

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>180</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.

Incident ID	NAB1513157754
District RP	2RP-2998
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 Consultant
Signature: Dale Woodall Date: 1/3/2023
email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 03/21/2023

Incident ID	NAB1513157754
District RP	2RP-2998
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 Consultant
Signature: Dale Woodall Date: 1/3/2023
email: dale.woodall@dv.com Telephone: 575-748-1848

OCD Only

Received by: Jocelyn Harimon Date: 03/21/2023

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: Brittany Hall Date: 4/10/2023
Printed Name: Brittany Hall Title: Environmental Specialist



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

December 6, 2022

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

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

RE: Site Assessment and Closure Report
Arcturus 18 Federal #005H
API No. 30-015-41802
GPS: Latitude 32.6653332 Longitude -103.9008789
UL-A, Section 18, Township 19S, Range 31E
NMOCD Reference No. NAB1513157754

Devon Energy Production Company (Devon) has contracted Pima Environmental Services, LLC (Pima) to perform a site assessment and prepare this closure report for a crude oil/produced water mixed release that happened at the Arcturus 18 Federal #005H (Arcturus). An initial C-141 was submitted on May 11, 2015, and can be found in Appendix C. This incident was assigned Incident ID NAB1513157754, by the New Mexico Oil Conservation Division (NMOCD).

Site Information and Site Characterization

The Arcturus is located approximately twelve (12) miles South of Loco Hills, NM. This spill site is in Unit A, Section 18, Township 19S, Range 31E, Latitude 32.6653332 Longitude -103.9008789, Eddy County, NM. A Location Map can be found in Figure 1.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is made up of Eolian and piedmont deposits-Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits. The soil in this area is made up of Berino loamy fine sand, 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 around the Arcturus (Figure 3).

Based upon New Mexico Office of the State Engineer well water data, depth to the nearest groundwater in this area is 180 feet below -grade surface (BGS). According to the United States Geological Survey well water data, depth to the nearest groundwater in this area is 204 feet BGS. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29

Depth to Groundwater	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50'	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100' (C 01907 POD1)	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

A Topographic Map can be found in Figure 2.

Release Information

NAB1513157754: On May 6, 2015, the Lease Operator was contacted and told that the Arcturus 18 Fed 5H was leaking from the wellhead. Upon Lease Operator's arrival to the location, he discovered a H.F. back pressure valve had washed out releasing 20 bbls of oil and produced water mix onto location. The affected area was 48x85 with all fluids contained on location. Legendary Trucking recovered all 20 bbls of oil and produced water mix and the contaminated dirt will be removed from location and replaced with fresh dirt.

Site Assessment and Soil Sampling Results

On August 31, 2020, Pima Environmental conducted a site assessment and obtained soil samples. The laboratory results of this sampling event can be found in the following data table. A Site Map can be found in Figure 4.

8-31-20 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 51-100')								
Devon Energy - Arcturus 18 Fed 5H								
Date 8-31-20		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
S1	0-6"	ND	ND	ND	ND	ND	0	48
S2	0-6"	ND	ND	ND	ND	ND	ND	112
	1'	ND	ND	ND	ND	ND	ND	48
	2'	ND	ND	ND	ND	ND	0	32
	3'	ND	ND	ND	ND	ND	0	32
S3	0-6"	ND	ND	ND	164	297	461	112
	1'	ND	ND	ND	25	ND	25	32
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	ND	ND	0	32
S4	0-6"	ND	ND	ND	ND	ND	0	48
	1'	ND	ND	ND	ND	ND	0	48
	2'	ND	ND	ND	ND	ND	0	48
	3'	ND	ND	ND	ND	ND	0	64
S5	0-6"	ND	ND	ND	ND	ND	0	240
	1'	ND	ND	ND	ND	ND	0	48
	2'	ND	ND	ND	ND	ND	0	48
	3'	ND	ND	ND	ND	ND	0	48
S6	0-6"	ND	ND	ND	ND	ND	0	2360
	1'	ND	ND	ND	ND	ND	0	144
	2'	ND	ND	ND	ND	ND	0	112
	3'	ND	ND	ND	ND	ND	0	80
S7	0-6"	ND	ND	ND	ND	ND	0	208
	1'	ND	ND	ND	ND	ND	0	64
	2'	ND	ND	ND	ND	ND	0	32
	3'	ND	ND	ND	ND	ND	0	32
S8	0-6"	ND	ND	ND	ND	ND	0	96
	1'	ND	ND	ND	ND	ND	0	16
	2'	ND	ND	ND	ND	ND	0	16
	3'	ND	ND	ND	ND	ND	0	ND
S9	0-6"	ND	ND	ND	ND	ND	0	144
	1'	ND	ND	ND	ND	ND	0	64
	2'	ND	ND	ND	ND	ND	0	32
	3'	ND	ND	ND	ND	ND	0	64

S10	0-6"	ND	ND	ND	ND	ND	0	6560
	1'	ND	ND	ND	ND	ND	0	416
	2'	ND	ND	ND	ND	ND	0	256
	3'	ND	ND	ND	ND	ND	0	128
S11	0-6"	ND	ND	ND	31.8	ND	31.8	432
	1'	ND	ND	ND	ND	ND	0	112
	2'	ND	ND	ND	ND	ND	0	80
	3'	ND	ND	ND	ND	ND	0	96
S12	0-6"	ND	ND	ND	ND	ND	0	192
	1'	ND	ND	ND	ND	ND	0	48
	2'	ND	ND	ND	ND	ND	0	64
	3'	ND	ND	ND	ND	ND	0	64
S13	0-6"	ND	ND	ND	ND	ND	0	80
	1'	ND	ND	ND	ND	ND	0	48
	2'	ND	ND	ND	ND	ND	0	32
	3'	ND	ND	ND	ND	ND	0	48
S14	0-6"	ND	ND	ND	ND	ND	0	96
	1'	ND	ND	ND	ND	ND	0	112
	2'	ND	ND	ND	ND	ND	0	160
	3'	ND	ND	ND	ND	ND	0	160
S15	0-6"	ND	ND	ND	ND	ND	0	32
	1'	ND	ND	ND	ND	ND	0	64
	2'	ND	ND	ND	ND	ND	0	48
	3'	ND	ND	ND	ND	ND	0	48
S16	0-6"	ND	ND	ND	ND	ND	0	2000
	1'	ND	ND	ND	ND	ND	0	448
	2'	ND	ND	ND	ND	ND	0	128
	3'	ND	ND	ND	ND	ND	0	80

ND – Analyte Not Detected

Complete Laboratory reports can be found in Appendix D.

Remediation Activities

On July 13, 2022, Atkins Engineering personnel arrived on site to drill a test boring to determine depth to ground water. This drilling event was completed and registered with the OSE on 8-4-2022. The hole was bored to a depth of 55' bgs and ground water was not encountered during or after the 72-hour time period.

All sample results on this site are below NMOCD closure criteria per Table 1 of 19.15.29 NMAC. Based on these events, no remediation is necessary at this location.

Closure Request

After careful review, Pima requests that this incident, NAB1513157754 be closed. Devon has complied with the applicable closure requirements.

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

Attachments

Figures:

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

Appendices:

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



Pima Environmental Services

Figures:

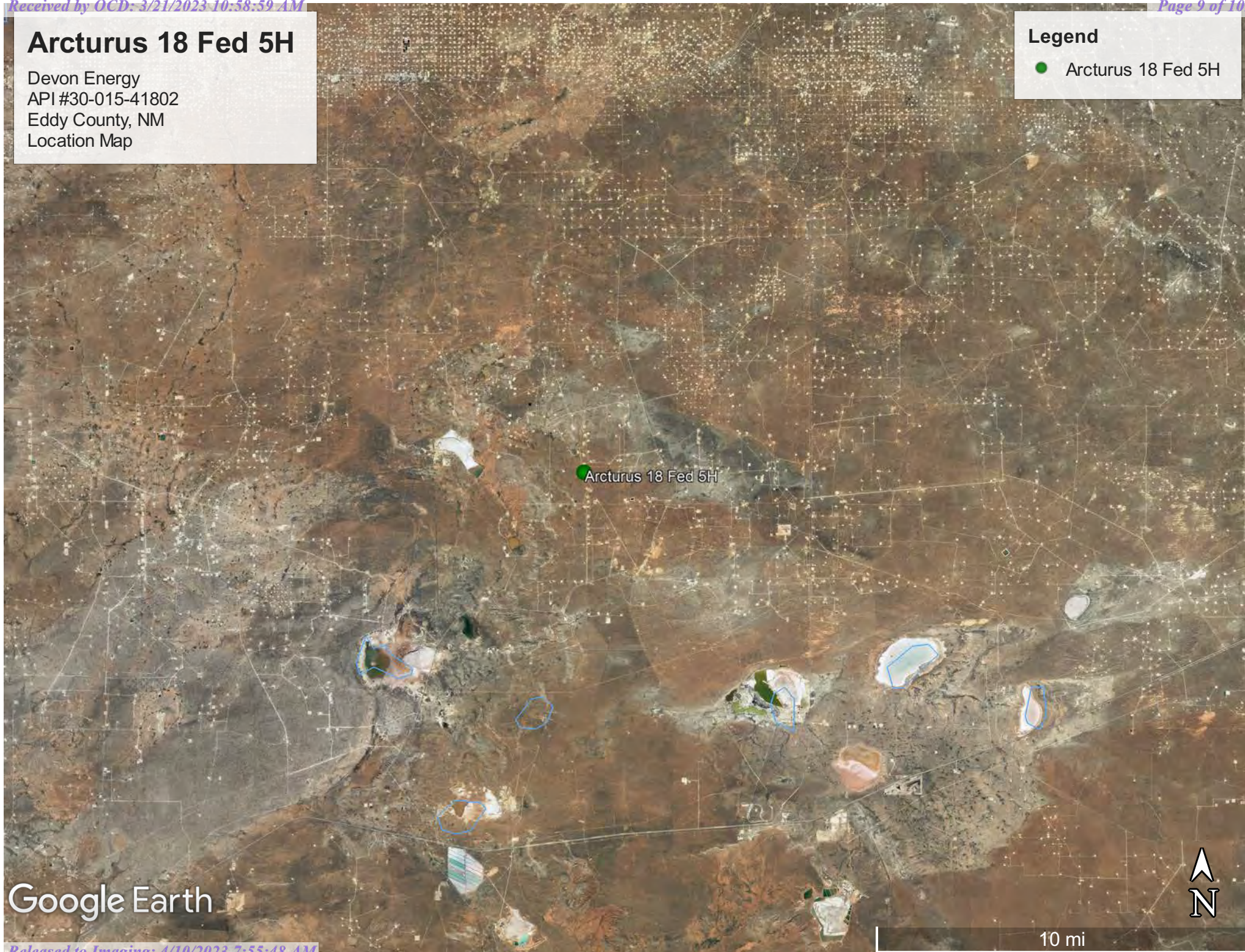
- 1 - Location Map
- 2 - Topographic Map
- 3 - Karst Map
- 4 - Site Map

Arcturus 18 Fed 5H

Devon Energy
API #30-015-41802
Eddy County, NM
Location Map

Legend

● Arcturus 18 Fed 5H



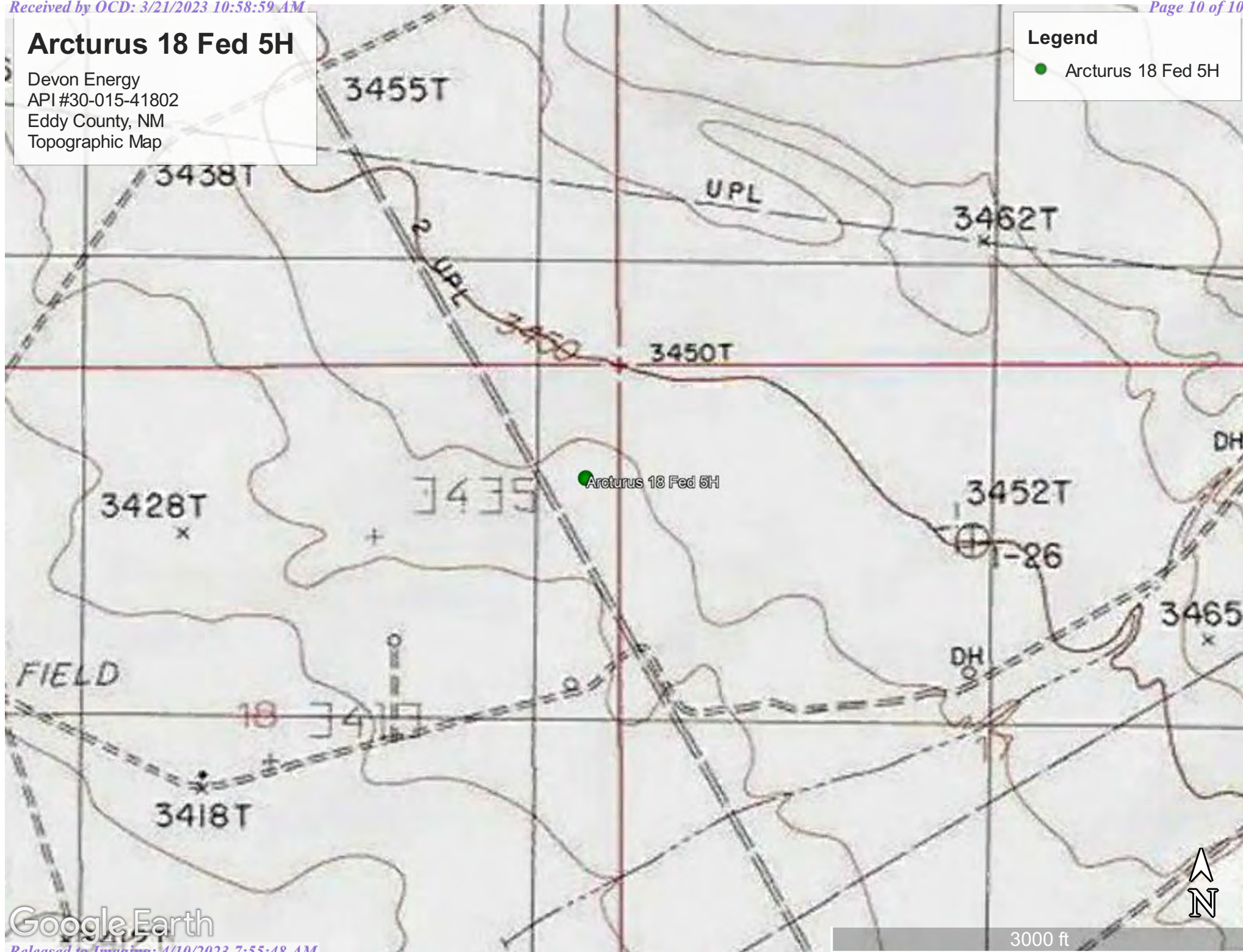
Google Earth

Arcturus 18 Fed 5H

Devon Energy
API #30-015-41802
Eddy County, NM
Topographic Map

Legend

● Arcturus 18 Fed 5H



Arcturus 18 Fed 5H

Devon Energy
API #30-015-41802
Eddy County, NM
Karst Map

- Legend**
- High Karst
 - Low Karst
 - Medium Karst

Arcturus 18 Fed 5H

Google Earth



2 mi

Devon Energy

Arcturus 18 Fed #5H
API 30-015-41802
Eddy County, NM
Site Map

Legend

○ Sample



100 ft



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	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 01907 POD1		CP	ED	4	2	2	18	19S	31E	603017	3614737	8			
CP 00873 POD1		CP	LE	1	1	19		19S	31E	601772	3613147*	2024	340	180	160
CP 00357 POD1		CP	ED	4	4	1	24	19S	30E	600667	3612631*	3159	630		
CP 00829 POD1		CP	LE	2	4	16		19S	31E	606165	3614009*	3234	120		
CP 00357 POD2		CP	ED	4	3	1	24	19S	30E	600265	3612627*	3471	630		
Average Depth to Water:														180 feet	
Minimum Depth:														180 feet	
Maximum Depth:														180 feet	

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 603015.3

Northing (Y): 3614745.15

Radius: 4000

*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.



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	Tw	Rng	X	Y
NA	CP 01907 POD1	4	2	2	18	19S	31E	603017	3614737

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:**

Casing Perforations:	Top	Bottom
	0	55

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.

12/6/22 1:21 PM

POINT OF DIVERSION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

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

FOR OSE INTERNAL USE

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

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

4. HYDROGEOLOGIC LOG OF WELL

5. TEST: RIG SUPERVISION

5. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	CP-1907-PODI TW-1	POD NO.	1
LOCATION		TRN NO.	726167
19.31.18.422		WELL TAG ID NO.	
		PAGE 2 OF 2	



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

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- See the [Water Data for the Nation Blog](#) for the latest news and updates.

Groundwater levels for the Nation

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

Search Results -- 1 sites found

site_no list =

- 323810103511401

Minimum number of levels = 1

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

USGS 323810103511401 19S.31E.27.214121

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°38'10", Longitude 103°51'14" NAD27

Land-surface elevation 3,480 feet above NGVD29

The depth of the well is 210.00 feet below land surface.

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

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

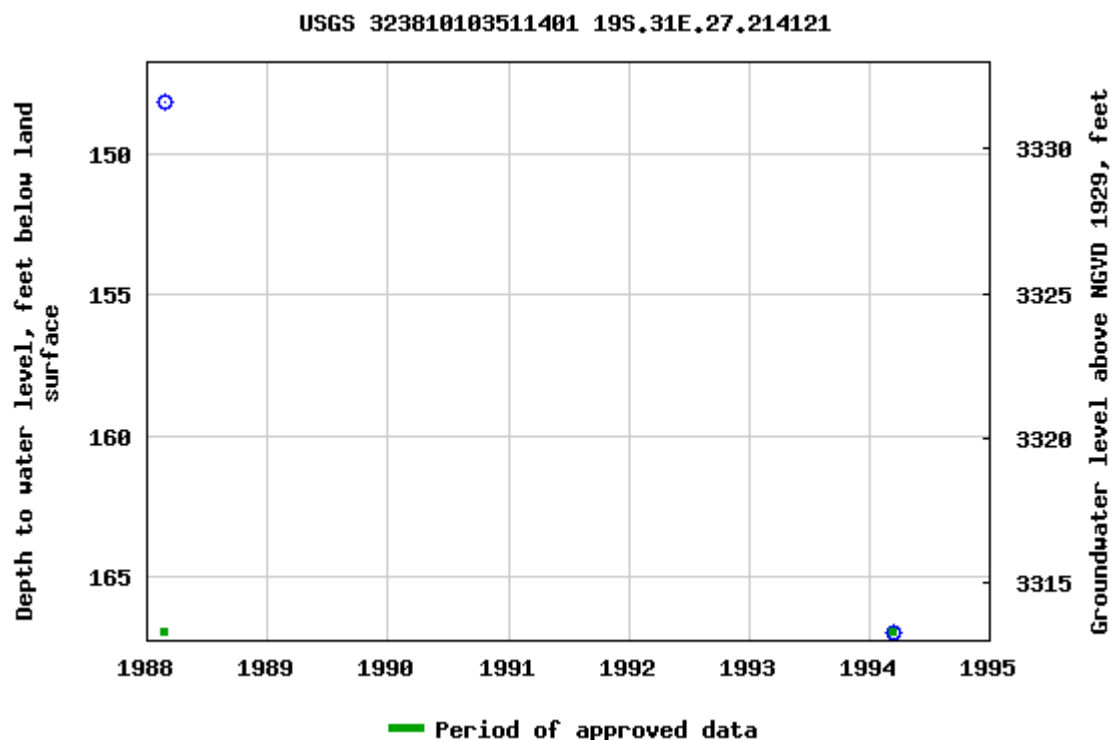
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



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

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

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

Title: Groundwater for USA: Water Levels

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

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

Page Last Modified: 2022-12-06 15:24:07 EST



0.53 0.46 nadww01

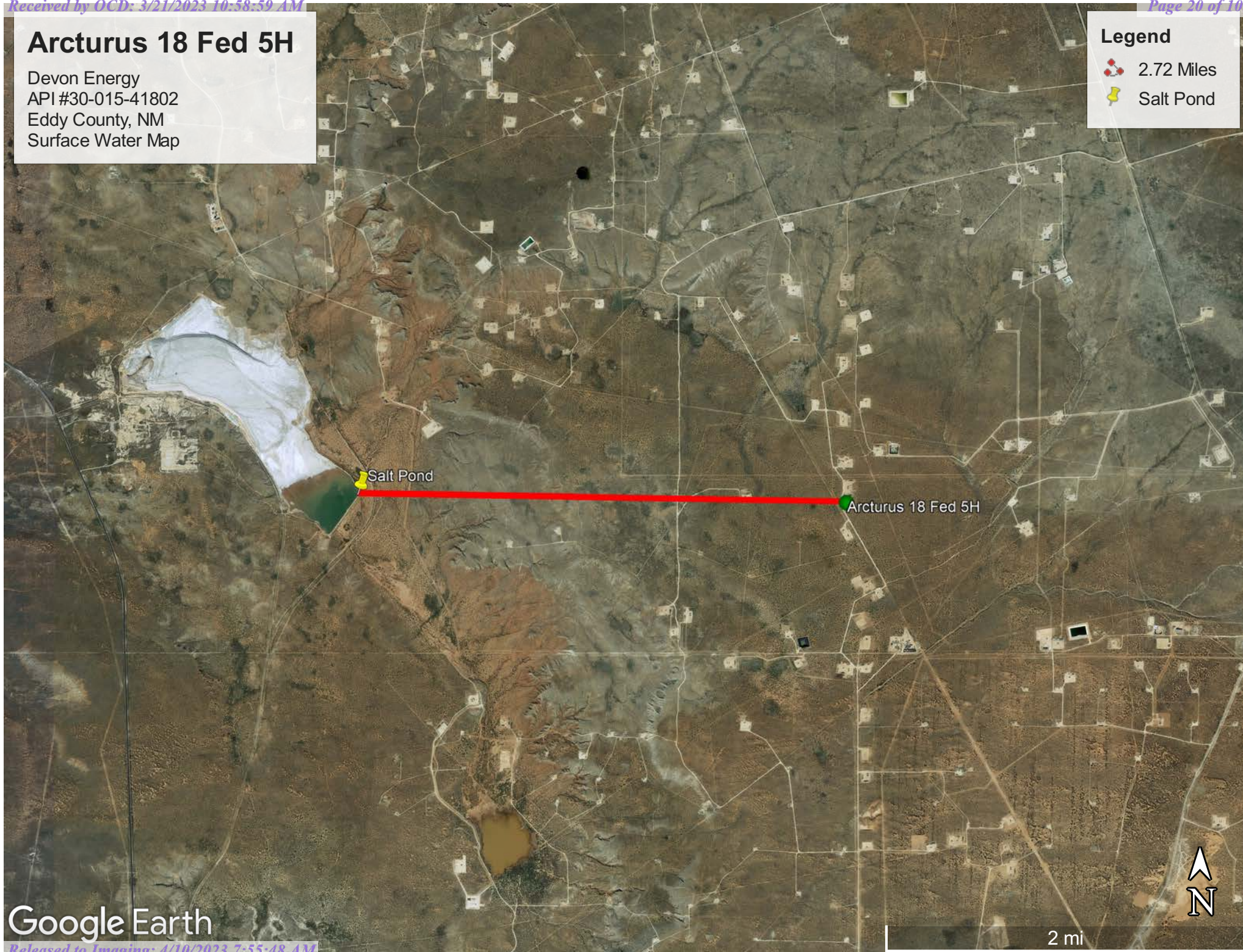


Arcturus 18 Fed 5H

Devon Energy
API #30-015-41802
Eddy County, NM
Surface Water Map

Legend

-  2.72 Miles
-  Salt Pond



Google Earth

2 mi



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

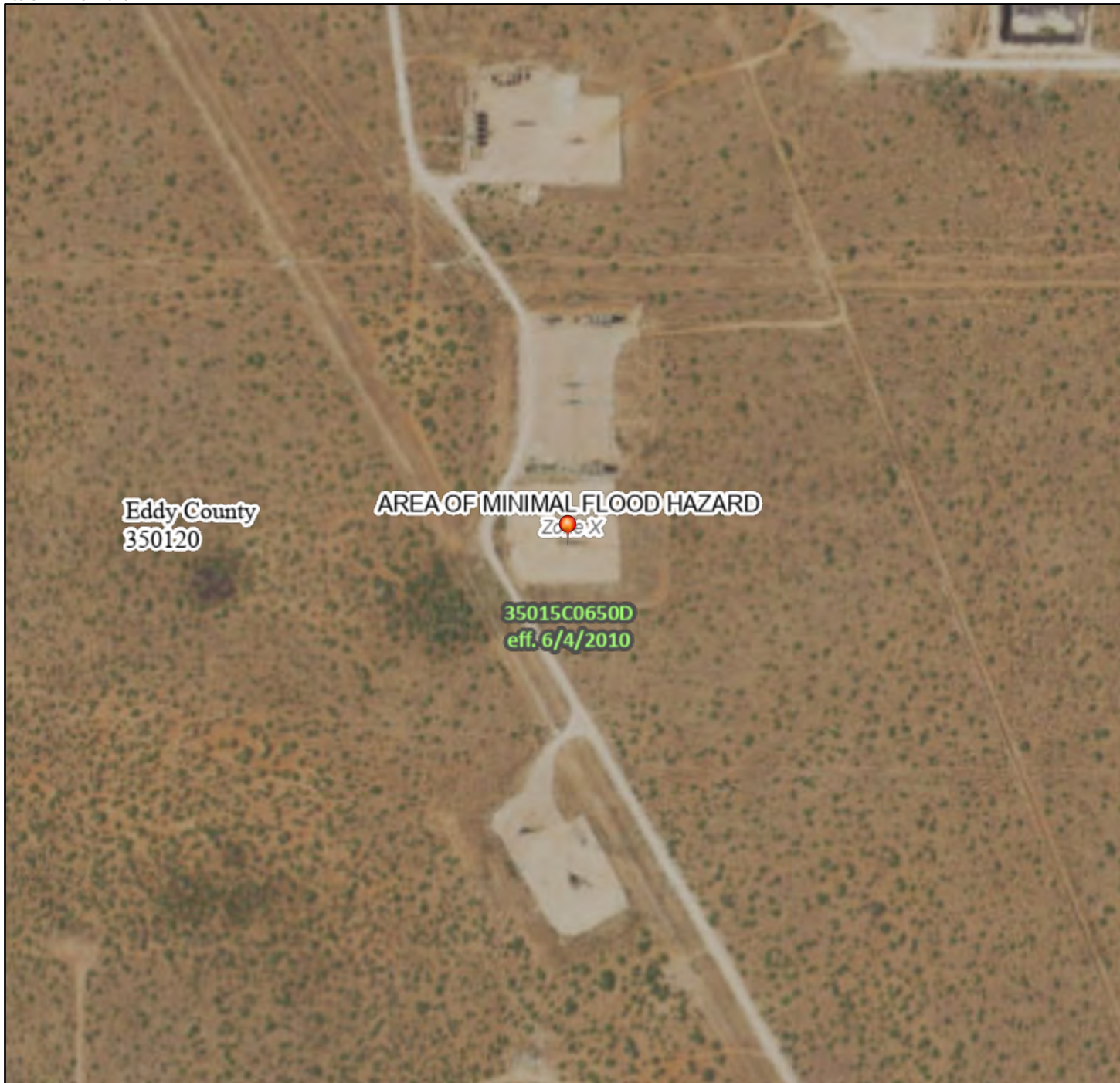
Data Source Information

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

National Flood Hazard Layer FIRMette

























103°54'22"W 32°40'10"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 103°53'44"W 32°39'40"N

Legend

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

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



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

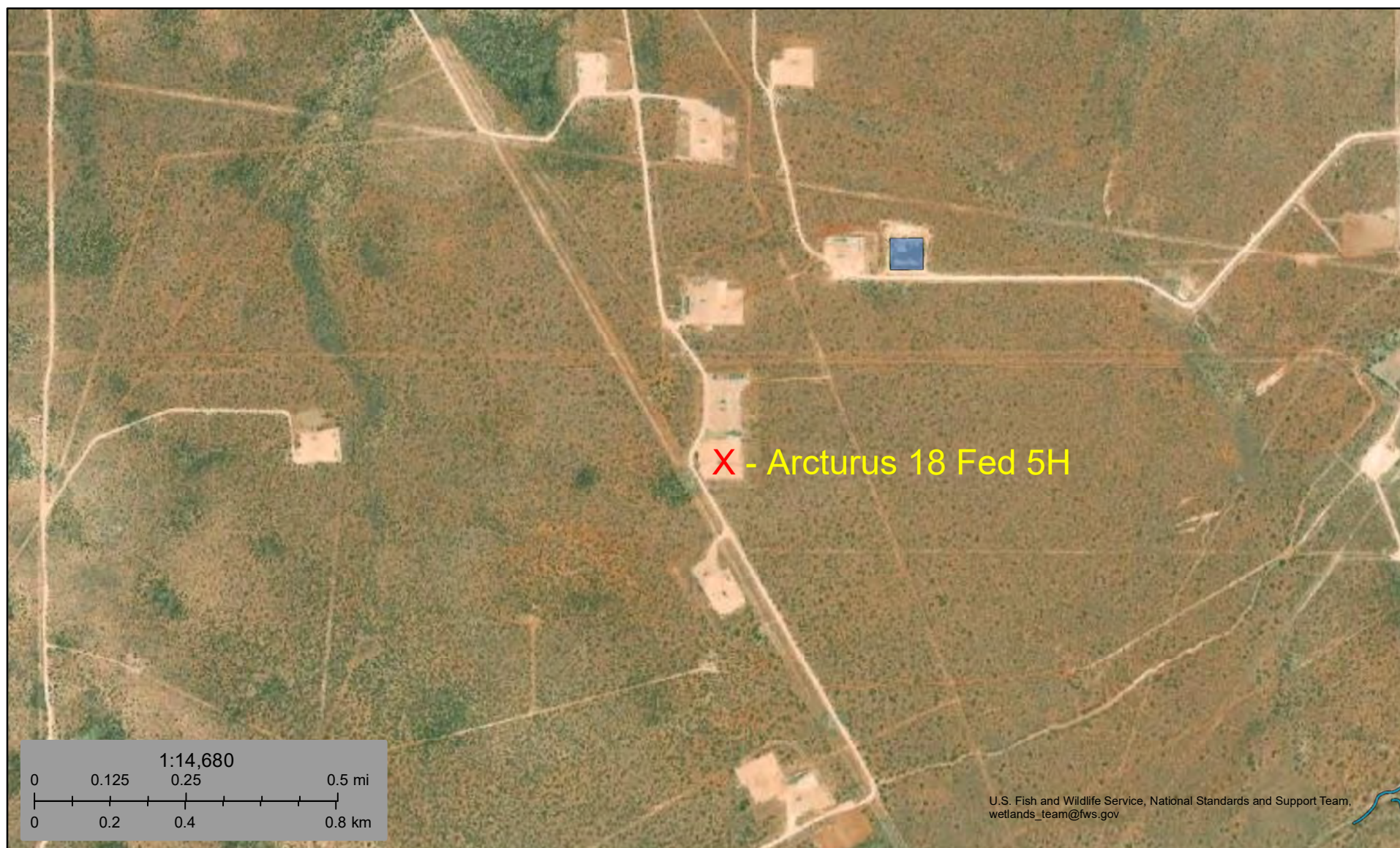
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/6/2022 at 3:27 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



Wetlands Map



December 6, 2022

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 Form

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

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

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141

Revised August 8, 2011

MAY 11 2015

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

RECEIVED

Release Notification and Corrective Action

NAB1513157754

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production	Contact Rudy Zuniga, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575-390-5435
Facility Name Arcturus 18 Fed 5H	Facility Type Oil

Surface Owner Federal	Mineral Owner Federal	API No. 30-015-41802
-----------------------	-----------------------	----------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	18	19S	31E	845	FNL	250	FEL	Eddy

Latitude: 32.6653332°N

Longitude: 103.9008789°W

NATURE OF RELEASE

Type of Release Oil & Produced Water	Volume of Release 20bbls	Volume Recovered 20bbls
Source of Release H.F. back pressure valve	Date and Hour of Occurrence May 6, 2015 6:30 AM	Date and Hour of Discovery May 6, 2015 6:30 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeff Robertson, BLM Mike Bratcher, OCD	
By Whom? Lynn Smith, Asst. Production Foreman	Date and Hour Jeff Robertson, BLM May 6, 2015 8:57 AM Mike Bratcher, OCD May 6, 2015 8:59 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A


Describe Cause of Problem and Remedial Action Taken.*

On May 6, 2015 6:30 AM the Lease Operator was contacted and told that the Arcturus 18 Fed 5H was leaking from the well head, upon Lease Operator's arrival to the location he discovered a H. F. back pressure valve had washed out releasing 20bbls of oil and produced water mix onto location.

Describe Area Affected and Cleanup Action Taken.*

The affected area was 48x85 with all fluids contained on location. Legendary Trucking recovered all 20bbls of oil and produced water mix and the contaminated dirt will be removed from location and replaced with fresh dirt.

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: Sheila Fisher	OIL CONSERVATION DIVISION	
Printed Name: Sheila Fisher	Approved by Environmental Specialist: 	
Title: Field Admin Support	Approval Date: 5/11/15	Expiration Date: N/A
E-mail Address: Sheila.Fisher@dmn.com	Conditions of Approval: Mediation per O.C.D. Rules & Guidelines Attached <input type="checkbox"/>	
Date: Phone: 575.748.1829	SUBMIT REMEDIATION PROPOSAL NO	

* Attach Additional Sheets If Necessary

LATER THAN: 01/21/15

2RP-2998

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?	_____ 180 (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.

Incident ID	NAB1513157754
District RP	2RP-2998
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 Consultant
Signature: Dale Woodall Date: 1/3/2023
email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

Incident ID	NAB1513157754
District RP	2RP-2998
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 Consultant
Signature: Dale Woodall Date: 1/3/2023
email: dale.woodall@dv.com Telephone: 575-748-1848

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

Laboratory Reports



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

September 03, 2020

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: ARCTURUS 18 FED 5H

Enclosed are the results of analyses for samples received by the laboratory on 09/01/20 8:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S1 - 0-6" (H002305-01)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2020	ND	1.94	96.9	2.00	3.75	
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	2.88	
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.94	97.2	2.00	1.75	
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	1.50	
Total BTEx	<0.300	0.300	09/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 123 % 44.3-144

Surrogate: 1-Chlorooctadecane 133 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S2 - 0-6" (H002305-02)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2020	ND	1.94	96.9	2.00	3.75	
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	2.88	
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.94	97.2	2.00	1.75	
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	1.50	
Total BTX	<0.300	0.300	09/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/02/2020	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 127 % 44.3-144

Surrogate: 1-Chlorooctadecane 136 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S2 - 1' (H002305-03)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.94	96.9	2.00	3.75		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	2.88		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.94	97.2	2.00	1.75		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	1.50		
Total BTEx	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 124 % 44.3-144

Surrogate: 1-Chlorooctadecane 136 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S2 - 2' (H002305-04)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47	QR-03
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895	QR-03
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956	QR-03
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879	QR-03
Total BTX	<0.300	0.300	09/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/02/2020	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 135 % 44.3-144

Surrogate: 1-Chlorooctadecane 148 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S2 - 3' (H002305-05)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 131 % 44.3-144

Surrogate: 1-Chlorooctadecane 141 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S3 - 0-6" (H002305-06)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47	
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895	
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956	
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879	
Total BTEX	<0.300	0.300	09/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/02/2020	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	164	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	297	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 115 % 44.3-144

Surrogate: 1-Chlorooctadecane 130 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S3 - 1' (H002305-07)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTEx	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	25.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 125 % 44.3-144

Surrogate: 1-Chlorooctadecane 139 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S3 - 2' (H002305-08)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/02/2020	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 120 % 44.3-144

Surrogate: 1-Chlorooctadecane 130 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S3 - 3' (H002305-09)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 129 % 44.3-144

Surrogate: 1-Chlorooctadecane 141 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S4 - 0-6" (H002305-10)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 118 % 44.3-144

Surrogate: 1-Chlorooctadecane 131 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S4 - 1' (H002305-11)

BTX 8021B			mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 124 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S4 - 2' (H002305-12)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 125 % 44.3-144

Surrogate: 1-Chlorooctadecane 138 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S4 - 3' (H002305-13)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTEx	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 130 % 44.3-144

Surrogate: 1-Chlorooctadecane 136 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S5 - 0-6" (H002305-14)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47	
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895	
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956	
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879	
Total BTEx	<0.300	0.300	09/01/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 123 % 44.3-144

Surrogate: 1-Chlorooctadecane 133 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S5 - 1' (H002305-15)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/01/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/01/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/01/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/01/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/01/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 138 % 44.3-144

Surrogate: 1-Chlorooctadecane 151 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S5 - 2' (H002305-16)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 128 % 44.3-144

Surrogate: 1-Chlorooctadecane 140 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S5 - 3' (H002305-17)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47	
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 127 % 44.3-144

Surrogate: 1-Chlorooctadecane 139 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S6 - 0-6" (H002305-18)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2360	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 124 % 44.3-144

Surrogate: 1-Chlorooctadecane 136 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S6 - 1' (H002305-19)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 133 % 44.3-144

Surrogate: 1-Chlorooctadecane 144 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S6 - 2' (H002305-20)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	214	107	200	0.909	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	227	113	200	1.28	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 128 % 44.3-144

Surrogate: 1-Chlorooctadecane 141 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S6 - 3' (H002305-21)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 133 % 44.3-144

Surrogate: 1-Chlorooctadecane 142 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S7 - 0-6" (H002305-22)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 139 % 44.3-144

Surrogate: 1-Chlorooctadecane 150 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S7 - 1' (H002305-23)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.96	97.8	2.00	1.47		
Toluene*	<0.050	0.050	09/02/2020	ND	1.97	98.3	2.00	0.895		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.92	95.9	2.00	0.956		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.93	98.8	6.00	0.879		
Total BTEX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 136 % 44.3-144

Surrogate: 1-Chlorooctadecane 149 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S7 - 2' (H002305-24)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 132 % 44.3-144

Surrogate: 1-Chlorooctadecane 144 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S7 - 3' (H002305-25)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 129 % 44.3-144

Surrogate: 1-Chlorooctadecane 140 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S8 - 0-6" (H002305-26)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76	
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 112 % 44.3-144

Surrogate: 1-Chlorooctadecane 118 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S8 - 1' (H002305-27)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 133 % 44.3-144

Surrogate: 1-Chlorooctadecane 136 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S8 - 2' (H002305-28)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/02/2020	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 140 % 44.3-144

Surrogate: 1-Chlorooctadecane 143 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S8 - 3' (H002305-29)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 145 % 44.3-144

Surrogate: 1-Chlorooctadecane 149 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S9 - 0-6" (H002305-30)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/02/2020	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 141 % 44.3-144

Surrogate: 1-Chlorooctadecane 142 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S9 - 1' (H002305-31)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 133 % 44.3-144

Surrogate: 1-Chlorooctadecane 139 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S9 - 2' (H002305-32)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 130 % 44.3-144

Surrogate: 1-Chlorooctadecane 138 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S9 - 3' (H002305-33)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 139 % 44.3-144

Surrogate: 1-Chlorooctadecane 146 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S10 - 0-6" (H002305-34)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6560	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 135 % 44.3-144

Surrogate: 1-Chlorooctadecane 142 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S10 - 1' (H002305-35)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 133 % 44.3-144

Surrogate: 1-Chlorooctadecane 140 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S10 - 2' (H002305-36)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	09/02/2020	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 141 % 44.3-144

Surrogate: 1-Chlorooctadecane 148 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S10 - 3' (H002305-37)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76	
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 138 % 44.3-144

Surrogate: 1-Chlorooctadecane 144 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S11 - 0-6" (H002305-38)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	09/02/2020	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	31.8	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 136 % 44.3-144

Surrogate: 1-Chlorooctadecane 153 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S11 - 1' (H002305-39)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 143 % 44.3-144

Surrogate: 1-Chlorooctadecane 152 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S11 - 2' (H002305-40)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	164	82.0	200	7.76	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	168	84.0	200	5.47	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 141 % 44.3-144

Surrogate: 1-Chlorooctadecane 152 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S11 - 3' (H002305-41)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTX	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 134 % 44.3-144

Surrogate: 1-Chlorooctadecane 146 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S12 - 0-6" (H002305-42)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76	
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 120 % 44.3-144

Surrogate: 1-Chlorooctadecane 135 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S12 - 1' (H002305-43)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.9	2.00	7.76		
Toluene*	<0.050	0.050	09/02/2020	ND	1.89	94.5	2.00	8.25		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.88	93.8	2.00	8.05		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.82	97.0	6.00	6.94		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 143 % 44.3-144

Surrogate: 1-Chlorooctadecane 164 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S12 - 2' (H002305-44)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26		
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 134 % 44.3-144

Surrogate: 1-Chlorooctadecane 153 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S12 - 3' (H002305-45)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26		
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 127 % 44.3-144

Surrogate: 1-Chlorooctadecane 146 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S13- 0-6" (H002305-46)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 121 % 44.3-144

Surrogate: 1-Chlorooctadecane 135 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S13- 1' (H002305-47)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26		
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 138 % 44.3-144

Surrogate: 1-Chlorooctadecane 154 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S13- 2' (H002305-48)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 127 % 44.3-144

Surrogate: 1-Chlorooctadecane 139 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S13- 3' (H002305-49)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEx	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 131 % 44.3-144

Surrogate: 1-Chlorooctadecane 144 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S14- 0-6" (H002305-50)

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26		
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	09/02/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 130 % 44.3-144

Surrogate: 1-Chlorooctadecane 146 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S14- 1' (H002305-51)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEx	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	09/02/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 116 % 44.3-144

Surrogate: 1-Chlorooctadecane 129 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S14- 2' (H002305-52)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 123 % 44.3-144

Surrogate: 1-Chlorooctadecane 134 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S14- 3' (H002305-53)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEx	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 137 % 44.3-144

Surrogate: 1-Chlorooctadecane 152 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S15- 0-6" (H002305-54)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/02/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 126 % 44.3-144

Surrogate: 1-Chlorooctadecane 139 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S15- 1' (H002305-55)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEx	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	189	94.7	200	1.20	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	206	103	200	1.94	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 133 % 44.3-144

Surrogate: 1-Chlorooctadecane 146 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S15- 2' (H002305-56)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEx	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	09/02/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	194	96.8	200	1.21	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	203	101	200	0.0513	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 124 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S15- 3' (H002305-57)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTEX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	194	96.8	200	1.21	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	203	101	200	0.0513	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 126 % 44.3-144

Surrogate: 1-Chlorooctadecane 135 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S16- 0-6" (H002305-58)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	2.07	103	2.00	5.26	
Toluene*	<0.050	0.050	09/02/2020	ND	2.08	104	2.00	5.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	2.06	103	2.00	4.93	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.96	99.3	6.00	4.77	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2000	16.0	09/02/2020	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	194	96.8	200	1.21	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	203	101	200	0.0513	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 123 % 44.3-144

Surrogate: 1-Chlorooctadecane 132 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S16- 1' (H002305-59)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.8	2.00	7.17	
Toluene*	<0.050	0.050	09/02/2020	ND	1.92	96.0	2.00	6.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.91	95.6	2.00	6.32	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.87	97.9	6.00	6.24	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	194	96.8	200	1.21	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	203	101	200	0.0513	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 126 % 44.3-144

Surrogate: 1-Chlorooctadecane 134 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S16- 2' (H002305-60)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.8	2.00	7.17		
Toluene*	<0.050	0.050	09/02/2020	ND	1.92	96.0	2.00	6.59		
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.91	95.6	2.00	6.32		
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.87	97.9	6.00	6.24		
Total BTEx	<0.300	0.300	09/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/02/2020	ND	194	96.8	200	1.21	
DRO >C10-C28*	<10.0	10.0	09/02/2020	ND	203	101	200	0.0513	
EXT DRO >C28-C36	<10.0	10.0	09/02/2020	ND					

Surrogate: 1-Chlorooctane 128 % 44.3-144

Surrogate: 1-Chlorooctadecane 137 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

PIMA ENVIROMENTAL
CHRIS JONES
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received: 09/01/2020
Reported: 09/03/2020
Project Name: ARCTURUS 18 FED 5H
Project Number: 46
Project Location: DEVON - EDDY CO NM

Sampling Date: 08/31/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: S16- 3' (H002305-61)

BTX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2020	ND	1.90	94.8	2.00	7.17	
Toluene*	<0.050	0.050	09/02/2020	ND	1.92	96.0	2.00	6.59	
Ethylbenzene*	<0.050	0.050	09/02/2020	ND	1.91	95.6	2.00	6.32	
Total Xylenes*	<0.150	0.150	09/02/2020	ND	5.87	97.9	6.00	6.24	
Total BTX	<0.300	0.300	09/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	09/02/2020	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/01/2020	ND	174	86.9	200	3.71	
DRO >C10-C28*	<10.0	10.0	09/01/2020	ND	177	88.6	200	3.40	
EXT DRO >C28-C36	<10.0	10.0	09/01/2020	ND					

Surrogate: 1-Chlorooctane 134 % 44.3-144

Surrogate: 1-Chlorooctadecane 142 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene", written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Pima Environmental		BILL TO		ANALYSIS REQUEST	
Project Manager: Chris Jones		P.O. #: 20869482			
Address: 1601 N. Turner Ste 500		Company: Devon			
City: Hobbs		Attn: Tou Bynum			
Phone #: 575-631-6977 Fax #:		Address:			
Project #: 46 Project Owner: Devon		City:			
Project Name: Arcturus 18 FED SH		State: Zip:			
Project Location: EDDY County		Phone #:			
Sampler Name: Mark Newcomb		Fax #:			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	TPH EXT	BTEX	Chloride
HD02304											
5											
1	51-0-6"	C									
2	52-0-6"										
3	52-0-6"										
4	52-2'										
5	52-3'										
6	53-0-6"										
7	53-1'										
8	53-2'										
9	53-3'										
10	54-0-6"										

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising from this contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services heretofore by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 01/11/20	Received By: Bill TD Devon	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:
Delivered By: (Circle One)	Observed Temp. °C: -3.9	Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>
Sampler - UPS - Bus - Other:	Corrected Temp. °C:	CHECKED BY: [Signature]	Bacteria (only) Sample Condition: <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No
			Thermometer ID #113 <input type="checkbox"/> Correction Factor None <input type="checkbox"/>
			Observed Temp. °C: <input type="checkbox"/> Corrected Temp. °C: <input type="checkbox"/>

† Cardinal cannot accept verbal changes. Please email changes to caley.keene@cardinallabsnm.com



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Pima Environmental		BILL TO		ANALYSIS REQUEST	
Project Manager: Chris Jones		P.O. #: 20869482			
Address: 1601 N. Turner St		Company: Devon			
City: Hobbs		Attn: Tom Bynum			
Phone #: 575-631-6977		Address:			
Project #: 46		City:			
Project Name: Arcturus 18 Fed SH		State:			
Project Location: Eddy County		Zip:			
Sample Name: Mark Newcomb		Phone #:			
Fax #:					

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	TPH EXT	BTEX	Chloride
HD02304											
11	54-1'	C					8/31/20				
12	54-2'										
13	54-3'										
14	55-0-6"										
15	55-1'										
16	55-2'										
17	55-3'										
18	56-0-6"										
19	56-1'										
20	56-2'										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising from this report shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 9/1/20	Received By:	Date: 8/31/20
Relinquished By:	Date:	Received By:	Date:
Time:		Time:	

Delivered By: (Circle One) **Observed Temp. °C - 3.9**

Sampler - UPS - Bus - Other: **Corrected Temp. °C**

Sample Condition: ☒ Intact ☐ Broken

Thermometer ID #113

Turnaround Time: **Standard** ☐ Rush ☐

Bacteria (only) ☐ Sample Condition ☐

Corrected Temp. °C

REMARKS: **Bill to Devon**

Verbal Result: ☐ Yes ☐ No ☐ Add'l Phone #:

All Results are emailed. Please provide Email address:



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Pyra Environmental		BILL TO		ANALYSIS REQUEST	
Project Manager: Chris Jones		P.O. #: 20869482			
Address: 1601 N. Turner Ste 500		Company: Devon			
City: Hobbs		Attn: Tom Brynum			
Phone #: 575-631-6977 Fax #:		Address:			
Project #: 46 Project Owner: Devon		City:			
Project Name: Arturus 18 Fed SH		State:			
Project Location: EDDY County		Zip:			
Sample Name: Mark Neumann		Phone #:			
		Fax #:			

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH EXT	BTEX	Chloride	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE						ICE / COOL
4002304																
41	S11-3'															
42	S12-0-6"															
43	S12-1'															
44	S12-2'															
45	S12-3'															
46	S13-0-6"															
47	S13-1'															
48	S13-2'															
49	S13-3'															
50	S14-0-6"															

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 8/11/20	Received By: Devon	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One)	Observed Temp. °C: -3.9	Sample Condition	CHECKED BY: Initials	
Sampler - UPS - Bus - Other:	Corrected Temp. °C	Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>	Turnaround Time: Standard <input type="checkbox"/> Rush <input type="checkbox"/>	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	Bacteria (only) Sample Condition	
			Cool Intact <input type="checkbox"/> Observed Temp. °C	
			Corrected Temp. °C	

REMARKS: **Bill to Devon**

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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 199271

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 199271
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Site must meet the requirements of 19.15.29.13 NMAC at time of plugging and abandonment.	4/10/2023