/2020 9:31:37 PM	54099
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	8/2/2020 9:31:37 PM	54099
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	8/2/2020 9:31:37 PM	54099
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/2/2020 9:31:37 PM	54099
Surr: Toluene-d8	96.3	70-130		%Rec	1	8/2/2020 9:31:37 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:53:00 AM

Lab ID: 2007F82-019

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 1:05:31 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 10:01:13 PM	54099
Surr: BFB	105	70-130		%Rec	1	8/2/2020 10:01:13 PM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/6/2020 4:39:43 PM	54143
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2020 4:39:43 PM	54143
Surr: DNOP	94.2	30.4-154		%Rec	1	8/6/2020 4:39:43 PM	54143
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 10:01:13 PM	54099
Toluene	ND	0.050		mg/Kg	1	8/2/2020 10:01:13 PM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 10:01:13 PM	54099
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 10:01:13 PM	54099
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	8/2/2020 10:01:13 PM	54099
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	8/2/2020 10:01:13 PM	54099
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	8/2/2020 10:01:13 PM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/2/2020 10:01:13 PM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:56:00 AM

Lab ID: 2007F82-020

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/5/2020 1:17:56 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 12:57:44 AM	54099
Surr: BFB	105	70-130		%Rec	1	8/3/2020 12:57:44 AM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/5/2020 9:17:11 AM	54144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/5/2020 9:17:11 AM	54144
Surr: DNOP	112	30.4-154		%Rec	1	8/5/2020 9:17:11 AM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 12:57:44 AM	54099
Toluene	ND	0.050		mg/Kg	1	8/3/2020 12:57:44 AM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 12:57:44 AM	54099
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2020 12:57:44 AM	54099
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	8/3/2020 12:57:44 AM	54099
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	8/3/2020 12:57:44 AM	54099
Surr: Dibromofluoromethane	98.4	70-130		%Rec	1	8/3/2020 12:57:44 AM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/3/2020 12:57:44 AM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S6-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 8:59:00 AM

Lab ID: 2007F82-021

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	80	60		mg/Kg	20	8/5/2020 1:55:09 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 1:27:16 AM	54099
Surr: BFB	105	70-130		%Rec	1	8/3/2020 1:27:16 AM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/5/2020 2:11:15 PM	54144
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/5/2020 2:11:15 PM	54144
Surr: DNOP	82.1	30.4-154		%Rec	1	8/5/2020 2:11:15 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 1:27:16 AM	54099
Toluene	ND	0.049		mg/Kg	1	8/3/2020 1:27:16 AM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 1:27:16 AM	54099
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 1:27:16 AM	54099
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	8/3/2020 1:27:16 AM	54099
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	8/3/2020 1:27:16 AM	54099
Surr: Dibromofluoromethane	98.5	70-130		%Rec	1	8/3/2020 1:27:16 AM	54099
Surr: Toluene-d8	100	70-130		%Rec	1	8/3/2020 1:27:16 AM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:02:00 AM

Lab ID: 2007F82-022

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	5000	150		mg/Kg	50	8/5/2020 11:21:09 PM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 1:56:39 AM	54099
Surr: BFB	100	70-130		%Rec	1	8/3/2020 1:56:39 AM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/5/2020 2:35:08 PM	54144
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/5/2020 2:35:08 PM	54144
Surr: DNOP	96.3	30.4-154		%Rec	1	8/5/2020 2:35:08 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 1:56:39 AM	54099
Toluene	ND	0.050		mg/Kg	1	8/3/2020 1:56:39 AM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 1:56:39 AM	54099
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 1:56:39 AM	54099
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	8/3/2020 1:56:39 AM	54099
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	8/3/2020 1:56:39 AM	54099
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	8/3/2020 1:56:39 AM	54099
Surr: Toluene-d8	97.6	70-130		%Rec	1	8/3/2020 1:56:39 AM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:05:00 AM

Lab ID: 2007F82-023

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1200	60		mg/Kg	20	8/5/2020 2:19:58 AM	54167
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 2:26:01 AM	54099
Surr: BFB	104	70-130		%Rec	1	8/3/2020 2:26:01 AM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/5/2020 2:59:01 PM	54144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/5/2020 2:59:01 PM	54144
Surr: DNOP	98.2	30.4-154		%Rec	1	8/5/2020 2:59:01 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/3/2020 2:26:01 AM	54099
Toluene	ND	0.049		mg/Kg	1	8/3/2020 2:26:01 AM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 2:26:01 AM	54099
Xylenes, Total	ND	0.097		mg/Kg	1	8/3/2020 2:26:01 AM	54099
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	8/3/2020 2:26:01 AM	54099
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	8/3/2020 2:26:01 AM	54099
Surr: Dibromofluoromethane	99.5	70-130		%Rec	1	8/3/2020 2:26:01 AM	54099
Surr: Toluene-d8	101	70-130		%Rec	1	8/3/2020 2:26:01 AM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:08:00 AM

Lab ID: 2007F82-024

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	390	60		mg/Kg	20	8/5/2020 12:58:35 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 2:55:20 AM	54099
Surr: BFB	103	70-130		%Rec	1	8/3/2020 2:55:20 AM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/5/2020 3:22:51 PM	54144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/5/2020 3:22:51 PM	54144
Surr: DNOP	99.1	30.4-154		%Rec	1	8/5/2020 3:22:51 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 2:55:20 AM	54099
Toluene	ND	0.050		mg/Kg	1	8/3/2020 2:55:20 AM	54099
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 2:55:20 AM	54099
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2020 2:55:20 AM	54099
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%Rec	1	8/3/2020 2:55:20 AM	54099
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	1	8/3/2020 2:55:20 AM	54099
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/3/2020 2:55:20 AM	54099
Surr: Toluene-d8	102	70-130		%Rec	1	8/3/2020 2:55:20 AM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:11:00 AM

Lab ID: 2007F82-025

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	240	60		mg/Kg	20	8/5/2020 1:35:35 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 3:24:42 AM	54099
Surr: BFB	103	70-130		%Rec	1	8/3/2020 3:24:42 AM	54099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/5/2020 3:46:43 PM	54144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/5/2020 3:46:43 PM	54144
Surr: DNOP	107	30.4-154		%Rec	1	8/5/2020 3:46:43 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 3:24:42 AM	54099
Toluene	ND	0.049		mg/Kg	1	8/3/2020 3:24:42 AM	54099
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 3:24:42 AM	54099
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 3:24:42 AM	54099
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	8/3/2020 3:24:42 AM	54099
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	8/3/2020 3:24:42 AM	54099
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/3/2020 3:24:42 AM	54099
Surr: Toluene-d8	99.9	70-130		%Rec	1	8/3/2020 3:24:42 AM	54099

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:14:00 AM

Lab ID: 2007F82-026

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 2:37:18 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/2/2020 11:24:03 PM	54102
Surr: BFB	101	70-130		%Rec	1	8/2/2020 11:24:03 PM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	1300	96		mg/Kg	10	8/6/2020 8:58:02 AM	54144
Motor Oil Range Organics (MRO)	2300	480		mg/Kg	10	8/6/2020 8:58:02 AM	54144
Surr: DNOP	0	30.4-154	S	%Rec	10	8/6/2020 8:58:02 AM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/2/2020 11:24:03 PM	54102
Toluene	ND	0.050		mg/Kg	1	8/2/2020 11:24:03 PM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/2/2020 11:24:03 PM	54102
Xylenes, Total	ND	0.10		mg/Kg	1	8/2/2020 11:24:03 PM	54102
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%Rec	1	8/2/2020 11:24:03 PM	54102
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	8/2/2020 11:24:03 PM	54102
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/2/2020 11:24:03 PM	54102
Surr: Toluene-d8	97.3	70-130		%Rec	1	8/2/2020 11:24:03 PM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:17:00 AM

Lab ID: 2007F82-027

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	59		mg/Kg	20	8/5/2020 2:49:39 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 2:43:17 AM	54102
Surr: BFB	101	70-130		%Rec	1	8/3/2020 2:43:17 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	660	94		mg/Kg	10	8/6/2020 9:21:54 AM	54144
Motor Oil Range Organics (MRO)	1200	470		mg/Kg	10	8/6/2020 9:21:54 AM	54144
Surr: DNOP	0	30.4-154	S	%Rec	10	8/6/2020 9:21:54 AM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 2:43:17 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/3/2020 2:43:17 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 2:43:17 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 2:43:17 AM	54102
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	8/3/2020 2:43:17 AM	54102
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	8/3/2020 2:43:17 AM	54102
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/3/2020 2:43:17 AM	54102
Surr: Toluene-d8	93.6	70-130		%Rec	1	8/3/2020 2:43:17 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:20:00 AM

Lab ID: 2007F82-028

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 3:02:00 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 4:08:39 AM	54102
Surr: BFB	97.9	70-130		%Rec	1	8/3/2020 4:08:39 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	15	8.7		mg/Kg	1	8/5/2020 5:22:19 PM	54144
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/5/2020 5:22:19 PM	54144
Surr: DNOP	111	30.4-154		%Rec	1	8/5/2020 5:22:19 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 4:08:39 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/3/2020 4:08:39 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 4:08:39 AM	54102
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2020 4:08:39 AM	54102
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	8/3/2020 4:08:39 AM	54102
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	8/3/2020 4:08:39 AM	54102
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/3/2020 4:08:39 AM	54102
Surr: Toluene-d8	95.7	70-130		%Rec	1	8/3/2020 4:08:39 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:23:00 AM

Lab ID: 2007F82-029

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 3:14:20 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 4:37:06 AM	54102
Surr: BFB	101	70-130		%Rec	1	8/3/2020 4:37:06 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	55	9.6		mg/Kg	1	8/6/2020 9:45:43 AM	54144
Motor Oil Range Organics (MRO)	96	48		mg/Kg	1	8/6/2020 9:45:43 AM	54144
Surr: DNOP	96.7	30.4-154		%Rec	1	8/6/2020 9:45:43 AM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 4:37:06 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/3/2020 4:37:06 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 4:37:06 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2020 4:37:06 AM	54102
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	8/3/2020 4:37:06 AM	54102
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	8/3/2020 4:37:06 AM	54102
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/3/2020 4:37:06 AM	54102
Surr: Toluene-d8	97.0	70-130		%Rec	1	8/3/2020 4:37:06 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S9-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:26:00 AM

Lab ID: 2007F82-030

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 3:26:41 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 5:05:35 AM	54102
Surr: BFB	103	70-130		%Rec	1	8/3/2020 5:05:35 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/5/2020 6:10:24 PM	54144
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/5/2020 6:10:24 PM	54144
Surr: DNOP	89.5	30.4-154		%Rec	1	8/5/2020 6:10:24 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 5:05:35 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/3/2020 5:05:35 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 5:05:35 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2020 5:05:35 AM	54102
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	8/3/2020 5:05:35 AM	54102
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	8/3/2020 5:05:35 AM	54102
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/3/2020 5:05:35 AM	54102
Surr: Toluene-d8	101	70-130		%Rec	1	8/3/2020 5:05:35 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S9-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:29:00 AM

Lab ID: 2007F82-031

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 3:39:02 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 5:34:14 AM	54102
Surr: BFB	102	70-130		%Rec	1	8/3/2020 5:34:14 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/5/2020 6:34:25 PM	54144
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/5/2020 6:34:25 PM	54144
Surr: DNOP	107	30.4-154		%Rec	1	8/5/2020 6:34:25 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 5:34:14 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/3/2020 5:34:14 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 5:34:14 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 5:34:14 AM	54102
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/3/2020 5:34:14 AM	54102
Surr: 4-Bromofluorobenzene	95.6	70-130		%Rec	1	8/3/2020 5:34:14 AM	54102
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/3/2020 5:34:14 AM	54102
Surr: Toluene-d8	101	70-130		%Rec	1	8/3/2020 5:34:14 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S9-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:32:00 AM

Lab ID: 2007F82-032

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 3:51:23 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 6:02:44 AM	54102
Surr: BFB	101	70-130		%Rec	1	8/3/2020 6:02:44 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/5/2020 6:58:25 PM	54144
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	8/5/2020 6:58:25 PM	54144
Surr: DNOP	97.4	30.4-154		%Rec	1	8/5/2020 6:58:25 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 6:02:44 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/3/2020 6:02:44 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 6:02:44 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2020 6:02:44 AM	54102
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/3/2020 6:02:44 AM	54102
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	8/3/2020 6:02:44 AM	54102
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/3/2020 6:02:44 AM	54102
Surr: Toluene-d8	98.9	70-130		%Rec	1	8/3/2020 6:02:44 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S9-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:35:00 AM

Lab ID: 2007F82-033

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 4:03:43 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2020 6:31:16 AM	54102
Surr: BFB	103	70-130		%Rec	1	8/3/2020 6:31:16 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/5/2020 7:22:27 PM	54144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/5/2020 7:22:27 PM	54144
Surr: DNOP	98.8	30.4-154		%Rec	1	8/5/2020 7:22:27 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 6:31:16 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/3/2020 6:31:16 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2020 6:31:16 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 6:31:16 AM	54102
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	8/3/2020 6:31:16 AM	54102
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	8/3/2020 6:31:16 AM	54102
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/3/2020 6:31:16 AM	54102
Surr: Toluene-d8	102	70-130		%Rec	1	8/3/2020 6:31:16 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S10-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:38:00 AM

Lab ID: 2007F82-034

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	140	60		mg/Kg	20	8/5/2020 4:16:04 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 6:59:49 AM	54102
Surr: BFB	96.6	70-130		%Rec	1	8/3/2020 6:59:49 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/5/2020 7:46:23 PM	54144
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/5/2020 7:46:23 PM	54144
Surr: DNOP	94.3	30.4-154		%Rec	1	8/5/2020 7:46:23 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 6:59:49 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/3/2020 6:59:49 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 6:59:49 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2020 6:59:49 AM	54102
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	8/3/2020 6:59:49 AM	54102
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	8/3/2020 6:59:49 AM	54102
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/3/2020 6:59:49 AM	54102
Surr: Toluene-d8	95.0	70-130		%Rec	1	8/3/2020 6:59:49 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S10-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:41:00 AM

Lab ID: 2007F82-035

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 4:28:25 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 7:28:24 AM	54102
Surr: BFB	103	70-130		%Rec	1	8/3/2020 7:28:24 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/5/2020 8:10:19 PM	54144
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/5/2020 8:10:19 PM	54144
Surr: DNOP	102	30.4-154		%Rec	1	8/5/2020 8:10:19 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 7:28:24 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/3/2020 7:28:24 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 7:28:24 AM	54102
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2020 7:28:24 AM	54102
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	8/3/2020 7:28:24 AM	54102
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/3/2020 7:28:24 AM	54102
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/3/2020 7:28:24 AM	54102
Surr: Toluene-d8	96.9	70-130		%Rec	1	8/3/2020 7:28:24 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S10-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:44:00 AM

Lab ID: 2007F82-036

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	66	60		mg/Kg	20	8/5/2020 5:05:26 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2020 7:56:53 AM	54102
Surr: BFB	97.6	70-130		%Rec	1	8/3/2020 7:56:53 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	23	9.3		mg/Kg	1	8/5/2020 8:34:11 PM	54144
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/5/2020 8:34:11 PM	54144
Surr: DNOP	103	30.4-154		%Rec	1	8/5/2020 8:34:11 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/3/2020 7:56:53 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/3/2020 7:56:53 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2020 7:56:53 AM	54102
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2020 7:56:53 AM	54102
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	8/3/2020 7:56:53 AM	54102
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	8/3/2020 7:56:53 AM	54102
Surr: Dibromofluoromethane	109	70-130		%Rec	1	8/3/2020 7:56:53 AM	54102
Surr: Toluene-d8	94.7	70-130		%Rec	1	8/3/2020 7:56:53 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S10-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:47:00 AM

Lab ID: 2007F82-037

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 5:17:47 PM	54179
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/3/2020 8:25:33 AM	54102
Surr: BFB	101	70-130		%Rec	1	8/3/2020 8:25:33 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/5/2020 8:58:05 PM	54144
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/5/2020 8:58:05 PM	54144
Surr: DNOP	100	30.4-154		%Rec	1	8/5/2020 8:58:05 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/3/2020 8:25:33 AM	54102
Toluene	ND	0.048		mg/Kg	1	8/3/2020 8:25:33 AM	54102
Ethylbenzene	ND	0.048		mg/Kg	1	8/3/2020 8:25:33 AM	54102
Xylenes, Total	ND	0.097		mg/Kg	1	8/3/2020 8:25:33 AM	54102
Surr: 1,2-Dichloroethane-d4	98.8	70-130		%Rec	1	8/3/2020 8:25:33 AM	54102
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	8/3/2020 8:25:33 AM	54102
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/3/2020 8:25:33 AM	54102
Surr: Toluene-d8	97.2	70-130		%Rec	1	8/3/2020 8:25:33 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S11-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:50:00 AM

Lab ID: 2007F82-038

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	61		mg/Kg	20	8/5/2020 5:54:50 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	24	D	mg/Kg	5	8/3/2020 8:54:08 AM	54102
Surr: BFB	99.1	70-130	D	%Rec	5	8/3/2020 8:54:08 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	17000	940		mg/Kg	100	8/5/2020 9:21:56 PM	54144
Motor Oil Range Organics (MRO)	9100	4700		mg/Kg	100	8/5/2020 9:21:56 PM	54144
Surr: DNOP	0	30.4-154	S	%Rec	100	8/5/2020 9:21:56 PM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.12	D	mg/Kg	5	8/3/2020 8:54:08 AM	54102
Toluene	ND	0.24	D	mg/Kg	5	8/3/2020 8:54:08 AM	54102
Ethylbenzene	ND	0.24	D	mg/Kg	5	8/3/2020 8:54:08 AM	54102
Xylenes, Total	ND	0.47	D	mg/Kg	5	8/3/2020 8:54:08 AM	54102
Surr: 1,2-Dichloroethane-d4	101	70-130	D	%Rec	5	8/3/2020 8:54:08 AM	54102
Surr: 4-Bromofluorobenzene	63.0	70-130	SD	%Rec	5	8/3/2020 8:54:08 AM	54102
Surr: Dibromofluoromethane	105	70-130	D	%Rec	5	8/3/2020 8:54:08 AM	54102
Surr: Toluene-d8	95.8	70-130	D	%Rec	5	8/3/2020 8:54:08 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S11-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:53:00 AM

Lab ID: 2007F82-039

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	61		mg/Kg	20	8/5/2020 6:07:11 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/4/2020 2:23:02 AM	54102
Surr: BFB	99.2	70-130		%Rec	1	8/4/2020 2:23:02 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	940	93		mg/Kg	10	8/6/2020 10:09:32 AM	54144
Motor Oil Range Organics (MRO)	980	460		mg/Kg	10	8/6/2020 10:09:32 AM	54144
Surr: DNOP	0	30.4-154	S	%Rec	10	8/6/2020 10:09:32 AM	54144
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/4/2020 2:23:02 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/4/2020 2:23:02 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/4/2020 2:23:02 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/4/2020 2:23:02 AM	54102
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	8/4/2020 2:23:02 AM	54102
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	8/4/2020 2:23:02 AM	54102
Surr: Dibromofluoromethane	99.2	70-130		%Rec	1	8/4/2020 2:23:02 AM	54102
Surr: Toluene-d8	96.7	70-130		%Rec	1	8/4/2020 2:23:02 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S11-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:56:00 AM

Lab ID: 2007F82-040

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	61		mg/Kg	20	8/5/2020 6:19:32 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/4/2020 2:51:31 AM	54102
Surr: BFB	101	70-130		%Rec	1	8/4/2020 2:51:31 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	4300	92		mg/Kg	10	8/6/2020 9:57:59 AM	54150
Motor Oil Range Organics (MRO)	3200	460		mg/Kg	10	8/6/2020 9:57:59 AM	54150
Surr: DNOP	0	30.4-154	S	%Rec	10	8/6/2020 9:57:59 AM	54150
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/4/2020 2:51:31 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/4/2020 2:51:31 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2020 2:51:31 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/4/2020 2:51:31 AM	54102
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%Rec	1	8/4/2020 2:51:31 AM	54102
Surr: 4-Bromofluorobenzene	75.0	70-130		%Rec	1	8/4/2020 2:51:31 AM	54102
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/4/2020 2:51:31 AM	54102
Surr: Toluene-d8	99.5	70-130		%Rec	1	8/4/2020 2:51:31 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S11-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 9:59:00 AM

Lab ID: 2007F82-041

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 6:31:52 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/4/2020 3:20:12 AM	54102
Surr: BFB	98.5	70-130		%Rec	1	8/4/2020 3:20:12 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	250	9.7		mg/Kg	1	8/6/2020 10:07:30 AM	54150
Motor Oil Range Organics (MRO)	270	48		mg/Kg	1	8/6/2020 10:07:30 AM	54150
Surr: DNOP	129	30.4-154		%Rec	1	8/6/2020 10:07:30 AM	54150
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/4/2020 3:20:12 AM	54102
Toluene	ND	0.050		mg/Kg	1	8/4/2020 3:20:12 AM	54102
Ethylbenzene	ND	0.050		mg/Kg	1	8/4/2020 3:20:12 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/4/2020 3:20:12 AM	54102
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	8/4/2020 3:20:12 AM	54102
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	8/4/2020 3:20:12 AM	54102
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/4/2020 3:20:12 AM	54102
Surr: Toluene-d8	97.6	70-130		%Rec	1	8/4/2020 3:20:12 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S12-0-6"

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 10:02:00 AM

Lab ID: 2007F82-042

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	100	60		mg/Kg	20	8/5/2020 6:44:12 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/4/2020 3:48:48 AM	54102
Surr: BFB	102	70-130		%Rec	1	8/4/2020 3:48:48 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 10:17:02 AM	54150
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 10:17:02 AM	54150
Surr: DNOP	92.6	30.4-154		%Rec	1	8/6/2020 10:17:02 AM	54150
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/4/2020 3:48:48 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/4/2020 3:48:48 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2020 3:48:48 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/4/2020 3:48:48 AM	54102
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	8/4/2020 3:48:48 AM	54102
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/4/2020 3:48:48 AM	54102
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/4/2020 3:48:48 AM	54102
Surr: Toluene-d8	99.4	70-130		%Rec	1	8/4/2020 3:48:48 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S12-1'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 10:05:00 AM

Lab ID: 2007F82-043

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 6:56:33 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/4/2020 4:17:21 AM	54102
Surr: BFB	104	70-130		%Rec	1	8/4/2020 4:17:21 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 10:26:34 AM	54150
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 10:26:34 AM	54150
Surr: DNOP	95.1	30.4-154		%Rec	1	8/6/2020 10:26:34 AM	54150
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/4/2020 4:17:21 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/4/2020 4:17:21 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2020 4:17:21 AM	54102
Xylenes, Total	ND	0.099		mg/Kg	1	8/4/2020 4:17:21 AM	54102
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/4/2020 4:17:21 AM	54102
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	8/4/2020 4:17:21 AM	54102
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/4/2020 4:17:21 AM	54102
Surr: Toluene-d8	99.2	70-130		%Rec	1	8/4/2020 4:17:21 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S12-2'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 10:08:00 AM

Lab ID: 2007F82-044

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 7:33:34 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/4/2020 4:45:50 AM	54102
Surr: BFB	101	70-130		%Rec	1	8/4/2020 4:45:50 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/6/2020 10:36:09 AM	54150
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 10:36:09 AM	54150
Surr: DNOP	104	30.4-154		%Rec	1	8/6/2020 10:36:09 AM	54150
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/4/2020 4:45:50 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/4/2020 4:45:50 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2020 4:45:50 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/4/2020 4:45:50 AM	54102
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	8/4/2020 4:45:50 AM	54102
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	8/4/2020 4:45:50 AM	54102
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/4/2020 4:45:50 AM	54102
Surr: Toluene-d8	99.6	70-130		%Rec	1	8/4/2020 4:45:50 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2007F82

Date Reported: 8/11/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S12-3'

Project: Hackberry 18 Fed 2 Battery

Collection Date: 7/29/2020 10:11:00 AM

Lab ID: 2007F82-045

Matrix: SOIL

Received Date: 7/31/2020 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/5/2020 8:10:37 PM	54193
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/4/2020 5:14:29 AM	54102
Surr: BFB	96.3	70-130		%Rec	1	8/4/2020 5:14:29 AM	54102
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/6/2020 10:45:44 AM	54150
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 10:45:44 AM	54150
Surr: DNOP	119	30.4-154		%Rec	1	8/6/2020 10:45:44 AM	54150
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/4/2020 5:14:29 AM	54102
Toluene	ND	0.049		mg/Kg	1	8/4/2020 5:14:29 AM	54102
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2020 5:14:29 AM	54102
Xylenes, Total	ND	0.098		mg/Kg	1	8/4/2020 5:14:29 AM	54102
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%Rec	1	8/4/2020 5:14:29 AM	54102
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	8/4/2020 5:14:29 AM	54102
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/4/2020 5:14:29 AM	54102
Surr: Toluene-d8	98.6	70-130		%Rec	1	8/4/2020 5:14:29 AM	54102

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: MB-54167	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54167	RunNo: 70830								
Prep Date: 8/4/2020	Analysis Date: 8/4/2020	SeqNo: 2466185 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54167	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54167	RunNo: 70830								
Prep Date: 8/4/2020	Analysis Date: 8/4/2020	SeqNo: 2466186 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: MB-54162	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54162	RunNo: 70833								
Prep Date: 8/4/2020	Analysis Date: 8/4/2020	SeqNo: 2466432 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54162	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54162	RunNo: 70833								
Prep Date: 8/4/2020	Analysis Date: 8/4/2020	SeqNo: 2466433 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	90	110			

Sample ID: MB-54179	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54179	RunNo: 70844								
Prep Date: 8/5/2020	Analysis Date: 8/5/2020	SeqNo: 2467698 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54179	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54179	RunNo: 70844								
Prep Date: 8/5/2020	Analysis Date: 8/5/2020	SeqNo: 2467699 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: MB-54193	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54193	RunNo: 70844								
Prep Date: 8/5/2020	Analysis Date: 8/5/2020	SeqNo: 2467763	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54193	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54193	RunNo: 70844								
Prep Date: 8/5/2020	Analysis Date: 8/5/2020	SeqNo: 2467765	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: MB-54144	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 54144	RunNo: 70836								
Prep Date: 8/4/2020	Analysis Date: 8/5/2020	SeqNo: 2466547 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.4	30.4	154			

Sample ID: LCS-54144	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 54144	RunNo: 70836								
Prep Date: 8/4/2020	Analysis Date: 8/5/2020	SeqNo: 2466548 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	70	130			
Surr: DNOP	4.8		5.000		95.1	30.4	154			

Sample ID: 2007F82-020AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S5-3'	Batch ID: 54144	RunNo: 70836								
Prep Date: 8/4/2020	Analysis Date: 8/5/2020	SeqNo: 2466550 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.30	0	99.1	47.4	136			
Surr: DNOP	4.9		5.030		97.3	30.4	154			

Sample ID: 2007F82-020AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S5-3'	Batch ID: 54144	RunNo: 70836								
Prep Date: 8/4/2020	Analysis Date: 8/5/2020	SeqNo: 2466801 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.2	46.08	0	115	47.4	136	6.55	43.4	
Surr: DNOP	4.8		4.608		104	30.4	154	0	0	

Sample ID: MB-54143	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 54143	RunNo: 70836								
Prep Date: 8/4/2020	Analysis Date: 8/6/2020	SeqNo: 2467336 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		109	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: LCS-54143	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 54143			RunNo: 70836						
Prep Date: 8/4/2020	Analysis Date: 8/6/2020			SeqNo: 2467342		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	111	70	130			
Surr: DNOP	5.1		5.000		103	30.4	154			

Sample ID: LCS-54150	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 54150			RunNo: 70894						
Prep Date: 8/4/2020	Analysis Date: 8/6/2020			SeqNo: 2469094		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.9	70	130			
Surr: DNOP	4.3		5.000		86.3	30.4	154			

Sample ID: MB-54150	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 54150			RunNo: 70894						
Prep Date: 8/4/2020	Analysis Date: 8/6/2020			SeqNo: 2469097		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	30.4	154			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: mb-54093	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54093	RunNo: 70774								
Prep Date: 7/31/2020	Analysis Date: 8/1/2020	SeqNo: 2462986	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		99.0	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.6	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.49		0.5000		98.2	70	130			

Sample ID: lcs-54093	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54093	RunNo: 70774								
Prep Date: 7/31/2020	Analysis Date: 8/1/2020	SeqNo: 2462987	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.4	80	120			
Toluene	1.0	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.2	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.2	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.6	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID: mb-54099	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463470	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.3	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.2	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.9	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: Ics-54099	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463471	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	105	80	120			
Toluene	1.1	0.050	1.000	0	112	80	120			
Ethylbenzene	1.1	0.050	1.000	0	111	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.8	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.5	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		98.1	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: 2007f82-006ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S2-1'	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463473	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	0.9862	0	99.7	71.1	115			
Toluene	1.1	0.049	0.9862	0	114	79.6	132			
Ethylbenzene	1.1	0.049	0.9862	0	114	83.8	134			
Xylenes, Total	3.4	0.099	2.959	0	113	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.45		0.4931		92.1	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4931		91.0	70	130			
Surr: Dibromofluoromethane	0.47		0.4931		96.3	70	130			
Surr: Toluene-d8	0.50		0.4931		102	70	130			

Sample ID: 2007f82-006amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S2-1'	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463474	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9747	0	103	71.1	115	2.42	20	
Toluene	1.1	0.049	0.9747	0	113	79.6	132	2.05	20	
Ethylbenzene	1.1	0.049	0.9747	0	114	83.8	134	1.39	20	
Xylenes, Total	3.3	0.097	2.924	0	112	82.4	132	2.44	20	
Surr: 1,2-Dichloroethane-d4	0.47		0.4873		96.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4873		93.2	70	130	0	0	
Surr: Dibromofluoromethane	0.50		0.4873		103	70	130	0	0	
Surr: Toluene-d8	0.51		0.4873		106	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: Ics-54102	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463620	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.1	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		96.2	70	130			

Sample ID: 2007f82-026ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S8-0-6"	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463622	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	0.9950	0	97.5	71.1	115			
Toluene	1.0	0.050	0.9950	0	101	79.6	132			
Ethylbenzene	1.0	0.050	0.9950	0	101	83.8	134			
Xylenes, Total	3.1	0.10	2.985	0	105	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.50		0.4975		101	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.4975		98.8	70	130			
Surr: Dibromofluoromethane	0.54		0.4975		108	70	130			
Surr: Toluene-d8	0.49		0.4975		97.7	70	130			

Sample ID: 2007f82-026amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: S8-0-6"	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/3/2020	SeqNo: 2463623	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	0.9843	0	93.3	71.1	115	5.50	20	
Toluene	0.96	0.049	0.9843	0	97.1	79.6	132	4.97	20	
Ethylbenzene	0.97	0.049	0.9843	0	98.8	83.8	134	3.71	20	
Xylenes, Total	3.0	0.098	2.953	0	101	82.4	132	5.21	20	
Surr: 1,2-Dichloroethane-d4	0.51		0.4921		103	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.49		0.4921		100	70	130	0	0	
Surr: Dibromofluoromethane	0.54		0.4921		109	70	130	0	0	
Surr: Toluene-d8	0.48		0.4921		96.7	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: mb-54093	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54093	RunNo: 70774								
Prep Date: 7/31/2020	Analysis Date: 8/1/2020	SeqNo: 2463013			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		103	70	130			

Sample ID: lcs-54093	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54093	RunNo: 70774								
Prep Date: 7/31/2020	Analysis Date: 8/1/2020	SeqNo: 2463014			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.0	70	130			
Surr: BFB	500		500.0		100	70	130			

Sample ID: mb-54099	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463562			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	520		500.0		105	70	130			

Sample ID: lcs-54099	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463585			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.2	70	130			
Surr: BFB	520		500.0		104	70	130			

Sample ID: 2007f82-007ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: S2-2'	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463592			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.75	0	95.2	49.2	122			
Surr: BFB	510		495.0		103	70	130			

Sample ID: 2007f82-007amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: S2-2'	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463593			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2007F82

11-Aug-20

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Battery

Sample ID: 2007f82-007amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: S2-2'	Batch ID: 54099	RunNo: 70781								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463593 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.46	0	87.3	49.2	122	9.82	20	
Surr: BFB	500		489.2		103	70	130	0	0	

Sample ID: mb-54102	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463652 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.6	70	130			

Sample ID: lcs-54102	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/2/2020	SeqNo: 2463653 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.3	70	130			
Surr: BFB	490		500.0		98.6	70	130			

Sample ID: 2007f82-027ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: S8-1'	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/3/2020	SeqNo: 2463656 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.65	0	89.2	49.2	122			
Surr: BFB	490		493.1		98.7	70	130			

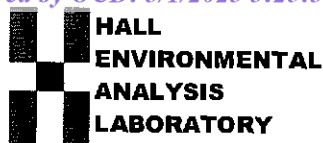
Sample ID: 2007f82-027amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: S8-1'	Batch ID: 54102	RunNo: 70783								
Prep Date: 7/31/2020	Analysis Date: 8/3/2020	SeqNo: 2463657 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.9	49.2	122	5.52	20	
Surr: BFB	520		500.0		103	70	130	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Pima Environmental Services LLC**

Work Order Number: **2007F82**

RcptNo: 1

Received By: **Emily Mocho**

7/31/2020 9:55 AM EM 7/31/20

Completed By: **Emily Mocho**

7/31/2020 10:31:04 AM

Reviewed By: **JR 7/31/20**

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: cmc 7/31/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good				

Released to Imaging: 3/6/2023 7:51:41 AM

Turn-Around Time: 5 Days

Project Name: Hackberry 18 Fed 2 Battery

Project #:

Project Manager:
Chris Jones

☒ Standard ☐ Level 4 (Full Validation)

Sampler:

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp(including CF): 3.8-0.1=3.7 (°C)

Date	Time	Matrix	Sample Name	Cooler Temp (including CF): 3.8-0.1-3.7 (°C)			BTEX / MT	TPH:8015DD	8081 Pestic	EDB (Metho	PAHs by 83	RCRA 8 Me	Cl, F, Br, N	8260 (VOA)	8270 (Semi-	Total Colifor	chlori
				Container Type and #	Preservative Type	HEAL No.											
7/29/20	0800		S1-0-6"	GLASS	ICE	2007F82-001											
	0803		S1-1'			-002											
	0806		S1-2'			-003											
	0809		S1-3'			-004											
	0811		S2-0-6"			005											
	0814		S2-1'			006											
	0817		S2-2'			007											
	0820		S2-3'			008											
	0823		S3-0-6"			009											
	0826		S3-1'			010											
	0829		S3-2'			011											
	0832		S3-3'			012											
Date:	Time:	Relinquished by:		Received by:		Via:	Date	Time	Remarks: Bill to Devon								
7/30/20	8:25	[Signature]		[Signature]			7/30/20	825									
Date:	Time:	Relinquished by:		Received by:		Via:	Date	Time									
7/30/20	1900	[Signature]		Ekm courier			7/31/20	955									

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

	BTEX / MTBE / TMB's (8021)	
	TPH:8015D(GRO / DRO / MRO)	
	8081 Pesticides/8082 PCB's	
	EDB (Method 504.1)	
	PAHs by 8310 or 8270SIMS	
	RCRA 8 Metals	
	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	
	8260 (VOA)	
	8270 (Semi-VOA)	
	Total Coliform (Present/Absent)	
	chloride	

Remarks:

Bill to Devon

Chain-of-Custody Record

Client: Pima EnvironmentalTurn-Around Time: 5 Days☒ Standard ☐ RushMailing Address: 1601 N. Turner ste 500
Hobbs, NM 88240Project Name: Hackberry 18 Fed 2 BatteryPhone #: 575-631-6977

Project #:

email or Fax#: Chris@pimaoil.com

Project Manager:

QA/QC Package:

Chris Jones☒ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance

Sampler:

☐ NELAC ☐ OtherOn Ice: ☒ Yes ☐ No☐ EDD (Type)# of Coolers: 1Cooler Temp (Including CF): 3.8 - 0.1 = 3.7 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
7/29/20	0835		S4-0-6"	GLASS	ICE	-013											
	0838		S4-0-1'			014											
	0841		S4-2'			015											
	0844		S4-3'			016											
	0847		S5-0-6"			017											
	0850		S5-1'			018											
	0853		S5-2'			019											
	0856		S5-3'			020											
	0859		S6-0-6"			021											
	0902		S7-0-6"			022											
	0905		S7-1'			023											
	0908		S7-2'			-024											
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks:										
7/30/20	8:25	<u>[Signature]</u>	<u>[Signature]</u>		7/30/20	8:25											
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Bill TO DEVON										
7/30/20	1:00	<u>[Signature]</u>	<u>[Signature]</u>		7/31/20	9:55											

HALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX / MTBE / TMB's (8021)
 TPH:8015D(GRO / DRO / MRO)
 8081 Pesticides/8082 PCB's
 EDB (Method 504.1)
 PAHs by 8310 or 8270SIMS
 RCRA 8 Metals
 Cl, F, Br, NO₃, NO₂, PO₄, SO₄
 8260 (VOA)
 8270 (Semi-VOA)
 Total Coliform (Present/Absent)
 Chloride

Released to Imaging: 3/6/2023 7:51:41 AM

Turn-Around Time: 5 Days

☒ Standard ☐ Rush _____

Project Name: Hackberry 18 Fed 2 Battery

Project #:

Project Manager:
Chris Jones

☒ Standard ☐ Level 4 (Full Validation)

Sampler:

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): $3.8 - 0.1 = 3.7$ ($^{\circ}\text{C}$)[illegible]

Received by:	Via:	Date:	Time
Colummins		7/30/20	8:25
Received by:	Via:	Date:	Time
4 km courier		7/31/20	9:55

Remarks: Bill to Devon



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

April 09, 2021

Tom Bynum

Pima Environmental Services LLC

1601 N. Turner Ste 500

Hobbs, NM 88240

TEL: (575) 631-6977

FAX

RE: Hackberry 18 Fed 2 Batt

OrderNo.: 2104164

Dear Tom Bynum:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/6/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2104164

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-8-2ft Bottom

Project: Hackberry 18 Fed 2 Batt

Collection Date: 4/1/2021 8:30:00 AM

Lab ID: 2104164-001

Matrix: SOIL

Received Date: 4/6/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/7/2021 2:57:03 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/7/2021 2:57:03 PM
Surr: DNOP	100	70-130		%Rec	1	4/7/2021 2:57:03 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/8/2021 7:01:33 PM
Surr: BFB	95.0	70-130		%Rec	1	4/8/2021 7:01:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/8/2021 7:01:33 PM
Toluene	ND	0.050		mg/Kg	1	4/8/2021 7:01:33 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/8/2021 7:01:33 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2021 7:01:33 PM
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	4/8/2021 7:01:33 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/9/2021 5:35:56 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104164

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-8 Wall

Project: Hackberry 18 Fed 2 Batt

Collection Date: 4/1/2021 8:35:00 AM

Lab ID: 2104164-002

Matrix: SOIL

Received Date: 4/6/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/7/2021 3:21:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/7/2021 3:21:22 PM
Surr: DNOP	97.4	70-130		%Rec	1	4/7/2021 3:21:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/8/2021 7:25:16 PM
Surr: BFB	97.2	70-130		%Rec	1	4/8/2021 7:25:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/8/2021 7:25:16 PM
Toluene	ND	0.048		mg/Kg	1	4/8/2021 7:25:16 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/8/2021 7:25:16 PM
Xylenes, Total	ND	0.096		mg/Kg	1	4/8/2021 7:25:16 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	4/8/2021 7:25:16 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/9/2021 5:48:17 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104164

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-11-3ft Bottom

Project: Hackberry 18 Fed 2 Batt

Collection Date: 4/1/2021 8:40:00 AM

Lab ID: 2104164-003

Matrix: SOIL

Received Date: 4/6/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2021 3:31:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2021 3:31:13 PM
Surr: DNOP	97.0	70-130		%Rec	1	4/7/2021 3:31:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2021 7:48:43 PM
Surr: BFB	97.8	70-130		%Rec	1	4/8/2021 7:48:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/8/2021 7:48:43 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2021 7:48:43 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2021 7:48:43 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2021 7:48:43 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	4/8/2021 7:48:43 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/9/2021 6:00:38 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104164

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-11- Wall

Project: Hackberry 18 Fed 2 Batt

Collection Date: 4/1/2021 8:45:00 AM

Lab ID: 2104164-004

Matrix: SOIL

Received Date: 4/6/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	4/7/2021 3:41:08 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	4/7/2021 3:41:08 PM
Surr: DNOP	105	70-130		%Rec	1	4/7/2021 3:41:08 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/8/2021 8:12:10 PM
Surr: BFB	99.0	70-130		%Rec	1	4/8/2021 8:12:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	4/8/2021 8:12:10 PM
Toluene	ND	0.047		mg/Kg	1	4/8/2021 8:12:10 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/8/2021 8:12:10 PM
Xylenes, Total	ND	0.093		mg/Kg	1	4/8/2021 8:12:10 PM
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	4/8/2021 8:12:10 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/9/2021 6:37:40 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104164

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-7-4ft Bottom

Project: Hackberry 18 Fed 2 Batt

Collection Date: 4/1/2021 8:50:00 AM

Lab ID: 2104164-005

Matrix: SOIL

Received Date: 4/6/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/7/2021 3:51:02 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/7/2021 3:51:02 PM
Surr: DNOP	102	70-130		%Rec	1	4/7/2021 3:51:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2021 8:35:37 PM
Surr: BFB	98.8	70-130		%Rec	1	4/8/2021 8:35:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/8/2021 8:35:37 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2021 8:35:37 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2021 8:35:37 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/8/2021 8:35:37 PM
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	4/8/2021 8:35:37 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/9/2021 6:50:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104164

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S-7- Wall

Project: Hackberry 18 Fed 2 Batt

Collection Date: 4/1/2021 8:55:00 AM

Lab ID: 2104164-006

Matrix: SOIL

Received Date: 4/6/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/7/2021 4:00:58 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/7/2021 4:00:58 PM
Surr: DNOP	111	70-130		%Rec	1	4/7/2021 4:00:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/8/2021 8:59:07 PM
Surr: BFB	100	70-130		%Rec	1	4/8/2021 8:59:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/8/2021 8:59:07 PM
Toluene	ND	0.049		mg/Kg	1	4/8/2021 8:59:07 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/8/2021 8:59:07 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/8/2021 8:59:07 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	4/8/2021 8:59:07 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	61		mg/Kg	20	4/9/2021 7:02:21 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2104164
09-Apr-21

Client: Pima Environmental Services LLC
Project: Hackberry 18 Fed 2 Batt

Sample ID: MB-59301	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 59301	RunNo: 76565
Prep Date: 4/8/2021	Analysis Date: 4/9/2021	SeqNo: 2712617 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-59301	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 59301	RunNo: 76565
Prep Date: 4/8/2021	Analysis Date: 4/9/2021	SeqNo: 2712618 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.0 90 110

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2104164

09-Apr-21

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Batt

Sample ID: MB-59242	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59242	RunNo: 76528								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711249 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	70	130			

Sample ID: LCS-59242	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59242	RunNo: 76528								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711250 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.1	68.9	141			
Surr: DNOP	5.1		5.000		102	70	130			

Sample ID: MB-59281	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59281	RunNo: 76564								
Prep Date: 4/8/2021	Analysis Date: 4/8/2021	SeqNo: 2712500 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		104	70	130			

Sample ID: LCS-59281	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59281	RunNo: 76564								
Prep Date: 4/8/2021	Analysis Date: 4/8/2021	SeqNo: 2712502 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		98.0	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2104164

09-Apr-21

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Batt

Sample ID: mb-59235	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 59235	RunNo: 76526								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711181			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.4	70	130			

Sample ID: lcs-59235	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 59235	RunNo: 76526								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711182			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.2	78.6	131			
Surr: BFB	1100		1000		106	70	130			

Sample ID: mb-59283	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 59283	RunNo: 76560								
Prep Date: 4/7/2021	Analysis Date: 4/9/2021	SeqNo: 2712382			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		97.8	70	130			

Sample ID: lcs-59283	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 59283	RunNo: 76560								
Prep Date: 4/7/2021	Analysis Date: 4/8/2021	SeqNo: 2712383			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2104164

09-Apr-21

Client: Pima Environmental Services LLC**Project:** Hackberry 18 Fed 2 Batt

Sample ID: mb-59235	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 59235	RunNo: 76526								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711230 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	70	130			

Sample ID: LCS-59235	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59235	RunNo: 76526								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711231 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	80	120			
Toluene	0.95	0.050	1.000	0	95.4	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.7	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.5	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	70	130			

Sample ID: mb-59283	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 59283	RunNo: 76560								
Prep Date: 4/7/2021	Analysis Date: 4/9/2021	SeqNo: 2712425 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	70	130			

Sample ID: LCS-59283	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59283	RunNo: 76560								
Prep Date: 4/7/2021	Analysis Date: 4/9/2021	SeqNo: 2712426 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Pima Environmental Services LLC

Work Order Number: 2104164

RcptNo: 1

Received By: Juan Rojas

4/6/2021 7:30:00 AM

Completed By: Cheyenne Cason

4/6/2021 7:52:23 AM

Reviewed By: SGC 4/6/21

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☐ No ☒ NA ☐
5. Sample(s) in proper container(s)? Approved by client.
Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SPA 4.6.21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	7.7	Good				

Released to Imaging: 3/6/2023 7:51:41 AM

☐ EDD (Type) _____Cooler Temp (including CF): $2.8 - 0.1 = 2.7$ ($^{\circ}\text{C}$)

Received by:	Via:	Date	Time
--------------	------	------	------

[illegible]

Remarks: Bill To Devon

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Hackberry 18 Fed 2

Work Order: E301108

Job Number: 01058-0007

Received: 1/20/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
1/24/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 1/24/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Hackberry 18 Fed 2
Workorder: E301108
Date Received: 1/20/2023 7:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/20/2023 7:00:00AM, under the Project Name: Hackberry 18 Fed 2.

The analytical test results summarized in this report with the Project Name: Hackberry 18 Fed 2 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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Rayny Hagan
Technical Representative
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Envirotech Web Address: www.envirotech-inc.com

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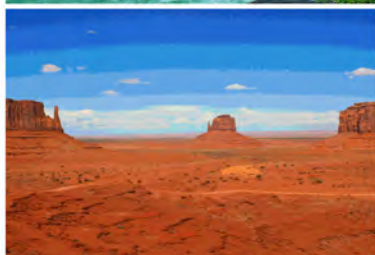
Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported: 01/24/23 09:26
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S-8 4'	E301108-01A	Soil	01/17/23	01/20/23	Glass Jar, 2 oz.
S-11 4'	E301108-02A	Soil	01/17/23	01/20/23	Glass Jar, 2 oz.



Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Hackberry 18 Fed 2

Work Order: E302011

Job Number: 01058-0007

Received: 2/2/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/8/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 2/8/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Hackberry 18 Fed 2
Workorder: E302011
Date Received: 2/2/2023 8:15:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/2/2023 8:15:00AM, under the Project Name: Hackberry 18 Fed 2.

The analytical test results summarized in this report with the Project Name: Hackberry 18 Fed 2 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported: 02/08/23 09:09
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW-1	E302011-01A	Soil	01/30/23	02/02/23	Glass Jar, 2 oz.
SW-2	E302011-02A	Soil	01/30/23	02/02/23	Glass Jar, 2 oz.
SW-3	E302011-03A	Soil	01/30/23	02/02/23	Glass Jar, 2 oz.
SW-4	E302011-04A	Soil	01/30/23	02/02/23	Glass Jar, 2 oz.



Sample Data

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

Project Name: Hackberry 18 Fed 2
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/8/2023 9:09:59AM

SW-1

E302011-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2305051	
Benzene	ND	0.0250	1	02/02/23	02/03/23	
Ethylbenzene	ND	0.0250	1	02/02/23	02/03/23	
Toluene	ND	0.0250	1	02/02/23	02/03/23	
o-Xylene	ND	0.0250	1	02/02/23	02/03/23	
p,m-Xylene	ND	0.0500	1	02/02/23	02/03/23	
Total Xylenes	ND	0.0250	1	02/02/23	02/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	102 %	70-130		02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2305051	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/02/23	02/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.5 %	70-130		02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2305040	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/02/23	02/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/02/23	02/02/23	
<i>Surrogate: n-Nonane</i>						
	99.9 %	50-200		02/02/23	02/02/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2305061	
Chloride	ND	20.0	1	02/02/23	02/03/23	



Sample Data

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

Project Name: Hackberry 18 Fed 2
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/8/2023 9:09:59AM

SW-2

E302011-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2305051
Benzene	ND	0.0250	1	02/02/23	02/03/23	
Ethylbenzene	ND	0.0250	1	02/02/23	02/03/23	
Toluene	ND	0.0250	1	02/02/23	02/03/23	
o-Xylene	ND	0.0250	1	02/02/23	02/03/23	
p,m-Xylene	ND	0.0500	1	02/02/23	02/03/23	
Total Xylenes	ND	0.0250	1	02/02/23	02/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		103 %	70-130	02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2305051
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/02/23	02/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.9 %	70-130	02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2305040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/02/23	02/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/02/23	02/02/23	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	02/02/23	02/02/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2305061
Chloride	ND	20.0	1	02/02/23	02/03/23	



Sample Data

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

Project Name: Hackberry 18 Fed 2
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/8/2023 9:09:59AM

SW-3

E302011-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2305051
Benzene	ND	0.0250	1	02/02/23	02/03/23	
Ethylbenzene	ND	0.0250	1	02/02/23	02/03/23	
Toluene	ND	0.0250	1	02/02/23	02/03/23	
o-Xylene	ND	0.0250	1	02/02/23	02/03/23	
p,m-Xylene	ND	0.0500	1	02/02/23	02/03/23	
Total Xylenes	ND	0.0250	1	02/02/23	02/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2305051
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/02/23	02/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		90.6 %	70-130	02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2305040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/02/23	02/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/02/23	02/02/23	
<i>Surrogate: n-Nonane</i>						
		106 %	50-200	02/02/23	02/02/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2305061
Chloride	ND	20.0	1	02/02/23	02/03/23	



Sample Data

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

Project Name: Hackberry 18 Fed 2
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/8/2023 9:09:59AM

SW-4

E302011-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2305051
Benzene	ND	0.0250	1	02/02/23	02/03/23	
Ethylbenzene	ND	0.0250	1	02/02/23	02/03/23	
Toluene	ND	0.0250	1	02/02/23	02/03/23	
o-Xylene	ND	0.0250	1	02/02/23	02/03/23	
p,m-Xylene	ND	0.0500	1	02/02/23	02/03/23	
Total Xylenes	ND	0.0250	1	02/02/23	02/03/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2305051
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/02/23	02/03/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		88.9 %	70-130	02/02/23	02/03/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2305040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/02/23	02/02/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/02/23	02/02/23	
<i>Surrogate: n-Nonane</i>						
		106 %	50-200	02/02/23	02/02/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2305061
Chloride	ND	20.0	1	02/02/23	02/03/23	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/8/2023 9:09:59AM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2305051-BLK1)

Prepared: 02/02/23 Analyzed: 02/03/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.28		8.00		103	70-130			

LCS (2305051-BS1)

Prepared: 02/02/23 Analyzed: 02/03/23

Benzene	5.01	0.0250	5.00		100	70-130			
Ethylbenzene	4.96	0.0250	5.00		99.3	70-130			
Toluene	5.10	0.0250	5.00		102	70-130			
o-Xylene	5.13	0.0250	5.00		103	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.2	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.31		8.00		104	70-130			

Matrix Spike (2305051-MS1)

Source: E302010-01

Prepared: 02/02/23 Analyzed: 02/03/23

Benzene	4.63	0.0250	5.00	ND	92.6	54-133			
Ethylbenzene	4.71	0.0250	5.00	ND	94.1	61-133			
Toluene	4.80	0.0250	5.00	ND	96.1	61-130			
o-Xylene	4.85	0.0250	5.00	ND	97.1	63-131			
p,m-Xylene	9.54	0.0500	10.0	ND	95.4	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	96.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.25		8.00		103	70-130			

Matrix Spike Dup (2305051-MSD1)

Source: E302010-01

Prepared: 02/02/23 Analyzed: 02/03/23

Benzene	4.89	0.0250	5.00	ND	97.9	54-133	5.56	20	
Ethylbenzene	4.96	0.0250	5.00	ND	99.2	61-133	5.27	20	
Toluene	5.07	0.0250	5.00	ND	101	61-130	5.39	20	
o-Xylene	5.13	0.0250	5.00	ND	103	63-131	5.48	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	5.42	20	
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131	5.44	20	
Surrogate: 4-Bromochlorobenzene-PID	8.55		8.00		107	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/8/2023 9:09:59AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2305051-BLK1) Prepared: 02/02/23 Analyzed: 02/03/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			

LCS (2305051-BS2) Prepared: 02/02/23 Analyzed: 02/03/23

Gasoline Range Organics (C6-C10)	53.5	20.0	50.0		107	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.16		8.00		89.6	70-130			

Matrix Spike (2305051-MS2) Source: E302010-01 Prepared: 02/02/23 Analyzed: 02/03/23

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.2	70-130			

Matrix Spike Dup (2305051-MSD2) Source: E302010-01 Prepared: 02/02/23 Analyzed: 02/03/23

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0	ND	101	70-130	0.0427	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/8/2023 9:09:59AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2305040-BLK1)					Prepared: 02/01/23 Analyzed: 02/01/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.5		50.0		111	50-200			

LCS (2305040-BS1)					Prepared: 02/01/23 Analyzed: 02/01/23				
Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	52.2		50.0		104	50-200			

LCS Dup (2305040-BSD1)					Prepared: 02/01/23 Analyzed: 02/01/23				
Diesel Range Organics (C10-C28)	265	25.0	250		106	38-132	1.55	20	
Surrogate: n-Nonane	51.8		50.0		104	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/8/2023 9:09:59AM

Anions by EPA 300.0/9056A

Analyst: BA

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

Blank (2305061-BLK1)					Prepared: 02/02/23 Analyzed: 02/02/23				
Chloride	ND	20.0							
LCS (2305061-BS1)					Prepared: 02/02/23 Analyzed: 02/03/23				
Chloride	250	20.0	250		99.8	90-110			
Matrix Spike (2305061-MS1)					Source: E302010-01		Prepared: 02/02/23 Analyzed: 02/03/23		
Chloride	250	20.0	250	ND	100	80-120			
Matrix Spike Dup (2305061-MSD1)					Source: E302010-01		Prepared: 02/02/23 Analyzed: 02/03/23		
Chloride	250	20.0	250	ND	100	80-120	0.0244	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 18 Fed 2	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	02/08/23 09:09

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

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

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

Project Information

Chain of Custody

Page 1 of 1

Client: Pima Environmental Services		Bill To		Lab Use Only		TAT		EPA Program	
Project: HACKBERRY 18 Feb 2		Attention: Devon Energy		Lab WO# E302011		Job Number 01058-0007		CWA SDWA	
Project Manager: Tom Bynum		Address:		Analysis and Method		1D 2D 3D Standard		RCRA	
Address: 5614 N. Lovington Hwy.		City, State, Zip		DRO by 8015		GRO by 8015		State	
City, State, Zip Hobbs, NM, 88240		Phone:		BTX by 8021		VOC by 8260		NM CO UT AZ TX	
Phone: 580-748-1613		Email:		Metals 6010		Chloride 300.0		BGDOC NM	
Email: tom@pimaoil.com		Pima Project # 1-34						BGDOC TX	
Report due by:								Remarks	

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO by 8015	GRO by 8015	BTX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
1:00	1/30/23	S	1	SW-1	1							X		
1:05				SW-2	2									
1:10				SW-3	3									
1:15				SW-4	4									

Additional Instructions: Bill To Devon Energy: # 20879759

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

Relinquished by: (Signature) Neil Rogers Date 2-1-23 Time 2:00 Received by: (Signature) Michelle Cuyas Date 2-1-23 Time 1400

Relinquished by: (Signature) Michelle Cuyas Date 2-1-23 Time 1700 Received by: (Signature) Lorenz Fei Date 2-1-23 Time 1700

Relinquished by: (Signature) Lorenz Fei Date 2-1-23 Time 2308 Received by: (Signature) Carlin Chite Date 2/2/23 Time 8:15

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

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

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



Envirotech Analytical Laboratory

Printed: 2/2/2023 9:21:37AM

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:	02/02/23 08:15	Work Order ID:	E302011
Phone:	(575) 631-6977	Date Logged In:	02/01/23 16:23	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	02/08/23 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

Sample Data

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

Project Name: Hackberry 18 Fed 2
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
1/24/2023 9:26:36AM

S-8 4'

E301108-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2303066
Benzene	ND	0.0250	1	01/20/23	01/20/23	
Ethylbenzene	ND	0.0250	1	01/20/23	01/20/23	
Toluene	ND	0.0250	1	01/20/23	01/20/23	
o-Xylene	ND	0.0250	1	01/20/23	01/20/23	
p,m-Xylene	ND	0.0500	1	01/20/23	01/20/23	
Total Xylenes	ND	0.0250	1	01/20/23	01/20/23	
Surrogate: 4-Bromochlorobenzene-PID	106 %	70-130		01/20/23	01/20/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2303066
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/20/23	01/20/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.1 %	70-130		01/20/23	01/20/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2303064
Diesel Range Organics (C10-C28)	ND	25.0	1	01/20/23	01/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/20/23	01/20/23	
Surrogate: n-Nonane	99.7 %	50-200		01/20/23	01/20/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2303081
Chloride	ND	20.0	1	01/20/23	01/21/23	



Sample Data

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

Project Name: Hackberry 18 Fed 2
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
1/24/2023 9:26:36AM

S-11 4'

E301108-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2303066
Benzene	ND	0.0250	1	01/20/23	01/20/23	
Ethylbenzene	ND	0.0250	1	01/20/23	01/20/23	
Toluene	ND	0.0250	1	01/20/23	01/20/23	
o-Xylene	ND	0.0250	1	01/20/23	01/20/23	
p,m-Xylene	ND	0.0500	1	01/20/23	01/20/23	
Total Xylenes	ND	0.0250	1	01/20/23	01/20/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		105 %	70-130	01/20/23	01/20/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2303066
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/20/23	01/20/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		97.1 %	70-130	01/20/23	01/20/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2303064
Diesel Range Organics (C10-C28)	ND	25.0	1	01/20/23	01/20/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/20/23	01/20/23	
<i>Surrogate: n-Nonane</i>						
		102 %	50-200	01/20/23	01/20/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2303081
Chloride	ND	20.0	1	01/20/23	01/21/23	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported: 1/24/2023 9:26:36AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2303066-BLK1)

Prepared: 01/20/23 Analyzed: 01/20/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.22		8.00		103	70-130			

LCS (2303066-BS1)

Prepared: 01/20/23 Analyzed: 01/20/23

Benzene	5.20	0.0250	5.00		104	70-130			
Ethylbenzene	5.59	0.0250	5.00		112	70-130			
Toluene	5.62	0.0250	5.00		112	70-130			
o-Xylene	5.74	0.0250	5.00		115	70-130			
p,m-Xylene	11.3	0.0500	10.0		113	70-130			
Total Xylenes	17.1	0.0250	15.0		114	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.20		8.00		102	70-130			

LCS Dup (2303066-BSD1)

Prepared: 01/20/23 Analyzed: 01/20/23

Benzene	4.92	0.0250	5.00		98.4	70-130	5.44	20	
Ethylbenzene	5.29	0.0250	5.00		106	70-130	5.58	20	
Toluene	5.33	0.0250	5.00		107	70-130	5.43	20	
o-Xylene	5.43	0.0250	5.00		109	70-130	5.55	20	
p,m-Xylene	10.7	0.0500	10.0		107	70-130	5.54	20	
Total Xylenes	16.2	0.0250	15.0		108	70-130	5.54	20	
Surrogate: 4-Bromochlorobenzene-PID	8.22		8.00		103	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported: 1/24/2023 9:26:36AM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2303066-BLK1) Prepared: 01/20/23 Analyzed: 01/20/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.95		8.00		99.4	70-130			

LCS (2303066-BS2) Prepared: 01/20/23 Analyzed: 01/20/23

Gasoline Range Organics (C6-C10)	51.6	20.0	50.0		103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.95		8.00		99.4	70-130			

LCS Dup (2303066-BSD2) Prepared: 01/20/23 Analyzed: 01/20/23

Gasoline Range Organics (C6-C10)	57.8	20.0	50.0		116	70-130	11.3	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.03		8.00		100	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	1/24/2023 9:26:36AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2303064-BLK1)					Prepared: 01/20/23 Analyzed: 01/20/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	43.7		50.0		87.4	50-200			

LCS (2303064-BS1)					Prepared: 01/20/23 Analyzed: 01/20/23				
Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	51.9		50.0		104	50-200			

Matrix Spike (2303064-MS1)					Source: E301108-02		Prepared: 01/20/23 Analyzed: 01/20/23		
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	52.2		50.0		104	50-200			

Matrix Spike Dup (2303064-MSD1)					Source: E301108-02		Prepared: 01/20/23 Analyzed: 01/20/23		
Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	38-132	0.210	20	
Surrogate: n-Nonane	52.1		50.0		104	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Hackberry 18 Fed 2	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	1/24/2023 9:26:36AM

Anions by EPA 300.0/9056A

Analyst: BA

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

Blank (2303081-BLK1)					Prepared: 01/20/23 Analyzed: 01/21/23				
Chloride	ND	20.0							
LCS (2303081-BS1)					Prepared: 01/20/23 Analyzed: 01/21/23				
Chloride	249	20.0	250		99.7	90-110			
Matrix Spike (2303081-MS1)					Source: E301104-01		Prepared: 01/20/23 Analyzed: 01/21/23		
Chloride	5380	400	250	5740	NR	80-120			M4
Matrix Spike Dup (2303081-MSD1)					Source: E301104-01		Prepared: 01/20/23 Analyzed: 01/21/23		
Chloride	5730	400	250	5740	NR	80-120	6.39	20	M4

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 18 Fed 2	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	01/24/23 09:26

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





Envirotech Analytical Laboratory

Printed: 1/20/2023 8:51:28AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Pima Environmental Services-Carlsbad	Date Received:	01/20/23 07:00	Work Order ID:	E301108
Phone:	(575) 631-6977	Date Logged In:	01/19/23 15:56	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	01/26/23 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

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

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Pima Environmental Services

Appendix F

Rejected Closure Report



Pima Environmental Services, LLC
1601 N. Turner Ste 500
Hobbs, NM 88240
575-964-7740

August 26, 2020

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

Bureau of Land Management
Mr. Jim Amos
620 East Green Street
Carlsbad, NM 88220

**Re: Work Plan Report
Hackberry 18 Fed #2
API No. 30-015-30551
GPS: Latitude 32.6658363 Longitude -103.9105835
UL "C", Sec. 18, T19S, R31E
Eddy County, NM
NMOCD Ref. No. 2RP-660**

Dear Mr. Billings and Mr. Amos,

Pima Environmental Services, LLC (Pima) has been contracted by Devon Energy Production Company (Devon) to perform a spill assessment and to submit a work plan for approved remediation activities on the open releases that occurred at the Hackberry 18 Fed #2 (Hackberry). The current open spill at this site is 2RP-660 release, the initial C-141 was submitted on 3-13-2009 and was assigned Incident ID NKMW1108338334, by the New Mexico Oil Conservation Division (NMOCD).

See Appendix C for Initial C-141.

Site Characterization

The Hackberry is located approximately twenty-five (25) miles northeast of Carlsbad, NM. This spill site is in Unit C, Section 18, Township 19S, Range 31E, Latitude 32.6658363, Longitude -103.9105835, Eddy County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation Eolian and piedmont deposits (Holocene to middle Pleistocene)-interlayered eolian sands and piedmont-slope deposits (QEP). The soil in this area is made up of Berino loamy 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 well-drained. There is a low potential for karst geology to be present in the area of 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 depth to groundwater is greater than 100 feet below grade surface (BGS). The nearest surface water is located 2.17 miles to the southeast. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
180'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
<50	600 mg/kg	100 mg/kg	100 mg/kg	50 mg/kg	10mg/kg
If the release occurred within any of the following areas, the responsible party would treat the release as if the groundwater was less than 50 feet per Rule 19.15.29					
Water Issues				Yes	No
Within 300 feet of any continuously flowing watercourse or any other significant watercourse					x
Within 200 feet of any lakebed, sinkhole or playa lake (measures from the ordinary high-water mark					x
Within 300 feet from an occupied permanent residence, school, hospital, institution or church					x
Within 500 feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock water purposes					x
Within 1000 feet of any freshwater well or spring					x
Within incorporated municipal boundaries or within a defined municipal freshwater well field					x
Within 300 feet of a wetlands					x
Within the area overlying a subsurface mine					x
Within an unstable area (Karst)					x
Within a 100-year floodplain					x

Reference Figure 2 for a TOPO Map.

Release Information

2RP-660: On March 9, 2009, a leak was discovered coming from the heater treater. Upon further investigation the fire tube developed a pin hole due to corrosion. The released fluids were calculated to be approximately 5 barrels (bbls) of oil and 5 bbls of produced water. No fluids were recovered.

Site Assessment and Soil Sampling Results

On July 29, 2020, Pima Environmental mobilized to the site to conduct a site assessment and obtain soil samples with a hand auger. Upon first look, there are some visual staining from the release. We sampled based on the description from the Initial C-141 and sampled in a grid pattern to get horizontal definition. The laboratory results of this sampling event can be found in the following data table.

7-29-20 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')								
Sample Date 7-29-20		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
S-1	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-2	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-3	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-4	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-5	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-6	0-6"	ND	ND	ND	ND	ND	ND	80
S-7	0-6"	ND	ND	ND	ND	ND	ND	5000
	1'	ND	ND	ND	ND	ND	ND	1200
	2'	ND	ND	ND	ND	ND	ND	390
	3'	ND	ND	ND	ND	ND	ND	240
S-8	0-6"	ND	ND	ND	1300	2300	3600	ND
	1'	ND	ND	ND	660	1200	1860	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	55	96	151	ND
S-9	0-6"	ND	ND	ND	ND	ND	ND	ND
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-10	0-6"	ND	ND	ND	ND	ND	ND	140
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	23	ND	23	66
	3'	ND	ND	ND	ND	ND	ND	ND
S-11	0-6"	ND	ND	ND	17000	9100	26100	ND
	1'	ND	ND	ND	940	980	1920	ND
	2'	ND	ND	ND	4300	3200	7500	ND
	3'	ND	ND	ND	250	270	520	ND
S-12	0-6"	ND	ND	ND	ND	ND	ND	100
	1'	ND	ND	ND	ND	ND	ND	ND
	2'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Complete Laboratory Reports are attached in Appendix D.

Proposed Site Remediation

Pima proposes that the contaminated areas from the releases and from our sampling event that exceed NMAC Closure Criteria be remediated through excavation and removal using mechanical equipment. The area in the vicinity of S-8 will be excavated to a depth of 2-feet BGS. The area in the vicinity of S-11 will be excavated to a depth of 3-feet BGS. Sidewall composite samples will be obtained to ensure that the horizontal extents of the contamination had been removed. Each composite sample will be representative of no more than 200 square feet. Laboratory analysis will include Method 8015 for TPH, including MRO, DRO, and GRO. Upon laboratory results showing all samples meet the required closure criteria, the excavation will be backfilled with locally obtained clean like material and contoured to match the surrounding location.

Should you have any questions or need additional information, please feel free to contact Chris Jones at 575-964-7740 or chris@pimaoil.com.

Respectfully,



Chris Jones
Environmental Professional
Pima Environmental Services, LLC

Attachments

Figures:

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

Appendices:

- Appendix A- Referenced Water Surveys
- Appendix B- Soil Survey and Geological Data
- Appendix C- C-141
- Appendix D- Laboratory Reports

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

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

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

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

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

CONDITIONS

Action 192181

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 192181
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	3/6/2023