



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

Request For Incident Closure

January 12, 2021

Re: Remediation Activities & Closure Report
Emerald PWU 20 #1H
API No. 30-015-38338
GPS: Latitude 32.6525154 Longitude -104.1045456
UL "D," Sec. 20, T19S, R29E
Eddy County, NM
NMOCD Ref. No. 2RP-779; 2RP-4281; 2RP-5167; 2RP-5377

Pima Environmental Services, LLC (Pima) was contracted by Devon Energy Production Company (Devon) to perform remediation activities and submit a closure report on the forthcoming releases that occurred at the Emerald PWU 20 Fed #1H (Emerald). There are currently four open spills at this site. 2RP-779 release, the initial C-141, has been submitted and was assigned Incident ID nMLR1113050834 by the New Mexico Oil Conservation Division (NMOCD). 2RP-4281 release, the initial C-141 was submitted on June 29, 2017, and was assigned Incident ID nAB1718733399. A work plan was submitted and approved for this incident. The work plan was followed as approved. The third release, 2RP-5167, the C-141, was submitted on November 20, 2018, and assigned Incident ID NAB1900959144. The fourth release, 2RP-5377, the initial C-141, was submitted on November 21, 2018, and assigned Incident ID NAB1912031219.

See Appendix C for all Initial and Final C-141's.

Site Characterization

The Emerald is located approximately eighteen (18) miles northeast of Carlsbad, NM. This spill site is in Unit D, Section 20, Township 19S, Range 29E, Latitude 32.6525154, Longitude -104.1045456, Eddy County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Quaternary Formation Eolian and piedmont deposits (Holocene to middle Pleistocene)-interlayered eolian sands and piedmont-slope deposits (QEP). According to the United States Department of Agriculture Natural Resources Conservation Service soil survey, the soil in this area comprises Simona-Bippus complex, 0 to 5 percent slopes (Appendix B). The drainage courses in this area are well-drained. There is a high potential for karst geology in the Emerald area (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 150 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the closest groundwater is between 51-100 feet below grade surface (BGS). See Appendix A for referenced water surveys.

| Table 1 NMAC and Closure Criteria 19.15.29 | | | | | |
|--|----------------------|-------------|-------------|----------|----------|
| Depth to Groundwater (Appendix A) | Constituent & Limits | | | | |
| | Chlorides | Total TPH | GRO+DRO | BTEX | Benzene |
| 150' | 20,000 mg/kg | 2,500 mg/kg | 1,000 mg/kg | 50 mg/kg | 10 mg/kg |
| <50 | 600 mg/kg | 100 mg/kg | 100 mg/kg | 50 mg/kg | 10mg/kg |
| If the release occurred within any of the following areas, the responsible party would treat the release as if the groundwater was less than 50 feet per Rule 19.15.29 | | | | | |

| Water Issues | Yes | No |
|--|-----|----|
| Within 300 feet of any continuously flowing watercourse or any other significant watercourse | | x |
| Within 200 feet of any lakebed, sinkhole, or playa lake (measures from the ordinary high-water mark) | | x |
| Within 300 feet from an occupied permanent residence, school, hospital, institution, or church | | x |
| Within 500 feet of a spring or a private, domestic freshwater well used by less than five households for domestic or stock water purposes | | x |
| Within 1000 feet of any freshwater well or spring | | x |
| Within incorporated municipal boundaries or within a defined municipal freshwater well field | | x |
| Within 300 feet of a wetlands | | x |
| Within the area overlying a subsurface mine | | x |
| Within an unstable area (Karst) | x | |
| Within a 100-year floodplain | | x |

Reference Figure 2 for a TOPO Map.

Release Information

2RP-779: On May 4, 2011, during the flowback process, the overnight watchman fell asleep and awoke to a frac tank overflowing. The released fluids were calculated to be approximately 23 barrels (bbls) of oil and 3 bbls of produced water. A vac truck was dispatched and was able to recover 22 bbls of fluids.

2RP-4281: On June 28, 2017, repairs were being made to the three-phase separator, gas, and sand cut the water dump resulting in a release of 0.5 bbls of oil and 4.5 bbls of produced water. The wells were shut-in, repairs were made to contain the leak. No fluids were recovered in this area.

2RP-5167: On November 10, 2018, a gasket failed on the heater treater resulting in a release of 20 bbls of oil and 10 bbls of produced water. The treater was isolated, and repairs were made. A vac truck was able to recover app 5 bbls of oil.

2RP-5377: On November 13, 2018, oil was found spraying out of the wellhead resulting in a release of 7 bbls of oil with no fluids being recovered.

Site Assessment and Soil Sampling Results

Another Environmental Service Company conducted a site assessment and soil sampling event for the 2RP-4281 spill. They submitted a work plan that was approved by the NMOCD.

On July 7, 2020, Pima Environmental mobilized to the site to conduct a site assessment and obtain soil samples. Upon first look, there was no visual staining from any of the releases. We followed previously outlined diagrams and descriptions from C-141's to track the spills' vicinity and sampled in various random locations. The laboratory results of this sampling event can be found in the following data table. Pima submitted a work plan that would address all open RP's and was approved by the NMOCD.

7-7-20 Soil Sample Results

| NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100') | | | | | | | | |
|--|----------------|--------------------------------|------------------|--------------|--------------|--------------|--------------------|-------------|
| Sample Date 7-7-20 | | NM Approved Laboratory Results | | | | | | |
| Sample ID | Depth (BGS) | BTEX mg/kg | Benzene mg/kg | GRO mg/kg | DRO mg/kg | MRO mg/kg | Total TPH mg/kg | Cl mg/kg |
| S-1 | 0-6 | ND | ND | ND | ND | ND | ND | 360 |
| | 1 | ND | ND | ND | ND | ND | ND | 160 |
| S-2 | 0-6 | ND | ND | ND | 11000 | 8300 | 19300 | 3800 |
| S-3 | 0-6 | ND | ND | ND | 11 | ND | 11 | 17000 |
| S-4 | 0-6 | ND | ND | ND | ND | ND | ND | 570 |
| | 1 | ND | ND | ND | ND | ND | ND | 210 |
| S-5 | 0-6 | ND | ND | ND | ND | ND | ND | ND |
| | 1 | ND | ND | ND | ND | ND | ND | 64 |
| S-6 | 0-6 | ND | ND | ND | ND | ND | ND | 1200 |
| S-7 | 0-6 | ND | ND | ND | ND | ND | ND | ND |
| | 1 | ND | ND | ND | ND | ND | ND | ND |
| S-8 | 0-6 | ND | ND | ND | ND | ND | ND | 2300 |
| | 1 | ND | ND | ND | ND | ND | ND | 200 |
| S-9 | 0-6 | ND | ND | ND | 20000 | 12000 | 32000 | 4100 |
| | 1 | ND | ND | ND | 240 | 190 | 430 | 430 |
| S-10 | 0-6 | ND | ND | ND | 2700 | 3200 | 5900 | 2600 |
| S-11 | 0-6 | ND | ND | ND | 3500 | 3600 | 7100 | 250 |
| | 1 | ND | ND | ND | 74 | 90 | 164 | 460 |

ND- Analyte Not Detected

Complete Laboratory Reports are attached in Appendix E.

Remediation Activities

Pima submitted a work plan to address all open RP's that was ultimately approved and followed. Pima removed the contaminated areas from the releases and our sampling event that exceeded the NMAC Closure Criteria. We remediated through excavation and removal using mechanical equipment and hand tools. The area in the vicinity of S-2 and S-3 was excavated to a depth of 2-feet BGS. As we started excavating in the vicinity of S-6, S-8, S-9, and S-10, we extended our sampling to define where our excavation would require cleanup horizontally. This area's excavation extended further horizontally and vertically than initially expected. We ended up excavating vertically to a depth of 2-feet and 3-feet BGS respectively. The vicinity of S-11 was excavated to a depth of 2-feet BGS and ended up becoming part of the larger area. Five-point composite bottom and sidewall composite samples were obtained to ensure that the contamination's vertical and horizontal extents had been removed. Each composite sample was representative of no more than 200 square feet. Laboratory analysis includes Method SM-4500 for chlorides and Method 8015 for TPH, including MRO, DRO, and GRO. See Figure 5 for Confirmation Sample Map.

11-19-20 Extended Soil Sample Results

| NMOCD Table 1 Closure Criteria 19.15.29 NMAC (HIGH KARST AREA <50') | | | | | | | | |
|---|----------------|--------------------------------|------------------|--------------|--------------|--------------|--------------------|-------------|
| Sample Date 11-19-20 | | NM Approved Laboratory Results | | | | | | |
| Sample ID | Depth (BGS) | BTEX mg/kg | Benzene mg/kg | GRO mg/kg | DRO mg/kg | MRO mg/kg | Total TPH mg/kg | Cl mg/kg |
| S-15 | 1 | ND | ND | ND | 1350 | 272 | 1622 | 560 |
| | 2 | ND | ND | ND | 204 | 53.2 | 257.2 | 688 |
| | 3 | ND | ND | ND | 50.8 | ND | 50.8 | 464 |
| S-16 | 1 | ND | ND | ND | 13.2 | ND | 13.2 | 320 |
| | 2 | ND | ND | ND | ND | ND | ND | 272 |
| | 3 | ND | ND | ND | 70.5 | 15.8 | 86.3 | 176 |
| S-17 | 1 | ND | ND | ND | ND | ND | ND | 48 |
| | 2 | ND | ND | ND | ND | ND | ND | 32 |
| | 3 | ND | ND | ND | ND | ND | ND | 32 |
| S-18 | 1 | ND | ND | ND | ND | ND | ND | 16 |
| | 2 | ND | ND | ND | ND | ND | ND | 32 |
| | 3 | ND | ND | ND | ND | ND | ND | 32 |
| S-19 | 1 | 1.11 | ND | 121 | 4640 | 814 | 5575 | 368 |
| | 2 | ND | ND | 12 | 904 | 151 | 1067 | 512 |
| | 3 | ND | ND | ND | 418 | 80.9 | 498.9 | 544 |
| S-20 | 1 | ND | ND | 35.6 | 5850 | 1120 | 7005.6 | 96 |
| | 2 | ND | ND | ND | 83.9 | 18.2 | 102.1 | 128 |
| | 3 | ND | ND | ND | 290 | 55.9 | 345.9 | 176 |
| S-21 | 1 | ND | ND | ND | 123 | 35.6 | 158.6 | 80 |
| S-22 | 1 | ND | ND | ND | 44.4 | 10.6 | 55 | 1620 |
| | 2 | ND | ND | ND | 22 | ND | 22 | 48 |
| | 3 | ND | ND | ND | 11.1 | ND | 11.1 | 32 |

ND-Analyte Not Detected

On November 25, 2020, Pima sent an Env. Tech to obtain confirmation sidewall and bottom samples. Samples were obtained and field screened using method S300 for chlorides and using a Tiger Select to measure for VOC. Samples representing the largest areas of the excavation were sent to the lab to back up our field tests. The results of both results are on the following data tables.

11-25-20 Field Screens

| NMOC Table 1 Closure Criteria 19.15.29 NMOC (High Karst <50') | | | |
|---|-------------|--|-----------|
| Sample Date | 11-25-20 | Field Screening Utilizing PID Meter & S300 | |
| Sample ID | Depth (BGS) | VOC | Chlorides |
| S-1 B | 2 | 0.8 | 142 |
| S-1 S | 2 | 0.8 | 284 |
| S-2 B | 2 | 1.8 | 284 |
| S-2 S | 2 | 2.2 | 284 |
| S-3 B | 2 | 24 | 284 |
| S-3 S | 2 | 0.9 | 142 |
| S-4 B | 2 | 0.4 | 284 |
| S-4 S | 2 | 0.2 | 142 |
| S-5 B | 2 | 0.4 | 284 |
| S-5 S | 2 | 4.3 | 284 |
| S-6 B | 2 | 0.2 | 425 |
| S-6 S | 2 | 0.3 | 284 |
| S-7 B | 2 | 0 | 0 |
| S-7 S | 2 | 0 | 0 |
| S-8 B | 2 | 0 | 567 |
| S-8 S | 2 | 0 | 284 |
| S-9 B | 2 | 0 | 0 |
| S-9 S | 2 | 0 | 355 |
| S-10 B | 2 | 0 | 142 |
| S-10 S | 2 | 0 | 0 |
| S-11 B | 2 | 0.5 | 284 |
| S-11 S | 2 | 0.1 | 425 |
| S-12 B | 2 | 0 | 567 |
| S-12 S | 2 | 0 | 284 |
| S-13 B | 2 | 0 | 567 |
| S-13 S | 2 | 0 | 567 |
| S-14 B | 2 | 0.1 | 284 |
| S-14 S | 2 | 0.1 | 567 |

11-25-20 Confirmation Soil Sample Results

| NMOC Table 1 Closure Criteria 19.15.29 NMOC (HIGH KARST AREA <50') | | | | | | | | |
|--|-------------|--------------------------------|---------------|-----------|-----------|-----------|-----------------|----------|
| Sample Date | 11-25-20 | NM Approved Laboratory Results | | | | | | |
| Sample ID | Depth (BGS) | BTEX mg/kg | Benzene mg/kg | GRO mg/kg | DRO mg/kg | MRO mg/kg | Total TPH mg/kg | Cl mg/kg |
| S-1 W. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 64 |
| S-1 W. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 64 |
| S-5 S. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 96 |
| S-5 S. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-6 S. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 112 |
| S-6 S. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 112 |
| S-13 E. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 64 |
| S-13 E. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-12 N. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 96 |
| S-12 N. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 64 |
| S-11 W. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-11 W. SIDEWALL COMP | 2 | ND | ND | ND | 20.9 | 23.1 | 44 | 64 |
| S-14 S. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 64 |
| S-14 S. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-23 | 1 | ND | ND | ND | ND | ND | ND | 112 |
| | 2 | ND | ND | ND | ND | ND | ND | 112 |
| | 3 | ND | ND | ND | ND | ND | ND | 112 |
| S-24 | 1 | ND | ND | ND | ND | ND | ND | 800 |
| | 2 | ND | ND | ND | ND | ND | ND | 112 |
| | 3 | ND | ND | ND | ND | ND | ND | 96 |
| S-25 | 1 | ND | ND | ND | ND | ND | ND | 272 |
| | 2 | ND | ND | ND | ND | ND | ND | 80 |
| | 3 | ND | ND | ND | ND | ND | ND | 112 |

ND- Analyte Not Detected

12-10-20 Confirmation Soil Sample Results

| NMOCD Table 1 Closure Criteria 19.15.29 NMAC (HIGH KARST AREA <50') | | | | | | | | |
|---|-------------|--------------------------------|---------------|-----------|-----------|-----------|-----------------|----------|
| Sample Date: 12-10-20 | | NM Approved Laboratory Results | | | | | | |
| Sample ID | Depth (BGS) | BTEX mg/kg | Benzene mg/kg | GRO mg/kg | DRO mg/kg | MRO mg/kg | Total TPH mg/kg | Cl mg/kg |
| S-6 S. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 96 |
| S-6 S. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-9 E. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-9 E. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-22 N. SIDEWALL | 2 | ND | ND | ND | ND | ND | ND | 96 |
| S-22 N. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 112 |
| S-24 N. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 80 |
| S-24 N. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 64 |
| S-25 E. SIDEWALL COMP | 2 | ND | ND | ND | ND | ND | ND | 48 |
| S-25 E. BOTTOM | 2 | ND | ND | ND | ND | ND | ND | 48 |
| S-26 S. SIDEWALL COMP | 3 | ND | ND | ND | ND | ND | ND | 80 |
| S-26 S. BOTTOM | 3 | ND | ND | ND | ND | ND | ND | 64 |

ND- Analyte Not Detected

Complete Laboratory Reports are attached in Appendix E.

Upon laboratory results showing all samples had met the required closure criteria, the excavation was backfilled with locally obtained clean like material and contoured to match the surrounding location.

Closure Request

After careful review, Pima requests that these incidents be closed. Devon has complied with the applicable closure requirements outlined in rule 19.15.19.12 NMAC.

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

Respectfully,



Chris Jones
Environmental Professional
Pima Environmental Services, LLC

Attachments

Figures:

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

Appendices:

- Appendix A- Referenced Water Surveys
- Appendix B- Soil Survey and FEMA Flood Map
- Appendix C- Initial & Final C-141's
- Appendix D- Photographic Documentation
- Appendix E- Laboratory Reports



Pima Environmental Services

Figures:

1-Site Map

2- TOPO Map

3- Karst Map

4- Location Map

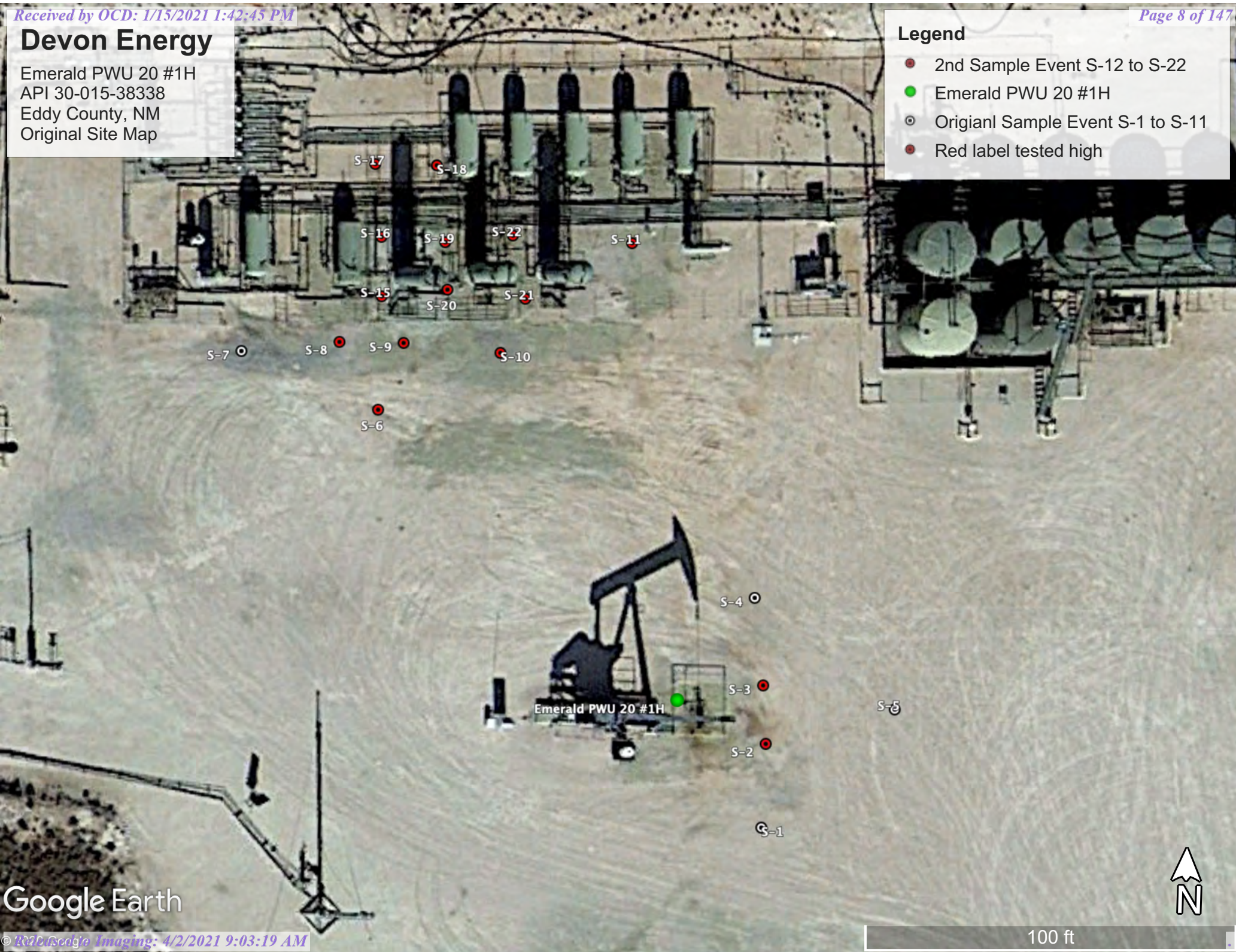
5- Confirmation Sample Map

Devon Energy

Emerald PWU 20 #1H
API 30-015-38338
Eddy County, NM
Original Site Map

Legend

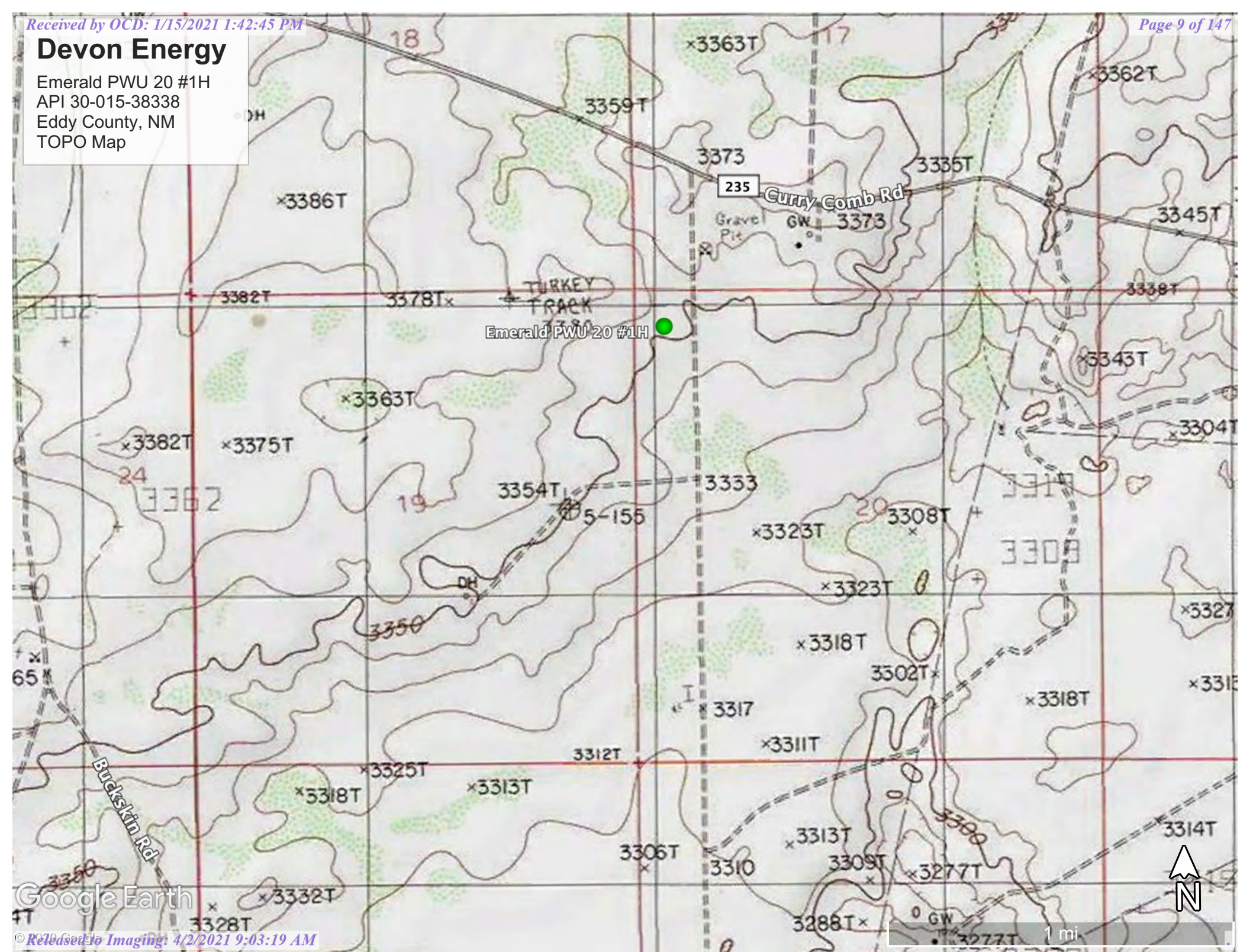
- 2nd Sample Event S-12 to S-22
- Emerald PWU 20 #1H
- Original Sample Event S-1 to S-11
- Red label tested high



Google Earth

100 ft

Emerald PWU 20 #1H
API 30-015-38338
Eddy County, NM
TOPO Map



Devon Energy

Emerald PWU 20 #1H
API 30-015-38338
Eddy County, NM
Karst Map

Legend

- High
- Low
- Medium

Emerald PWU 20 #1H



2 mi

Google Earth

Devon Energy

Emerald PWU 20 #1H
API 30-015-38338
Eddy County, NM
Location Map

235

Curry Comb Rd

Emerald PWU 20 #1H



Buckskin Rd

Google Earth






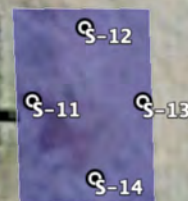
4000 ft

Devon Energy

Emerald PWU 20 #1H
API 30-015-38338
Eddy County, NM
Confirmation Sample Map

Legend

-  2RP-5377 Excavation
-  2RP-779, 2RP-5167 & 2RP-4281 Excavation
-  Confirmation Samples



100 ft

Google Earth



Pima Environmental Services

Appendix A
Water Surveys:
OSE
USGS



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 |
|-------------------------|------|---------------|--------|------|------|-----|-----|-----|-----|--------|---------|--|-------------------------|------------|--------------|
| CP00646 | | CP | ED | 1 | 1 | 4 | 07 | 19S | 29E | 583155 | 3615551 |  2565 | 199 | 150 | 49 |
| | | | | | | | | | | | | | Average Depth to Water: | 150 feet | |
| | | | | | | | | | | | | | Minimum Depth: | 150 feet | |
| | | | | | | | | | | | | | Maximum Depth: | 150 feet | |

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 583977

Northing (Y): 3613121.615

Radius: 3000

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.

6/9/20 11:34 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323900104052901

Minimum number of levels = 1

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

USGS 323900104052901 19S.29E.20.24111 RATLSNAKE

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°39'00", Longitude 104°05'29" NAD27
Land-surface elevation 3,306 feet above NAVD88
This well is completed in the Rustler Formation (312RSLR) local aquifer.

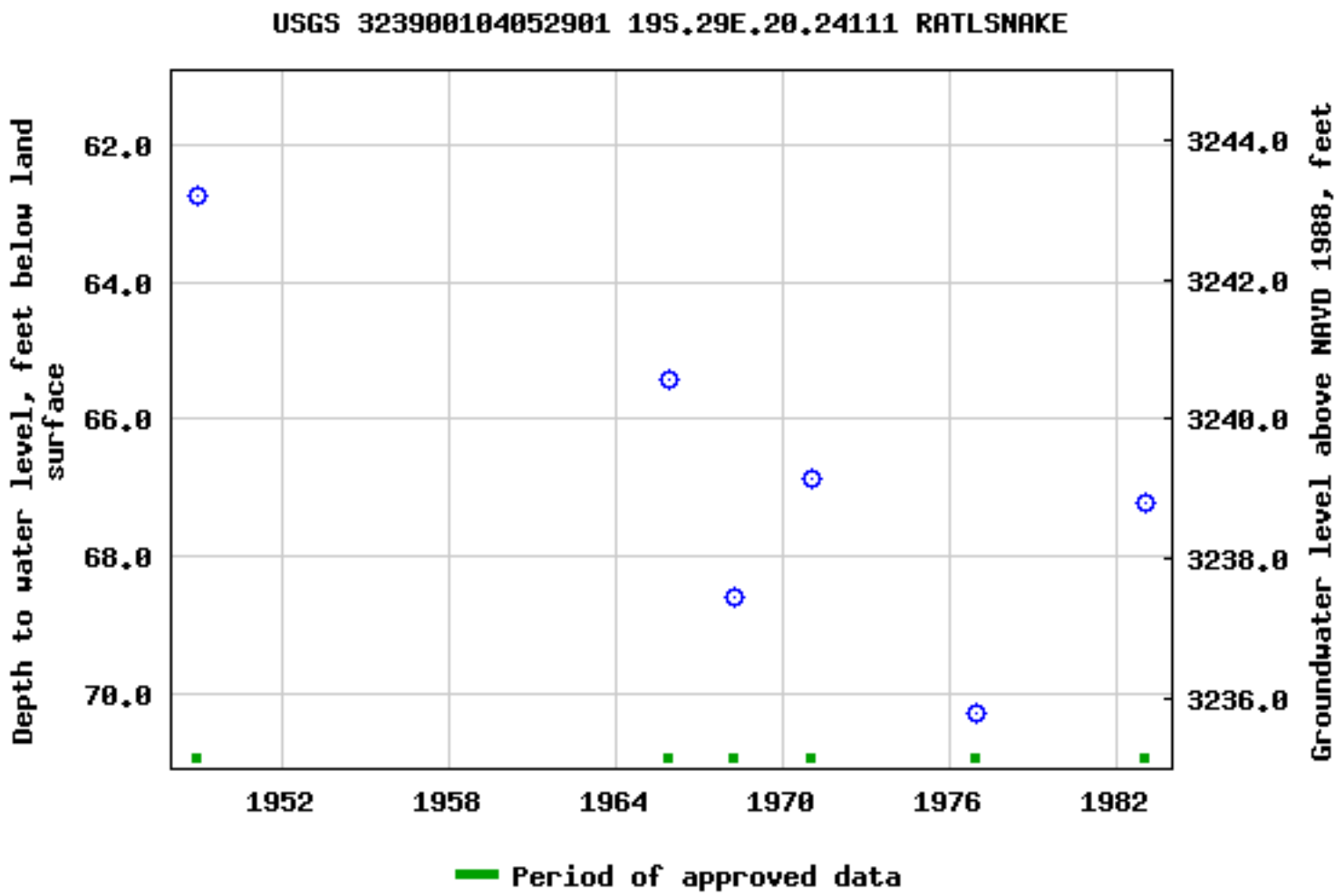
Output formats

Table of data

Tab-separated data

Graph of data

Reselect period




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


[Questions about sites/data?](#)
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[Data Tips](#)
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National Water Information System: Mapper


Help Info


 Sites

 Map

 Search

 Surface-Water Sites

 Groundwater Sites

 Active Sites

☒ Any data


☐ Instantaneous data

☐ Daily data

☐ Water-quality data

☐ Measurements

☐ Annual Report

 Inactive Sites

☒ Any data


☐ Instantaneous data


☐ Daily data


☐ Water-quality data

☐ Measurements

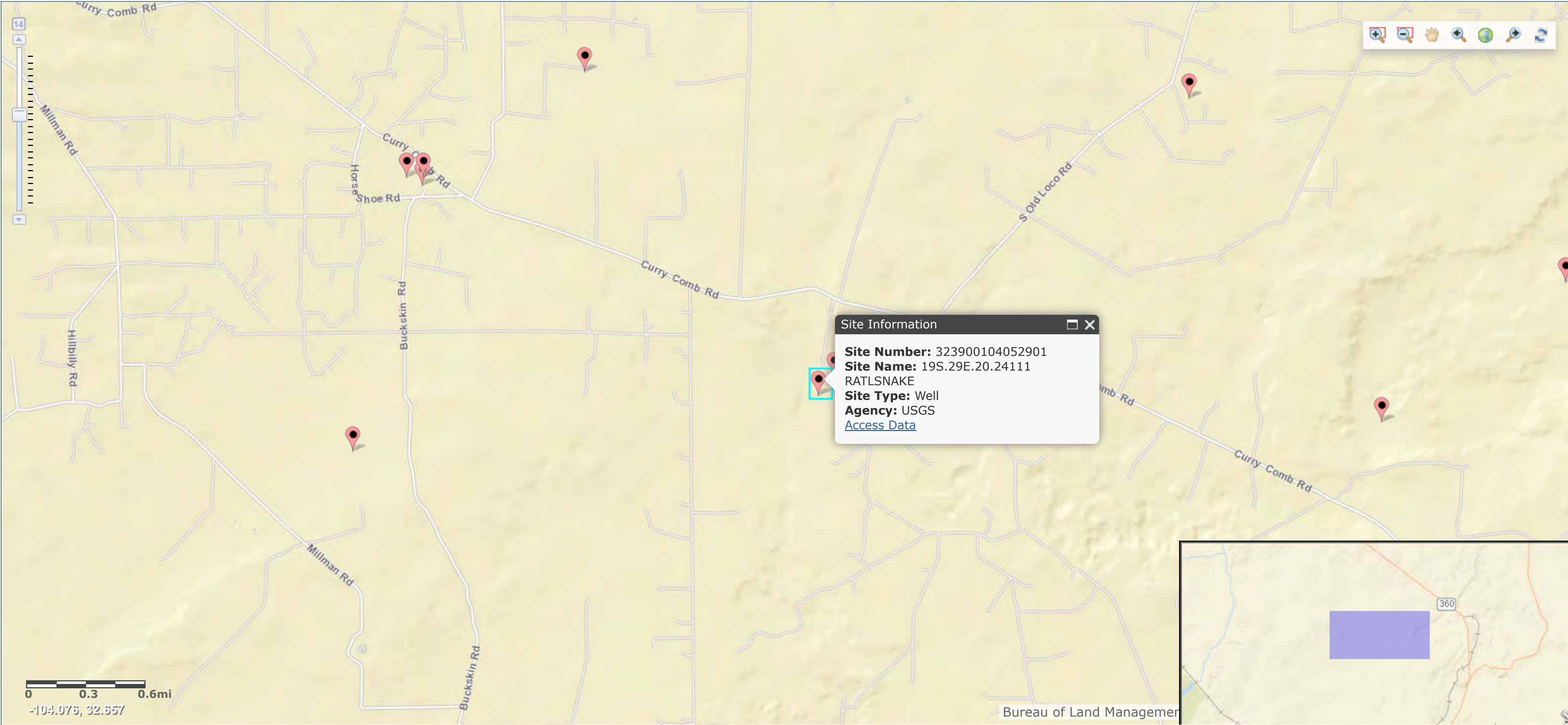
☐ Annual Report

 Springs

 Atmospheric Sites

 Other Sites

Released to Imaging: 4/2/2021 9:03:19 AM



Site Information

Site Number: 323900104052901
Site Name: 19S.29E.20.24111
RATLSNAKE
Site Type: Well
Agency: USGS
[Access Data](#)

0 0.3 0.6mi
-104.076, 32.657

Bureau of Land Management

Site Information



Pima Environmental Services

Appendix B
Soil Survey & Geological Data:
FEMA Flood Map

Map Unit Description: Simona-Bippus complex, 0 to 5 percent slopes---Eddy Area, New Mexico

Eddy Area, New Mexico

SM—Simona-Bippus complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1w5x

Elevation: 1,800 to 5,000 feet

Mean annual precipitation: 8 to 24 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 180 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Simona and similar soils: 55 percent

Bippus and similar soils: 30 percent

Minor components: 15 percent

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

Description of Simona

Setting

Landform: Plains, alluvial fans

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 19 inches: gravelly fine sandy loam

H2 - 19 to 23 inches: indurated

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 7 to 20 inches to petrocalcic

Natural drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 1.0

Available water storage in profile: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Map Unit Description: Simona-Bippus complex, 0 to 5 percent slopes---Eddy Area, New Mexico

Ecological site: Shallow Sandy (R042XC002NM)
Hydric soil rating: No

Description of Bippus

Setting

Landform: Flood plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 37 inches: silty clay loam
H2 - 37 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very 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: Occasional
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: Bottomland (R042XC017NM)
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 8 percent
Ecological site: Shallow Sandy (R042XC002NM)
Hydric soil rating: No

Bippus

Percent of map unit: 7 percent
Ecological site: Bottomland (R042XC017NM)

Map Unit Description: Simona-Bippus complex, 0 to 5 percent slopes---Eddy Area, New Mexico

Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 15, Sep 15, 2019

National Flood Hazard Layer FIRMette



32°39'24.20"N



USGS The National Map: Orthoimagery. Data refreshed April, 2019.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

32°38'53.91"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 |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard Zone D |
| | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | 17.5 |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| MAP PANELS | | Profile Baseline |
| | | Hydrographic Feature |
| | | 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 6/10/2020 at 1:40:02 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.



Pima Environmental Services

Appendix C

C-141's:

Initial

Final

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

nmlb 1113050834

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|-----------------------------------|
| Name of Company Devon Energy | Contact Roy White, Foreman |
| Address 6488 Seven Rivers Hwy - P.O. Box 250 | Telephone No. 575-513-1741 |
| Facility Name Emerald PWU 20 #1H 30-015-38338 | Facility Type |

| | | |
|---------------|---------------|-----------|
| Surface Owner | Mineral Owner | Lease No. |
|---------------|---------------|-----------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------------------|----------------------|------------------------|---------------------|-----------------------------|--------------------------------|-----------------------------|------------------------------|-----------------------|
| Unit Letter D | Section 20 | Township 19S | Range 29E | Feet from the 400 | North/South Line FNL | Feet from the 330 | East/West Line FWL | County Eddy |
|-------------------------|----------------------|------------------------|---------------------|-----------------------------|--------------------------------|-----------------------------|------------------------------|-----------------------|

Latitude _____ Longitude _____

NATURE OF RELEASE

| | | |
|---|--|--|
| Type of Release Oil & Produced Water | Volume of Release 23 bbls - Oil - 3 bbls - PW | Volume Recovered 20 bbls - Oil - 2 bbls - PW |
| Source of Release An overnight flow back hand fell asleep during his shift resulting in a frac tank to overflow and release 26 bbl of oil and produced water on the ground. | Date and Hour of Occurrence 05-04-11 - 6:22 am | Date and Hour of Discovery 05-04-11 - 06:22 am |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Mike Bratcher, NMOCD | |
| By Whom? Roy White, Foreman | Date and Hour 05-04-11 - 10:100 am | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | |
| If a Watercourse was Impacted, Describe Fully.* | | |
| Describe Cause of Problem and Remedial Action Taken.* <input type="checkbox"/> An overnight flow back hand fell asleep during his shift resulting in a frac tank to overflow and release 26 bbl of oil and produced water on the ground. Flow back hand had gauged the tank at 5:00 am before he fell asleep. Tank (500 bbl capacity) was at 6'5" at 5:00 am. Crew member woke up at 5:45 am and observed the 9' tall tank was overflowing. Crew member who fell asleep is no longer employed with the contract company. 22 bbl of the oil and produced water was recovered resulting in a 4 bbl spill | | |
| Describe Area Affected and Cleanup Action Taken.* 100 yards in length x 25 width - Called vacuum truck Removed contaminated soil and replaced w/new soil. | | |

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: Mykol Horner | OIL CONSERVATION DIVISION | |
| Printed Name: Mykol Horner | Approved by District Supervisor Signed By Mike Bratcher | |
| Title: Field Tech 1 | Approval Date: 5/10/2011 | Expiration Date: |
| E-mail Address: mykol.horner@dvn.com | Conditions of Approval: Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION | Attached <input type="checkbox"/> |
| Date: _____ Phone: 575-748-0160 | PROPOSAL NOT LATER THAN: 6/10/2011 | |

* Attach Additional Sheets If Necessary

2RP-779

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

JUN 29 2017

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

RECEIVED

Release Notification and Corrective Action

NAB1718733399

OPERATOR

☒ Initial Report ☐ Final Report

| | | | |
|-----------------|---|---------------|--------------------------------|
| Name of Company | Devon Energy Production Company | Contact | Danny Velo, Production Foreman |
| Address | 6488 Seven Rivers Hwy Artesia, NM 88210 | Telephone No. | 575-703-3360 |
| Facility Name | Emerald PWU 20 1H | Facility Type | Oil |

| | | | |
|---------------------|---------------------|--------|--------------|
| Surface Owner State | Mineral Owner State | API No | 30-015-38338 |
|---------------------|---------------------|--------|--------------|

LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| D | 20 | 19S | 29E | 400' | FNL | 330' | FWL | Eddy |

Latitude: 32.6525154

Longitude: -104.1045456

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release Oil & Produced Water | Volume of Release .5bbls oil & 4.5bbls produced water | Volume Recovered 0bbls recovered |
| Source of Release Water dump on three-phase separator | Date and Hour of Occurrence June 28, 2017 @ 7:00 PM | Date and Hour of Discovery June 28, 2017 @ 7:00 PM |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Shelly Tucker, BLM Mike Bratcher, OCD | |
| By Whom? Jesse Armendariz, Asst. Production Foreman | Date and Hour Shelly Tucker, BLM June 28, 2017 @ 9:38 PM Mike Bratcher, OCD June 28, 2017 @ 9:40 PM | |
| 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.*
Three-phase separator was being bled down when gas and sand cut the water dump. The wells producing to the battery were shut in to stop the flow to the battery and then the water dump and three-phase separator were isolated.

Describe Area Affected and Cleanup Action Taken.*
Approximately .5bbls oil and 4.5bbls produced water were released on to location. All fluid remained on location and 0bbls were recovered. The affected area is approximately 13' x 12' on location. An environmental contractor will be contacted to assist with delineation and remediation

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: <i>Crystal W...</i> | |
| Title: Field Admin Support | Approval Date: 7/3/17 | Expiration Date: N/A |
| E-mail Address: Sheila.fisher@dmv.com | Conditions of Approval: see attached | Attached <input checked="" type="checkbox"/> |
| Date: 6/29/17 | Phone: 575.748.1829 | |

* Attach Additional Sheets If Necessary

Please refer to the New Mexico Oil
Conservation Division Website for
updated form(s) at:

<http://www.emnrd.state.nm.us/>

Thank you

2RP-4281

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **6/29/17** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number ARP-4281 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 7/29/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.
- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.
- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.
- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold

OCD Environmental Bureau Chief

1220 South St. Francis Drive

Santa Fe, New Mexico 87505

505-476-3465

jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Fisher, Sheila <Sheila.Fisher@dvn.com>
Sent: Thursday, June 29, 2017 3:52 PM
To: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; Amber Groves (agroves@slo.state.nm.us)
Cc: Shoemaker, Mike; Fulks, Brett; Velo, Danny; Armendariz, Jesse; Scott, KY
Subject: Emerald PWU 20 1H_5bbls oil & 4.5bbls pw_6.28.17
Attachments: Emerald PWU 20 1H_5bbls oil & 4.5bbls pw_Intial C-141_6.28.17.doc; Emerald PWU 20 1H_5bbls oil & 4.5bbls pw_GIS Image_6.28.17.pdf

Good Afternoon,

Attached please find the Initial C-141 and GIS Image for the .5bbl oil & 4.5bbls produced water release at the Emerald PWU 20 1H on 6.28.17.

If you have any questions please feel free to contact me.

Thank you,

Sheila Fisher
Field Admin Support
Production
B-Schedule

Devon Energy Corporation
PO Box 250
Artesia, NM 88211
575 748 1829 Direct



Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

strict I
25 N. French Dr., Hobbs, NM 88240
strict II
1 S. First St., Artesia, NM 88210
strict III
00 Rio Brazos Road, Aztec, NM 87410
strict IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

| | |
|----------------|---------------|
| Incident ID | NAB1900959144 |
| District RP | 2RP-5167 |
| Facility ID | |
| Application ID | pAB1900958601 |

Release Notification

Responsible Party

| | |
|---|--|
| Responsible Party Devon Energy Production | OGRID 6137 |
| Contact Name Amanda T. Davis | Contact Telephone 575-748-3371 |
| Contact email amanda.davis@divn.com | Incident # (assigned by OCD) NAB1900959144 |
| Contact mailing address 6488 Seven Rivers Hwy | |

Location of Release Source

Latitude 32.6525154 Longitude -104.1045456
(NAD 83 in decimal degrees to 5 decimal places)

| | |
|------------------------------------|---------------------------------|
| Site Name Emerald PWU 20 1H | Site Type Oil |
| Date Release Discovered 11/10/2018 | API# (if applicable) 3001538338 |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| D | 20 | 19S | 29E | Eddy |

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

| | | |
|--|--|--|
| <input checked="" type="checkbox"/> Crude Oil | Volume Released (bbls) 20 BBLS | Volume Recovered (bbls) 10 BBLS |
| <input checked="" type="checkbox"/> Produced Water | Volume Released (bbls) 5 BBLS | Volume Recovered (bbls) |
| | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| <input type="checkbox"/> Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| <input type="checkbox"/> Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |

Cause of Release Gasket failed on the heater treater. Recovered 10 bbls. All stayed on the pad


State of New Mexico
Oil Conservation Division

| | |
|----------------|---------------|
| Incident ID | NAB1900959144 |
| District RP | 2RP-5167 |
| Facility ID | |
| Application ID | pAB1900958601 |

| | |
|---|--|
| Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? This release is considered a major release because it is over the 25 BBLS. |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? | |

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

| | |
|--|-------------------------|
| <input checked="" type="checkbox"/> The source of the release has been stopped. | |
| <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. | |
| <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. | |
| <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately. | |
| If all the actions described above have <u>not</u> been undertaken, explain why: | |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. | |
| 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: Kendra DeHoyos | Title: EHS Associate |
| Signature: Kendra DeHoyos <small>Digitally signed by Kendra DeHoyos DN: cn=Kendra DeHoyos, o.ou, email=kendra.dehoyos@dmn.com, c=US Date: 2018.11.20 15:57:38 -0700</small> | Date: 11/19/2018 |
| Email: kendra.dehoyos@dmn.com | Telephone: 575-748-3371 |
| OCD Only | |
| Received by:  | Date: 1/09/2019 |

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

| | |
|----------------|---------------|
| Incident ID | NAB1912031438 |
| District RP | 2RP-5377 |
| Facility ID | |
| Application ID | pAB1912031219 |

Release Notification

Responsible Party

| | |
|---|--|
| Responsible Party Devon Energy Production | OGRID 6137 |
| Contact Name Amanda T. Davis | Contact Telephone 575-748-3371 |
| Contact email amanda.davis@dvn.com | Incident # (assigned by OCD) NAB1912031438 |
| Contact mailing address 6488 Seven Rivers Hwy | |

Location of Release Source

Latitude 32.65251 Longitude -104.10455
(NAD 83 in decimal degrees to 5 decimal places)

| | |
|------------------------------------|-----------------------------------|
| Site Name Emerald PWU 20 #001H | Site Type Oil |
| Date Release Discovered 11/13/2018 | API# (if applicable) 30-015-38338 |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| D | 20 | 19S | 29E | Eddy |

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

| | | |
|---|--|--|
| <input checked="" type="checkbox"/> Crude Oil | Volume Released (bbls) 7 BBLS | Volume Recovered (bbls) 0 BBLS |
| <input type="checkbox"/> Produced Water | Volume Released (bbls) | Volume Recovered (bbls) |
| | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate | Volume Released (bbls) | Volume Recovered (bbls) |
| <input type="checkbox"/> Natural Gas | Volume Released (Mcf) | Volume Recovered (Mcf) |
| <input type="checkbox"/> Other (describe) | Volume/Weight Released (provide units) | Volume/Weight Recovered (provide units) |


Cause of Release Oil spraying out from wellhead. Affected area 18'X18'X8" around the well head.

| | |
|----------------|---------------|
| Incident ID | NAB1912031438 |
| District RP | 2RP-5377 |
| Facility ID | |
| Application ID | pAB1912031219 |

| | |
|--|--|
| Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? | |

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

| | |
|--|--------------------------------|
| <input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately. | |
| If all the actions described above have <u>not</u> been undertaken, explain why: Wellhead not in containment | |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. | |
| 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: Kendra DeHoyos | Title: EHS Associate |
| Signature: Kendra DeHoyos <small>Digitally signed by Kendra DeHoyos DN: cn=Kendra DeHoyos, o=ou, email=kendra.dehoyos@dvni.com, c=US Date: 2018.11.21 11:49:08 -0700</small> | Date: 11/21/2018 |
| email: kendra.dehoyos@dvni.com | Telephone: 575-748-3371 |
| OCD Only Received by:  Date: 4/30/2019 | |

| | |
|----------------|---------------|
| Incident ID | NAB1718733399 |
| District RP | |
| Facility ID | |
| Application ID | |

Site Assessment/Characterization

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

| | |
|---|--|
| What is the shallowest depth to groundwater beneath the area affected by the release? | <u>150</u> (ft bgs) |
| Did this release impact groundwater or surface water? | <input type="checkbox"/> Yes <input 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 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 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 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 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 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 type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Did the release impact areas not on an exploration, development, production, or storage site? | <input type="checkbox"/> Yes <input 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 | NAB1718733399 |
| District RP | |
| Facility ID | |
| Application ID | |

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

Printed Name: Tom Bynum Title: EHS Consultant

Signature: *Tom Bynum* Date: 10/21/2020

email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: Cristina Eads Date: 01/15/2021

| | |
|----------------|---------------|
| Incident ID | NAB1718733399 |
| District RP | |
| Facility ID | |
| Application ID | |

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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Printed Name: Tom Bynum Title: EHS Consultant
Signature: Tom Bynum Date: 10/21/2020
email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

| | |
|----------------|---------------|
| Incident ID | NAB1718733399 |
| District RP | |
| Facility ID | |
| Application ID | |

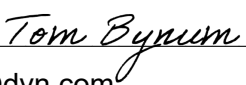
Closure

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

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

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

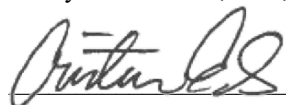
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Printed Name: Tom Bynum Title: EHS Consultant
Signature:  Date: 10-21-20
email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: Cristina Eads Date: 01/15/2021

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: 04/02/2021
Printed Name: Cristina Eads Title: Environmental Specialist

| | |
|----------------|---------------|
| Incident ID | NAB1912031438 |
| District RP | |
| Facility ID | |
| Application ID | |

Site Assessment/Characterization

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

| | |
|---|--|
| What is the shallowest depth to groundwater beneath the area affected by the release? | <u>150</u> (ft bgs) |
| Did this release impact groundwater or surface water? | <input type="checkbox"/> Yes <input 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 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 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 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 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 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 type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Did the release impact areas not on an exploration, development, production, or storage site? | <input type="checkbox"/> Yes <input 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
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| | |
|----------------|---------------|
| Incident ID | NAB1912031438 |
| District RP | |
| Facility ID | |
| Application ID | |

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Printed Name: Tom Bynum Title: EHS Consultant

Signature: *Tom Bynum* Date: 10/21/2020

email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: Cristina Eads Date: 01/15/2021

| | |
|----------------|---------------|
| Incident ID | NAB1912031438 |
| District RP | |
| Facility ID | |
| Application ID | |

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
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Printed Name: Tom Bynum Title: EHS Consultant
Signature: Tom Bynum Date: 10/21/2020
email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

| | |
|----------------|---------------|
| Incident ID | NAB1912031438 |
| District RP | |
| Facility ID | |
| Application ID | |

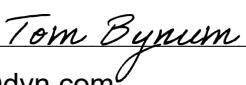
Closure

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- ☐ Description of remediation activities

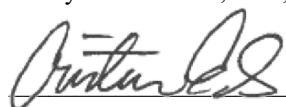
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Printed Name: Tom Bynum Title: EHS Consultant
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email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: Cristina Eads Date: 01/15/2021

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Closure Approved by:  Date: 04/02/2021
Printed Name: Cristina Eads Title: Environmental Specialist

| | |
|----------------|----------------|
| Incident ID | NMLB1113050834 |
| District RP | |
| Facility ID | |
| Application ID | |

Site Assessment/Characterization

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

| | |
|---|--|
| What is the shallowest depth to groundwater beneath the area affected by the release? | <u>150</u> (ft bgs) |
| Did this release impact groundwater or surface water? | <input type="checkbox"/> Yes <input 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 type="checkbox"/> No |
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| 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 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 type="checkbox"/> No |
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| 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 type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Did the release impact areas not on an exploration, development, production, or storage site? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

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| | |
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| Incident ID | NMLB1113050834 |
| District RP | |
| Facility ID | |
| Application ID | |

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Printed Name: Tom Bynum Title: EHS Consultant

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email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: Cristina Eads Date: 01/15/2021

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Printed Name: Tom Bynum Title: EHS Consultant
Signature: Tom Bynum Date: 10/21/2020
email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

| | |
|----------------|----------------|
| Incident ID | NMLB1113050834 |
| District RP | |
| Facility ID | |
| Application ID | |

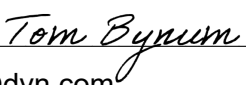
Closure

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- ☐ Description of remediation activities

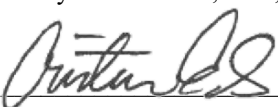
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Printed Name: Tom Bynum Title: EHS Consultant
Signature:  Date: 10-21-20
email: tom.bynum@dv.com Telephone: 575-748-2663

OCD Only

Received by: Cristina Eads Date: 01/15/2021

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Closure Approved by:  Date: 04/02/2021
Printed Name: Cristina Eads Title: Environmental Specialist



Pima Environmental Services

Appendix D:
Photographic
Documentation

Excavation Photos

Tank Battery Area





In Front of Wellhead for 2RP-5377

Completed & Backfilled







Pima Environmental Services

Appendix E:
Laboratory Results



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

July 16, 2020

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

RE: Emerald PWU 20 1H

OrderNo.: 2007408

Dear Chris Jones:

Hall Environmental Analysis Laboratory received 18 sample(s) on 7/9/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 3:30:00 PM

Lab ID: 2007408-001

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 360 | 60 | | mg/Kg | 20 | 7/11/2020 4:41:31 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Surr: BFB | 93.5 | 70-130 | | %Rec | 1 | 7/11/2020 9:45:27 PM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 7/11/2020 10:07:05 AM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 7/11/2020 10:07:05 AM | 53629 |
| Surr: DNOP | 97.5 | 55.1-146 | | %Rec | 1 | 7/11/2020 10:07:05 AM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.023 | | mg/Kg | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Xylenes, Total | ND | 0.092 | | mg/Kg | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 104 | 70-130 | | %Rec | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Surr: 4-Bromofluorobenzene | 94.6 | 70-130 | | %Rec | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Surr: Dibromofluoromethane | 112 | 70-130 | | %Rec | 1 | 7/11/2020 9:45:27 PM | 53614 |
| Surr: Toluene-d8 | 101 | 70-130 | | %Rec | 1 | 7/11/2020 9:45:27 PM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S1, 1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 3:35:00 PM

Lab ID: 2007408-002

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 160 | 60 | | mg/Kg | 20 | 7/11/2020 4:53:56 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Surr: BFB | 94.9 | 70-130 | | %Rec | 1 | 7/11/2020 10:42:56 PM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 7/11/2020 11:20:31 AM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 7/11/2020 11:20:31 AM | 53629 |
| Surr: DNOP | 56.7 | 55.1-146 | | %Rec | 1 | 7/11/2020 11:20:31 AM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 109 | 70-130 | | %Rec | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Surr: 4-Bromofluorobenzene | 96.4 | 70-130 | | %Rec | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Surr: Dibromofluoromethane | 115 | 70-130 | | %Rec | 1 | 7/11/2020 10:42:56 PM | 53614 |
| Surr: Toluene-d8 | 104 | 70-130 | | %Rec | 1 | 7/11/2020 10:42:56 PM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S2, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 3:40:00 PM

Lab ID: 2007408-003

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: JMT |
| Chloride | 3800 | 150 | | mg/Kg | 50 | 7/13/2020 3:54:10 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 23 | D | mg/Kg | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Surr: BFB | 93.1 | 70-130 | D | %Rec | 5 | 7/12/2020 2:04:49 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 11000 | 490 | | mg/Kg | 50 | 7/11/2020 11:45:11 AM | 53629 |
| Motor Oil Range Organics (MRO) | 8300 | 2500 | | mg/Kg | 50 | 7/11/2020 11:45:11 AM | 53629 |
| Surr: DNOP | 0 | 55.1-146 | S | %Rec | 50 | 7/11/2020 11:45:11 AM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.12 | D | mg/Kg | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Toluene | ND | 0.23 | D | mg/Kg | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Ethylbenzene | ND | 0.23 | D | mg/Kg | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Xylenes, Total | ND | 0.46 | D | mg/Kg | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 105 | 70-130 | D | %Rec | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 93.7 | 70-130 | D | %Rec | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Surr: Dibromofluoromethane | 109 | 70-130 | D | %Rec | 5 | 7/12/2020 2:04:49 AM | 53614 |
| Surr: Toluene-d8 | 102 | 70-130 | D | %Rec | 5 | 7/12/2020 2:04:49 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S3, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 3:45:00 PM

Lab ID: 2007408-004

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|-----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: JMT |
| Chloride | 17000 | 600 | | mg/Kg | 200 | 7/13/2020 4:06:35 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Surr: BFB | 97.3 | 70-130 | | %Rec | 1 | 7/12/2020 2:33:19 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 11 | 9.8 | | mg/Kg | 1 | 7/11/2020 12:09:59 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 7/11/2020 12:09:59 PM | 53629 |
| Surr: DNOP | 49.1 | 55.1-146 | S | %Rec | 1 | 7/11/2020 12:09:59 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 105 | 70-130 | | %Rec | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 97.3 | 70-130 | | %Rec | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Surr: Dibromofluoromethane | 104 | 70-130 | | %Rec | 1 | 7/12/2020 2:33:19 AM | 53614 |
| Surr: Toluene-d8 | 103 | 70-130 | | %Rec | 1 | 7/12/2020 2:33:19 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 3:50:00 PM

Lab ID: 2007408-005

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 570 | 60 | | mg/Kg | 20 | 7/11/2020 5:31:09 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Surr: BFB | 96.1 | 70-130 | | %Rec | 1 | 7/12/2020 3:01:50 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.6 | | mg/Kg | 1 | 7/11/2020 12:34:49 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 7/11/2020 12:34:49 PM | 53629 |
| Surr: DNOP | 33.0 | 55.1-146 | S | %Rec | 1 | 7/11/2020 12:34:49 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Xylenes, Total | ND | 0.096 | | mg/Kg | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 113 | 70-130 | | %Rec | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 96.5 | 70-130 | | %Rec | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Surr: Dibromofluoromethane | 112 | 70-130 | | %Rec | 1 | 7/12/2020 3:01:50 AM | 53614 |
| Surr: Toluene-d8 | 102 | 70-130 | | %Rec | 1 | 7/12/2020 3:01:50 AM | 53614 |

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

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

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S4, 1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 3:55:00 PM

Lab ID: 2007408-006

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 210 | 60 | | mg/Kg | 20 | 7/11/2020 5:43:33 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Surr: BFB | 96.4 | 70-130 | | %Rec | 1 | 7/12/2020 3:30:36 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 7/11/2020 12:59:50 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 7/11/2020 12:59:50 PM | 53629 |
| Surr: DNOP | 44.3 | 55.1-146 | S | %Rec | 1 | 7/11/2020 12:59:50 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Xylenes, Total | ND | 0.10 | | mg/Kg | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 108 | 70-130 | | %Rec | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 95.1 | 70-130 | | %Rec | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Surr: Dibromofluoromethane | 108 | 70-130 | | %Rec | 1 | 7/12/2020 3:30:36 AM | 53614 |
| Surr: Toluene-d8 | 104 | 70-130 | | %Rec | 1 | 7/12/2020 3:30:36 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:00:00 PM

Lab ID: 2007408-007

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | ND | 60 | | mg/Kg | 20 | 7/11/2020 5:55:57 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Surr: BFB | 94.2 | 70-130 | | %Rec | 1 | 7/12/2020 3:59:11 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.2 | | mg/Kg | 1 | 7/11/2020 1:24:53 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 7/11/2020 1:24:53 PM | 53629 |
| Surr: DNOP | 29.7 | 55.1-146 | S | %Rec | 1 | 7/11/2020 1:24:53 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 103 | 70-130 | | %Rec | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 92.0 | 70-130 | | %Rec | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Surr: Dibromofluoromethane | 109 | 70-130 | | %Rec | 1 | 7/12/2020 3:59:11 AM | 53614 |
| Surr: Toluene-d8 | 102 | 70-130 | | %Rec | 1 | 7/12/2020 3:59:11 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S5, 1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:05:00 PM

Lab ID: 2007408-008

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 64 | 60 | | mg/Kg | 20 | 7/11/2020 6:08:22 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Surr: BFB | 96.4 | 70-130 | | %Rec | 1 | 7/12/2020 4:27:38 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 7/11/2020 1:49:46 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 7/11/2020 1:49:46 PM | 53629 |
| Surr: DNOP | 47.2 | 55.1-146 | S | %Rec | 1 | 7/11/2020 1:49:46 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 108 | 70-130 | | %Rec | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 93.1 | 70-130 | | %Rec | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Surr: Dibromofluoromethane | 110 | 70-130 | | %Rec | 1 | 7/12/2020 4:27:38 AM | 53614 |
| Surr: Toluene-d8 | 105 | 70-130 | | %Rec | 1 | 7/12/2020 4:27:38 AM | 53614 |

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

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

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S6, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:10:00 PM

Lab ID: 2007408-009

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 1200 | 60 | | mg/Kg | 20 | 7/11/2020 6:45:34 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Surr: BFB | 94.2 | 70-130 | | %Rec | 1 | 7/12/2020 4:56:06 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.3 | | mg/Kg | 1 | 7/11/2020 2:14:39 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 47 | | mg/Kg | 1 | 7/11/2020 2:14:39 PM | 53629 |
| Surr: DNOP | 30.9 | 55.1-146 | S | %Rec | 1 | 7/11/2020 2:14:39 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 104 | 70-130 | | %Rec | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 94.8 | 70-130 | | %Rec | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Surr: Dibromofluoromethane | 104 | 70-130 | | %Rec | 1 | 7/12/2020 4:56:06 AM | 53614 |
| Surr: Toluene-d8 | 102 | 70-130 | | %Rec | 1 | 7/12/2020 4:56:06 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:15:00 PM

Lab ID: 2007408-010

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | ND | 60 | | mg/Kg | 20 | 7/11/2020 6:57:58 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Surr: BFB | 92.3 | 70-130 | | %Rec | 1 | 7/12/2020 5:25:03 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.6 | | mg/Kg | 1 | 7/11/2020 2:39:45 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 7/11/2020 2:39:45 PM | 53629 |
| Surr: DNOP | 44.4 | 55.1-146 | S | %Rec | 1 | 7/11/2020 2:39:45 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 104 | 70-130 | | %Rec | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 92.3 | 70-130 | | %Rec | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Surr: Dibromofluoromethane | 115 | 70-130 | | %Rec | 1 | 7/12/2020 5:25:03 AM | 53614 |
| Surr: Toluene-d8 | 99.0 | 70-130 | | %Rec | 1 | 7/12/2020 5:25:03 AM | 53614 |

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

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

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S7, 1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:20:00 PM

Lab ID: 2007408-011

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | ND | 60 | | mg/Kg | 20 | 7/11/2020 7:10:22 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Surr: BFB | 94.8 | 70-130 | | %Rec | 1 | 7/12/2020 5:53:47 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.5 | | mg/Kg | 1 | 7/11/2020 3:04:50 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 48 | | mg/Kg | 1 | 7/11/2020 3:04:50 PM | 53629 |
| Surr: DNOP | 71.9 | 55.1-146 | | %Rec | 1 | 7/11/2020 3:04:50 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 108 | 70-130 | | %Rec | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 98.0 | 70-130 | | %Rec | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Surr: Dibromofluoromethane | 114 | 70-130 | | %Rec | 1 | 7/12/2020 5:53:47 AM | 53614 |
| Surr: Toluene-d8 | 101 | 70-130 | | %Rec | 1 | 7/12/2020 5:53:47 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:25:00 PM

Lab ID: 2007408-012

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 2300 | 60 | | mg/Kg | 20 | 7/11/2020 7:22:47 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Surr: BFB | 95.8 | 70-130 | | %Rec | 1 | 7/12/2020 6:22:15 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.2 | | mg/Kg | 1 | 7/11/2020 3:54:54 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 46 | | mg/Kg | 1 | 7/11/2020 3:54:54 PM | 53629 |
| Surr: DNOP | 57.8 | 55.1-146 | | %Rec | 1 | 7/11/2020 3:54:54 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Xylenes, Total | ND | 0.096 | | mg/Kg | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 108 | 70-130 | | %Rec | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 93.9 | 70-130 | | %Rec | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Surr: Dibromofluoromethane | 105 | 70-130 | | %Rec | 1 | 7/12/2020 6:22:15 AM | 53614 |
| Surr: Toluene-d8 | 106 | 70-130 | | %Rec | 1 | 7/12/2020 6:22:15 AM | 53614 |

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

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

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S8, 1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:30:00 PM

Lab ID: 2007408-013

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 200 | 61 | | mg/Kg | 20 | 7/11/2020 7:35:12 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Surr: BFB | 95.3 | 70-130 | | %Rec | 1 | 7/12/2020 6:50:45 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | ND | 9.7 | | mg/Kg | 1 | 7/11/2020 4:19:36 PM | 53629 |
| Motor Oil Range Organics (MRO) | ND | 49 | | mg/Kg | 1 | 7/11/2020 4:19:36 PM | 53629 |
| Surr: DNOP | 86.4 | 55.1-146 | | %Rec | 1 | 7/11/2020 4:19:36 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.025 | | mg/Kg | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 105 | 70-130 | | %Rec | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 93.1 | 70-130 | | %Rec | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %Rec | 1 | 7/12/2020 6:50:45 AM | 53614 |
| Surr: Toluene-d8 | 104 | 70-130 | | %Rec | 1 | 7/12/2020 6:50:45 AM | 53614 |

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

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

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S9, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:35:00 PM

Lab ID: 2007408-014

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: JMT |
| Chloride | 4100 | 150 | | mg/Kg | 50 | 7/13/2020 4:18:59 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 25 | D | mg/Kg | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Surr: BFB | 96.4 | 70-130 | D | %Rec | 5 | 7/12/2020 7:19:14 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 20000 | 490 | | mg/Kg | 50 | 7/11/2020 4:44:23 PM | 53629 |
| Motor Oil Range Organics (MRO) | 12000 | 2500 | | mg/Kg | 50 | 7/11/2020 4:44:23 PM | 53629 |
| Surr: DNOP | 0 | 55.1-146 | S | %Rec | 50 | 7/11/2020 4:44:23 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.12 | D | mg/Kg | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Toluene | ND | 0.25 | D | mg/Kg | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Ethylbenzene | ND | 0.25 | D | mg/Kg | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Xylenes, Total | ND | 0.49 | D | mg/Kg | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 104 | 70-130 | D | %Rec | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 73.9 | 70-130 | D | %Rec | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Surr: Dibromofluoromethane | 106 | 70-130 | D | %Rec | 5 | 7/12/2020 7:19:14 AM | 53614 |
| Surr: Toluene-d8 | 104 | 70-130 | D | %Rec | 5 | 7/12/2020 7:19:14 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S9,1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:40:00 PM

Lab ID: 2007408-015

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: CJS |
| Chloride | 430 | 59 | | mg/Kg | 20 | 7/11/2020 8:00:00 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Surr: BFB | 92.4 | 70-130 | | %Rec | 1 | 7/12/2020 7:47:47 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 240 | 9.8 | | mg/Kg | 1 | 7/11/2020 5:09:07 PM | 53629 |
| Motor Oil Range Organics (MRO) | 190 | 49 | | mg/Kg | 1 | 7/11/2020 5:09:07 PM | 53629 |
| Surr: DNOP | 112 | 55.1-146 | | %Rec | 1 | 7/11/2020 5:09:07 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 101 | 70-130 | | %Rec | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 92.1 | 70-130 | | %Rec | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %Rec | 1 | 7/12/2020 7:47:47 AM | 53614 |
| Surr: Toluene-d8 | 101 | 70-130 | | %Rec | 1 | 7/12/2020 7:47:47 AM | 53614 |

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

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

Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S10, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:45:00 PM

Lab ID: 2007408-016

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: JMT |
| Chloride | 2600 | 150 | | mg/Kg | 50 | 7/13/2020 4:31:23 PM | 53651 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 23 | D | mg/Kg | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Surr: BFB | 95.2 | 70-130 | D | %Rec | 5 | 7/12/2020 8:16:16 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 2700 | 190 | | mg/Kg | 20 | 7/11/2020 5:34:21 PM | 53629 |
| Motor Oil Range Organics (MRO) | 3200 | 930 | | mg/Kg | 20 | 7/11/2020 5:34:21 PM | 53629 |
| Surr: DNOP | 0 | 55.1-146 | S | %Rec | 20 | 7/11/2020 5:34:21 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.12 | D | mg/Kg | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Toluene | ND | 0.23 | D | mg/Kg | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Ethylbenzene | ND | 0.23 | D | mg/Kg | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Xylenes, Total | ND | 0.47 | D | mg/Kg | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 107 | 70-130 | D | %Rec | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 95.7 | 70-130 | D | %Rec | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Surr: Dibromofluoromethane | 113 | 70-130 | D | %Rec | 5 | 7/12/2020 8:16:16 AM | 53614 |
| Surr: Toluene-d8 | 103 | 70-130 | D | %Rec | 5 | 7/12/2020 8:16:16 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S11, 0"-6"

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:50:00 PM

Lab ID: 2007408-017

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: JMT |
| Chloride | 250 | 60 | | mg/Kg | 20 | 7/13/2020 11:46:02 AM | 53665 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 24 | D | mg/Kg | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Surr: BFB | 95.7 | 70-130 | D | %Rec | 5 | 7/12/2020 8:44:46 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 3500 | 98 | | mg/Kg | 10 | 7/11/2020 5:59:39 PM | 53629 |
| Motor Oil Range Organics (MRO) | 3600 | 490 | | mg/Kg | 10 | 7/11/2020 5:59:39 PM | 53629 |
| Surr: DNOP | 0 | 55.1-146 | S | %Rec | 10 | 7/11/2020 5:59:39 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.12 | D | mg/Kg | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Toluene | ND | 0.24 | D | mg/Kg | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Ethylbenzene | ND | 0.24 | D | mg/Kg | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Xylenes, Total | ND | 0.49 | D | mg/Kg | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 103 | 70-130 | D | %Rec | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 90.5 | 70-130 | D | %Rec | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Surr: Dibromofluoromethane | 104 | 70-130 | D | %Rec | 5 | 7/12/2020 8:44:46 AM | 53614 |
| Surr: Toluene-d8 | 106 | 70-130 | D | %Rec | 5 | 7/12/2020 8:44:46 AM | 53614 |

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

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

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Analytical Report

Lab Order 2007408

Date Reported: 7/16/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Pima Environmental Services LLC

Client Sample ID: S11, 1'

Project: Emerald PWU 20 1H

Collection Date: 7/7/2020 4:55:00 PM

Lab ID: 2007408-018

Matrix: SOIL

Received Date: 7/9/2020 9:18:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: JMT |
| Chloride | 460 | 60 | | mg/Kg | 20 | 7/13/2020 11:58:26 AM | 53665 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: DJF |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Surr: BFB | 97.7 | 70-130 | | %Rec | 1 | 7/12/2020 9:13:15 AM | 53614 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BRM |
| Diesel Range Organics (DRO) | 74 | 10 | | mg/Kg | 1 | 7/11/2020 6:24:55 PM | 53629 |
| Motor Oil Range Organics (MRO) | 90 | 50 | | mg/Kg | 1 | 7/11/2020 6:24:55 PM | 53629 |
| Surr: DNOP | 109 | 55.1-146 | | %Rec | 1 | 7/11/2020 6:24:55 PM | 53629 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: DJF |
| Benzene | ND | 0.024 | | mg/Kg | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Xylenes, Total | ND | 0.096 | | mg/Kg | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Surr: 1,2-Dichloroethane-d4 | 105 | 70-130 | | %Rec | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Surr: 4-Bromofluorobenzene | 97.4 | 70-130 | | %Rec | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Surr: Dibromofluoromethane | 107 | 70-130 | | %Rec | 1 | 7/12/2020 9:13:15 AM | 53614 |
| Surr: Toluene-d8 | 107 | 70-130 | | %Rec | 1 | 7/12/2020 9:13:15 AM | 53614 |

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

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

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

WO#: 2007408

16-Jul-20

Client: Pima Environmental Services LLC**Project:** Emerald PWU 20 1H

| Sample ID: MB-53651 | SampType: mblk | TestCode: EPA Method 300.0: Anions | | | | | | | | |
|-----------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 53651 | RunNo: 70283 | | | | | | | | |
| Prep Date: 7/11/2020 | Analysis Date: 7/11/2020 | SeqNo: 2443142 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: LCS-53651 | SampType: lcs | TestCode: EPA Method 300.0: Anions | | | | | | | | |
|-----------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: LCSS | Batch ID: 53651 | RunNo: 70283 | | | | | | | | |
| Prep Date: 7/11/2020 | Analysis Date: 7/11/2020 | SeqNo: 2443143 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 94.4 | 90 | 110 | | | |

| Sample ID: MB-53665 | SampType: mblk | TestCode: EPA Method 300.0: Anions | | | | | | | | |
|-----------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 53665 | RunNo: 70304 | | | | | | | | |
| Prep Date: 7/13/2020 | Analysis Date: 7/13/2020 | SeqNo: 2443770 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| Sample ID: LCS-53665 | SampType: lcs | TestCode: EPA Method 300.0: Anions | | | | | | | | |
|-----------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: LCSS | Batch ID: 53665 | RunNo: 70304 | | | | | | | | |
| Prep Date: 7/13/2020 | Analysis Date: 7/13/2020 | SeqNo: 2443771 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 93.1 | 90 | 110 | | | |

Qualifiers:

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

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

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

WO#: 2007408

16-Jul-20

Client: Pima Environmental Services LLC**Project:** Emerald PWU 20 1H

| Sample ID: MB-53629 | SampType: MBLK | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | | |
|--------------------------------|---------------------------------|--|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 53629 | RunNo: 70238 | | | | | | | | |
| Prep Date: 7/10/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442220 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Motor Oil Range Organics (MRO) | ND | 50 | | | | | | | | |
| Surr: DNOP | 12 | | 10.00 | | 121 | 55.1 | 146 | | | |

| Sample ID: LCS-53629 | SampType: LCS | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | | |
|-----------------------------|---------------------------------|--|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: LCSS | Batch ID: 53629 | RunNo: 70238 | | | | | | | | |
| Prep Date: 7/10/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442221 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 53 | 10 | 50.00 | 0 | 106 | 70 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.0 | 55.1 | 146 | | | |

| Sample ID: 2007408-001AMS | SampType: MS | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | | |
|----------------------------------|---------------------------------|--|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: S1, 0"-6" | Batch ID: 53629 | RunNo: 70238 | | | | | | | | |
| Prep Date: 7/10/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442223 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 44 | 9.4 | 47.13 | 0 | 92.4 | 47.4 | 136 | | | |
| Surr: DNOP | 4.5 | | 4.713 | | 95.2 | 55.1 | 146 | | | |

| Sample ID: 2007408-001AMSD | SampType: MSD | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | | | | |
|-----------------------------------|---------------------------------|--|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: S1, 0"-6" | Batch ID: 53629 | RunNo: 70238 | | | | | | | | |
| Prep Date: 7/10/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442224 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 45 | 9.7 | 48.40 | 0 | 92.4 | 47.4 | 136 | 2.60 | 43.4 | |
| Surr: DNOP | 4.4 | | 4.840 | | 91.6 | 55.1 | 146 | 0 | 0 | |

Qualifiers:

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

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

Page 20 of 23

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

WO#: 2007408

16-Jul-20

Client: Pima Environmental Services LLC**Project:** Emerald PWU 20 1H

| Sample ID: mb-53614 | SampType: MBLK | TestCode: EPA Method 8260B: Volatiles Short List | | | | | | | | |
|-----------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442043 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.53 | | 0.5000 | | 107 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.47 | | 0.5000 | | 93.1 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.55 | | 0.5000 | | 110 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.50 | | 0.5000 | | 99.2 | 70 | 130 | | | |

| Sample ID: lcs-53614 | SampType: LCS4 | TestCode: EPA Method 8260B: Volatiles Short List | | | | | | | | |
|-----------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: BatchQC | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442044 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.025 | 1.000 | 0 | 111 | 80 | 120 | | | |
| Toluene | 1.0 | 0.050 | 1.000 | 0 | 102 | 80 | 120 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 103 | 80 | 120 | | | |
| Xylenes, Total | 3.3 | 0.10 | 3.000 | 0 | 111 | 80 | 120 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.55 | | 0.5000 | | 110 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.47 | | 0.5000 | | 94.8 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.56 | | 0.5000 | | 111 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.48 | | 0.5000 | | 96.4 | 70 | 130 | | | |

| Sample ID: 2007408-001ams | SampType: MS4 | TestCode: EPA Method 8260B: Volatiles Short List | | | | | | | | |
|----------------------------------|---------------------------------|---|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: S1, 0"-6" | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442046 | Units: mg/Kg | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.025 | 0.9814 | 0 | 116 | 71.1 | 115 | | | S |
| Toluene | 1.0 | 0.049 | 0.9814 | 0 | 106 | 79.6 | 132 | | | |
| Ethylbenzene | 1.1 | 0.049 | 0.9814 | 0 | 107 | 83.8 | 134 | | | |
| Xylenes, Total | 3.3 | 0.098 | 2.944 | 0 | 113 | 82.4 | 132 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.52 | | 0.4907 | | 107 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.44 | | 0.4907 | | 89.4 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.55 | | 0.4907 | | 111 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.48 | | 0.4907 | | 98.0 | 70 | 130 | | | |

Qualifiers:

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

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

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

WO#: 2007408

16-Jul-20

Client: Pima Environmental Services LLC**Project:** Emerald PWU 20 1H

| Sample ID: 2007408-001amsd | | SampType: MSD4 | | TestCode: EPA Method 8260B: Volatiles Short List | | | | | | |
|-----------------------------------|--------|---------------------------------|-----------|---|------|---------------------|-----------|-------|----------|------|
| Client ID: S1, 0"-6" | | Batch ID: 53614 | | RunNo: 70265 | | | | | | |
| Prep Date: 7/9/2020 | | Analysis Date: 7/11/2020 | | SeqNo: 2442047 | | Units: mg/Kg | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.024 | 0.9533 | 0 | 118 | 71.1 | 115 | 0.906 | 20 | S |
| Toluene | 1.0 | 0.048 | 0.9533 | 0 | 106 | 79.6 | 132 | 3.28 | 20 | |
| Ethylbenzene | 1.1 | 0.048 | 0.9533 | 0 | 111 | 83.8 | 134 | 0.748 | 20 | |
| Xylenes, Total | 3.4 | 0.095 | 2.860 | 0 | 117 | 82.4 | 132 | 0.974 | 20 | |
| Surr: 1,2-Dichloroethane-d4 | 0.50 | | 0.4766 | | 106 | 70 | 130 | 0 | 0 | |
| Surr: 4-Bromofluorobenzene | 0.48 | | 0.4766 | | 101 | 70 | 130 | 0 | 0 | |
| Surr: Dibromofluoromethane | 0.55 | | 0.4766 | | 115 | 70 | 130 | 0 | 0 | |
| Surr: Toluene-d8 | 0.47 | | 0.4766 | | 98.8 | 70 | 130 | 0 | 0 | |

Qualifiers:

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

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

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

WO#: 2007408

16-Jul-20

Client: Pima Environmental Services LLC**Project:** Emerald PWU 20 1H

| Sample ID: mb-53614 | SampType: MBLK | TestCode: EPA Method 8015D Mod: Gasoline Range | | | | | | | | |
|-------------------------------|---------------------------------|---|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: PBS | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442071 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 450 | | 500.0 | | 89.8 | 70 | 130 | | | |

| Sample ID: lcs-53614 | SampType: LCS | TestCode: EPA Method 8015D Mod: Gasoline Range | | | | | | | | |
|-------------------------------|---------------------------------|---|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: LCSS | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442072 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 19 | 5.0 | 25.00 | 0 | 75.9 | 70 | 130 | | | |
| Surr: BFB | 480 | | 500.0 | | 96.2 | 70 | 130 | | | |

| Sample ID: 2007408-002ams | SampType: MS | TestCode: EPA Method 8015D Mod: Gasoline Range | | | | | | | | |
|----------------------------------|---------------------------------|---|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: S1, 1' | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/11/2020 | SeqNo: 2442076 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 21 | 4.9 | 24.73 | 0 | 84.3 | 70 | 130 | | | |
| Surr: BFB | 480 | | 494.6 | | 97.1 | 70 | 130 | | | |

| Sample ID: 2007408-002amsd | SampType: MSD | TestCode: EPA Method 8015D Mod: Gasoline Range | | | | | | | | |
|-----------------------------------|---------------------------------|---|-----------|-------------|------|----------|-----------|------|----------|------|
| Client ID: S1, 1' | Batch ID: 53614 | RunNo: 70265 | | | | | | | | |
| Prep Date: 7/9/2020 | Analysis Date: 7/12/2020 | SeqNo: 2442077 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 21 | 4.8 | 23.92 | 0 | 86.0 | 70 | 130 | 1.38 | 20 | |
| Surr: BFB | 470 | | 478.5 | | 97.3 | 70 | 130 | 0 | 0 | |

Qualifiers:

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

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



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

Sample Log-In Check List

Client Name: Pima Environmental Services LLC

Work Order Number: 2007408

RcptNo: 1

Received By: Juan Rojas

7/9/2020 9:18:00 AM

[Signature]

Completed By: Juan Rojas

7/9/2020 10:12:55 AM

[Signature]

Reviewed By:

em 7/9/20

Chain of Custody

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

Log In

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

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted? ☐

Checked by: *JE 7/9/20*

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1 | 0.7 | Good | | | | |



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

November 25, 2020

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: EMERALD 20 PWV #1H

Enclosed are the results of analyses for samples received by the laboratory on 11/23/20 8:05.

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 "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For 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: | 11/23/2020 | Sampling Date: | 11/19/2020 |
| Reported: | 11/25/2020 | Sampling Type: | Soil |
| Project Name: | EMERALD 20 PWV #1H | Sampling Condition: | Cool & Intact |
| Project Number: | NONE GIVEN | Sample Received By: | Tamara Oldaker |
| Project Location: | DEVON - EDDY CO NM | | |

Sample ID: S - 15 - 1' (H003091-01)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 124 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 560 | 16.0 | 11/23/2020 | ND | 400 | 100 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 1350 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 272 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 88.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 110 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 15 - 2' (H003091-02)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 688 | 16.0 | 11/23/2020 | ND | 400 | 100 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 204 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 53.2 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 94.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 102 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 15 - 3' (H003091-03)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 464 | 16.0 | 11/23/2020 | ND | 400 | 100 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 50.8 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 94.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.1 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 16 - 1' (H003091-04)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 320 | 16.0 | 11/23/2020 | ND | 400 | 100 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 13.2 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.9 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 16 - 2' (H003091-05)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | |
| Total BTX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 272 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 101 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.8 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 16 - 3' (H003091-06)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 176 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 70.1 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 15.8 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 94.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.8 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 17 - 1' (H003091-07)

| 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 | 11/23/2020 | ND | 1.78 | 88.9 | 2.00 | 11.6 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.70 | 84.9 | 2.00 | 11.6 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.74 | 87.1 | 2.00 | 11.3 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.05 | 84.1 | 6.00 | 10.6 | | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 48.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.2 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 17 - 2' (H003091-08)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 32.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 108 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 17 - 3' (H003091-09)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 32.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.0 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 18 - 1' (H003091-10)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 16.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 100 % 44.3-144

Surrogate: 1-Chlorooctadecane 92.5 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 18 - 2' (H003091-11)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 95.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 90.2 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 18 - 3' (H003091-12)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.1 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 19 - 1' (H003091-13)

| BTEx 8021B | | mg/kg | | Analyzed By: MS | | | | S-04 | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | GC-NC | |
| Total Xylenes* | 1.09 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEX | 1.11 | 0.300 | 11/23/2020 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 246 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 368 | 16.0 | 11/23/2020 | ND | 432 | 108 | 400 | 0.00 | | |

| 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* | 121 | 10.0 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 4640 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 814 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 138 % 44.3-144

Surrogate: 1-Chlorooctadecane 214 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 19 - 2' (H003091-14)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | GC-NC | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 114 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 512 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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* | 12.0 | 10.0 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 904 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 151 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 111 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 19 - 3' (H003091-15)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 544 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 418 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 80.9 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 107 % 44.3-144

Surrogate: 1-Chlorooctadecane 118 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 20 - 1' (H003091-16)

| BTX 8021B | | mg/kg | | Analyzed By: MS | | | | S-04 | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | GC-NC | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 175 % 73.3-129

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 96.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 400 | 0.00 | | |

| 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* | 35.6 | 10.0 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 5850 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 1120 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 113 % 44.3-144

Surrogate: 1-Chlorooctadecane 270 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 20 - 2' (H003091-17)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 128 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 83.9 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 18.2 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 102 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 20 - 3' (H003091-18)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEX | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 176 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 290 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 55.9 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 106 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 21 - 1' (H003091-19)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 123 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 35.6 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 90.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.3 % 42.2-156

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Mike Snyder For 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: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 22 - 1' (H003091-20)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1620 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/23/2020 | ND | 240 | 120 | 200 | 1.58 | |
| DRO >C10-C28* | 44.4 | 10.0 | 11/23/2020 | ND | 243 | 122 | 200 | 0.638 | |
| EXT DRO >C28-C36 | 10.6 | 10.0 | 11/23/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 107 % 44.3-144

Surrogate: 1-Chlorooctadecane 105 % 42.2-156

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Analytical Results For:

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

Received: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 22 - 2' (H003091-21)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 48.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/24/2020 | ND | 246 | 123 | 200 | 8.82 | |
| DRO >C10-C28* | 22.0 | 10.0 | 11/24/2020 | ND | 249 | 125 | 200 | 12.3 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/24/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.0 % 42.2-156

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/23/2020
Reported: 11/25/2020
Project Name: EMERALD 20 PWV #1H
Project Number: NONE GIVEN
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/19/2020
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: S - 22 - 3' (H003091-22)

| 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 | 11/23/2020 | ND | 1.98 | 99.1 | 2.00 | 2.74 | | |
| Toluene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.89 | 94.4 | 2.00 | 3.24 | | |
| Ethylbenzene* | <0.050 | 0.050 | 11/23/2020 | ND | 1.96 | 98.2 | 2.00 | 2.42 | | |
| Total Xylenes* | <0.150 | 0.150 | 11/23/2020 | ND | 5.64 | 94.0 | 6.00 | 2.13 | | |
| Total BTEx | <0.300 | 0.300 | 11/23/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 11/23/2020 | ND | 432 | 108 | 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 | 11/24/2020 | ND | 246 | 123 | 200 | 8.82 | |
| DRO >C10-C28* | 11.1 | 10.0 | 11/24/2020 | ND | 249 | 125 | 200 | 12.3 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 11/24/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 96.2 % 42.2-156

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

| | |
|-------|--|
| S-04 | The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect. |
| GC-NC | 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND. |
| 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 |

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A handwritten signature in black ink, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



ANALYSIS REQUEST

+ 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

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



ANALYSIS REQUEST

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

REMARKS:

| | | | | |
|---------------------------|----------|-------------------------------------|-----------------|--------------------|
| Turnaround Time: | Standard | <input checked="" type="checkbox"/> | Bacteria (only) | Sample Condition |
| Thermometer ID #027 | RUSH | <input type="checkbox"/> | Cool | Observed Temp. °C |
| Correction Factor +0.3 °C | 70. | <input type="checkbox"/> | Intact | |
| | 11/13/20 | <input type="checkbox"/> | Yes | Yes |
| | | <input type="checkbox"/> | No | No |
| | | | | Corrected Temp. °C |

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



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

December 03, 2020

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: EMERALD 20 PWU #1H

Enclosed are the results of analyses for samples received by the laboratory on 11/30/20 12:30.

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, flowing style.

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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 1 W - BOTTOM (H003128-01)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 64.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 120 % 44.3-144

Surrogate: 1-Chlorooctadecane 125 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 1 W - SIDE (H003128-02)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 118 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 5 S - BOTTOM (H003128-03)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTEX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 96.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 105 % 44.3-144

Surrogate: 1-Chlorooctadecane 108 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 5 S - SIDE (H003128-04)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 113 % 44.3-144

Surrogate: 1-Chlorooctadecane 118 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 6 S - SIDE (H003128-05)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 112 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 118 % 44.3-144

Surrogate: 1-Chlorooctadecane 123 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 6 S - BOTTOM (H003128-06)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 112 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 107 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 13 E - SIDE (H003128-07)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 119 % 44.3-144

Surrogate: 1-Chlorooctadecane 124 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 13 E - BOTTOM (H003128-08)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 107 % 44.3-144

Surrogate: 1-Chlorooctadecane 113 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 12 N - BOTTOM (H003128-09)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 96.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 115 % 44.3-144

Surrogate: 1-Chlorooctadecane 122 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 12 N - SIDE (H003128-10)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 114 % 44.3-144

Surrogate: 1-Chlorooctadecane 120 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 11 W - BOTTOM (H003128-11)

| 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 | 12/01/2020 | ND | 1.96 | 98.2 | 2.00 | 4.41 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.89 | 94.3 | 2.00 | 4.60 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 1.97 | 98.7 | 2.00 | 4.30 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.64 | 94.0 | 6.00 | 4.14 | | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/01/2020 | 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 | 12/01/2020 | ND | 208 | 104 | 200 | 5.58 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/01/2020 | ND | 180 | 89.9 | 200 | 12.1 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/01/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 109 % 44.3-144

Surrogate: 1-Chlorooctadecane 116 % 42.2-156

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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 11 W - SIDE (H003128-12)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | | |
| Total BTEX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | 20.9 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | 23.1 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.2 % 42.2-156

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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 14 S - SIDE (H003128-13)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 95.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 14 S - BOTTOM (H003128-14)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 86.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 84.9 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 23 - 1' (H003128-15)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 112 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 97.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.1 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 23 - 2' (H003128-16)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTEX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 112 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 86.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.1 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 23 - 3' (H003128-17)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 112 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 87.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.2 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 24 - 1' (H003128-18)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 800 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 92.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.9 % 42.2-156

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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: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 24 - 2' (H003128-19)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 112 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 89.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.2 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 24 - 3' (H003128-20)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 96.0 | 16.0 | 12/01/2020 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 94.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.9 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 25 - 1' (H003128-21)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTX | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 272 | 16.0 | 12/01/2020 | ND | 432 | 108 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 90.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 87.1 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 25 - 2' (H003128-22)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | |

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

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 80.0 | 16.0 | 12/01/2020 | ND | 432 | 108 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 87.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.6 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 11/30/2020
Reported: 12/03/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 11/25/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 25 - 3' (H003128-23)

| 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 | 12/01/2020 | ND | 2.10 | 105 | 2.00 | 3.68 | | |
| Toluene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.02 | 101 | 2.00 | 3.56 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/01/2020 | ND | 2.09 | 104 | 2.00 | 3.60 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/01/2020 | ND | 5.96 | 99.4 | 6.00 | 3.43 | | |
| Total BTEx | <0.300 | 0.300 | 12/01/2020 | ND | | | | | | |

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

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AC | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 112 | 16.0 | 12/01/2020 | ND | 432 | 108 | 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 | 12/02/2020 | ND | 211 | 105 | 200 | 4.03 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/02/2020 | ND | 211 | 106 | 200 | 1.88 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/02/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 94.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 91.4 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

| | |
|-----|--|
| 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 |

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|---|--|--|--|
| Company Name: PMA Environmental Project Manager: Chris Jones Address: 1601 N. Turner St. 500 City: Hobbs State: NM Zip: 88240 Phone #: 575-964-4440 Fax #: Project #: 3 Project Owner: Project Name: Emerald 20 PMA 1H Project Location: Edley Co NM Sampler Name: Robert Carper | | | | BILL TO P.O. #: 20715188 Company: Deval Attn: Tom Bynum Address: City: State: Zip: Phone #: Fax #: | | | | ANALYSIS REQUEST | | | |
| FOR LAB USE ONLY | | MATRIX (G) RAB OR (C) OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE : ICE / COOL OTHER : | | PRESERV. DATE TIME | | SAMPLING DATE TIME | | TPH BTEX Chloride | | | |
| Lab I.D. H003128 11-25-20 | | Sample I.D. S-1W-Bottom S-1W-Side S-5S-Bottom S-5S-Side S-6S-Side S-6S-Bottom S-13E-Side S-13E-Bottom S-12N-Bottom S-12N-Side | | 4 1 1 1 1 1 1 1 1 1 1 1 | | 11-25-20 0900 0905 0910 0915 0920 0925 0930 0935 0940 0945 | | > > > > > > > > > > > | | | |
| 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: [Signature] Date: 11-30-20 Time: 12:30 Received By: [Signature] Date: 11-30-20 Time: 12:30 Received By: [Signature] | | | | Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address: REMARKS: | | | | | | | |
| Delivered By: (Circle One) Delivered By: UPS - Bus - Other: | | | | Observed Temp. °C 18.7 Corrected Temp. °C Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Checked BY: (Initials) TJS | | | | Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer ID #113 <input type="checkbox"/> Bacteria (only) <input type="checkbox"/> Sample Condition <input type="checkbox"/> Correction Factor None <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C <input type="checkbox"/> Corrected Temp. °C | | | |

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



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | |
|---|--------------------|---------------------------------|--------------|--|-------|
| Company Name: FINA Environmental | | BILL TO | | ANALYSIS REQUEST | |
| Project Manager: Chris Jones | | P.O. # 07/5188 | | | |
| Address: 1601 N. Turner St. 500 | | Company: Devon | | | |
| City: Hobbs | | Attn: Tou Bynum | | | |
| Phone #: 575-964-7740 | | Address: | | | |
| Fax #: 575-964-7740 | | City: | | | |
| Project #: 3 | | State: | | | |
| Project Owner: | | Zip: | | | |
| Project Name: Emerald 20 Area 14 | | Phone #: | | | |
| Project Location: Eddy Co NM | | Fax #: | | | |
| Sampler Name: Robert Carter | | | | | |
| FOR LAB USE ONLY | | | | | |
| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | | |
| H003128 | 11 S-11 W - Bottom | 9 | GROUNDWATER | DATE | TIME |
| | 12 S-11 W - Side | | WASTEWATER | 11:25:20 | 10:00 |
| | 13 S-14 S - Side | | SOIL | | 10:05 |
| | 14 S-14 S - Bottom | | OIL | | 10:10 |
| | 15 S-23 - 1' | | SLUDGE | | 10:15 |
| | 16 S-23 - 2' | | OTHER : | | 10:20 |
| | 17 S-23 - 3' | | ACID/BASE: | | 10:25 |
| | 18 S-24 - 1' | | ICE / COOL | | 10:30 |
| | 19 S-24 - 2' | | OTHER : | | 10:35 |
| | 20 S-24 - 3' | | | | 10:40 |
| | | | | 10:45 | |
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| Relinquished By: [Signature] | | Received By: [Signature] | | Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: | |
| Date: 11-3-20 | | Time: 12:30 | | All Results are emailed. Please provide Email address: | |
| Relinquished By: [Signature] | | Received By: [Signature] | | REMARKS: | |
| Date: 11-3-20 | | Time: 12:30 | | | |
| Delivered By: (Circle One) | | Observed Temp. °C 18.7 | | Turnaround Time: Standard | |
| Sampler - UPS - Bus - Other: | | Corrected Temp. °C | | Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| | | | | Bacteria (only) Sample Condition | |
| | | | | Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| | | | | Observed Temp. °C | |
| | | | | Corrected Temp. °C | |

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

| | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Company Name: <i>Fine Environmental</i> Project Manager: <i>Chris Jones</i> Address: <i>1601 N Turner St. 500</i> City: <i>Alhambra</i> State: <i>NY</i> zip: <i>88240</i> Phone #: <i>515-964-7740</i> Fax #: _____ Project #: <i>3</i> Project Owner: _____ Project Name: <i>Eucalyd 20 PML 14</i> Project Location: <i>Eddy Co NY</i> Sampler Name: <i>Robert Carper</i> | | | | P.O. #: <i>2075188</i> Company: <i>Neuron</i> Attn: <i>Tara Byham</i> Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ | | | | BILL TO | | | | ANALYSIS REQUEST | | | | | | | | | |
| FOR LAB USE ONLY Lab I.D. <i>H003128</i> Sample I.D. | | (G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL <input checked="" type="checkbox"/> OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : | | MATRIX PRESERV. SAMPLING | | DATE | | TIME | | TPH | | | | | | | | | | | |
| | | | | | | <i>8-25-1'</i> <i>8-25-2'</i> <i>8-25-3'</i> | | <i>11:52</i> <i>11:05</i> <i>11:16</i> <i>11:45</i> <i>11:25</i> <i>11:30</i> <i>11:40</i> <i>11:46</i> | | <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> | | <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> <i>✓</i> | | | | | | | | | |
| PL-ENR NOTE: Liability and Damages. Cardinal's liability and clients' 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: <i>[Signature]</i> Date: <i>11/8/20</i> Time: <i>12:30</i> | | | | Received By: <i>[Signature]</i> Date: <i>11/8/20</i> Time: <i>12:30</i> | | | | Turnaround Time: _____ Thermometer ID #113 <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Correction Factor None <input type="checkbox"/> Bacteria (only) <input type="checkbox"/> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____ | | | | | | | | | | | | | |
| Delivered By: (Circle One) Sampler - UPS - Bus - Other: | | | | Observed Temp. °C <i>12.7</i> Corrected Temp. °C _____ | | | | Sample Condition Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | | | | CHECKED BY: <i>[Signature]</i> (Initials) | | | | | | | | | |
| REMARKS: Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ | | | | | | | | | | | | | | | | | | | | | |



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

December 14, 2020

CHRIS JONES

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: EMERALD 20 PWU #1H

Enclosed are the results of analyses for samples received by the laboratory on 12/10/20 16:55.

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".

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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 6 S - BOTTOM (H003237-01)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEX | <0.300 | 0.300 | 12/11/2020 | 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 | 96.0 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/11/2020 | ND | 244 | 122 | 200 | 1.35 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/11/2020 | ND | 235 | 118 | 200 | 1.05 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/11/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 87.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.5 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 6 S - SIDE (H003237-02)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 80.0 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/11/2020 | ND | 244 | 122 | 200 | 1.35 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/11/2020 | ND | 235 | 118 | 200 | 1.05 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/11/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 84.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.6 % 42.2-156

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

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

Received: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 9 E - SIDE (H003237-03)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 80.0 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/11/2020 | ND | 244 | 122 | 200 | 1.35 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/11/2020 | ND | 235 | 118 | 200 | 1.05 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/11/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 87.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 82.2 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 9 E - BOTTOM (H003237-04)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 85.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.9 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 22 N - SIDE (H003237-05)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 91.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.6 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 22 N - BOTTOM (H003237-06)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 112 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 84.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.3 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 24 N - SIDE (H003237-07)

| 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 | 12/11/2020 | ND | 1.93 | 96.6 | 2.00 | 8.05 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.85 | 92.4 | 2.00 | 7.75 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 95.8 | 2.00 | 8.56 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.47 | 91.1 | 6.00 | 8.59 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 80.0 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 88.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 83.4 % 42.2-156

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Analytical Results For:

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

Received: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 24 N - BOTTOM (H003237-08)

| 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 | 12/11/2020 | ND | 2.02 | 101 | 2.00 | 5.96 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 96.0 | 2.00 | 5.88 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 2.01 | 101 | 2.00 | 5.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.76 | 96.0 | 6.00 | 5.29 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 64.0 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 80.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 75.7 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 25 E - SIDE (H003237-09)

| 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 | 12/11/2020 | ND | 2.02 | 101 | 2.00 | 5.96 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 96.0 | 2.00 | 5.88 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 2.01 | 101 | 2.00 | 5.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.76 | 96.0 | 6.00 | 5.29 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 85.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 79.7 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 25 E - BOTTOM (H003237-10)

| 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 | 12/11/2020 | ND | 2.02 | 101 | 2.00 | 5.96 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 96.0 | 2.00 | 5.88 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 2.01 | 101 | 2.00 | 5.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.76 | 96.0 | 6.00 | 5.29 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 92.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.6 % 42.2-156

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 26 S - SIDE (H003237-11)

| 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 | 12/11/2020 | ND | 2.02 | 101 | 2.00 | 5.96 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 96.0 | 2.00 | 5.88 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 2.01 | 101 | 2.00 | 5.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.76 | 96.0 | 6.00 | 5.29 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 84.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.8 % 42.2-156

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*=Accredited Analyte

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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: 12/10/2020
Reported: 12/14/2020
Project Name: EMERALD 20 PWU #1H
Project Number: 3
Project Location: DEVON - EDDY CO NM

Sampling Date: 12/10/2020
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Tamara Oldaker

Sample ID: S - 26 S - BOTTOM (H003237-12)

| 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 | 12/11/2020 | ND | 2.02 | 101 | 2.00 | 5.96 | | |
| Toluene* | <0.050 | 0.050 | 12/11/2020 | ND | 1.92 | 96.0 | 2.00 | 5.88 | | |
| Ethylbenzene* | <0.050 | 0.050 | 12/11/2020 | ND | 2.01 | 101 | 2.00 | 5.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 12/11/2020 | ND | 5.76 | 96.0 | 6.00 | 5.29 | | |
| Total BTEx | <0.300 | 0.300 | 12/11/2020 | 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 | 64.0 | 16.0 | 12/14/2020 | ND | 432 | 108 | 400 | 3.77 | | |

| 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 | 12/12/2020 | ND | 248 | 124 | 200 | 0.114 | |
| DRO >C10-C28* | <10.0 | 10.0 | 12/12/2020 | ND | 241 | 120 | 200 | 1.43 | |
| EXT DRO >C28-C36 | <10.0 | 10.0 | 12/12/2020 | ND | | | | | |

Surrogate: 1-Chlorooctane 86.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 80.4 % 42.2-156

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

| | |
|-------|---|
| QR-02 | The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data. |
| QM-07 | The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery. |
| 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 |

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

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: <u>Pima Environmental</u> | | BILL TO | | P.O. #: <u>20715188</u> | | ANALYSIS REQUEST | |
| Project Manager: <u>Chris Jones</u> | | Address: <u>1661 W. Turner</u> | | Company: <u>Devon</u> | | | |
| City: <u>Hobbs</u> | | State: <u>NM</u> Zip: <u>88200</u> | | Attn: <u>Mrs Mathews</u> | | | |
| Phone #: <u>964-7740</u> | | Fax #: <u></u> | | Address: <u></u> | | | |
| Project #: <u>3</u> | | Project Owner: <u>Devon</u> | | City: <u></u> | | | |
| Project Name: <u>Emerald 30 PWD 1H</u> | | State: <u></u> Zip: <u></u> | | State: <u></u> Zip: <u></u> | | | |
| Project Location: <u>Cedely Co NM</u> | | Phone #: <u></u> | | Phone #: <u></u> | | | |
| Sampler Name: <u>Robert Carper</u> | | Fax #: <u></u> | | PRESERV. | | SAMPLING | |
| FOR LAB USE ONLY | | | | | | | |
| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX | DATE | TIME | |
| <u>H003237</u> | <u>S-6S-Bottom</u> | <u>G</u> | <u>1</u> | GROUNDWATER | <u>1/10/20</u> | <u>9:00</u> | <u>TPH</u> |
| <u>1</u> | <u>S-6S-Side</u> | <u></u> | <u></u> | WASTEWATER | <u>9:10</u> | <u>9:10</u> | <u>STEX</u> |
| <u>2</u> | <u>S-9E-Side</u> | <u></u> | <u></u> | SOIL | <u>9:20</u> | <u>9:20</u> | <u>Chloride</u> |
| <u>3</u> | <u>S-9E-Bottom</u> | <u></u> | <u></u> | OIL | <u>9:30</u> | <u>9:30</u> | |
| <u>4</u> | <u>S-22N-Side</u> | <u></u> | <u></u> | SLUDGE | <u>9:40</u> | <u>9:40</u> | |
| <u>5</u> | <u>S-22N-Bottom</u> | <u></u> | <u></u> | OTHER: | <u>9:52</u> | <u>9:52</u> | |
| <u>6</u> | <u>S-24N-Side</u> | <u></u> | <u></u> | ACID/BASE: | <u>10:00</u> | <u>10:00</u> | |
| <u>7</u> | <u>S-24N-Bottom</u> | <u></u> | <u></u> | ICE / COOL | <u>10:16</u> | <u>10:16</u> | |
| <u>8</u> | <u>S-25E-Side</u> | <u></u> | <u></u> | OTHER: | <u>10:20</u> | <u>10:20</u> | |
| <u>9</u> | <u>S-25E-Bottom</u> | <u></u> | <u></u> | | <u>10:30</u> | <u>10:30</u> | |
| <u>10</u> | <u>S-25E-Bottom</u> | <u></u> | <u></u> | | | | |

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Relinquished By: Therese Date: 12-10-20 Received By: Monica Delacruz Date: 1/15/20

Time: 4:30 Received By: Monica Delacruz Date: 1/15/20

Time: 14:55 Received By: Monica Delacruz Date: 1/15/20

Delivered By: (Circle One) Observed Temp. °C 13.7 Sample Condition Cool Intact ☒ Yes ☐ No ☐ No

Sampler - UPS - Bus - Other: Corrected Temp. °C TP CHECKED BY: (Initials) TP

Turnaround Time: Standard ☒ Rush ☐ Bacteria (only) ☐ Sample Condition Cool Intact ☐ Observed Temp. °C ☐ Yes ☐ No ☐ No ☐ No ☐ No

Thermometer ID #113 Correction Factor None

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

REMARKS: All Results are emailed. Please provide Email address:

FORN-000 R-3.1 09/04/20

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



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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 14823

CONDITIONS OF APPROVAL

| | | | |
|--|-----------|----------------|--------------|
| Operator: | OGRID: | Action Number: | Action Type: |
| PIMA ENVIRONMENTAL SERVICES, L Suite 500 Hobbs, NM88240 | 329999 | 14823 | C-141 |
| 1601 N. Turner | | | |
| OCD Reviewer | Condition | | |
| ceads | None | | |