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

June 16th, 2021

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

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

Re: Remediation, and Closure Report
Bootes 15 Federal Com #001H
API No. 30-015-40407
GPS: Latitude 32.6676 Longitude -103.8497
UL "A", Sec. 15, T19S, R31E
Eddy County, NM
NMOCD Ref. No. NRM2014569455

Dear Mr. Bratcher and Mr. Amos,

Pima Environmental Services, LLC (Pima) has been contracted by Devon Energy Production Company (Devon) to perform remediation activities and write a closure report for a crude oil/produced water mixed release that occurred at the Bootes Federal Com #001H (Bootes). The initial C-141 was submitted on May 22nd, 2020 (Appendix C). This incident was assigned Incident ID NRM2014569455, by the New Mexico Oil Conservation Division (NMOCD). A remediation plan was submitted for this incident on December 3rd, 2020 and approved by the NMOCD on March 1st, 2021 (Appendix F).

Site Characterization

The Bootes is located approximately thirteen (13) miles southeast of Loco Hills, NM. This spill site is in Unit A, Section 15, Township 19S, Range 31E, Latitude 32.6676, Longitude -103.8497, 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-Piedmont alluvial deposits (Holocene to lower Pleistocene). Includes deposits of higher gradient tributaries bordering major stream valleys, alluvial veneers of the piedmont slope, and alluvial fans. May locally include uppermost Pliocene deposits. The soil in this area is made up of partially of Kimbrough-Stegall loams, 0 to 3 percent slopes; and Simona and Wink fine sandy loams, 0 to 3 percent slopes, eroded according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well-drained. There is a low potential for karst geology to be present around the Bootes (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 102 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is greater than 100 feet BGS. The closest waterway is a playa located approximately 5.15 miles to the southwest of this location. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29					
Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
102’	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/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 Topographic Map.

Release Information

NRM2014569455: On May 10th, 2020, fluid released from the stuffing box on the well. Some fluid ran off pad. The calculated fluids were approximately 10.79 barrels (bbls) of crude oil and 21.44 bbls of produced water. Approximately 5 bbls of total fluid was recovered via vacuum truck.

Site Assessment and Soil Sampling Results

On May 29th, 2020, a site assessment was performed by another environmental consultant. The lab results of this assessment can be found in the NMOCD-Approved remediation plan (Appendix F).

Remediation Activities

On June 3rd, 2021, Pima mobilized personnel and equipment to the site to begin remediation activities. We excavated the affected areas to the approved depths. The contaminated soil was hauled out to be disposed of at Lea Land Disposal, and clean backfill was brought in for the pad areas. Topsoil was brought in for the off-pad area. After collecting confirmation samples, the excavations were backfilled, packed, and contoured back to their original state.

On June 7th, 2021, after sending out a 48-hour notification, Pima personnel collected confirmation samples according to the guidelines set aside in the approved remediation plan. A confirmation site map can be found in Figure 5. The results of this sampling event can be seen in the following table.

2-2-21 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is 50')								
DEVON ENERGY - BOOTES 15 FED COM #1 H								
Date 6-7-2021		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
CSW 1	2'	ND	ND	ND	ND	ND	ND	ND
CSW 2	2'	ND	ND	ND	ND	ND	ND	32
CSW 3	3'	ND	ND	ND	ND	ND	ND	ND
CSW 4	0-6"	ND	ND	ND	ND	ND	ND	ND
CSW 5	2'	ND	ND	ND	ND	ND	ND	ND
CSW 6	0-6"	ND	ND	ND	ND	ND	ND	ND
CSW 7	2'	ND	ND	ND	ND	ND	ND	ND
CSW 8	2'	ND	ND	ND	ND	ND	ND	ND
CSW 9	2'	ND	ND	ND	ND	ND	ND	ND
CSW 10	2'	ND	ND	ND	ND	ND	ND	ND
CSW 11	2'	ND	ND	ND	ND	ND	ND	ND
CSW 12	4'	ND	ND	ND	ND	ND	ND	ND
CSW 13	4'	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Complete Laboratory Reports are attached in Appendix E.

Closure Request

After careful review, Pima requests that this incident, NRM2014569455, be closed. Devon has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

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

Respectfully,

Tom Bynum

Tom Bynum
Environmental Project Manager
Pima Environmental Services, LLC

Attachments

Figures:
1- Location Map
2- Topo Map
3- Karst Map
4- Site Map
5- Confirmation Site Map

Appendices:
Appendix A – Referenced Water Surveys
Appendix B – Soil Survey and Geological Data
Appendix C – C-141's
Appendix D – Photographic Documentation
Appendix E – Laboratory Reports
Appendix F – NMOCD-Approved Remediation Plan

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Figures:

1 - Location Map

2 - Topo Map

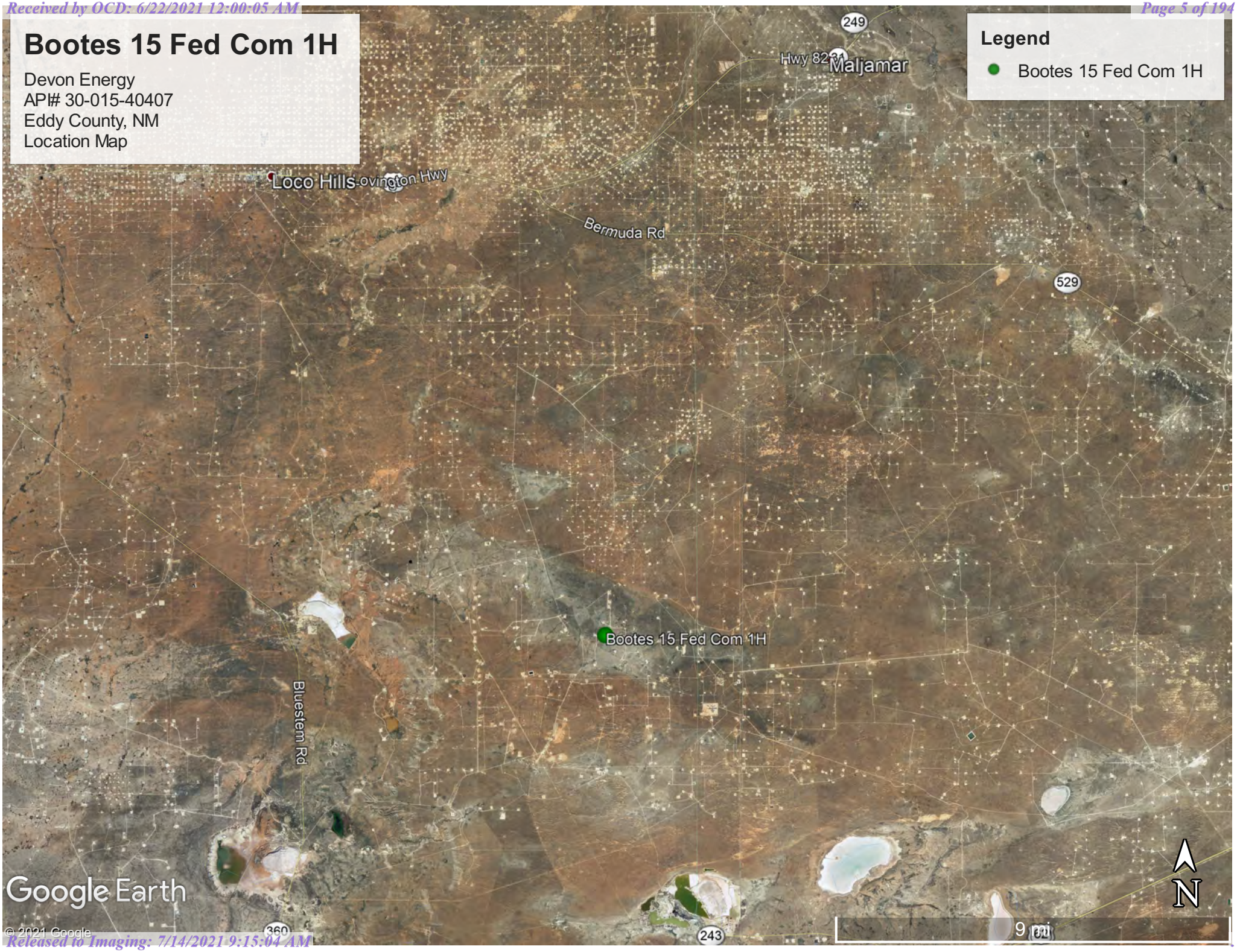
3 - Karst Map

4 - Site Map

5 - Confirmation Site Map

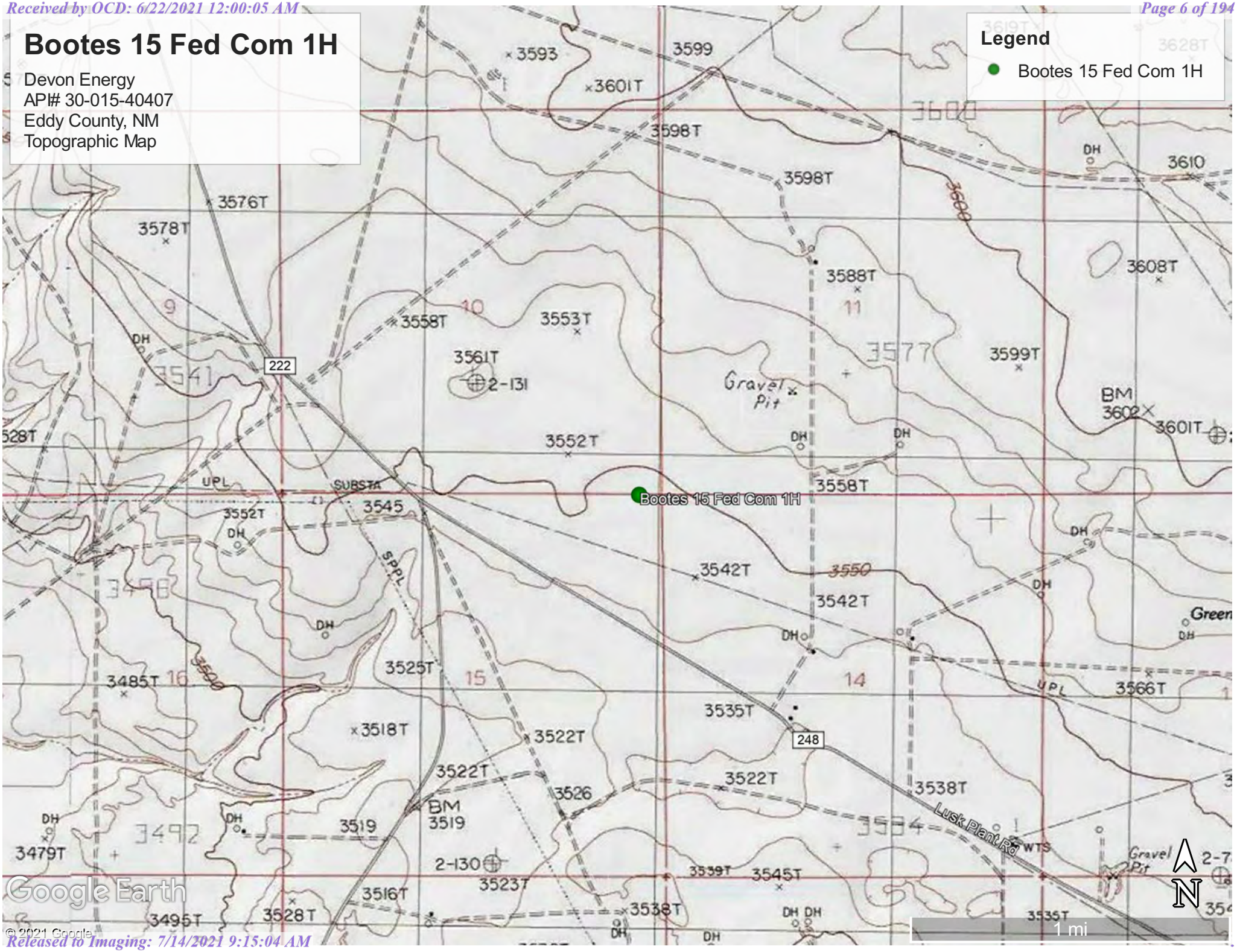
Bootes 15 Fed Com 1H

Devon Energy
API# 30-015-40407
Eddy County, NM
Location Map



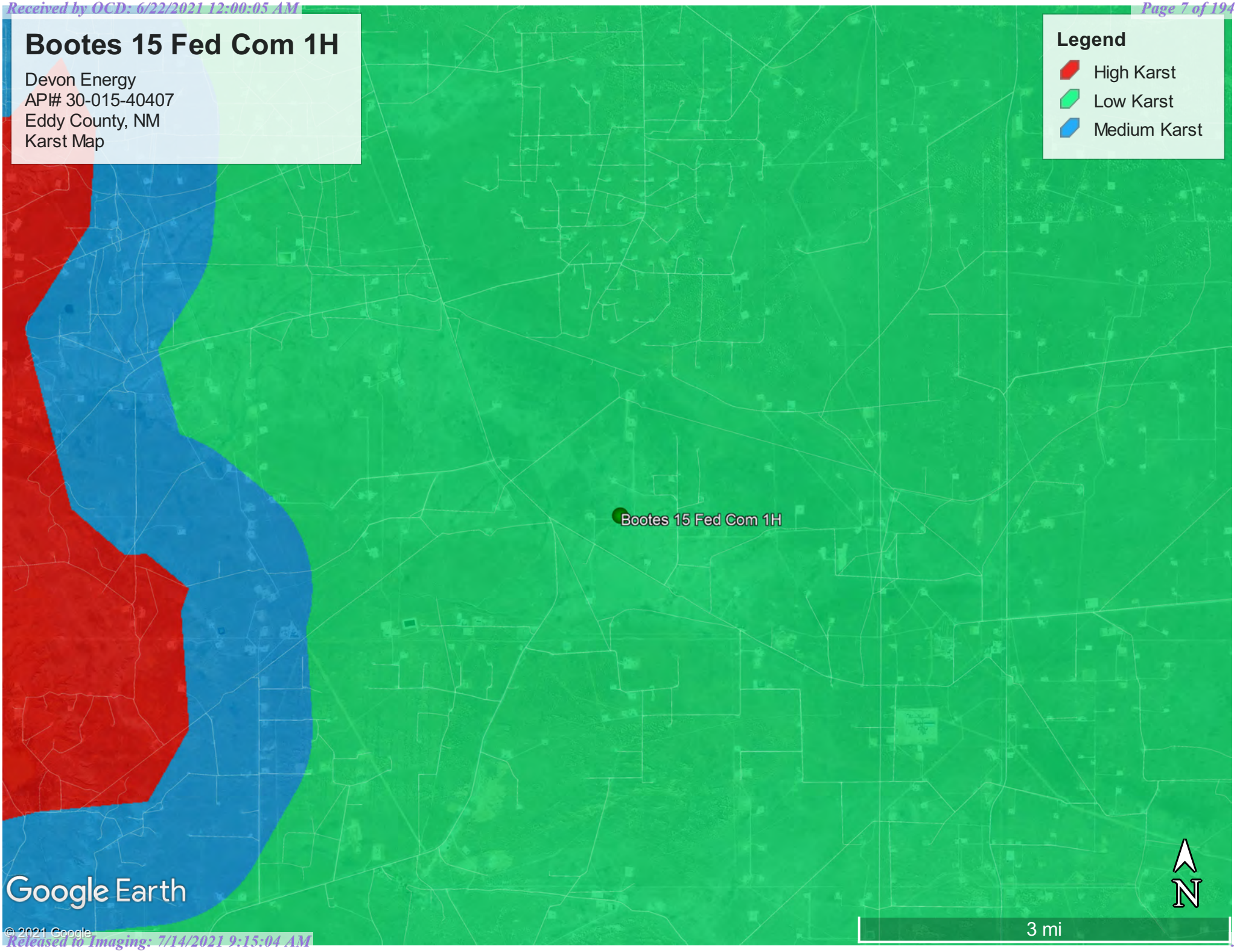
Bootes 15 Fed Com 1H

Devon Energy
API# 30-015-40407
Eddy County, NM
Topographic Map



Bootes 15 Fed Com 1H

Devon Energy
API# 30-015-40407
Eddy County, NM
Karst Map



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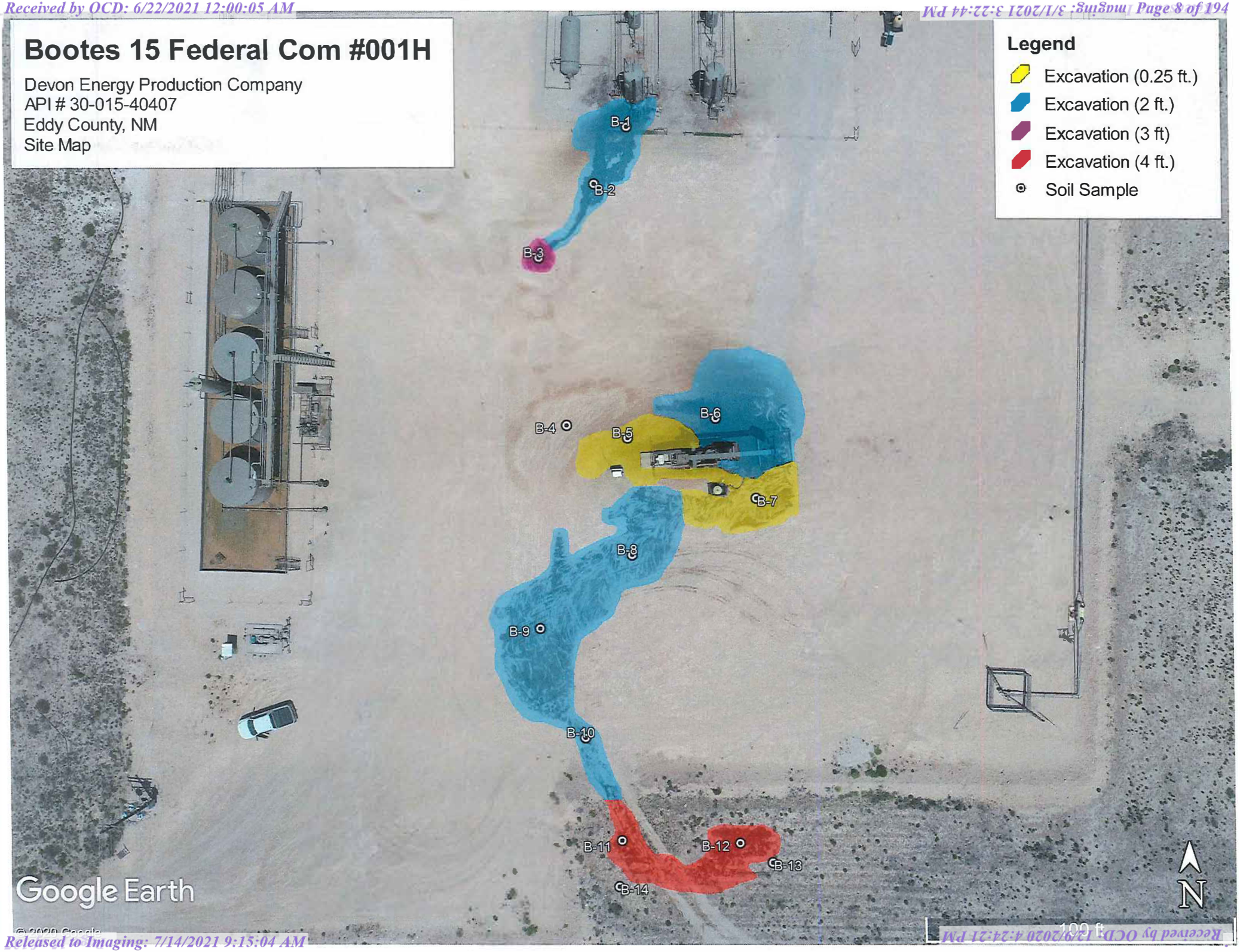
Bootes 15 Federal Com #001H

Devon Energy Production Company
API # 30-015-40407
Eddy County, NM
Site Map



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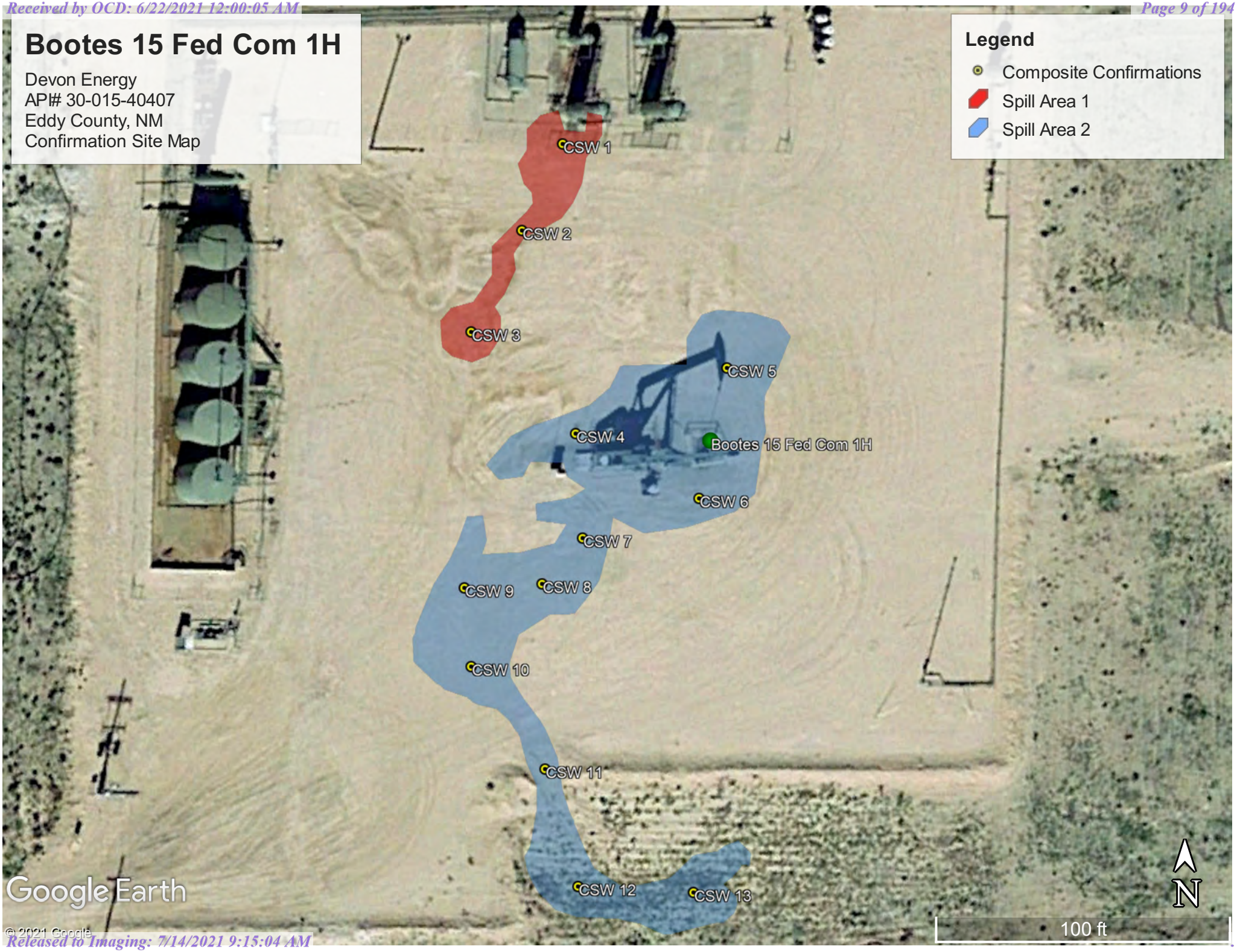
Received by OCD: 12/9/2020 4:24:21 PM

Bootes 15 Fed Com 1H

Devon Energy
API# 30-015-40407
Eddy County, NM
Confirmation Site Map



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Appendix A

Water Surveys:

OSE

USGS

Surface Water Map

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01554 POD1		CP	LE	2	2	1	22	19S	31E	607166	3613354	1762	400		
CP 01554 POD2		CP	LE	2	2	1	22	19S	31E	607165	3613322	1792	400		
CP 00829 POD1		CP	LE		2	4	16	19S	31E	606165	3614009*	1921	120		
CP 00849 POD1		CP	LE	3	1	3	35	18S	31E	608012	3618757*	3769	300		
CP 00563 POD1		CP	LE	1	1	2	19	19S	32E	612118	3613376*	4596	300		
CP 00642 POD1		CP	ED		2	2	25	19S	31E	611025	3611657*	4629	250		
CP 00640 POD1		CP	LE		2	2	19	19S	32E	612621	3613280*	5101	260	102	158
CP 01864 POD1		CP	ED	4	2	1	34	19S	31E	607068	3609824	5222	110		
CP 00725 POD1		CP	ED	1	3	3	28	19S	31E	604906	3610473*	5375	231		
CP 00722 POD1		CP	LE	4	3	3	28	19S	31E	605106	3610273*	5442	200		
CP 00722 POD1	R	CP	LE	4	3	3	28	19S	31E	605106	3610273*	5442	200		
CP 00723 POD1		CP	ED	2	1	1	33	19S	31E	605111	3610071*	5616	139		
CP 00639 POD1		CP	LE		3	1	20	19S	32E	613029	3612880*	5625	350	345	5
CP 01656 POD2		CP	LE	3	4	3	17	19S	32E	613364	3613648	5708	70		
CP 01656 POD1		CP	LE	3	4	3	17	19S	32E	613368	3613646	5713	70		
CP 01656 POD3		CP	LE	3	4	3	17	19S	32E	613374	3613633	5721	30		
CP 00722 POD3		CP	LE	2	4	1	33	19S	31E	605519	3609673*	5794	220	140	80
CP 00641 POD1		CP	ED		4	1	36	19S	31E	610247	3609634*	5884	300	130	170

Average Depth to Water: **179 feet**
Minimum Depth: **102 feet**
Maximum Depth: **345 feet**

Record Count: 18

UTMNAD83 Radius Search (in meters):

Easting (X): 607815.82 **Northing (Y):** 3614993 **Radius:** 6000

***UTM location was derived from PLSS - see Help**

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

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

- Explore the *New* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

site_no list =

- 324159103503801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

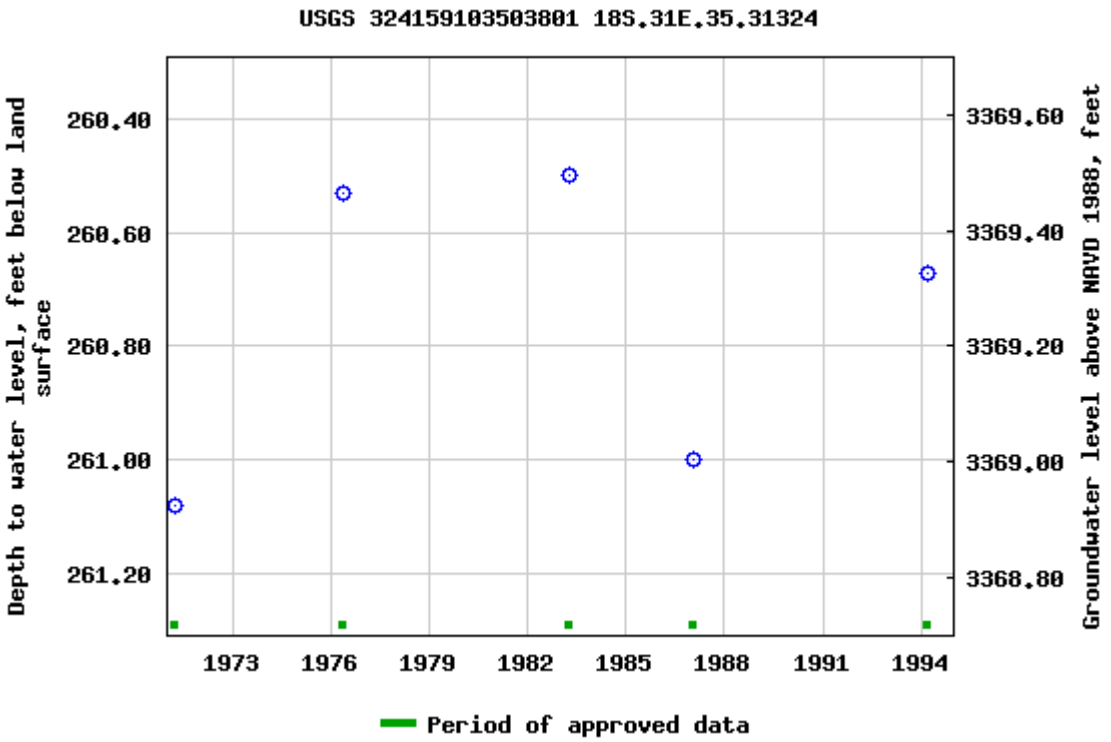
USGS 324159103503801 18S.31E.35.31324

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°42'07.3", Longitude 103°50'50.1" NAD83
Land-surface elevation 3,630 feet above NAVD88
The depth of the well is 300 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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

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

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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-06-15 16:43:34 EDT
0.77 0.64 nadww01

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

- Explore the *New* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

* IMPORTANT: Next Generation Station Page

Search Results -- 1 sites found

site_no list =

- 323810103511401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

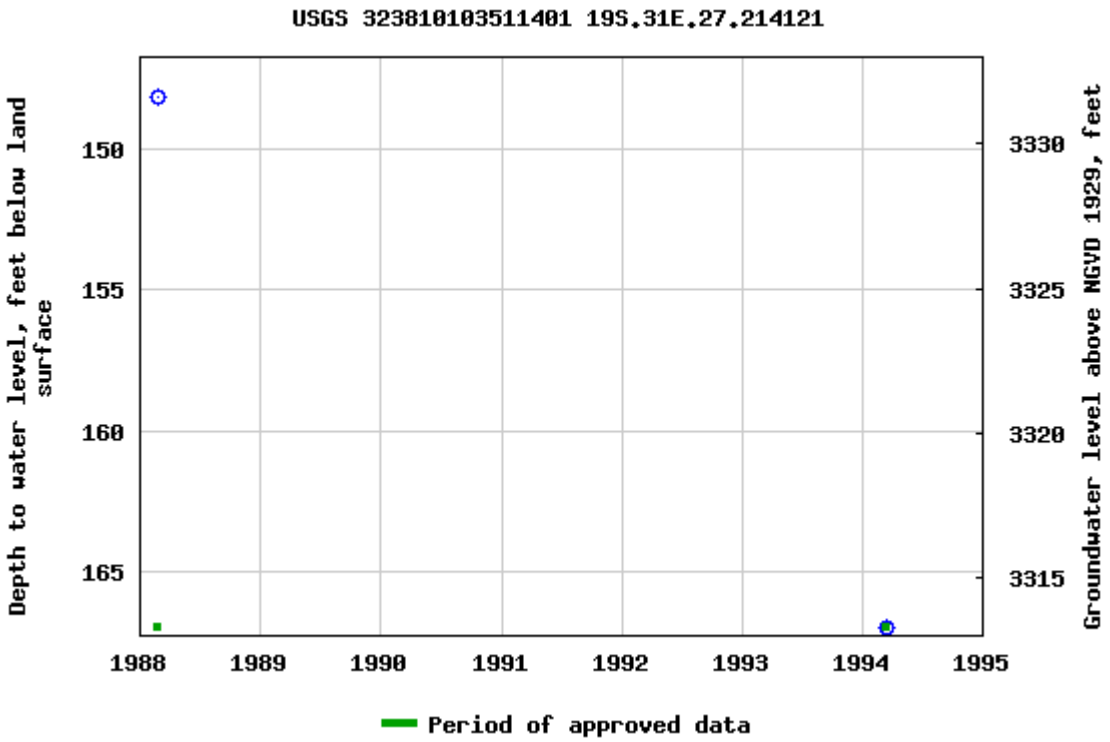
USGS 323810103511401 19S.31E.27.214121

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°38'10", Longitude 103°51'14" NAD27
Land-surface elevation 3,480 feet above NGVD29
The depth of the well is 210.00 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



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

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
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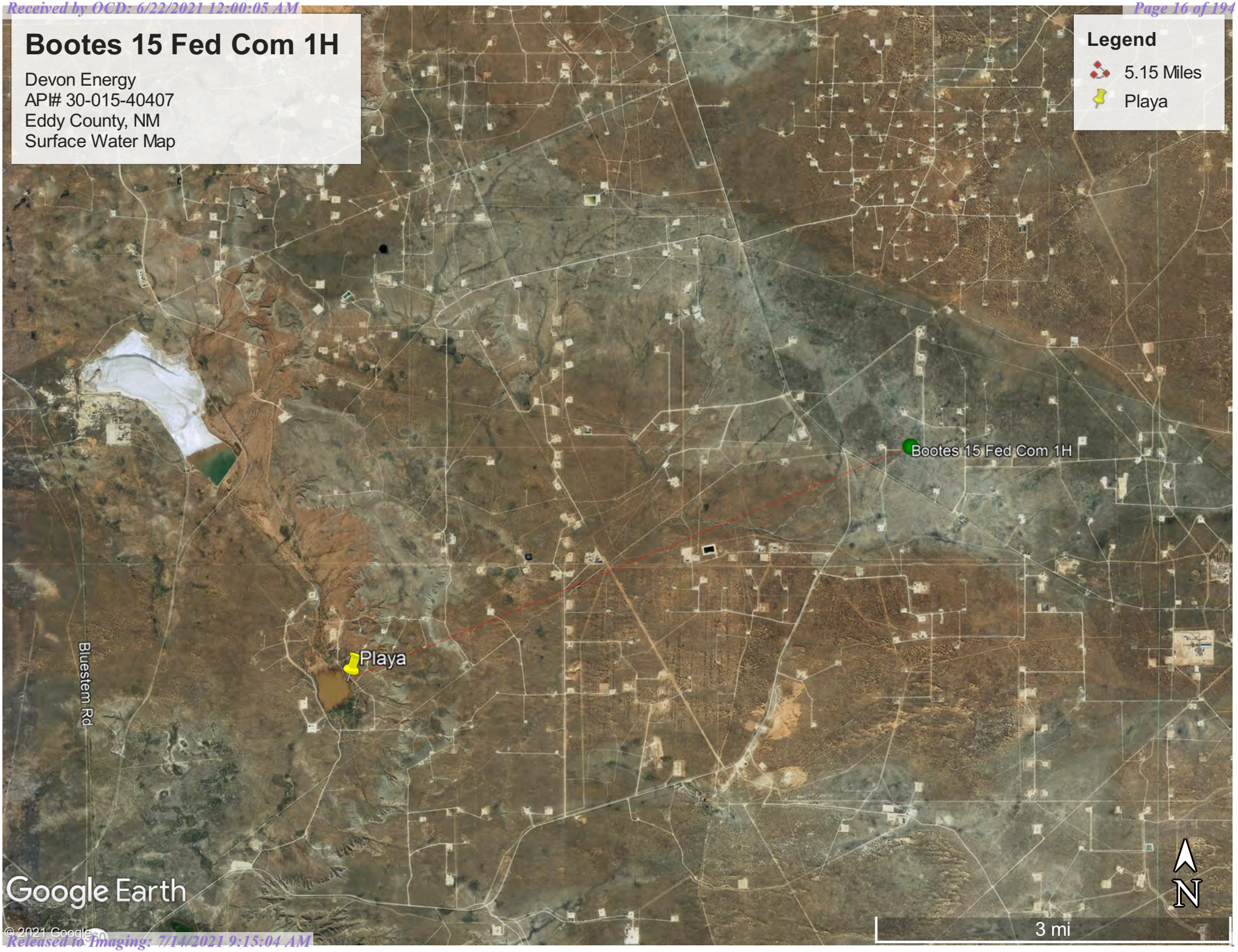
U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2021-06-15 16:43:59 EDT
0.66 0.59 nadww01

Bootes 15 Fed Com 1H

Devon Energy
API# 30-015-40407
Eddy County, NM
Surface Water Map



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Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Eddy Area, New Mexico

KT—Kimbrough-Stegall loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4t
Elevation: 2,750 to 5,000 feet
Mean annual precipitation: 8 to 16 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

Kimbrough and similar soils: 70 percent
Stegall and similar soils: 25 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Alluvial fans, plains
Landform position (three-dimensional): Rise, talf
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 9 inches: loam
H3 - 9 to 60 inches: indurated

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 8 to 20 inches to petrocalcic
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 content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Description of Stegall

Setting

Landform: Alluvial fans, plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 5 inches: loam
H2 - 5 to 28 inches: clay loam
H3 - 28 to 32 inches: indurated
H4 - 32 to 60 inches: variable

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 90 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 5 percent
Ecological site: R042XC002NM - Shallow Sandy
Hydric soil rating: No

Data Source Information

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

Eddy Area, New Mexico

SN—Simona and Wink fine sandy loams, 0 to 3 percent slopes, eroded

Map Unit Setting

National map unit symbol: 1w5y
Elevation: 3,000 to 4,200 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 200 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Simona and similar soils: 45 percent
Wink and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Simona

Setting

Landform: Alluvial fans, plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 19 inches: 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
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 content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D
Ecological site: R042XC002NM - Shallow Sandy
Hydric soil rating: No

Description of Wink

Setting

Landform: Depressions, swales
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 8 inches: fine sandy loam
H2 - 8 to 38 inches: fine sandy loam
H3 - 38 to 60 inches: stratified gravelly variable

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R042XC004NM - Sandy
Hydric soil rating: No

Minor Components

Dune land

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

Data Source Information

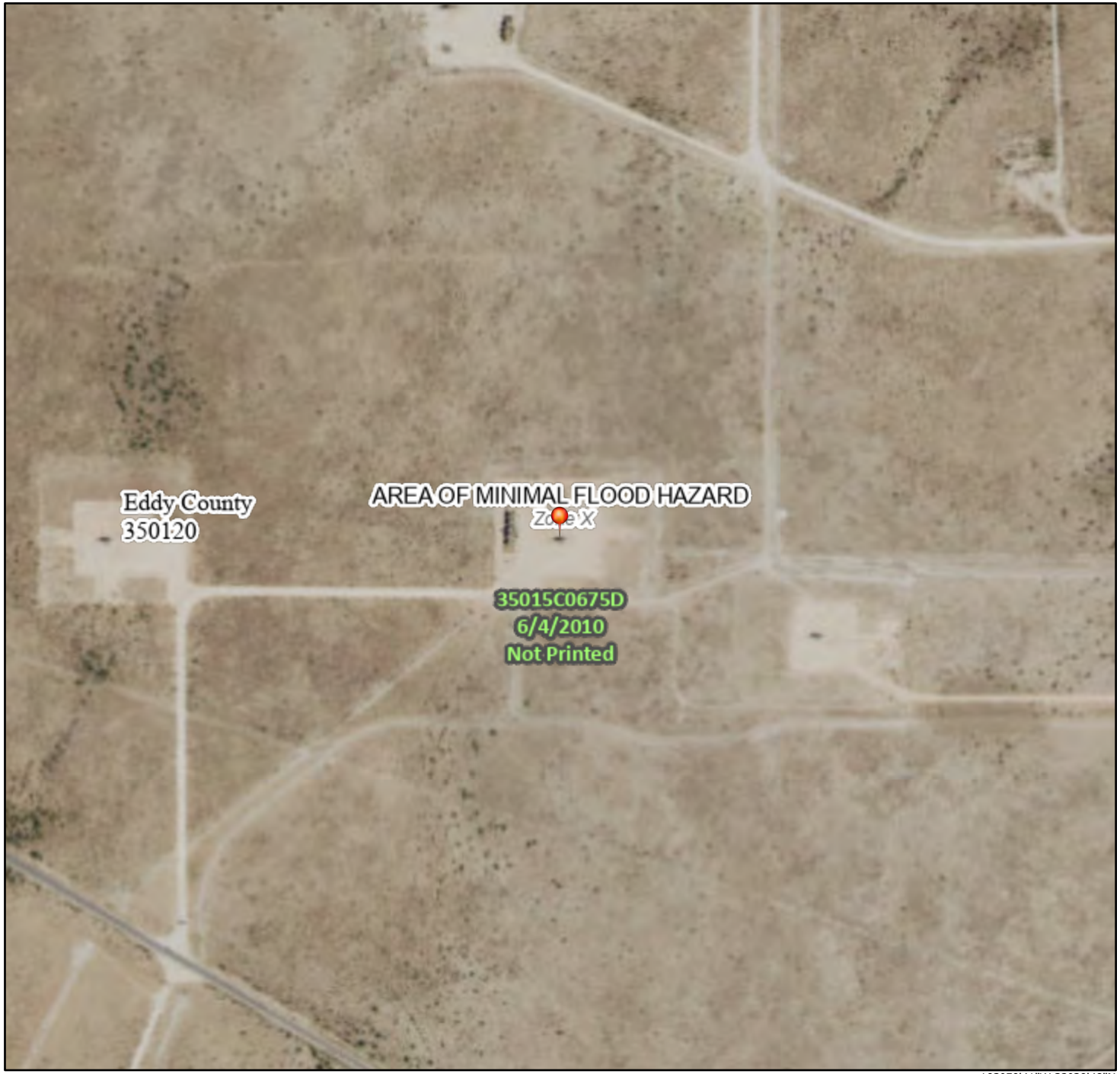
Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 16, Jun 8, 2020

Received by OCD: 6/22/2021 12:00:05 AM

National Flood Hazard Layer FIRMette

FEMA

103°51'18"W 32°40'19"N



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

1:6,000

103°50'41"W 32°39'48"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 6/15/2021 at 5:30 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.

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Pima Environmental Services

Appendix C

C-141's:

Initial

Final

Page 24 of 194

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Wesley Mathews	Contact Telephone 575-748-6195
Contact email Wesley.Mathews@dvn.com	Incident # *(assigned by OCD)*
Contact mailing address 6488 Seven Rivers Hwy	

Location of Release Source

Latitude 32.6676 Longitude -103.8497

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Bootes 15 Fed Com 1H	Site Type Oil
Date Release Discovered 5/10/2020	API# *(if applicable)* 30-015-40407

Unit Letter	Section	Township	Range	County
A	15	19S	31E	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)

☒ Crude Oil	Volume Released (bbls) 10.79 BBLS	Volume Recovered (bbls) 3 BBLS
☒ Produced Water	Volume Released (bbls) 21.44 BBLS	Volume Recovered (bbls) 2 BBLS
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Fluid released from stuffing box on the well. Some fluid ran off pad.

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 25 of 194

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This is considered a major release because it is over 25 BBLS.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Notice was given by email to Debhorah McKinne, Robert Hamlet, Jim Griswold, Mike Bratcher, and Victoria Venegas from Wesley Mathews on 5/11/2020.

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

The spill was 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 Date: 5/22/2020

email: Kendra.DeHoyos@dvn.com Telephone: 575-748-0167

OCD Only

Received by: Ramona Marcus Date: 5/24/2020

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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?	166 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal houndaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

☒ 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

the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation an. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan d methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of .15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Page 26 of 194
Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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: Brandon Sinclair

Title: Environmental Project Manager

Signature: Brandon Sinclair

Date: 12-3-2020

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____

Date: _____

Page 27 of 194
Received by OCD: 6/22/2021 12:00:05 PM
Released to Imaging: 7/14/2021 9:15:04 AM

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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.

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: Brandon Sinclair
Title: Environmental Project Manager

Signature: _____
Date: 12-3-2020

email: bsinclair@talonlpe.com
Telephone: 575-746-8768

OCD Only

Received by: Chad Hensley
Date: 03/1/2021

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

Signature: _____
Date: 03/01/2021

Page 28 of 194
Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Closure

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

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

☑ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☑ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☑ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☑ Description of remediation activities

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

Printed Name: Wes Mathews Title: EHS Professional

Signature: Wesley Mathews Date: 6/16/2021

email: wesley.mathews@dvn.com Telephone: 575-513-8608

OCD Only

Received by: Chad Hensley Date: 07/14/2021

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: Chad Hensley Date: 07/14/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

Pima Environmental Services

Appendix D

Photographic Documentation






Pima Environmental Services

Appendix E

Laboratory Reports

CARDINAL Laboratories

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

June 10, 2021

TOM BYNUM

PIMA ENVIROMENTAL

1601 N TURNER STE. 500

HOBBS, NM 88240

RE: BOOTES 15 FED COM 1

Enclosed are the results of analyses for samples received by the laboratory on 06/08/21 8:15.

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 accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 1 (H211465-01)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	GC-NC
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *86.6 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *83.3 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 2 (H211465-02)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *91.0 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *88.0 %* *38.9-142*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 3 (H211465-03)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *87.0 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *83.7 %* *38.9-142*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 4 (H211465-04)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *91.9 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *87.0 %* *38.9-142*

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 5 (H211465-05)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *88.8 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *87.8 %* *38.9-142*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 6 (H211465-06)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.7 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *94.0 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *92.3 %* *38.9-142*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 7 (H211465-07)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *81.2 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *77.3 %* *38.9-142*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 8 (H211465-08)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *96.6 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *81.4 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *78.8 %* *38.9-142*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 9 (H211465-09)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.4 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *72.7 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *69.3 %* *38.9-142*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 10 (H211465-10)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *87.9 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *85.0 %* *38.9-142*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 11 (H211465-11)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.8 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *89.4 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *88.0 %* *38.9-142*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 12 (H211465-12)

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	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.6 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *85.5 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *84.0 %* *38.9-142*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

PIMA ENVIROMENTAL
TOM BYNUM
1601 N TURNER STE. 500
HOBBS NM, 88240
Fax To:

Received:	06/08/2021	Sampling Date:	06/07/2021
Reported:	06/10/2021	Sampling Type:	Soil
Project Name:	BOOTES 15 FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	114	Sample Received By:	Tamara Oldaker
Project Location:	DEVON - EDDY CO NM		

Sample ID: CSW 13 (H211465-13)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/08/2021	ND	1.97	98.6	2.00	0.640	
Toluene*	<0.050	0.050	06/08/2021	ND	2.09	105	2.00	0.110	
Ethylbenzene*	<0.050	0.050	06/08/2021	ND	2.06	103	2.00	0.250	
Total Xylenes*	<0.150	0.150	06/08/2021	ND	6.20	103	6.00	0.637	
Total BTEX	<0.300	0.300	06/08/2021	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *69.9-140*

Chloride, SM4500Cl-B mg/kg Analyzed By: GM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2021	ND	416	104	400	3.92	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/09/2021	ND	190	95.1	200	0.599	
DRO >C10-C28*	<10.0	10.0	06/09/2021	ND	193	96.3	200	1.47	
EXT DRO >C28-C36	<10.0	10.0	06/09/2021	ND					

Surrogate: 1-Chlorooctane *91.7 %* *44.3-133*

Surrogate: 1-Chlorooctadecane *88.4 %* *38.9-142*

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

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

Cardinal Laboratories *=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Pima Environmental	**BILL TO**
Project Manager: Tom Bynum	P.O. #: nM-141910.01.RNM
Address: 1601 N Turner ste. 500	Company: Devon
City: Hobbs State: NM Zip: 88240	Attn: Wes Matthews
Phone #: 580-748-1613 Fax #:	Address:
Project #: 114 Project Owner: Devon	City:
Project Name: Bootes 15 Fed Com 1	State: Zip:
Project Location: Eddy, NM	Phone #:
Sampler Name: Tristan Jones	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH EXT	BTEX	Chlorides
H211465																	
1	CSW 1	C				✓					✓		6/7/21		✓	✓	✓
2	CSW 2																
3	CSW 3																
4	CSW 4																
5	CSW 5																
6	CSW 6																
7	CSW 7																
8	CSW 8																
9	CSW 9																
10	CSW 10																

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Relinquished By:	Date: 6-8-21 Time: 0815	Received By: Tamara Oldaker	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.6 Corrected Temp. °C	Sample Condition Cool ☑ Yes ☐ No Intact ☐ Yes ☐ No	CHECKED BY: (Initials) T.O.
			REMARKS: Bill to Devon nM-141910.01.RNM
			Turnaround Time: Standard ☑ Rush ☐ Bacteria (only) Sample Condition Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C
			Thermometer ID #113 Correction Factor None

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

FORM-006 R 3.1 08/04/20

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Page 55 of 194

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Pima Environmental
Project Manager:	Tom Bynum
Address:	1601 N Turner ste 500
City:	Hobbs State: NM Zip: 88240
Phone #:	580-748-1613 Fax #:
Project #:	114 Project Owner: Devon
Project Name:	Bootes 15 Fed Com 1
Project Location:	Eddy, NM
Sampler Name:	Tristan Jones

BILL TO

P.O. #:	
Company:	Devon
Attn:	Wes Matthews
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH EXT	BTEX	Chlorides
#211465																	
11	CSW 11	C				✓					✓		6/7/21		✓	✓	✓
12	CSW 12	C				✓					✓		↓		↓	↓	↓
13	CSW 13	C				✓					✓		↓		↓	↓	↓

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Relinquished By:	Date: 6/8/21 Time: 8:15am	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:
Relinquished By:	Date: Time:	Received By:	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.6 Corrected Temp. °C	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) TO.
Turnaround Time: ☑ Standard ☐ Rush	Thermometer ID #113 Correction Factor None	Bacteria (only) Sample Condition Cool: ☐ Yes ☐ Nc Intact: ☐ Yes ☐ No	Observed Temp. °C Corrected Temp. °C

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Pima Environmental Services

Appendix F

NMOCD-Approved

Remediation Plan

Page 57 of 194

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Wesley Mathews	Contact Telephone 575-748-6195
Contact email Wesley.Mathews@dvn.com	Incident # *(assigned by OCD)*
Contact mailing address 6488 Seven Rivers Hwy	

Location of Release Source

Latitude 32.6676 Longitude -103.8497

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Bootes 15 Fed Com 1H	Site Type Oil
Date Release Discovered 5/10/2020	API# *(if applicable)* 30-015-40407

Unit Letter	Section	Township	Range	County
A	15	19S	31E	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)

☒ Crude Oil	Volume Released (bbls) 10.79 BBLS	Volume Recovered (bbls) 3 BBLS
☒ Produced Water	Volume Released (bbls) 21.44 BBLS	Volume Recovered (bbls) 2 BBLS
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Fluid released from stuffing box on the well. Some fluid ran off pad.

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Page 58 of 194

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This is considered a major release because it is over 25 BBLS.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Notice was given by email to Debhorah McKinne, Robert Hamlet, Jim Griswold, Mike Bratcher, and Victoria Venegas from Wesley Mathews on 5/11/2020.

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

The spill was 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 Date: 5/22/2020

email: Kendra.DeHoyos@dvn.com Telephone: 575-748-0167

OCD Only

Received by: Ramona Marcus Date: 5/24/2020

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State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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?	166 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

☒ 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.

Received by OCD: 6/22/2021 12:00:05 PM

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Page 60 of 194

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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: Brandon Sinclair

Title: Environmental Project Manager

Signature: Brandon Sinclair

Date: 12-3-2020

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____

Date: _____

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Page 61 of 194

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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.

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: Brandon Sinclair

Title: Environmental Project Manager

Signature: _____

Date: 12-3-2020

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

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Page 62 of 194

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TALON LPE

Soil Assessment and Remediation Work Plan

Bootes 15 Federal Com #001H
Eddy County, New Mexico
API # 30-015-40407, NRM2014569455

Prepared For:

Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, New Mexico 88210

Prepared By:

TALON/LPE
408 West Texas Avenue
Artesia, New Mexico 88210

December 03, 2020

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Page 63 of 194

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Soil Assessment and Remediation Work Plan**
Bootes 15 Federal Com #001H
Eddy County, New Mexico
API# 30-015-40407, NRM2014569455

Dear Mr. Bratcher,

Devon Energy Production Company (Devon Energy) has contracted Talon/LPE (Talon) to perform soil assessment and remediation services at the above referenced location. The results of our soil assessment and proposed remediation activities are contained herein.

Site Information

Bootes 15 Federal Com #001H is located approximately twenty-eight (28) miles northeast of Carlsbad, New Mexico. The legal location for this release is Unit Letter A, Section 15, Township 19 South and Range 31 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.6676254 North and -103.8497314 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture Natural Resources Conservation Service, the soil in this area is made up of Kimbrough-Stegall loams, 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is Holocene to lower Pleistocene in age and is comprised of loam underlain by a petrocalcic horizon derived from alluvium and/or eolian deposits. Drainage courses in this area are typically dry.

The United States Geological Survey's (USGS) National Water Information System indicates that the nearest groundwater is 166' below ground surface (BGS). The New Mexico Office of the State Engineer web site indicates that the nearest reported depth to groundwater is 102-feet below ground surface (BGS). See Appendix II for the referenced groundwater data.

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 64 of 194

Site Characterization

Pursuant to Table I, New Mexico Oil Conservation Division (NMOCD) Rule 19.15.29 of the New Mexico Administrative Code (NMAC), if a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to the groundwater.

Approximate Depth to Groundwater	166 Feet/BGS
☐Yes ☒No	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
☐Yes ☒No	Within 200 feet of any lakebed, sinkhole or playa lake
☐Yes ☒No	Within 300 feet from an occupied permanent residence, school, hospital, institution or church
☐Yes ☒No	Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes
☐Yes ☒No	Within 1000 feet of any fresh water well or spring
☐Yes ☒No	Within incorporated municipal boundaries or within a defined Municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-2703 NMSA 1978
☐Yes ☒No	Within 300 feet of a wetland
☐Yes ☒No	Within the area overlying a subsurface mine
☐Yes ☒No	Within an unstable area
☐Yes ☒No	Within a 100-year floodplain

This site does not meet any of the above criteria, and the depth to groundwater is greater than 100-feet BGS. However, as the depth to groundwater could not be determined using a source within a half mile of the boundary of this release, a boring was advanced at sample point B-11 using a direct push sampling rig (Geoprobe) to 53' in order to exclude the presence of water at that depth. In addition, a portion of the release impacted pasture area to the south of the well pad. Therefore the closure criteria for each remediation area can be found within the data tables under the site assessment portion of this report.

Incident Description

On May 10, 2020, a mixture of 10.79 barrels (bbls) of crude oil and 21.44 bbls of produced water were discovered on the pad and pasture areas after having leaked from the stuffing box on the well. The initial C-141 is attached in Appendix III. A site map illustrating the affected area is presented in Appendix I.

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Page 65 of 194

Site Assessment

On May 29, 2020, Talon mobilized personnel to begin the site assessment and soil sampling activities for the construction of a work plan. Grab soil samples were collected within and around the impacted area utilizing a Geoprobe. Additional sampling was required in June in order to further delineate the impacted area. To verify the presence or absence of groundwater at depths below 50-feet (and to complete vertical delineation of the pasture area), an air-rotary drill rig was brought to the site in August (a soil boring log is presented in Appendix II). Groundwater was not encountered at 53-feet BGS after a 72-hour interval. Results from our sampling events are presented in the following data tables. A complete laboratory report can be found in Appendix V.

Table 1 : *Soil Sample Analysis of Pad Area*

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg	1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
B-1	0-1	5/29/2020	210.6	4.6	1500	3200	1600	6300.0	ND
	2	5/29/2020	0.75	0.023	5.8	150	83	238.8	ND
	3	5/29/2020	ND	ND	ND	ND	ND	-	ND
	4R	5/29/2020	0.037	ND	ND	19	ND	19.0	ND
B-2	0-1	5/29/2020	16.25	ND	150	1600	860	2610.0	61
	2	5/29/2020	ND	ND	ND	ND	ND	-	110
	3R	5/29/2020	ND	ND	ND	ND	ND	-	ND
B-3	0-1	5/29/2020	61.65	0.65	420	3500	1500	5420.0	ND
	2	5/29/2020	208.3	3.3	1300	3700	1400	6400.0	ND
	3R	5/29/2020	0.356	ND	ND	920	610	1530.0	ND
B-4	0-1	5/29/2020	ND	ND	ND	ND	ND	-	ND
	2	5/29/2020	ND	ND	ND	ND	ND	-	61
	3	5/29/2020	ND	ND	ND	ND	ND	-	ND
	4R	5/29/2020	ND	ND	ND	ND	ND	-	ND
B-5	0-1	5/29/2020	ND	ND	ND	16	ND	16.0	5200
	2	5/29/2020	ND	ND	ND	ND	ND	-	4000
	3	5/29/2020	ND	ND	ND	ND	ND	-	4300
	4R	5/29/2020	ND	ND	ND	ND	ND	-	3500

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Page 66 of 194

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg	1,000 mg/kg			2,500 mg/kg	10,000 mg/kg
B-6	0-1	5/29/2020	17.3	ND	69	2400	1500	3969.0	3800
	2	5/29/2020	0.2	ND	ND	ND	ND	-	970
	3	5/29/2020	0.14	ND	ND	ND	ND	-	550
	4R	5/29/2020	ND	ND	ND	ND	ND	-	360
B-7	0-1	5/29/2020	ND	ND	ND	ND	ND	-	390
	2	5/29/2020	ND	ND	ND	ND	ND	-	230
	3R	5/29/2020	ND	ND	ND	13	ND	13.0	990
B-8	0-1	5/29/2020	93.44	0.14	340	3900	2100	6340.0	3100
	2	5/29/2020	1.792	0.032	5.1	ND	ND	5.1	98
	3	5/29/2020	1.865	0.045	5.7	60	ND	65.7	170
	4R	5/29/2020	0.368	ND	ND	71	50	121.0	72
B-9	0-1	5/29/2020	6.337	0.027	29	1400	760	2189.0	4100
	2	5/29/2020	1.694	0.027	6.8	180	99	285.8	3100
	3	5/29/2020	1.156	0.029	ND	58	ND	58.0	1400
B-10	0-1	6/17/2020	3.32	ND	23	19000	12000	31023.0	13000
	2	6/17/2020	ND	ND	ND	180	120	300.0	290
	3	6/17/2020	ND	ND	ND	29	ND	29.0	220
	4	6/17/2020	ND	ND	ND	230	150	380.0	180

ND= Analyte Not Detected
R= Refusal with Geoprobe

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 67 of 194

Table 2 : *Soil Sample Analysis of Pasture Area*

Sample ID	Depth (ft.)	Date	BTEX (mg/kg)	Benzene (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Cl (mg/kg)
Closure Criteria 19.15.29.12 NMAC			50 mg/kg	10 mg/kg				100 mg/kg	600 mg/kg
B-11	0-1	6/17/2020	423.1	4.1	2700	11000	5100	18800.0	4200
	2	6/17/2020	1.519	0.029	13	290	170	473.0	220
	3R	6/17/2020	33.26	0.56	240	1500	940	2680.0	510
	4	8/4/2020	ND	ND	ND	60	ND	60.0	ND
	6	8/4/2020	ND	ND	ND	190	180	370.0	ND
	8	8/4/2020	ND	ND	ND	220	200	420.0	ND
	10	8/4/2020	NT	NT	ND	320	350	670.0	NT
	15	8/4/2020	NT	NT	ND	61	70	131.0	NT
	20	8/4/2020	NT	NT	ND	120	130	250.0	NT
	25	8/19/2020	NT	NT	ND	ND	ND	-	NT
	30	8/19/2020	NT	NT	ND	ND	ND	-	NT
B-12	0-1	6/17/2020	751	31	4300	21000	9100	34400.0	150
	2	6/17/2020	444	24	2800	11000	5200	19000.0	63
	3	6/17/2020	1.66	0.12	14	640	490	1144.0	ND
	4R	6/17/2020	ND	ND	ND	650	430	1080.0	94
	6	8/4/2020	NT	NT	ND	ND	ND	-	NT
	8	8/4/2020	NT	NT	ND	ND	ND	-	NT
B-13	0-1	6/17/2020	5.39	0.39	48	ND	ND	48.0	ND
	2R	6/17/2020	ND	ND	ND	ND	ND	-	ND
B-14	0-1	8/4/2020	ND	ND	ND	ND	ND	-	ND
	2	8/4/2020	ND	ND	ND	ND	ND	-	ND
	3R	8/4/2020	ND	ND	ND	ND	ND	-	ND

ND= Analyte Not Detected
NT=Analyte Not Tested
R= Refusal with Geoprobe

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 68 of 194

Proposed Remedial Actions

- Excavation activities within the separator battery and around the wellhead will be hand-excavated to the extent practicable. Potential limitations may exist due to safety concerns of field personnel and the presence of infrastructure (flow lines, electric lines, etc.).
- The impacted areas near sample points B-1, B-2, B-6 and B-8 through B-10 will be excavated to 2.0-feet BGS.
- The area near sample point B-3 will be excavated to 3.0-feet BGS.
- The surficial staining in the vicinity of sample points B-5 and B-7 (near the wellhead) will be scraped to a depth of 0.25-feet.
- The impacted pasture area near sample locations B-11 and B-12 will be excavated to a depth of 4.0-feet BGS. A site map illustrating the proposed excavation areas can be found in Appendix I.
- The horizontal extent of the release will be verified with composite confirmation samples from both excavation area sidewalls (well pad and pasture). Additional horizontal confirmation samples will be collected 10-15 feet beyond the excavated areas to verify the release footprint.
- The excavated areas will be backfilled with new caliche on the well pad and locally obtained topsoil in the pasture. Once the backfilling activities are complete the work areas will be machine compacted and contoured to match the surrounding terrain.
- The pasture area will be seeded with BLM Seed Mixture #1 utilizing a Culti-Pack seed drill.
- The excavated material (approximately 465 yards) will be transported to Lea Land, LLC, a NMOCD approved solid waste disposal facility.
- Remedial actions will commence within 14-days of client authorization to proceed.
- A final closure report documenting the remedial actions performed and a Final C-141 will be provided to the NMOCD District II Office.

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 69 of 194

Closure

Should you have any questions or if further information is required, please do not hesitate to contact our office at 575-746-8768.

Respectfully submitted,

TALON/LPE

Brandon Sinclair
Project Manager

David J. Adkins
Regional Manager

Attachments:
Appendix I Site Maps
Appendix II Soil Boring Log, Groundwater & Soil Data, FEMA Flood Map
Appendix III C-141 Forms
Appendix IV Photographic Documentation
Appendix V Laboratory Data

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 70 of 194

APPENDIX I

SITE MAPS

Received by OCD: 6/22/2021 12:00:05 PM

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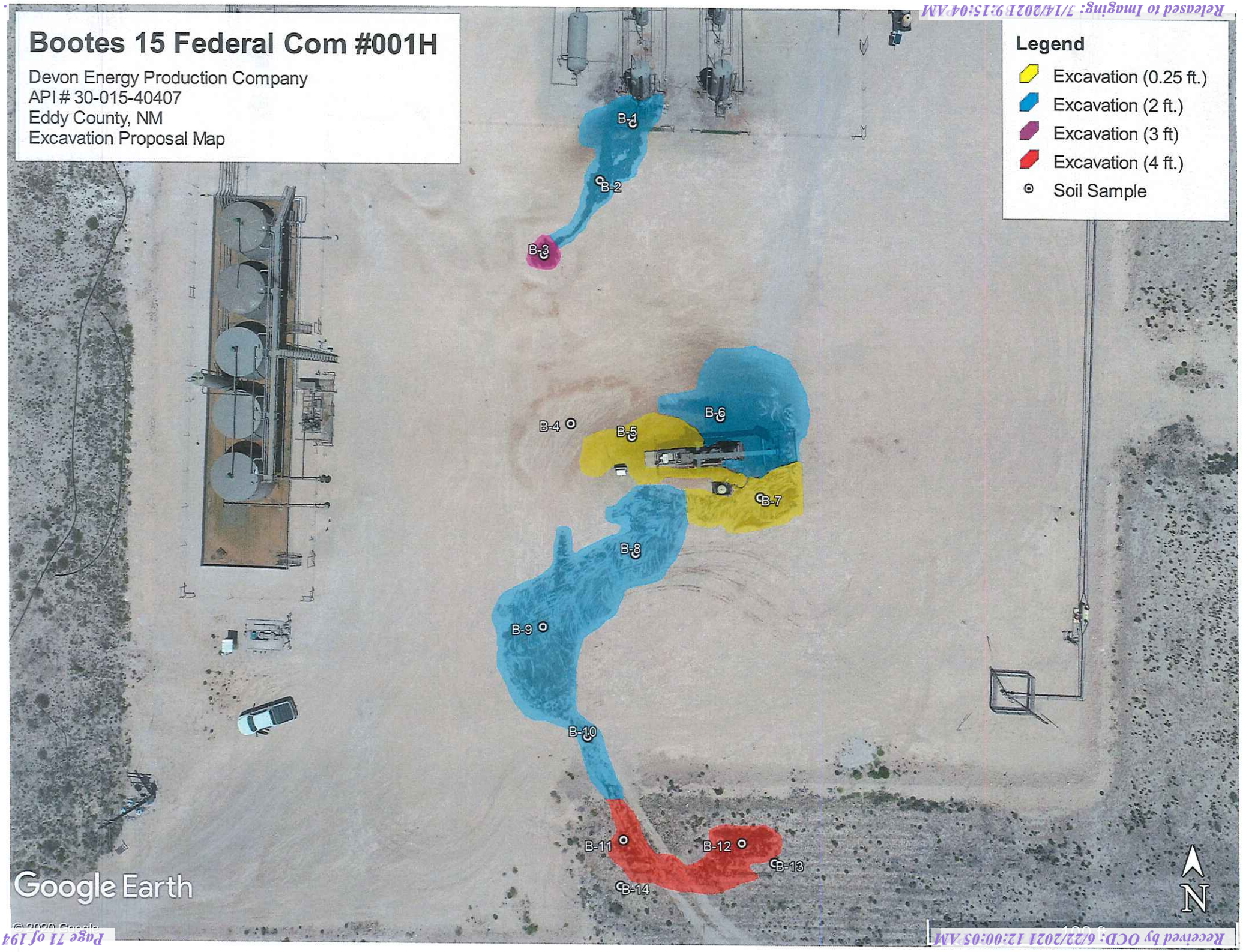
Bootes 15 Federal Com #001H

Devon Energy Production Company
API # 30-015-40407
Eddy County, NM
Excavation Proposal Map



Received by OCD: 6/22/2021 12:00:05 AM

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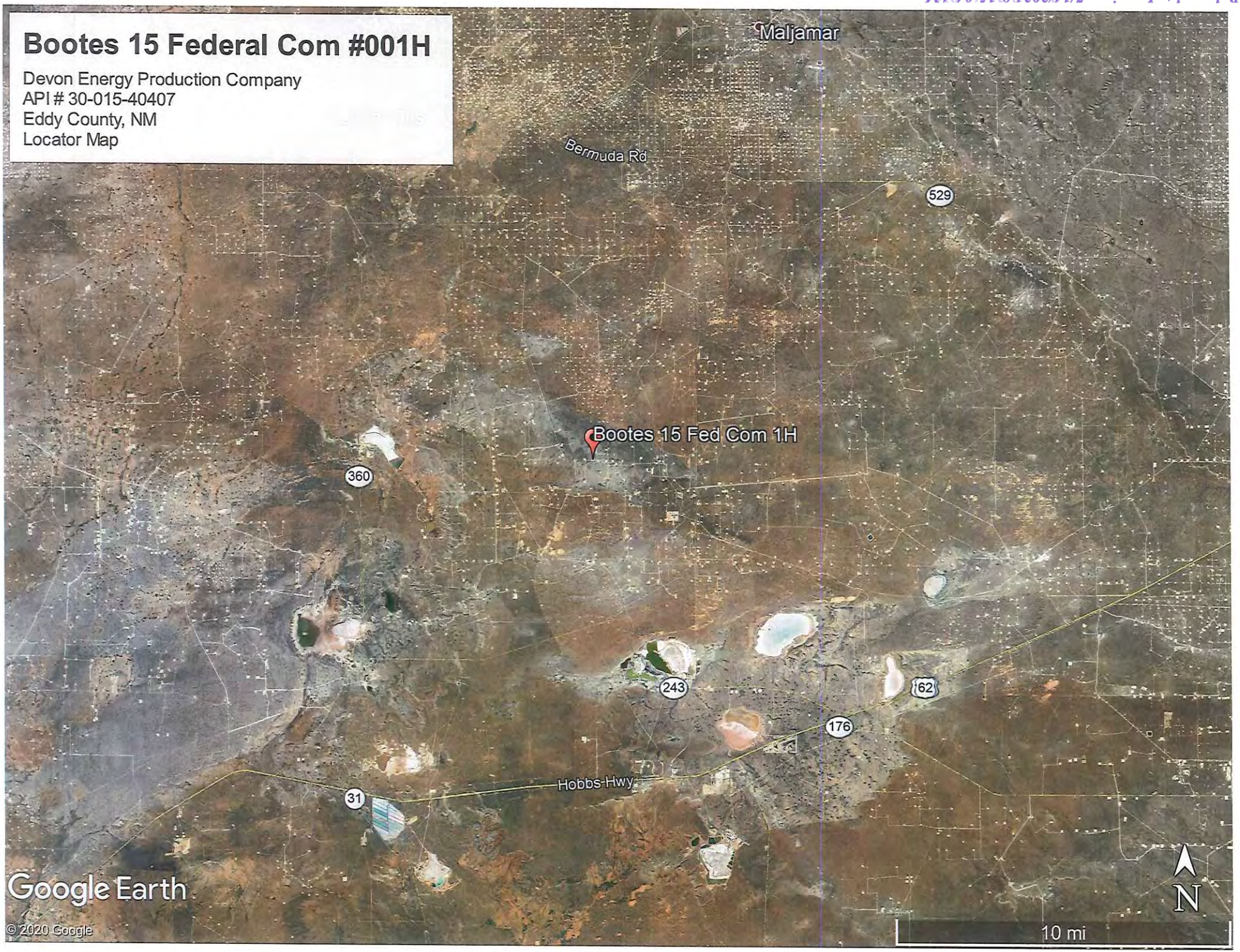
Bootes 15 Federal Com #001H

Devon Energy Production Company
API # 30-015-40407
Eddy County, NM
Locator Map



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Bootes 15 Federal Com #001H

Devon Energy Production Company
API # 30-015-40407
Eddy County, NM
Karst Map

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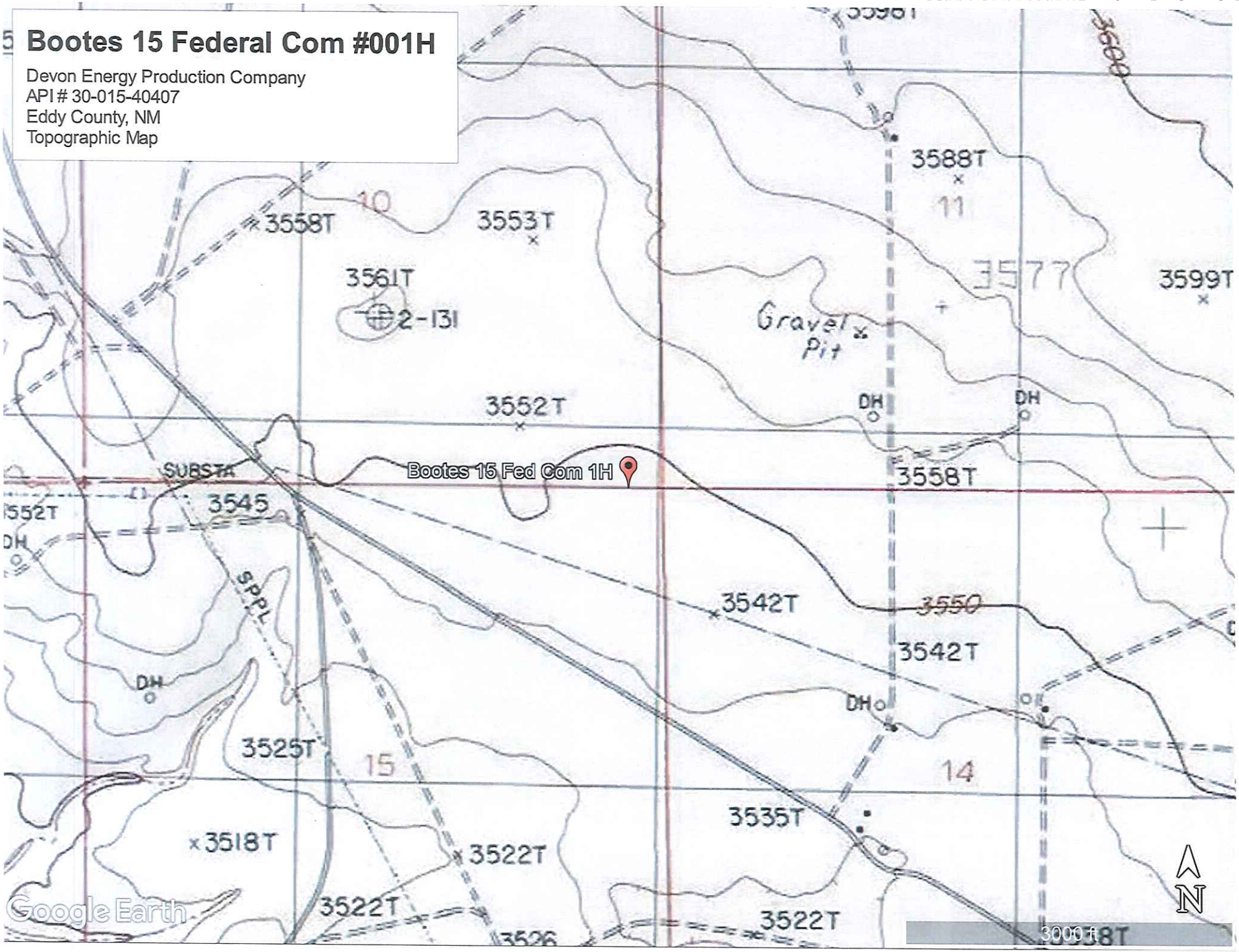
Bootes 15 Federal Com #001H

Devon Energy Production Company
API # 30-015-40407
Eddy County, NM
Topographic Map



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Page 75 of 194

APPENDIX II

SOIL BORING LOG

GROUNDWATER DATA

SOIL SURVEY

FEMA FLOOD MAP

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Page 76 of 194

BORING LOG

Project No.: 700794.343.01
Site Name: Bootes 15 Federal Com 1H
Location: Eddy County, New Mexico
Date: 8/4/2020
Boring Number: B-11

Weather: Sunny, Warm Temp.: 90s °F
Logger: B. Sinclair
Field Instrument: Lab Analysis
Latitude: 32.667258° N
Longitude: -103.849887° W

Driller: M. Doyle
Rig Type: Geoprobe 7822DT
Bit Size: 5 ¼"
Drilling Method: Air Rotary
Sample Retrieval Method: Core Liner

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	■	0-5'				Tan to light brown slightly silty fine Sand (SP-SM)	Slight	
	■	5-10'				Light tan fine Sand (SP)	Slight	
	■	10-15'				Light red/brown fine Sand (SP) with trace amounts of caliche.	Slight	
	■	15-20'				Dark red/brown fine Sand (SP) with varying amounts of caliche.	None	
	■	20-53'				Dark red/brown fine Sand (SP) with varying amounts of caliche.	None	
	☐							
	☐							
	☐							
	☐							
	☐							
	☐							
	☐							

Surface Elevation: _____
Notes: TD 53', Groundwater Not Encountered
Logger Initials: B.S.

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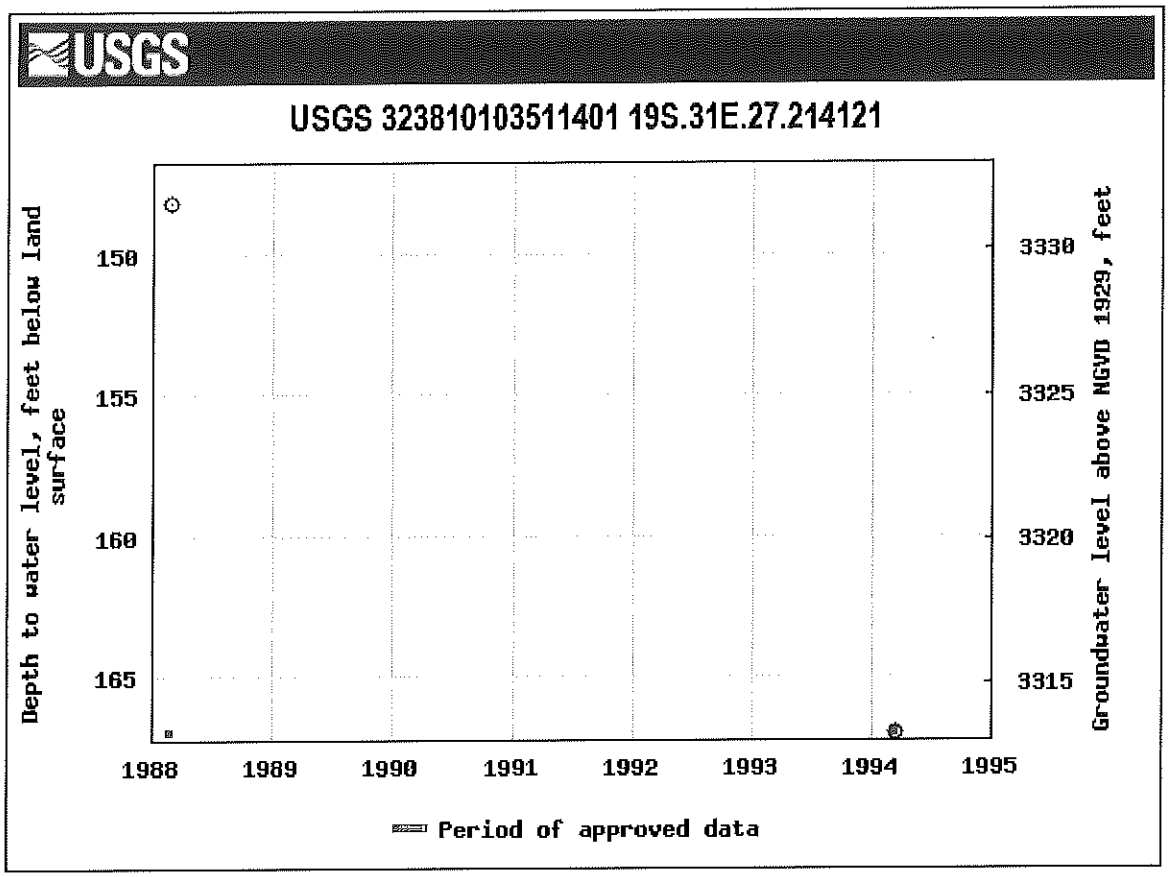
Page 77 of 194



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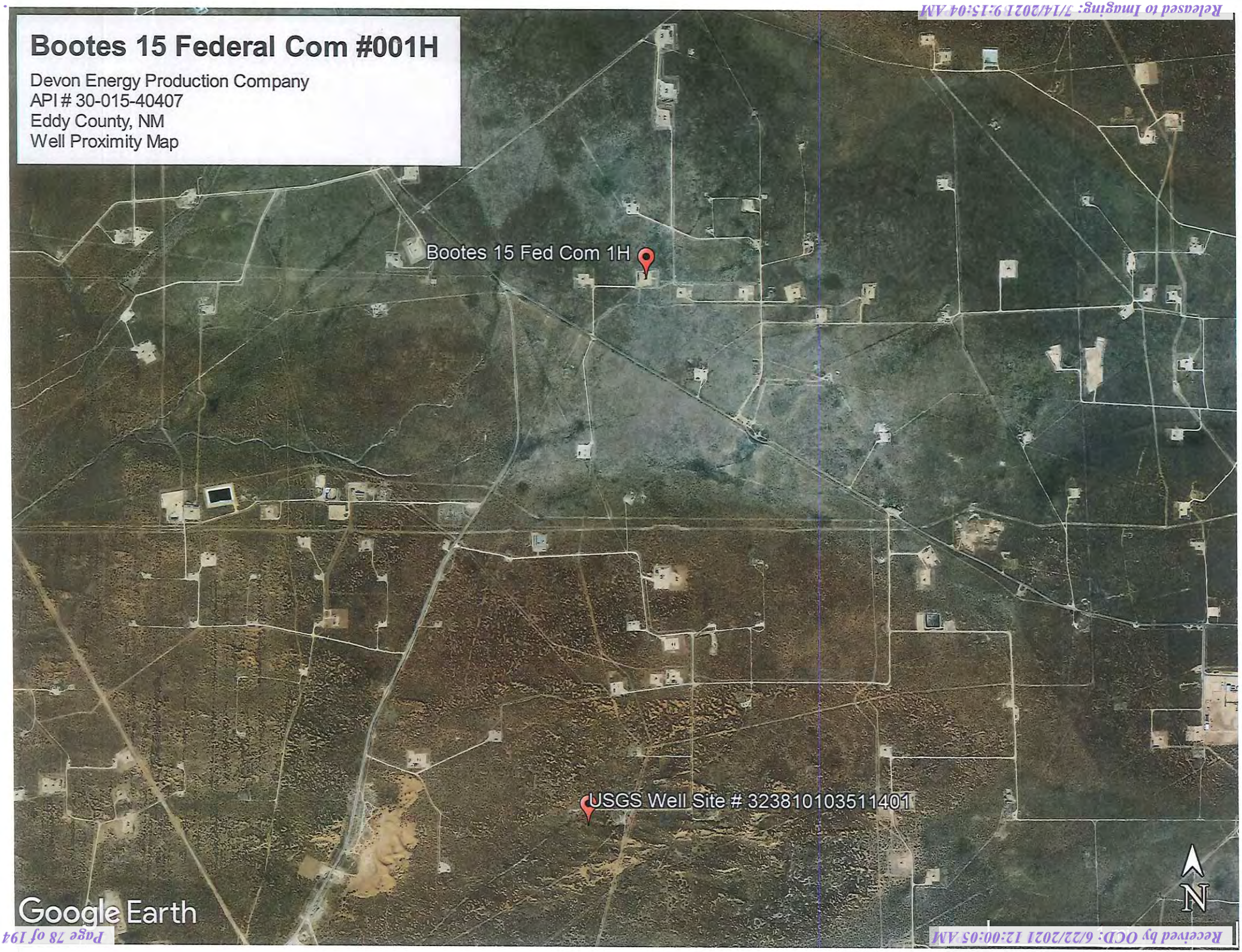
Bootes 15 Federal Com #001H

Devon Energy Production Company
API # 30-015-40407
Eddy County, NM
Well Proximity Map



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Page 79 of 194

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	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01554 POD1		CP	LE	2	2	1	22	19S	31E	607166	3613354	1808	400		
CP 01554 POD2		CP	LE	2	2	1	22	19S	31E	607165	3613322	1838	400		
CP 00829 POD1		CP	LE		2	4	16	19S	31E	606165	3614009*	1974	120		
CP 00849 POD1		CP	LE	3	1	3	35	18S	31E	608012	3618757*	3734	300		
CP 00563 POD1		CP	LE	1	1	2	19	19S	32E	612118	3613376*	4568	300		
CP 00642 POD1		CP	ED		2	2	25	19S	31E	611025	3611657*	4623	250		
CP 00640 POD1		CP	LE		2	2	19	19S	32E	612621	3613280*	5073	260	102	158
CP 00725 POD1		CP	ED	1	3	3	28	19S	31E	604906	3610473*	5425	231		
CP 00722 POD1		CP	LE	4	3	3	28	19S	31E	605106	3610273*	5491	200		
CP 00639 POD1		CP	LE		3	1	20	19S	32E	613029	3612880*	5598	350	345	5
CP 00723 POD1		CP	ED	2	1	1	33	19S	31E	605111	3610071*	5664	139		
CP 01656 POD2		CP	LE	3	4	3	17	19S	32E	613364	3613648	5675	70		
CP 01656 POD1		CP	LE	3	4	3	17	19S	32E	613368	3613646	5680	70		
CP 01656 POD3		CP	LE	3	4	3	17	19S	32E	613374	3613633	5689	30		
CP 00722 POD3		CP	LE	2	4	1	33	19S	31E	605519	3609673*	5840	220	140	80
CP 00641 POD1		CP	ED		4	1	36	19S	31E	610247	3609634*	5897	300	130	170
CP 00873 POD1		CP	LE		1	1	19	19S	31E	601772	3613147*	6368	340	180	160
CP 00357 POD1		CP	ED	4	4	1	24	19S	30E	600667	3612631*	7578	630		
CP 00357 POD2		CP	ED	4	3	1	24	19S	30E	600265	3612627*	7962	630		
CP 00722 POD2		CP	ED	2	1	1	25	19S	30E	600276	3611620*	8311	350	65	285
CP 00520		CP	ED	4	4	1	10	20S	31E	607163	3606278*	8774	280	130	150
CP 00767 POD1		CP	ED		3	2	35	18S	30E	599300	3619158*	9503	500		
CP 00647 POD1	O	CP	ED	4	2	2	15	19S	30E	598235	3614621*	9630	200	92	108
CP 00822 POD1		CP	LE		4	4	15	19S	30E	598148	3613516*	9826	90		

Average Depth to Water: 148 feet
Minimum Depth: 65 feet
Maximum Depth: 345 feet

Record Count:24

UTMNAD83 Radius Search (in meters):

Easting (X): 607857.43 Northing (Y): 3615025.28 Radius: 10000

*UTM location was derived from PLSS - see Help

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

5/13/20 8:22 AM

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Page 80 of 194

Eddy Area, New Mexico

KT—Kimbrough-Stegall loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4t
Elevation: 2,750 to 5,000 feet
Mean annual precipitation: 8 to 16 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

Kimbrough and similar soils: 70 percent
Stegall and similar soils: 25 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimbrough

Setting

Landform: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 3 inches: loam
H2 - 3 to 9 inches: loam
H3 - 9 to 60 inches: indurated

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 8 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 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s

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Page 81 of 194

Hydrologic Soil Group: D
Ecological site: Shallow (R042XC025NM)
Hydric soil rating: No

Description of Stegall

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 5 inches: loam
H2 - 5 to 28 inches: clay loam
H3 - 28 to 32 inches: indurated
H4 - 32 to 60 inches: variable

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 90 percent
Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 1.0
Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: Loamy (R042XC007NM)
Hydric soil rating: No

Minor Components

Simona

Percent of map unit: 5 percent
Ecological site: Shallow Sandy (R042XC002NM)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 15, Sep 15, 2019

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National Flood Hazard Layer FIRMette

FEMA

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, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone X*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- OTHER AREAS
  - NO SCREEN Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone*
- GENERAL STRUCTURES
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- OTHER FEATURES
  - 20.2 Cross Sections with 1% Annual Chance
  - 17.5 Water Surface Elevation
  - Coastal Transect
  - 513 Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- MAP PANELS
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe 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 5/13/2020 at 10:39:58 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

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APPENDIX III

C-141 FORMS

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Page 84 of 194

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Wesley Mathews	Contact Telephone 575-748-6195
Contact email Wesley.Mathews@dvn.com	Incident # *(assigned by OCD)*
Contact mailing address 6488 Seven Rivers Hwy	

Location of Release Source

Latitude 32.6676 Longitude -103.8497
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Bootes 15 Fed Com 1H	Site Type Oil
Date Release Discovered 5/10/2020	API# *(if applicable)* 30-015-40407

Unit Letter	Section	Township	Range	County
A	15	19S	31E	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)

■ Crude Oil	Volume Released (bbls) 10.79 BBLS	Volume Recovered (bbls) 3 BBLS
■ Produced Water	Volume Released (bbls) 21.44 BBLS	Volume Recovered (bbls) 2 BBLS
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Fluid released from stuffing box on the well. Some fluid ran off pad.

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Page 85 of 194

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? This is considered a major release because it is over 25 BBLS.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Notice was given by email to Debhorah McKinne, Robert Hamlet, Jim Griswold, Mike Bratcher, and Victoria Venegas from Wesley Mathews on 5/11/2020.

Initial Response

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

- ■ The source of the release has been stopped.
- ■ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ■ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

The spill was 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 Date: 5/22/2020

email: Kendra.DeHoyos@dvn.com Telephone: 575-748-0167

OCD Only

Received by: Ramona Marcus Date: 5/24/2020

Received by OCD: 6/22/2021 12:00:05 AM

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State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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?	166 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal houndaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

☒ 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

the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation an. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan d methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of .15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 6/22/2021 12:00:05 AM
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State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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: Brandon Sinclair

Title: Environmental Project Manager

Signature: Brandon Sinclair

Date: 12-3-2020

email: bsinclair@talonlpe.com

Telephone: 575-746-8768

OCD Only

Received by: _____

Date: _____

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

State of New Mexico
Oil Conservation Division

Incident ID	NRM2014569455
District RP	
Facility ID	30-015-40407
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.

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: Brandon Sinclair
Title: Environmental Project Manager

Signature: _____
Date: 12-3-2020

email: bsinclair@talonlpe.com
Telephone: 575-746-8768

OCD Only

Received by: Chad Hensley
Date: 03/1/2021

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

Signature: _____
Date: 03/01/2021

Page 88 of 194
Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

APPENDIX IV

PHOTOGRAPHIC DOCUMENTATION

Received by OCD: 6/22/2021 12:00:05 PM

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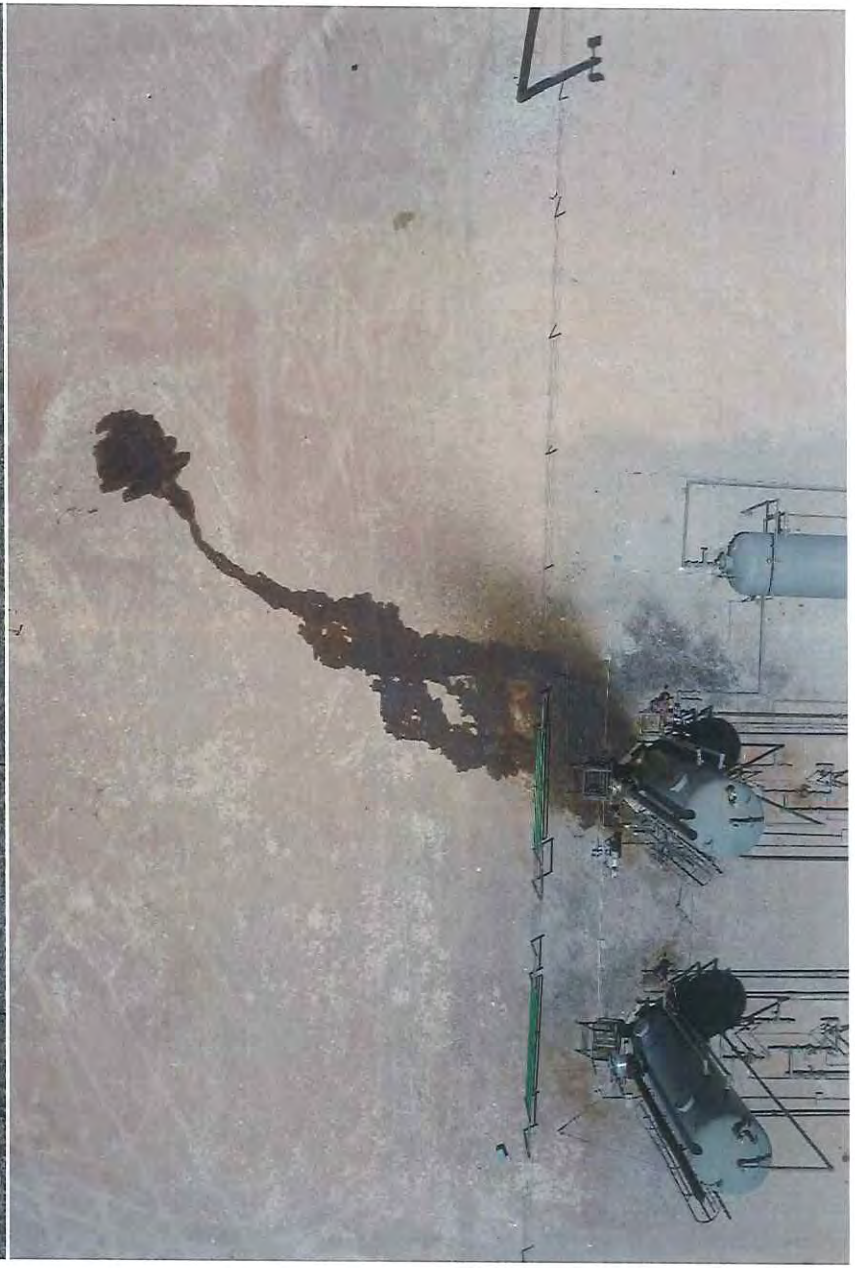

APPENDIX V

LABORATORY DATA

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 95 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 05, 2020

David Adkins
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX

RE: Bootes 15 Fed Com 1H OrderNo.: 2006054

Dear David Adkins:

Hall Environmental Analysis Laboratory received 32 sample(s) on 6/2/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 96 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-1 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 9:23:00 AM
Lab ID: 2006054-001 **Matrix:** MEOH (SOIL) **Received Date:** 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 7:19:08 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	3200	190		mg/Kg	20	6/2/2020 1:42:51 PM	52815
Motor Oil Range Organics (MRO)	1600	960		mg/Kg	20	6/2/2020 1:42:51 PM	52815
Surr: DNOP	0	55.1-146	S	%Rec	20	6/2/2020 1:42:51 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1500	21		mg/Kg	5	6/2/2020 12:01:16 PM	G69333
Surr: BFB	1630	66.6-105	S	%Rec	5	6/2/2020 12:01:16 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	4.6	0.10		mg/Kg	5	6/2/2020 12:01:16 PM	B69333
Toluene	68	2.1		mg/Kg	50	6/2/2020 9:03:16 PM	B69333
Ethylbenzene	58	2.1		mg/Kg	50	6/2/2020 9:03:16 PM	B69333
Xylenes, Total	80	4.2		mg/Kg	50	6/2/2020 9:03:16 PM	B69333
Surr: 4-Bromofluorobenzene	132	80-120	S	%Rec	50	6/2/2020 9:03:16 PM	B69333

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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Released to Imaging: 7/14/2021 9:15:04 AM

Page 97 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-1 2'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 9:23:00 AM
Lab ID: 2006054-002
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 7:56:21 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	150	9.9		mg/Kg	1	6/2/2020 12:39:51 PM	52815
Motor Oil Range Organics (MRO)	83	50		mg/Kg	1	6/2/2020 12:39:51 PM	52815
Surr: DNOP	95.0	55.1-146		%Rec	1	6/2/2020 12:39:51 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	5.8	4.2		mg/Kg	1	6/2/2020 12:48:33 PM	G69333
Surr: BFB	145	66.6-105	S	%Rec	1	6/2/2020 12:48:33 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.023	0.021		mg/Kg	1	6/2/2020 12:48:33 PM	B69333
Toluene	0.087	0.042		mg/Kg	1	6/2/2020 12:48:33 PM	B69333
Ethylbenzene	0.14	0.042		mg/Kg	1	6/2/2020 12:48:33 PM	B69333
Xylenes, Total	0.18	0.084		mg/Kg	1	6/2/2020 12:48:33 PM	B69333
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	6/2/2020 12:48:33 PM	B69333

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 98 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-1 3'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 9:23:00 AM
Lab ID: 2006054-003 **Matrix:** MEOH (SOIL) **Received Date:** 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 8:33:35 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/2/2020 12:16:00 PM	52815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 12:16:00 PM	52815
Surr: DNOP	92.2	55.1-146		%Rec	1	6/2/2020 12:16:00 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/2/2020 1:12:13 PM	G69333
Surr: BFB	82.9	66.6-105		%Rec	1	6/2/2020 1:12:13 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	6/2/2020 1:12:13 PM	B69333
Toluene	ND	0.047		mg/Kg	1	6/2/2020 1:12:13 PM	B69333
Ethylbenzene	ND	0.047		mg/Kg	1	6/2/2020 1:12:13 PM	B69333
Xylenes, Total	ND	0.094		mg/Kg	1	6/2/2020 1:12:13 PM	B69333
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/2/2020 1:12:13 PM	B69333

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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Page 99 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-004 **Matrix:** MEOH (SOIL)

Client Sample ID: B-1 4' R
Collection Date: 5/29/2020 9:23:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 8:46:00 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	19	9.7		mg/Kg	1	6/2/2020 12:19:32 PM	52815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/2/2020 12:19:32 PM	52815
Surr: DNOP	98.0	55.1-146		%Rec	1	6/2/2020 12:19:32 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/2/2020 1:35:50 PM	G69333
Surr: BFB	89.8	66.6-105		%Rec	1	6/2/2020 1:35:50 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	6/2/2020 1:35:50 PM	B69333
Toluene	ND	0.036		mg/Kg	1	6/2/2020 1:35:50 PM	B69333
Ethylbenzene	0.037	0.036		mg/Kg	1	6/2/2020 1:35:50 PM	B69333
Xylenes, Total	ND	0.072		mg/Kg	1	6/2/2020 1:35:50 PM	B69333
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	6/2/2020 1:35:50 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 100 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-2 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 9:47:00 AM
Lab ID: 2006054-005 **Matrix:** MEOH (SOIL) **Received Date:** 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	61	60		mg/Kg	20	6/2/2020 9:23:14 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	1600	99		mg/Kg	10	6/2/2020 2:06:43 PM	52815
Motor Oil Range Organics (MRO)	860	500		mg/Kg	10	6/2/2020 2:06:43 PM	52815
Surr: DNOP	0	55.1-146	S	%Rec	10	6/2/2020 2:06:43 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	150	21		mg/Kg	5	6/2/2020 1:59:34 PM	G69333
Surr: BFB	393	66.6-105	S	%Rec	5	6/2/2020 1:59:34 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	6/2/2020 1:59:34 PM	B69333
Toluene	0.95	0.21		mg/Kg	5	6/2/2020 1:59:34 PM	B69333
Ethylbenzene	5.3	0.21		mg/Kg	5	6/2/2020 1:59:34 PM	B69333
Xylenes, Total	10	0.41		mg/Kg	5	6/2/2020 1:59:34 PM	B69333
Surr: 4-Bromofluorobenzene	158	80-120	S	%Rec	5	6/2/2020 1:59:34 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 101 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-2 2'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 9:47:00 AM
Lab ID: 2006054-006 **Matrix:** MEOH (SOIL) **Received Date:** 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **CAS**
Chloride	110	60		mg/Kg	20	6/2/2020 9:35:39 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/2/2020 12:43:47 PM	52815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/2/2020 12:43:47 PM	52815
Surr: DNOP	86.9	55.1-146		%Rec	1	6/2/2020 12:43:47 PM	52815
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/2/2020 2:23:07 PM	G69333
Surr: BFB	80.0	66.6-105		%Rec	1	6/2/2020 2:23:07 PM	G69333
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	ND	0.024		mg/Kg	1	6/2/2020 2:23:07 PM	B69333
Toluene	ND	0.048		mg/Kg	1	6/2/2020 2:23:07 PM	B69333
Ethylbenzene	ND	0.048		mg/Kg	1	6/2/2020 2:23:07 PM	B69333
Xylenes, Total	ND	0.095		mg/Kg	1	6/2/2020 2:23:07 PM	B69333
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	6/2/2020 2:23:07 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 102 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-007 **Matrix:** MEOH (SOIL)

Client Sample ID: B-2 3'R
Collection Date: 5/29/2020 9:47:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 9:48:04 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 1:07:53 PM	52815
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/2/2020 1:07:53 PM	52815
Surr: DNOP	83.5	55.1-146		%Rec	1	6/2/2020 1:07:53 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	6/2/2020 2:46:38 PM	G69333
Surr: BFB	79.5	66.6-105		%Rec	1	6/2/2020 2:46:38 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	6/2/2020 2:46:38 PM	B69333
Toluene	ND	0.044		mg/Kg	1	6/2/2020 2:46:38 PM	B69333
Ethylbenzene	ND	0.044		mg/Kg	1	6/2/2020 2:46:38 PM	B69333
Xylenes, Total	ND	0.088		mg/Kg	1	6/2/2020 2:46:38 PM	B69333
Surr: 4-Bromofluorobenzene	97.9	80-120		%Rec	1	6/2/2020 2:46:38 PM	B69333

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 103 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-3 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:00:00 AM
Lab ID: 2006054-008
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **CAS**
Chloride	ND	59		mg/Kg	20	6/2/2020 10:00:28 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**
Diesel Range Organics (DRO)	3500	190		mg/Kg	20	6/2/2020 2:30:45 PM	52815
Motor Oil Range Organics (MRO)	1500	960		mg/Kg	20	6/2/2020 2:30:45 PM	52815
Surr: DNOP	0	55.1-146	S	%Rec	20	6/2/2020 2:30:45 PM	52815
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**
Gasoline Range Organics (GRO)	420	20		mg/Kg	5	6/2/2020 3:10:09 PM	G69333
Surr: BFB	623	66.6-105	S	%Rec	5	6/2/2020 3:10:09 PM	G69333
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	0.65	0.10		mg/Kg	5	6/2/2020 3:10:09 PM	B69333
Toluene	17	0.20		mg/Kg	5	6/2/2020 3:10:09 PM	B69333
Ethylbenzene	18	0.20		mg/Kg	5	6/2/2020 3:10:09 PM	B69333
Xylenes, Total	26	0.40		mg/Kg	5	6/2/2020 3:10:09 PM	B69333
Surr: 4-Bromofluorobenzene	208	80-120	S	%Rec	5	6/2/2020 3:10:09 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 PM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 104 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-3 2'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:00:00 AM
Lab ID: 2006054-009
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	6/2/2020 10:12:53 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**
Diesel Range Organics (DRO)	3700	190		mg/Kg	20	6/2/2020 1:45:54 PM	52815
Motor Oil Range Organics (MRO)	1400	970		mg/Kg	20	6/2/2020 1:45:54 PM	52815
Surr: DNOP	0	55.1-146	S	%Rec	20	6/2/2020 1:45:54 PM	52815
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**
Gasoline Range Organics (GRO)	1300	21		mg/Kg	5	6/2/2020 5:55:13 PM	G69333
Surr: BFB	1440	66.6-105	S	%Rec	5	6/2/2020 5:55:13 PM	G69333
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	3.3	0.10		mg/Kg	5	6/2/2020 5:55:13 PM	B69333
Toluene	66	2.1		mg/Kg	50	6/3/2020 8:29:25 AM	B69333
Ethylbenzene	59	2.1		mg/Kg	50	6/3/2020 8:29:25 AM	B69333
Xylenes, Total	80	4.2		mg/Kg	50	6/3/2020 8:29:25 AM	B69333
Surr: 4-Bromofluorobenzene	133	80-120	S	%Rec	50	6/3/2020 8:29:25 AM	B69333

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 105 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-010
Matrix: MEOH (SOIL)
Client Sample ID: B-3 3'R
Collection Date: 5/29/2020 10:00:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **CAS**
Chloride	ND	60		mg/Kg	20	6/2/2020 10:25:18 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**
Diesel Range Organics (DRO)	920	98		mg/Kg	10	6/2/2020 2:10:15 PM	52815
Motor Oil Range Organics (MRO)	610	490		mg/Kg	10	6/2/2020 2:10:15 PM	52815
Surr: DNOP	0	55.1-146	S	%Rec	10	6/2/2020 2:10:15 PM	52815
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	6/2/2020 6:18:41 PM	G69333
Surr: BFB	112	66.6-105	S	%Rec	1	6/2/2020 6:18:41 PM	G69333
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	ND	0.026		mg/Kg	1	6/2/2020 6:18:41 PM	B69333
Toluene	0.061	0.052		mg/Kg	1	6/2/2020 6:18:41 PM	B69333
Ethylbenzene	0.095	0.052		mg/Kg	1	6/2/2020 6:18:41 PM	B69333
Xylenes, Total	0.20	0.10		mg/Kg	1	6/2/2020 6:18:41 PM	B69333
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	6/2/2020 6:18:41 PM	B69333

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 106 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:15:00 AM
Lab ID: 2006054-011
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 10:37:42 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 2:34:19 PM	52815
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/2/2020 2:34:19 PM	52815
Surr: DNOP	90.5	55.1-146		%Rec	1	6/2/2020 2:34:19 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	6/2/2020 6:42:16 PM	G69333
Surr: BFB	80.5	66.6-105		%Rec	1	6/2/2020 6:42:16 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.027		mg/Kg	1	6/2/2020 6:42:16 PM	B69333
Toluene	ND	0.053		mg/Kg	1	6/2/2020 6:42:16 PM	B69333
Ethylbenzene	ND	0.053		mg/Kg	1	6/2/2020 6:42:16 PM	B69333
Xylenes, Total	ND	0.11		mg/Kg	1	6/2/2020 6:42:16 PM	B69333
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	6/2/2020 6:42:16 PM	B69333

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 107 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 2'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:15:00 AM
Lab ID: 2006054-012
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	61	60		mg/Kg	20	6/2/2020 10:50:06 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 2:58:30 PM	52815
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/2/2020 2:58:30 PM	52815
Surr: DNOP	91.4	55.1-146		%Rec	1	6/2/2020 2:58:30 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	6/2/2020 7:05:41 PM	G69333
Surr: BFB	83.3	66.6-105		%Rec	1	6/2/2020 7:05:41 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	6/2/2020 7:05:41 PM	B69333
Toluene	ND	0.039		mg/Kg	1	6/2/2020 7:05:41 PM	B69333
Ethylbenzene	ND	0.039		mg/Kg	1	6/2/2020 7:05:41 PM	B69333
Xylenes, Total	ND	0.079		mg/Kg	1	6/2/2020 7:05:41 PM	B69333
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/2/2020 7:05:41 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 108 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 3'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:15:00 AM
Lab ID: 2006054-013
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 11:02:30 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 3:22:40 PM	52815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 3:22:40 PM	52815
Surr: DNOP	92.3	55.1-146		%Rec	1	6/2/2020 3:22:40 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	6/2/2020 7:29:11 PM	G69333
Surr: BFB	82.1	66.6-105		%Rec	1	6/2/2020 7:29:11 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg	1	6/2/2020 7:29:11 PM	B69333
Toluene	ND	0.052		mg/Kg	1	6/2/2020 7:29:11 PM	B69333
Ethylbenzene	ND	0.052		mg/Kg	1	6/2/2020 7:29:11 PM	B69333
Xylenes, Total	ND	0.10		mg/Kg	1	6/2/2020 7:29:11 PM	B69333
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/2/2020 7:29:11 PM	B69333

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 109 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-4 4'R
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:15:00 AM
Lab ID: 2006054-014 **Matrix:** MEOH (SOIL) **Received Date:** 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	6/2/2020 11:14:54 PM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/2/2020 4:11:10 PM	52815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/2/2020 4:11:10 PM	52815
Surr: DNOP	93.7	55.1-146		%Rec	1	6/2/2020 4:11:10 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	6/2/2020 7:52:39 PM	G69333
Surr: BFB	80.7	66.6-105		%Rec	1	6/2/2020 7:52:39 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	6/2/2020 7:52:39 PM	B69333
Toluene	ND	0.044		mg/Kg	1	6/2/2020 7:52:39 PM	B69333
Ethylbenzene	ND	0.044		mg/Kg	1	6/2/2020 7:52:39 PM	B69333
Xylenes, Total	ND	0.088		mg/Kg	1	6/2/2020 7:52:39 PM	B69333
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	6/2/2020 7:52:39 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 110 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:28:00 AM
Lab ID: 2006054-015
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **CAS**
Chloride	5200	300		mg/Kg	100	6/3/2020 7:43:43 AM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**
Diesel Range Organics (DRO)	16	10		mg/Kg	1	6/2/2020 2:54:49 PM	52815
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/2/2020 2:54:49 PM	52815
Surr: DNOP	89.2	55.1-146		%Rec	1	6/2/2020 2:54:49 PM	52815
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	6/2/2020 8:16:14 PM	G69333
Surr: BFB	79.4	66.6-105		%Rec	1	6/2/2020 8:16:14 PM	G69333
EPA METHOD 8021B: VOLATILES							Analyst: **NSB**
Benzene	ND	0.021		mg/Kg	1	6/2/2020 8:16:14 PM	B69333
Toluene	ND	0.041		mg/Kg	1	6/2/2020 8:16:14 PM	B69333
Ethylbenzene	ND	0.041		mg/Kg	1	6/2/2020 8:16:14 PM	B69333
Xylenes, Total	ND	0.083		mg/Kg	1	6/2/2020 8:16:14 PM	B69333
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	6/2/2020 8:16:14 PM	B69333

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 PM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 111 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 2'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:28:00 AM
Lab ID: 2006054-016
Matrix: MEOH (SOIL)
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	4000	150		mg/Kg	50	6/3/2020 7:56:08 AM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/2/2020 3:19:04 PM	52815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 3:19:04 PM	52815
Surr: DNOP	89.6	55.1-146		%Rec	1	6/2/2020 3:19:04 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	6/2/2020 8:39:43 PM	G69333
Surr: BFB	80.2	66.6-105		%Rec	1	6/2/2020 8:39:43 PM	G69333
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	6/2/2020 8:39:43 PM	B69333
Toluene	ND	0.044		mg/Kg	1	6/2/2020 8:39:43 PM	B69333
Ethylbenzene	ND	0.044		mg/Kg	1	6/2/2020 8:39:43 PM	B69333
Xylenes, Total	ND	0.088		mg/Kg	1	6/2/2020 8:39:43 PM	B69333
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	6/2/2020 8:39:43 PM	B69333

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 112 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-017 **Matrix:** SOIL

Client Sample ID: B-5 3'
Collection Date: 5/29/2020 10:28:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	4300	150		mg/Kg	50	6/3/2020 8:08:33 AM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 4:35:20 PM	52815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 4:35:20 PM	52815
Surr: DNOP	89.9	55.1-146		%Rec	1	6/2/2020 4:35:20 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/3/2020 8:53:06 AM	52830
Surr: BFB	82.6	66.6-105		%Rec	1	6/3/2020 8:53:06 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	6/3/2020 8:53:06 AM	52830
Toluene	ND	0.046		mg/Kg	1	6/3/2020 8:53:06 AM	52830
Ethylbenzene	ND	0.046		mg/Kg	1	6/3/2020 8:53:06 AM	52830
Xylenes, Total	ND	0.093		mg/Kg	1	6/3/2020 8:53:06 AM	52830
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/3/2020 8:53:06 AM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 113 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-5 4'R
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 10:28:00 AM
Lab ID: 2006054-018 **Matrix:** SOIL
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	3500	150		mg/Kg	50	6/3/2020 8:20:57 AM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/2/2020 4:59:33 PM	52815
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/2/2020 4:59:33 PM	52815
Surr: DNOP	95.9	55.1-146		%Rec	1	6/2/2020 4:59:33 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/3/2020 9:16:43 AM	52830
Surr: BFB	82.9	66.6-105		%Rec	1	6/3/2020 9:16:43 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	6/3/2020 9:16:43 AM	52830
Toluene	ND	0.048		mg/Kg	1	6/3/2020 9:16:43 AM	52830
Ethylbenzene	ND	0.048		mg/Kg	1	6/3/2020 9:16:43 AM	52830
Xylenes, Total	ND	0.097		mg/Kg	1	6/3/2020 9:16:43 AM	52830
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/3/2020 9:16:43 AM	52830

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 114 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-019 **Matrix:** SOIL

Client Sample ID: B-6 0-1'
Collection Date: 5/29/2020 11:07:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	3800	150		mg/Kg	50	6/3/2020 8:33:21 AM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	2400	98		mg/Kg	10	6/2/2020 5:24:16 PM	52815
Motor Oil Range Organics (MRO)	1500	490		mg/Kg	10	6/2/2020 5:24:16 PM	52815
Surr: DNOP	0	55.1-146	S	%Rec	10	6/2/2020 5:24:16 PM	52815
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	69	24		mg/Kg	5	6/3/2020 9:40:23 AM	52830
Surr: BFB	140	66.6-105	S	%Rec	5	6/3/2020 9:40:23 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.12		mg/Kg	5	6/3/2020 9:40:23 AM	52830
Toluene	0.40	0.24		mg/Kg	5	6/3/2020 9:40:23 AM	52830
Ethylbenzene	2.9	0.24		mg/Kg	5	6/3/2020 9:40:23 AM	52830
Xylenes, Total	14	0.48		mg/Kg	5	6/3/2020 9:40:23 AM	52830
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	5	6/3/2020 9:40:23 AM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 115 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-020 **Matrix:** SOIL

Client Sample ID: B-6 2'
Collection Date: 5/29/2020 11:07:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **CAS**
Chloride	970	60		mg/Kg	20	6/3/2020 12:54:11 AM	52833
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **JME**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/2/2020 5:48:27 PM	52815
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 5:48:27 PM	52815
Surr: DNOP	91.5	55.1-146		%Rec	1	6/2/2020 5:48:27 PM	52815
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/3/2020 10:04:02 AM	52830
Surr: BFB	83.3	66.6-105		%Rec	1	6/3/2020 10:04:02 AM	52830
EPA METHOD 8021B: VOLATILES							Analyst: **RAA**
Benzene	ND	0.024		mg/Kg	1	6/3/2020 10:04:02 AM	52830
Toluene	ND	0.048		mg/Kg	1	6/3/2020 10:04:02 AM	52830
Ethylbenzene	ND	0.048		mg/Kg	1	6/3/2020 10:04:02 AM	52830
Xylenes, Total	0.20	0.097		mg/Kg	1	6/3/2020 10:04:02 AM	52830
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/3/2020 10:04:02 AM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 116 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-021 **Matrix:** SOIL

Client Sample ID: B-6 3'
Collection Date: 5/29/2020 11:07:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	550	60		mg/Kg	20	6/3/2020 2:58:17 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/2/2020 6:12:58 PM	52816
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 6:12:58 PM	52816
Surr: DNOP	98.3	55.1-146		%Rec	1	6/2/2020 6:12:58 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2020 10:27:42 AM	52830
Surr: BFB	81.8	66.6-105		%Rec	1	6/3/2020 10:27:42 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	6/3/2020 10:27:42 AM	52830
Toluene	ND	0.049		mg/Kg	1	6/3/2020 10:27:42 AM	52830
Ethylbenzene	ND	0.049		mg/Kg	1	6/3/2020 10:27:42 AM	52830
Xylenes, Total	0.14	0.099		mg/Kg	1	6/3/2020 10:27:42 AM	52830
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/3/2020 10:27:42 AM	52830

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 117 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-022 **Matrix:** SOIL

Client Sample ID: B-6 4'R
Collection Date: 5/29/2020 11:07:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	360	60		mg/Kg	20	6/3/2020 3:10:41 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 7:26:14 PM	52816
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 7:26:14 PM	52816
Surr: DNOP	95.9	55.1-146		%Rec	1	6/2/2020 7:26:14 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2020 10:51:22 AM	52830
Surr: BFB	82.1	66.6-105		%Rec	1	6/3/2020 10:51:22 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	6/3/2020 10:51:22 AM	52830
Toluene	ND	0.049		mg/Kg	1	6/3/2020 10:51:22 AM	52830
Ethylbenzene	ND	0.049		mg/Kg	1	6/3/2020 10:51:22 AM	52830
Xylenes, Total	ND	0.097		mg/Kg	1	6/3/2020 10:51:22 AM	52830
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/3/2020 10:51:22 AM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 PM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 118 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-023 **Matrix:** SOIL

Client Sample ID: B-7 0-1'
Collection Date: 5/29/2020 11:27:00 AM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	390	60		mg/Kg	20	6/3/2020 3:23:06 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/2/2020 7:50:46 PM	52816
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 7:50:46 PM	52816
Surr: DNOP	91.5	55.1-146		%Rec	1	6/2/2020 7:50:46 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/3/2020 11:15:00 AM	52830
Surr: BFB	82.4	66.6-105		%Rec	1	6/3/2020 11:15:00 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	6/3/2020 11:15:00 AM	52830
Toluene	ND	0.048		mg/Kg	1	6/3/2020 11:15:00 AM	52830
Ethylbenzene	ND	0.048		mg/Kg	1	6/3/2020 11:15:00 AM	52830
Xylenes, Total	ND	0.096		mg/Kg	1	6/3/2020 11:15:00 AM	52830
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/3/2020 11:15:00 AM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 119 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-7 2'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 11:27:00 AM
Lab ID: 2006054-024 **Matrix:** SOIL
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	230	60		mg/Kg	20	6/3/2020 3:35:31 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/2/2020 8:15:10 PM	52816
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 8:15:10 PM	52816
Surr: DNOP	101	55.1-146		%Rec	1	6/2/2020 8:15:10 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2020 11:38:46 AM	52830
Surr: BFB	85.9	66.6-105		%Rec	1	6/3/2020 11:38:46 AM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	6/3/2020 11:38:46 AM	52830
Toluene	ND	0.049		mg/Kg	1	6/3/2020 11:38:46 AM	52830
Ethylbenzene	ND	0.049		mg/Kg	1	6/3/2020 11:38:46 AM	52830
Xylenes, Total	ND	0.097		mg/Kg	1	6/3/2020 11:38:46 AM	52830
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	6/3/2020 11:38:46 AM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 120 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-7 3'R
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 11:27:00 AM
Lab ID: 2006054-025 **Matrix:** SOIL
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	990	60		mg/Kg	20	6/3/2020 3:47:55 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	13	9.9		mg/Kg	1	6/2/2020 8:39:38 PM	52816
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/2/2020 8:39:38 PM	52816
Surr: DNOP	91.5	55.1-146		%Rec	1	6/2/2020 8:39:38 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2020 12:02:20 PM	52830
Surr: BFB	83.7	66.6-105		%Rec	1	6/3/2020 12:02:20 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	6/3/2020 12:02:20 PM	52830
Toluene	ND	0.049		mg/Kg	1	6/3/2020 12:02:20 PM	52830
Ethylbenzene	ND	0.049		mg/Kg	1	6/3/2020 12:02:20 PM	52830
Xylenes, Total	ND	0.097		mg/Kg	1	6/3/2020 12:02:20 PM	52830
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/3/2020 12:02:20 PM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 121 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-026 **Matrix:** SOIL

Client Sample ID: B-8 0-1'
Collection Date: 5/29/2020 12:37:00 PM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	3100	150		mg/Kg	50	6/3/2020 8:45:46 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	3900	97		mg/Kg	10	6/2/2020 9:03:51 PM	52816
Motor Oil Range Organics (MRO)	2100	480		mg/Kg	10	6/2/2020 9:03:51 PM	52816
Surr: DNOP	0	55.1-146	S	%Rec	10	6/2/2020 9:03:51 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	340	23		mg/Kg	5	6/3/2020 12:49:12 PM	52830
Surr: BFB	343	66.6-105	S	%Rec	5	6/3/2020 12:49:12 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	0.14	0.12		mg/Kg	5	6/3/2020 12:49:12 PM	52830
Toluene	4.3	0.23		mg/Kg	5	6/3/2020 12:49:12 PM	52830
Ethylbenzene	17	0.23		mg/Kg	5	6/3/2020 12:49:12 PM	52830
Xylenes, Total	71	4.6		mg/Kg	50	6/3/2020 10:14:12 PM	52830
Surr: 4-Bromofluorobenzene	157	80-120	S	%Rec	5	6/3/2020 12:49:12 PM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 PM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 122 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-027 **Matrix:** SOIL

Client Sample ID: B-8 2'
Collection Date: 5/29/2020 12:37:00 PM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	98	60		mg/Kg	20	6/3/2020 4:37:33 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/2/2020 9:28:17 PM	52816
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 9:28:17 PM	52816
Surr: DNOP	76.4	55.1-146		%Rec	1	6/2/2020 9:28:17 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	5.1	4.9		mg/Kg	1	6/3/2020 1:12:46 PM	52830
Surr: BFB	97.2	66.6-105		%Rec	1	6/3/2020 1:12:46 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	0.032	0.024		mg/Kg	1	6/3/2020 1:12:46 PM	52830
Toluene	0.10	0.049		mg/Kg	1	6/3/2020 1:12:46 PM	52830
Ethylbenzene	0.26	0.049		mg/Kg	1	6/3/2020 1:12:46 PM	52830
Xylenes, Total	1.4	0.098		mg/Kg	1	6/3/2020 1:12:46 PM	52830
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	6/3/2020 1:12:46 PM	52830

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 PM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 123 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-028 **Matrix:** SOIL

Client Sample ID: B-8 3'
Collection Date: 5/29/2020 12:37:00 PM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	170	60		mg/Kg	20	6/3/2020 4:49:58 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	60	10		mg/Kg	1	6/2/2020 9:52:37 PM	52816
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/2/2020 9:52:37 PM	52816
Surr: DNOP	82.6	55.1-146		%Rec	1	6/2/2020 9:52:37 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	5.7	4.8		mg/Kg	1	6/3/2020 1:36:28 PM	52830
Surr: BFB	95.2	66.6-105		%Rec	1	6/3/2020 1:36:28 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	0.045	0.024		mg/Kg	1	6/3/2020 1:36:28 PM	52830
Toluene	0.13	0.048		mg/Kg	1	6/3/2020 1:36:28 PM	52830
Ethylbenzene	0.29	0.048		mg/Kg	1	6/3/2020 1:36:28 PM	52830
Xylenes, Total	1.4	0.097		mg/Kg	1	6/3/2020 1:36:28 PM	52830
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	6/3/2020 1:36:28 PM	52830

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 124 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-029 **Matrix:** SOIL

Client Sample ID: B-8 4'R
Collection Date: 5/29/2020 12:37:00 PM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	72	60		mg/Kg	20	6/3/2020 5:02:23 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	71	9.7		mg/Kg	1	6/2/2020 10:17:04 PM	52816
Motor Oil Range Organics (MRO)	50	48		mg/Kg	1	6/2/2020 10:17:04 PM	52816
Surr: DNOP	83.5	55.1-146		%Rec	1	6/2/2020 10:17:04 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2020 2:00:02 PM	52830
Surr: BFB	88.0	66.6-105		%Rec	1	6/3/2020 2:00:02 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	6/3/2020 2:00:02 PM	52830
Toluene	ND	0.049		mg/Kg	1	6/3/2020 2:00:02 PM	52830
Ethylbenzene	0.058	0.049		mg/Kg	1	6/3/2020 2:00:02 PM	52830
Xylenes, Total	0.31	0.099		mg/Kg	1	6/3/2020 2:00:02 PM	52830
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/3/2020 2:00:02 PM	52830

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 125 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-9 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 5/29/2020 1:00:00 PM
Lab ID: 2006054-030 **Matrix:** SOIL
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	4100	150		mg/Kg	50	6/3/2020 8:58:11 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	1400	97		mg/Kg	10	6/2/2020 10:41:26 PM	52816
Motor Oil Range Organics (MRO)	760	490		mg/Kg	10	6/2/2020 10:41:26 PM	52816
Surr: DNOP	0	55.1-146	S	%Rec	10	6/2/2020 10:41:26 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	29	4.7		mg/Kg	1	6/3/2020 2:23:34 PM	52830
Surr: BFB	249	66.6-105	S	%Rec	1	6/3/2020 2:23:34 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	0.027	0.024		mg/Kg	1	6/3/2020 2:23:34 PM	52830
Toluene	0.23	0.047		mg/Kg	1	6/3/2020 2:23:34 PM	52830
Ethylbenzene	0.98	0.047		mg/Kg	1	6/3/2020 2:23:34 PM	52830
Xylenes, Total	5.1	0.095		mg/Kg	1	6/3/2020 2:23:34 PM	52830
Surr: 4-Bromofluorobenzene	130	80-120	S	%Rec	1	6/3/2020 2:23:34 PM	52830

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 126 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-031 **Matrix:** SOIL

Client Sample ID: B-9 2'
Collection Date: 5/29/2020 1:00:00 PM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	3100	150		mg/Kg	50	6/3/2020 7:55:00 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	180	10		mg/Kg	1	6/2/2020 11:05:52 PM	52816
Motor Oil Range Organics (MRO)	99	50		mg/Kg	1	6/2/2020 11:05:52 PM	52816
Surr: DNOP	95.0	55.1-146		%Rec	1	6/2/2020 11:05:52 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	6.8	4.9		mg/Kg	1	6/3/2020 2:47:08 PM	52830
Surr: BFB	135	66.6-105	S	%Rec	1	6/3/2020 2:47:08 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	0.027	0.024		mg/Kg	1	6/3/2020 2:47:08 PM	52830
Toluene	0.097	0.049		mg/Kg	1	6/3/2020 2:47:08 PM	52830
Ethylbenzene	0.27	0.049		mg/Kg	1	6/3/2020 2:47:08 PM	52830
Xylenes, Total	1.3	0.097		mg/Kg	1	6/3/2020 2:47:08 PM	52830
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	1	6/3/2020 2:47:08 PM	52830

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 127 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006054-032 **Matrix:** SOIL

Client Sample ID: B-9 3'
Collection Date: 5/29/2020 1:00:00 PM
Received Date: 6/2/2020 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	1400	60		mg/Kg	20	6/3/2020 5:39:37 AM	52834
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	58	9.8		mg/Kg	1	6/2/2020 11:30:12 PM	52816
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/2/2020 11:30:12 PM	52816
Surr: DNOP	77.3	55.1-146		%Rec	1	6/2/2020 11:30:12 PM	52816
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2020 3:10:35 PM	52830
Surr: BFB	98.0	66.6-105		%Rec	1	6/3/2020 3:10:35 PM	52830
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	0.029	0.024		mg/Kg	1	6/3/2020 3:10:35 PM	52830
Toluene	0.077	0.049		mg/Kg	1	6/3/2020 3:10:35 PM	52830
Ethylbenzene	0.18	0.049		mg/Kg	1	6/3/2020 3:10:35 PM	52830
Xylenes, Total	0.87	0.097		mg/Kg	1	6/3/2020 3:10:35 PM	52830
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	6/3/2020 3:10:35 PM	52830

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 128 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006054

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **MB-52833**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **52833**	RunNo: **69353**							
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2405269**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-52833**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **52833**	RunNo: **69353**							
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2405270**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	90	110			

Sample ID: **MB-52834**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **52834**	RunNo: **69353**							
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405299**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-52834**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **52834**	RunNo: **69353**							
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405300**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.6	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 129 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006054

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **MB-52816**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **52816**	RunNo: **69321**
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2403981** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	55.1	146			

Sample ID: **LCS-52816**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **52816**	RunNo: **69321**
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2403982** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.9	70	130			
Surr: DNOP	4.7		5.000		93.6	55.1	146			

Sample ID: **MB-52815**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **52815**	RunNo: **69320**
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2404032** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.5	55.1	146			

Sample ID: **LCS-52815**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **52815**	RunNo: **69320**
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2404033** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.6	70	130			
Surr: DNOP	4.1		5.000		82.4	55.1	146			

Sample ID: **2006054-021AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **B-6 3'**	Batch ID: **52816**	RunNo: **69321**
Prep Date: **6/2/2020**	Analysis Date: **6/2/2020**	SeqNo: **2404572** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	49.75	3.525	90.2	47.4	136			
Surr: DNOP	4.5		4.975		91.3	55.1	146			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 130 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006054**

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **2006054-021AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **B-6 3'** Batch ID: **52816** RunNo: **69321**

Prep Date: **6/2/2020** Analysis Date: **6/2/2020** SeqNo: **2404573** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.8	49.02	3.525	93.6	47.4	136	2.04	43.4	
Surr: DNOP	4.7		4.902		96.0	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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 131 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006054

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **G69333**	RunNo: **69333**							
Prep Date:	Analysis Date: **6/2/2020**	SeqNo: **2404583**	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	820		1000		81.6	66.6	105			

Sample ID: **2.5ug gro lcsb**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **G69333**	RunNo: **69333**							
Prep Date:	Analysis Date: **6/2/2020**	SeqNo: **2404584**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	80	120			
Surr: BFB	930		1000		92.5	66.6	105			

Sample ID: **mb-52830**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **52830**	RunNo: **69340**							
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405514**	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	830		1000		82.5	66.6	105			

Sample ID: **2006054-003ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **B-1 3'**	Batch ID: **G69333**	RunNo: **69340**							
Prep Date:	Analysis Date: **6/3/2020**	SeqNo: **2406060**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.56	0	90.2	80	120			
Surr: BFB	930		942.5		98.3	66.6	105			

Sample ID: **2006054-003amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **B-1 3'**	Batch ID: **G69333**	RunNo: **69340**							
Prep Date:	Analysis Date: **6/3/2020**	SeqNo: **2406061**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.56	0	89.1	80	120	1.29	20	
Surr: BFB	990		942.5		105	66.6	105	0	0	

Sample ID: **lcs-52830**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **52830**	RunNo: **69340**							
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2406062**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Quanitative Limit
- RL Reporting Limit
- S % Recovery outside of range due to dilution or matrix

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Page 132 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006054**

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **lcs-52830**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **52830**	RunNo: **69340**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2406062** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.1	80	120			
Surr: BFB	960		1000		96.4	66.6	105			

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 133 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006054

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B69333**	RunNo: **69333**
Prep Date:	Analysis Date: **6/2/2020**	SeqNo: **2404606** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.5	80	120			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B69333**	RunNo: **69333**
Prep Date:	Analysis Date: **6/2/2020**	SeqNo: **2404607** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	84.7	80	120			
Toluene	0.86	0.050	1.000	0	86.5	80	120			
Ethylbenzene	0.85	0.050	1.000	0	85.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	85.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: **mb-52830**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **52830**	RunNo: **69340**
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2405532** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: **2006054-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **B-1 2'**	Batch ID: **B69333**	RunNo: **69340**
Prep Date:	Analysis Date: **6/3/2020**	SeqNo: **2406071** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.021	0.8446	0.02348	95.0	78.5	119			
Toluene	0.93	0.042	0.8446	0.08708	99.5	75.7	123			
Ethylbenzene	0.99	0.042	0.8446	0.1423	101	74.3	126			
Xylenes, Total	2.7	0.084	2.534	0.1780	99.0	72.9	130			
Surr: 4-Bromofluorobenzene	0.99		0.8446		117	80	120			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 134 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006054

05-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **2006054-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **B-1 2'**	Batch ID: **B69333**	RunNo: **69340**							
Prep Date:	Analysis Date: **6/3/2020**	SeqNo: **2406072**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.021	0.8446	0.02348	94.1	78.5	119	0.904	20	
Toluene	0.94	0.042	0.8446	0.08708	101	75.7	123	1.01	20	
Ethylbenzene	1.0	0.042	0.8446	0.1423	101	74.3	126	0.543	20	
Xylenes, Total	2.7	0.084	2.534	0.1780	99.9	72.9	130	0.827	20	
Surr: 4-Bromofluorobenzene	0.99		0.8446		118	80	120	0	0	

Sample ID: **LCS-52830**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **52830**	RunNo: **69340**							
Prep Date: **6/2/2020**	Analysis Date: **6/3/2020**	SeqNo: **2406074**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	80	120			
Toluene	0.95	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.7	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 135 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: TALON ARTESIA Work Order Number: 2006054 RcptNo: 1

Received By: Juan Rojas 6/2/2020 9:25:00 AM

Completed By: Isaiah Ortiz 6/2/2020 10:03:00 AM

Reviewed By: DAD 6/2/20

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: EM 2/6/20

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	2.5	Good	Not Present			

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Chain-of-Custody Record

Client: Talon LPE

Mailing Address: 408 W Texas Ave
Artesia, NM 88210

Phone #: 575-746-8768

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 24 hr

Project Name: Booter 15 Fed Com 1H

Project #: 200794.343.01

Project Manager: David Adkins

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.6-0.1=2.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006054	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5-29-20	09:23	SO;l	B-1 0-1'	4 oz jar	ice	-001	✓	✓					✓			
	09:23		B-1 2'			-002										
	09:23		B-1 3'			-003										
	09:23		B-1 4' R			-004										
	09:47		B-2 0-1'			-005										
	09:47		B-2 2'			-006										
	09:47		B-2 3' R			-007										
	10:00 BS		B-3 0-1'			-008										
	10:00		B-3 2'			-009										
	10:00		B-3 3' R			-010										
	10:15		B-4 0-1'			-011										
	10:15		B-4 2'			-012										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/1/20	09:20				6/1/20	09:20
6/1/20	1900			courier	6/2/20	9:15

Remarks: cc
dadkins@talonlpe.com
bsinclair@talonlpe.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Talon LPE

Mailing Address: 408 W Texas Ave
Artesia, NM 88210

Phone #: 575-746-8768

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 24 hr

Project Name: Bootes 15 Fed Com 1H

Project #: 200794.343.01

Project Manager: David Adkins

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.6-0.1=2.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006054	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl) F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5-29-20	10:15	soil	B-4 3'	4oz jar	ice	-013	✓	✓					✓			
	10:15		B-4 4' R			-014										
	10:28		B-5 0-1'			-015										
	10:28		B-5 2'			-016										
	10:28		B-5 3'			-017										
	10:28		B-5 4' R			-018										
	11:07		B-6 0-1'			-019										
	11:07		B-6 2'			-020										
	11:07		B-6 3'			-021										
	11:07		B-6 4' R			-022										
	11:27		B-7 0-1'			-023										
	11:27		B-7 2'			-024										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/1/20	0900				6/1/20	0900
6/1/20	1610			courier	6/2/20	9:25

Remarks: cc
dadkins@talonlpe.com
bsinclair@talonlpe.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Talon LPE

Mailing Address: 408 W Texas Ave / Artesia, NM 88210

Phone #: 575-746-8768

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☑ Rush 24 hr

Project Name: Bootes 1.5 Fed Com 1H

Project #: 200794.343.01

Project Manager: David Adkins

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.6-0.1=2.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006054	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5-29-20	11:27	Soil	B-7 3' R	4oz jar	ice	-025	✓	✓					✓			
	12:37		B-8 0-1'			-026										
	12:37		B-8 2'			-027										
	12:37		B-8 3'			-028										
	12:37		B-8 4' R			-029										
	13:00		B-9 0-1'			-030										
	13:00		B-9 2'			-031										
	13:00		B-9 3'			-032										

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/1/20	0900				6/1/20	0900
6/1/20	1900			courier	6/7/20	9:25

Remarks: cc dadkins@talonlpe.com bsinclair@talonlpe.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Page 139 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 24, 2020

David Adkins
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX:

RE: Bootes 15 Fed Com 1H

OrderNo.: 2006942

Dear David Adkins:

Hall Environmental Analysis Laboratory received 13 sample(s) on 6/18/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Received by OCD: 6/22/2021 12:00:05 AM

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Page 140 of 194

Analytical Report
Lab Order **2006942**
Date Reported: **6/24/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-001 **Matrix:** SOIL

Client Sample ID: B-10 0-1'
Collection Date: 6/17/2020 11:05:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	13000	600		mg/Kg	200	6/23/2020 6:08:12 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	23	4.9		mg/Kg	1	6/20/2020 4:03:28 PM	53155
Surr: BFB	101	70-130		%Rec	1	6/20/2020 4:03:28 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	19000	900		mg/Kg	100	6/19/2020 10:31:29 PM	53169
Motor Oil Range Organics (MRO)	12000	4500		mg/Kg	100	6/19/2020 10:31:29 PM	53169
Surr: DNOP	0	55.1-146	S	%Rec	100	6/19/2020 10:31:29 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	6/20/2020 4:03:28 PM	53155
Toluene	ND	0.049		mg/Kg	1	6/20/2020 4:03:28 PM	53155
Ethylbenzene	0.52	0.049		mg/Kg	1	6/20/2020 4:03:28 PM	53155
Xylenes, Total	2.8	0.098		mg/Kg	1	6/20/2020 4:03:28 PM	53155
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	6/20/2020 4:03:28 PM	53155
Surr: 4-Bromofluorobenzene	73.4	70-130		%Rec	1	6/20/2020 4:03:28 PM	53155
Surr: Dibromofluoromethane	106	70-130		%Rec	1	6/20/2020 4:03:28 PM	53155
Surr: Toluene-d8	106	70-130		%Rec	1	6/20/2020 4:03:28 PM	53155

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
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Page 141 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-002 **Matrix:** SOIL

Client Sample ID: B-10 2'
Collection Date: 6/17/2020 11:05:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	290	60		mg/Kg	20	6/22/2020 1:59:35 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/20/2020 5:58:07 PM	53155
Surr: BFB	97.6	70-130		%Rec	1	6/20/2020 5:58:07 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	180	9.8		mg/Kg	1	6/20/2020 1:03:48 PM	53169
Motor Oil Range Organics (MRO)	120	49		mg/Kg	1	6/20/2020 1:03:48 PM	53169
Surr: DNOP	122	55.1-146		%Rec	1	6/20/2020 1:03:48 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	6/20/2020 5:58:07 PM	53155
Toluene	ND	0.050		mg/Kg	1	6/20/2020 5:58:07 PM	53155
Ethylbenzene	ND	0.050		mg/Kg	1	6/20/2020 5:58:07 PM	53155
Xylenes, Total	ND	0.099		mg/Kg	1	6/20/2020 5:58:07 PM	53155
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/20/2020 5:58:07 PM	53155
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	6/20/2020 5:58:07 PM	53155
Surr: Dibromofluoromethane	115	70-130		%Rec	1	6/20/2020 5:58:07 PM	53155
Surr: Toluene-d8	103	70-130		%Rec	1	6/20/2020 5:58:07 PM	53155

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 142 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-003 **Matrix:** SOIL

Client Sample ID: B-10 3'
Collection Date: 6/17/2020 11:05:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	220	60		mg/Kg	20	6/22/2020 2:11:55 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2020 7:24:11 PM	53155
Surr: BFB	97.4	70-130		%Rec	1	6/20/2020 7:24:11 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	29	10		mg/Kg	1	6/19/2020 10:51:55 PM	53169
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/19/2020 10:51:55 PM	53169
Surr: DNOP	97.8	55.1-146		%Rec	1	6/19/2020 10:51:55 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	6/20/2020 7:24:11 PM	53155
Toluene	ND	0.049		mg/Kg	1	6/20/2020 7:24:11 PM	53155
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2020 7:24:11 PM	53155
Xylenes, Total	ND	0.099		mg/Kg	1	6/20/2020 7:24:11 PM	53155
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	6/20/2020 7:24:11 PM	53155
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	6/20/2020 7:24:11 PM	53155
Surr: Dibromofluoromethane	106	70-130		%Rec	1	6/20/2020 7:24:11 PM	53155
Surr: Toluene-d8	108	70-130		%Rec	1	6/20/2020 7:24:11 PM	53155

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 143 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-004 **Matrix:** SOIL

Client Sample ID: B-10 4'
Collection Date: 6/17/2020 11:05:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **MRA**
Chloride	180	60		mg/Kg	20	6/22/2020 2:24:15 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2020 7:52:52 PM	53155
Surr: BFB	100	70-130		%Rec	1	6/20/2020 7:52:52 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	230	9.7		mg/Kg	1	6/20/2020 1:13:39 PM	53169
Motor Oil Range Organics (MRO)	150	49		mg/Kg	1	6/20/2020 1:13:39 PM	53169
Surr: DNOP	118	55.1-146		%Rec	1	6/20/2020 1:13:39 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: **DJF**
Benzene	ND	0.025		mg/Kg	1	6/20/2020 7:52:52 PM	53155
Toluene	ND	0.049		mg/Kg	1	6/20/2020 7:52:52 PM	53155
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2020 7:52:52 PM	53155
Xylenes, Total	ND	0.098		mg/Kg	1	6/20/2020 7:52:52 PM	53155
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	6/20/2020 7:52:52 PM	53155
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	6/20/2020 7:52:52 PM	53155
Surr: Dibromofluoromethane	108	70-130		%Rec	1	6/20/2020 7:52:52 PM	53155
Surr: Toluene-d8	109	70-130		%Rec	1	6/20/2020 7:52:52 PM	53155

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 144 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-005 **Matrix:** SOIL

Client Sample ID: B-11 0-1'
Collection Date: 6/17/2020 11:26:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	4200	150		mg/Kg	50	6/23/2020 6:20:37 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	2700	480		mg/Kg	100	6/21/2020 1:47:45 PM	53155
Surr: BFB	102	70-130		%Rec	100	6/21/2020 1:47:45 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	11000	180		mg/Kg	20	6/19/2020 11:12:23 PM	53169
Motor Oil Range Organics (MRO)	5100	920		mg/Kg	20	6/19/2020 11:12:23 PM	53169
Surr: DNOP	0	55.1-146	S	%Rec	20	6/19/2020 11:12:23 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	4.1	0.12		mg/Kg	5	6/20/2020 8:21:33 PM	53155
Toluene	99	4.8		mg/Kg	100	6/21/2020 1:47:45 PM	53155
Ethylbenzene	110	4.8		mg/Kg	100	6/21/2020 1:47:45 PM	53155
Xylenes, Total	210	9.5		mg/Kg	100	6/21/2020 1:47:45 PM	53155
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	5	6/20/2020 8:21:33 PM	53155
Surr: 4-Bromofluorobenzene	48.6	70-130	S	%Rec	5	6/20/2020 8:21:33 PM	53155
Surr: Dibromofluoromethane	101	70-130		%Rec	5	6/20/2020 8:21:33 PM	53155
Surr: Toluene-d8	115	70-130		%Rec	5	6/20/2020 8:21:33 PM	53155

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 145 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-006 **Matrix:** SOIL

Client Sample ID: B-11 2'
Collection Date: 6/17/2020 11:26:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	220	60		mg/Kg	20	6/22/2020 3:13:39 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	13	4.9		mg/Kg	1	6/21/2020 2:16:28 PM	53155
Surr: BFB	97.8	70-130		%Rec	1	6/21/2020 2:16:28 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	290	9.6		mg/Kg	1	6/20/2020 1:33:35 PM	53169
Motor Oil Range Organics (MRO)	170	48		mg/Kg	1	6/20/2020 1:33:35 PM	53169
Surr: DNOP	125	55.1-146		%Rec	1	6/20/2020 1:33:35 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	0.029	0.024		mg/Kg	1	6/21/2020 2:16:28 PM	53155
Toluene	0.32	0.049		mg/Kg	1	6/21/2020 2:16:28 PM	53155
Ethylbenzene	0.37	0.049		mg/Kg	1	6/21/2020 2:16:28 PM	53155
Xylenes, Total	0.80	0.097		mg/Kg	1	6/21/2020 2:16:28 PM	53155
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	6/21/2020 2:16:28 PM	53155
Surr: 4-Bromofluorobenzene	72.3	70-130		%Rec	1	6/21/2020 2:16:28 PM	53155
Surr: Dibromofluoromethane	106	70-130		%Rec	1	6/21/2020 2:16:28 PM	53155
Surr: Toluene-d8	104	70-130		%Rec	1	6/21/2020 2:16:28 PM	53155

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 146 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-007 **Matrix:** SOIL

Client Sample ID: B-11 3'R
Collection Date: 6/17/2020 11:26:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Uuits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	510	60		mg/Kg	20	6/22/2020 3:26:00 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	240	4.9		mg/Kg	1	6/20/2020 9:18:45 PM	53155
Surr: BFB	111	70-130		%Rec	1	6/20/2020 9:18:45 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	1500	97		mg/Kg	10	6/19/2020 11:32:49 PM	53169
Motor Oil Range Organics (MRO)	940	490		mg/Kg	10	6/19/2020 11:32:49 PM	53169
Surr: DNOP	0	55.1-146	S	%Rec	10	6/19/2020 11:32:49 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	0.56	0.025		mg/Kg	1	6/20/2020 9:18:45 PM	53155
Toluene	8.4	0.49		mg/Kg	10	6/21/2020 2:45:12 PM	53155
Ethylbenzene	8.3	0.49		mg/Kg	10	6/21/2020 2:45:12 PM	53155
Xylenes, Total	16	0.98		mg/Kg	10	6/21/2020 2:45:12 PM	53155
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	6/20/2020 9:18:45 PM	53155
Surr: 4-Bromofluorobenzene	51.4	70-130	S	%Rec	1	6/20/2020 9:18:45 PM	53155
Surr: Dibromofluoromethane	106	70-130		%Rec	1	6/20/2020 9:18:45 PM	53155
Surr: Toluene-d8	108	70-130		%Rec	1	6/20/2020 9:18:45 PM	53155

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 147 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-008 **Matrix:** SOIL

Client Sample ID: B-12 0-1'
Collection Date: 6/17/2020 11:47:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	150	60		mg/Kg	20	6/22/2020 3:38:21 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	4300	460		mg/Kg	100	6/21/2020 3:13:58 PM	53155
Surr: BFB	101	70-130		%Rec	100	6/21/2020 3:13:58 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	21000	480		mg/Kg	50	6/19/2020 11:43:02 PM	53169
Motor Oil Range Organics (MRO)	9100	2400		mg/Kg	50	6/19/2020 11:43:02 PM	53169
Surr: DNOP	0	55.1-146	S	%Rec	50	6/19/2020 11:43:02 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	31	2.3		mg/Kg	100	6/21/2020 3:13:58 PM	53155
Toluene	220	4.6		mg/Kg	100	6/21/2020 3:13:58 PM	53155
Ethylbenzene	170	4.6		mg/Kg	100	6/21/2020 3:13:58 PM	53155
Xylenes, Total	330	9.3		mg/Kg	100	6/21/2020 3:13:58 PM	53155
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	100	6/21/2020 3:13:58 PM	53155
Surr: 4-Bromofluorobenzene	87.5	70-130		%Rec	100	6/21/2020 3:13:58 PM	53155
Surr: Dibromofluoromethane	103	70-130		%Rec	100	6/21/2020 3:13:58 PM	53155
Surr: Toluene-d8	108	70-130		%Rec	100	6/21/2020 3:13:58 PM	53155

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 148 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-009 **Matrix:** SOIL

Client Sample ID: B-12 2'
Collection Date: 6/17/2020 11:47:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	63	60		mg/Kg	20	6/22/2020 3:50:41 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	2800	490		mg/Kg	100	6/21/2020 3:42:44 PM	53155
Surr: BFB	100	70-130		%Rec	100	6/21/2020 3:42:44 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	11000	460		mg/Kg	50	6/19/2020 11:53:11 PM	53169
Motor Oil Range Organics (MRO)	5200	2300		mg/Kg	50	6/19/2020 11:53:11 PM	53169
Surr: DNOP	0	55.1-146	S	%Rec	50	6/19/2020 11:53:11 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	24	2.5		mg/Kg	100	6/21/2020 3:42:44 PM	53155
Toluene	150	4.9		mg/Kg	100	6/21/2020 3:42:44 PM	53155
Ethylbenzene	100	4.9		mg/Kg	100	6/21/2020 3:42:44 PM	53155
Xylenes, Total	170	9.8		mg/Kg	100	6/21/2020 3:42:44 PM	53155
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	100	6/21/2020 3:42:44 PM	53155
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	100	6/21/2020 3:42:44 PM	53155
Surr: Dibromofluoromethane	103	70-130		%Rec	100	6/21/2020 3:42:44 PM	53155
Surr: Toluene-d8	106	70-130		%Rec	100	6/21/2020 3:42:44 PM	53155

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

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 149 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-010 **Matrix:** SOIL

Client Sample ID: B-12 3'
Collection Date: 6/17/2020 11:47:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	6/22/2020 4:03:01 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: **JMR**
Gasoline Range Organics (GRO)	14	4.7		mg/Kg	1	6/21/2020 4:11:31 PM	53155
Surr: BFB	107	70-130		%Rec	1	6/21/2020 4:11:31 PM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	640	92		mg/Kg	10	6/20/2020 12:03:17 AM	53169
Motor Oil Range Organics (MRO)	490	460		mg/Kg	10	6/20/2020 12:03:17 AM	53169
Surr: DNOP	0	55.1-146	S	%Rec	10	6/20/2020 12:03:17 AM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: **JMR**
Benzene	0.12	0.023		mg/Kg	1	6/21/2020 4:11:31 PM	53155
Toluene	0.49	0.047		mg/Kg	1	6/21/2020 4:11:31 PM	53155
Ethylbenzene	0.33	0.047		mg/Kg	1	6/21/2020 4:11:31 PM	53155
Xylenes, Total	0.72	0.094		mg/Kg	1	6/21/2020 4:11:31 PM	53155
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	6/21/2020 4:11:31 PM	53155
Surr: 4-Bromofluorobenzene	79.2	70-130		%Rec	1	6/21/2020 4:11:31 PM	53155
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/21/2020 4:11:31 PM	53155
Surr: Toluene-d8	111	70-130		%Rec	1	6/21/2020 4:11:31 PM	53155

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 AM
Released to Imaging: 7/14/2021 9:15:04 AM

Page 150 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-011 **Matrix:** SOIL

Client Sample ID: B-12 4'R
Collection Date: 6/17/2020 11:47:00 AM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	94	60		mg/Kg	20	6/22/2020 4:15:22 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/21/2020 2:04:41 AM	53155
Surr: BFB	99.3	70-130		%Rec	1	6/21/2020 2:04:41 AM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	650	47		mg/Kg	5	6/20/2020 1:43:34 PM	53169
Motor Oil Range Organics (MRO)	430	240		mg/Kg	5	6/20/2020 1:43:34 PM	53169
Surr: DNOP	154	55.1-146	S	%Rec	5	6/20/2020 1:43:34 PM	53169
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	6/21/2020 2:04:41 AM	53155
Toluene	ND	0.049		mg/Kg	1	6/21/2020 2:04:41 AM	53155
Ethylbenzene	ND	0.049		mg/Kg	1	6/21/2020 2:04:41 AM	53155
Xylenes, Total	ND	0.097		mg/Kg	1	6/21/2020 2:04:41 AM	53155
Surr: 1,2-Dichloroethane-d4	99.8	70-130		%Rec	1	6/21/2020 2:04:41 AM	53155
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/21/2020 2:04:41 AM	53155
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/21/2020 2:04:41 AM	53155
Surr: Toluene-d8	103	70-130		%Rec	1	6/21/2020 2:04:41 AM	53155

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

Qualifiers:

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

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 151 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-13 0-1'
Project: Bootes 15 Fed Com 1H
Collection Date: 6/17/2020 12:12:00 PM
Lab ID: 2006942-012 **Matrix:** SOIL
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	6/22/2020 4:27:43 PM	53218
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	48	4.9		mg/Kg	1	6/21/2020 2:33:19 AM	53155
Surr: BFB	103	70-130		%Rec	1	6/21/2020 2:33:19 AM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/20/2020 3:24:07 PM	53182
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/20/2020 3:24:07 PM	53182
Surr: DNOP	89.1	55.1-146		%Rec	1	6/20/2020 3:24:07 PM	53182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	0.39	0.024		mg/Kg	1	6/21/2020 2:33:19 AM	53155
Toluene	1.6	0.049		mg/Kg	1	6/21/2020 2:33:19 AM	53155
Ethylbenzene	1.1	0.049		mg/Kg	1	6/21/2020 2:33:19 AM	53155
Xylenes, Total	2.3	0.097		mg/Kg	1	6/21/2020 2:33:19 AM	53155
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	6/21/2020 2:33:19 AM	53155
Surr: 4-Bromofluorobenzene	62.6	70-130	S	%Rec	1	6/21/2020 2:33:19 AM	53155
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/21/2020 2:33:19 AM	53155
Surr: Toluene-d8	103	70-130		%Rec	1	6/21/2020 2:33:19 AM	53155

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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Released to Imaging: 7/14/2021 9:15:04 AM

Page 152 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2006942-013 **Matrix:** SOIL

Client Sample ID: B-13 2'R
Collection Date: 6/17/2020 12:12:00 PM
Received Date: 6/18/2020 11:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	6/22/2020 5:04:47 PM	53222
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: **DJF**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/21/2020 3:01:51 AM	53155
Surr: BFB	99.4	70-130		%Rec	1	6/21/2020 3:01:51 AM	53155
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/20/2020 3:34:16 PM	53182
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2020 3:34:16 PM	53182
Surr: DNOP	99.0	55.1-146		%Rec	1	6/20/2020 3:34:16 PM	53182
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: **DJF**
Benzene	ND	0.025		mg/Kg	1	6/21/2020 3:01:51 AM	53155
Toluene	ND	0.050		mg/Kg	1	6/21/2020 3:01:51 AM	53155
Ethylbenzene	ND	0.050		mg/Kg	1	6/21/2020 3:01:51 AM	53155
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2020 3:01:51 AM	53155
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	6/21/2020 3:01:51 AM	53155
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	6/21/2020 3:01:51 AM	53155
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/21/2020 3:01:51 AM	53155
Surr: Toluene-d8	109	70-130		%Rec	1	6/21/2020 3:01:51 AM	53155

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 153 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006942

24-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **MB-53218**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **53218**	RunNo: **69820**
Prep Date: **6/22/2020**	Analysis Date: **6/22/2020**	SeqNo: **2424460** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-53218**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **53218**	RunNo: **69820**
Prep Date: **6/22/2020**	Analysis Date: **6/22/2020**	SeqNo: **2424461** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.2	90	110			

Sample ID: **MB-53222**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **53222**	RunNo: **69820**
Prep Date: **6/22/2020**	Analysis Date: **6/22/2020**	SeqNo: **2424491** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-53222**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **53222**	RunNo: **69820**
Prep Date: **6/22/2020**	Analysis Date: **6/22/2020**	SeqNo: **2424492** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	90	110			

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 154 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006942

24-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **LCS-53169** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **53169** RunNo: **69757**

Prep Date: **6/19/2020** Analysis Date: **6/19/2020** SeqNo: **2421977** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	4.4		5.000		88.0	55.1	146			

Sample ID: **MB-53169** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **53169** RunNo: **69757**

Prep Date: **6/19/2020** Analysis Date: **6/19/2020** SeqNo: **2421979** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.6	55.1	146			

Sample ID: **LCS-53182** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **53182** RunNo: **69768**

Prep Date: **6/19/2020** Analysis Date: **6/20/2020** SeqNo: **2422438** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.1	70	130			
Surr: DNOP	4.8		5.000		95.4	55.1	146			

Sample ID: **LCS-53184** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **53184** RunNo: **69768**

Prep Date: **6/19/2020** Analysis Date: **6/20/2020** SeqNo: **2422439** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.4		5.000		128	55.1	146			

Sample ID: **MB-53182** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **53182** RunNo: **69768**

Prep Date: **6/19/2020** Analysis Date: **6/20/2020** SeqNo: **2422441** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		111	55.1	146			

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 155 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006942

24-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **MB-53184**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**	
Client ID: **PBS**	Batch ID: **53184**	RunNo: **69768**	
Prep Date: **6/19/2020**	Analysis Date: **6/20/2020**	SeqNo: **2422442**	Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	14		10.00		137	55.1	146			

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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 166 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006942**

24-Jun-20

Client: Talon Artesia
Project: Bootes 15 Fed Com 1H

Sample ID: **mb-53155** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **53155** RunNo: **69776**
Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422516** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.7	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		87.8	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		103	70	130			
Surr: Toluene-d8	0.56		0.5000		112	70	130			

Sample ID: **lcs-53155** SampType: **LCS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **53155** RunNo: **69776**
Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422517** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.3	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		99.2	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		93.9	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		103	70	130			
Surr: Toluene-d8	0.56		0.5000		112	70	130			

Sample ID: **2006942-001ams** SampType: **MS4** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **B-10 0-1'** Batch ID: **53155** RunNo: **69776**
Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422519** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.023	0.9183	0	108	71.1	115			
Toluene	0.98	0.046	0.9183	0.02065	104	79.6	132			
Ethylbenzene	1.4	0.046	0.9183	0.5187	95.6	83.8	134			
Xylenes, Total	5.5	0.092	2.755	2.767	100	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.46		0.4591		101	70	130			
Surr: 4-Bromofluorobenzene	0.32		0.4591		69.5	70	130			S
Surr: Dibromofluoromethane	0.48		0.4591		105	70	130			
Surr: Toluene-d8	0.51		0.4591		110	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM

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Page 167 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006942

24-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **2006942-001amsd** SampType: **MSD4** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **B-10 0-1'** Batch ID: **53155** RunNo: **69776**

Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422520** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.023	0.9390	0	109	71.1	115	3.08	20	
Toluene	1.0	0.047	0.9390	0.02065	106	79.6	132	4.05	20	
Ethylbenzene	1.5	0.047	0.9390	0.5187	108	83.8	134	9.23	20	
Xylenes, Total	6.0	0.094	2.817	2.767	116	82.4	132	8.74	20	
Surr: 1,2-Dichloroethane-d4	0.49		0.4695		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.4695		67.0	70	130	0	0	S
Surr: Dibromofluoromethane	0.52		0.4695		110	70	130	0	0	
Surr: Toluene-d8	0.49		0.4695		105	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 168 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006942

24-Jun-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **mb-53155** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **53155** RunNo: **69776**

Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422554** 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	480		500.0		96.1	70	130			

Sample ID: **lcs-53155** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **LCSS** Batch ID: **53155** RunNo: **69776**

Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422555** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.4	70	130			
Surr: BFB	480		500.0		96.9	70	130			

Sample ID: **2006942-002ams** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **B-10 2'** Batch ID: **53155** RunNo: **69776**

Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422558** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.39	0	84.3	70	130			
Surr: BFB	450		487.8		92.8	70	130			

Sample ID: **2006942-002amsd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **B-10 2'** Batch ID: **53155** RunNo: **69776**

Prep Date: **6/18/2020** Analysis Date: **6/20/2020** SeqNo: **2422559** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.72	0	88.6	70	130	2.25	20	
Surr: BFB	470		474.4		99.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM

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Page 169 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Talon Artesia | Work Order Number: 2006942 | RcptNo: 1

Received By: Isaiah Ortiz 6/18/2020 11:10:00 AM

Completed By: Juan Rojas 6/18/2020 11:22:09 AM

Reviewed By: SPA 6.18.20

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checkad by: MJ 6/18/20

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	1.2	Good				
2	1.1	Good				

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Chain-of-Custody Record

Client: Talon LPE

Mailing Address: 408 W Texas Ave
Artesia, NM 88210

Phone #: 575-746-8768

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Bootes 15 Fed Com 1H

Project #: 200794.343.01

Project Manager: David Adkins

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.2-0 (IR) 1.2 / 1.2-0 (IR) 1.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2006942	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6-17-20	11:05	soil	B-10 0-1'	4oz jar	ice	-001	✓		✓					✓								
	11:05		B-10 2'			-002																
	11:05		B-10 3'			-003																
	11:05		B-10 4'			-004																
	11:26		B-11 0-1'			-005																
	11:26		B-11 2'			-006																
	11:26		B-11 3' R			-007																
	11:47		B-12 0-1'			-008																
	11:47		B-12 2'			-009																
	11:47		B-12 3'			-010																
	11:47		B-12 4' R			-011																
	12:12		B-13 0-1'			-012																

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/17/20	1400			6/17/20	1400
6/17/20	1900			6/18/20	1110

Remarks:

pg 1 of 2

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Talon LPE

Mailing Address: 408 W Texas Ave
Artesia, NM 88210

Phone #: 575-746-8768

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Bootes 15 Fed Com 1H

Project #: 200794.343.01

Project Manager: David Adkins

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.2-0 | 1.2 °F
1.1-0 | 1.1 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
6-17-20	12:12	soil	B-13 2' R	4oz jar	ice	2006942-013	✓		✓					✓								

Date	Time	Relinquished by:	Received by:	Date	Time
6/17/20	1700			6/17/20	1400
6/17/20	1900			6/18/20	1110

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Page 162 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 13, 2020

Brandon Sinclair
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX:

RE: Bootes 15 Fed Com 1H OrderNo.: 2008239

Dear Brandon Sinclair:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/6/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Received by OCD: 6/22/2021 12:00:05 PM

Released to Imaging: 7/14/2021 9:15:04 AM

Page 163 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-001 **Matrix:** SOIL

Client Sample ID: B-11 4'
Collection Date: 8/4/2020 10:30:00 AM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	8/10/2020 6:49:50 PM	54292
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	60	9.5		mg/Kg	1	8/12/2020 10:29:00 AM	54338
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2020 10:29:00 AM	54338
Surr: DNOP	111	30.4-154		%Rec	1	8/12/2020 10:29:00 AM	54338
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	8/7/2020 6:22:42 PM	54224
Surr: BFB	97.9	75.3-105		%Rec	5	8/7/2020 6:22:42 PM	54224
EPA METHOD 8021B: VOLATILES							Analyst: **RAA**
Benzene	ND	0.12		mg/Kg	5	8/7/2020 6:22:42 PM	54224
Toluene	ND	0.24		mg/Kg	5	8/7/2020 6:22:42 PM	54224
Ethylbenzene	ND	0.24		mg/Kg	5	8/7/2020 6:22:42 PM	54224
Xylenes, Total	ND	0.49		mg/Kg	5	8/7/2020 6:22:42 PM	54224
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	5	8/7/2020 6:22:42 PM	54224

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 164 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-002 **Matrix:** SOIL

Client Sample ID: B-11 6'
Collection Date: 8/4/2020 10:35:00 AM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/10/2020 7:27:03 PM	54292
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	190	10		mg/Kg	1	8/10/2020 12:02:28 PM	54229
Motor Oil Range Organics (MRO)	180	50		mg/Kg	1	8/10/2020 12:02:28 PM	54229
Surr: DNOP	126	30.4-154		%Rec	1	8/10/2020 12:02:28 PM	54229
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	8/7/2020 6:46:12 PM	54224
Surr: BFB	97.7	75.3-105		%Rec	5	8/7/2020 6:46:12 PM	54224
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.12		mg/Kg	5	8/7/2020 6:46:12 PM	54224
Toluene	ND	0.25		mg/Kg	5	8/7/2020 6:46:12 PM	54224
Ethylbenzene	ND	0.25		mg/Kg	5	8/7/2020 6:46:12 PM	54224
Xylenes, Total	ND	0.49		mg/Kg	5	8/7/2020 6:46:12 PM	54224
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	5	8/7/2020 6:46:12 PM	54224

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 165 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-003 **Matrix:** SOIL

Client Sample ID: B-11 8'
Collection Date: 8/4/2020 10:40:00 AM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	8/10/2020 7:39:27 PM	54292
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	220	9.9		mg/Kg	1	8/10/2020 12:26:36 PM	54229
Motor Oil Range Organics (MRO)	200	49		mg/Kg	1	8/10/2020 12:26:36 PM	54229
Surr: DNOP	128	30.4-154		%Rec	1	8/10/2020 12:26:36 PM	54229
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	8/7/2020 7:09:40 PM	54224
Surr: BFB	102	75.3-105		%Rec	5	8/7/2020 7:09:40 PM	54224
EPA METHOD 8021B: VOLATILES							Analyst: **RAA**
Benzene	ND	0.12		mg/Kg	5	8/7/2020 7:09:40 PM	54224
Toluene	ND	0.24		mg/Kg	5	8/7/2020 7:09:40 PM	54224
Ethylbenzene	ND	0.24		mg/Kg	5	8/7/2020 7:09:40 PM	54224
Xylenes, Total	ND	0.48		mg/Kg	5	8/7/2020 7:09:40 PM	54224
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	5	8/7/2020 7:09:40 PM	54224

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 166 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-004 **Matrix:** SOIL

Client Sample ID: B-12 6'
Collection Date: 8/4/2020 1:45:00 PM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/7/2020 2:16:42 PM	54229
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 2:16:42 PM	54229
Surr: DNOP	110	30.4-154		%Rec	1	8/7/2020 2:16:42 PM	54229
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/7/2020 7:33:09 PM	54224
Surr: BFB	93.8	75.3-105		%Rec	1	8/7/2020 7:33:09 PM	54224

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 167 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-005 **Matrix:** SOIL

Client Sample ID: B-12 8'
Collection Date: 8/4/2020 2:00:00 PM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/7/2020 2:26:26 PM	54229
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/7/2020 2:26:26 PM	54229
Surr: DNOP	132	30.4-154		%Rec	1	8/7/2020 2:26:26 PM	54229
EPA METHOD 8015D: GASOLINE RANGE							Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/7/2020 8:43:22 PM	54224
Surr: BFB	101	75.3-105		%Rec	1	8/7/2020 8:43:22 PM	54224

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 168 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-006 **Matrix:** SOIL

Client Sample ID: B-14 0-1'
Collection Date: 8/4/2020 12:55:00 PM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/10/2020 8:16:40 PM	54292
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	8/7/2020 2:36:09 PM	54229
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/7/2020 2:36:09 PM	54229
Surr: DNOP	89.6	30.4-154		%Rec	1	8/7/2020 2:36:09 PM	54229
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/7/2020 9:06:44 PM	54224
Surr: BFB	101	75.3-105		%Rec	1	8/7/2020 9:06:44 PM	54224
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/7/2020 9:06:44 PM	54224
Toluene	ND	0.048		mg/Kg	1	8/7/2020 9:06:44 PM	54224
Ethylbenzene	ND	0.048		mg/Kg	1	8/7/2020 9:06:44 PM	54224
Xylenes, Total	ND	0.095		mg/Kg	1	8/7/2020 9:06:44 PM	54224
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	8/7/2020 9:06:44 PM	54224

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 169 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-007 **Matrix:** SOIL

Client Sample ID: B-14 2'
Collection Date: 8/4/2020 12:55:00 PM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/10/2020 8:29:04 PM	54292
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/7/2020 2:45:54 PM	54229
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 2:45:54 PM	54229
Surr: DNOP	79.0	30.4-154		%Rec	1	8/7/2020 2:45:54 PM	54229
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2020 9:30:10 PM	54224
Surr: BFB	101	75.3-105		%Rec	1	8/7/2020 9:30:10 PM	54224
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	8/7/2020 9:30:10 PM	54224
Toluene	ND	0.049		mg/Kg	1	8/7/2020 9:30:10 PM	54224
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2020 9:30:10 PM	54224
Xylenes, Total	ND	0.099		mg/Kg	1	8/7/2020 9:30:10 PM	54224
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	8/7/2020 9:30:10 PM	54224

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 170 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008239-008 **Matrix:** SOIL

Client Sample ID: B-14 3'R
Collection Date: 8/4/2020 12:55:00 PM
Received Date: 8/6/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/10/2020 8:41:29 PM	54292
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/7/2020 2:55:39 PM	54229
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/7/2020 2:55:39 PM	54229
Surr: DNOP	61.9	30.4-154		%Rec	1	8/7/2020 2:55:39 PM	54229
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2020 9:53:35 PM	54224
Surr: BFB	99.1	75.3-105		%Rec	1	8/7/2020 9:53:35 PM	54224
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.025		mg/Kg	1	8/7/2020 9:53:35 PM	54224
Toluene	ND	0.049		mg/Kg	1	8/7/2020 9:53:35 PM	54224
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2020 9:53:35 PM	54224
Xylenes, Total	ND	0.098		mg/Kg	1	8/7/2020 9:53:35 PM	54224
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	8/7/2020 9:53:35 PM	54224

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 171 of 194

QC SUMMARY REPORT

WO#: **2008239**

Hall Environmental Analysis Laboratory, Inc.

13-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **MB-54292**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **54292**	RunNo: **70965**
Prep Date: **8/10/2020**	Analysis Date: **8/10/2020**	SeqNo: **2472350** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-54292**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **54292**	RunNo: **70965**
Prep Date: **8/10/2020**	Analysis Date: **8/10/2020**	SeqNo: **2472351** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.3	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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 172 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008239**

13-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **LCS-54229** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54229** RunNo: **70967**

Prep Date: **8/6/2020** Analysis Date: **8/7/2020** SeqNo: **2472657** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	63	10	50.00	0	125	70	130			
Surr: DNOP	6.6		5.000		131	30.4	154			

Sample ID: **MB-54229** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54229** RunNo: **70967**

Prep Date: **8/6/2020** Analysis Date: **8/7/2020** SeqNo: **2472660** 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	15		10.00		145	30.4	154			

Sample ID: **LCS-54255** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54255** RunNo: **70976**

Prep Date: **8/7/2020** Analysis Date: **8/10/2020** SeqNo: **2472908** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	30.4	154			

Sample ID: **MB-54255** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54255** RunNo: **70976**

Prep Date: **8/7/2020** Analysis Date: **8/11/2020** SeqNo: **2472909** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		10.00		56.6	30.4	154			

Sample ID: **MB-54338** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54338** RunNo: **71011**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474097** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		111	30.4	154			

Sample ID: **LCS-54338** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54338** RunNo: **71011**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474098** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 173 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008239**

13-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **LCS-54338** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54338** RunNo: **71011**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474098** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	70	130			
Surr: DNOP	5.1		5.000		101	30.4	154			

Sample ID: **MB-54340** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54340** RunNo: **71011**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474101** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		123	30.4	154			

Sample ID: **LCS-54340** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54340** RunNo: **71011**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474102** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	30.4	154			

Sample ID: **LCS-54341** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54341** RunNo: **71030**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474931** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		113	30.4	154			

Sample ID: **MB-54341** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54341** RunNo: **71030**

Prep Date: **8/11/2020** Analysis Date: **8/12/2020** SeqNo: **2474933** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		129	30.4	154			

Qualifiers:

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

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Page 174 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008239**

13-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **lcs-54224** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **54224** RunNo: **70921**

Prep Date: **8/6/2020** Analysis Date: **8/7/2020** SeqNo: **2470489** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.2	72.5	106			
Surr: BFB	1100		1000		110	75.3	105			S

Sample ID: **mb-54224** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **54224** RunNo: **70921**

Prep Date: **8/6/2020** Analysis Date: **8/7/2020** SeqNo: **2470491** 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	980		1000		98.3	75.3	105			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 175 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008239

13-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **LCS-54224** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **54224** RunNo: **70921**

Prep Date: **8/6/2020** Analysis Date: **8/7/2020** SeqNo: **2470537** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.1	80	120			
Toluene	0.98	0.050	1.000	0	97.7	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.8	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID: **mb-54224** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **54224** RunNo: **70921**

Prep Date: **8/6/2020** Analysis Date: **8/7/2020** SeqNo: **2470539** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Page 176 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: Talon Artesia | Work Order Number: 2008239 | RcptNo: 1

Received By: Juan Rojas 8/6/2020 8:00:00 AM

Completed By: Juan Rojas 8/6/2020 8:29:33 AM

Reviewed By: mg 08/06/20

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 ☐	Not Frozen
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SPA 8.6.20

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	3.3	Good				
2	2.1	Good				
3	-0.4	Good				

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Chain-of-Custody Record

Client: Talon / LPE

Mailing Address: 408 W Texas Ave
Artesia, NM 88210

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Bootes 15 Fed Com 1H

Project #: 200794.343.01

Project Manager: B Sinclair

Sampler: Brandon Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 3 se 8/6/20

Cooler Temp(including CF): See checklist Remarks

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2005239	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8-4-20	10:30	soil	B-11 4'	4 oz jar	ice	-001	✓	✓					✓			
	10:35		B-11 6'			-002	✓	✓					✓			
	10:40		B-11 8'			-003	✓	✓					✓			
	13:45		B-12 6'			-004		✓								
	14:00		B-12 8'			-005		✓								
	12:55		B-14 0-1'			-006	✓	✓					✓			
	12:55		B-14 2'			-007	✓	✓					✓			
	12:55		B-14 3' R			-008	✓	✓					✓			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/5/20	1305				8/5/20	1305
8/6/20	1900			courier	8/6/20	8:00

Remarks: 3.3 - 0 = 3.3
2.1 - 0 = 2.1
-0.4 - 0 = -0.4

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Page 178 of 194

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

August 25, 2020

Brandon Sinclair
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX:

RE: Bootes 15 Fed Com 1H OrderNo.: 2008781

Dear Brandon Sinclair:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/14/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

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Page 179 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008781-001 **Matrix:** SOIL

Client Sample ID: B-11 10'
Collection Date: 8/4/2020 10:40:00 AM
Received Date: 8/14/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/17/2020 5:46:32 AM	54435
Surr: BFB	105	70-130		%Rec	1	8/17/2020 5:46:32 AM	54435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	320	9.5	H	mg/Kg	1	8/20/2020 10:51:04 AM	54566
Motor Oil Range Organics (MRO)	350	47	H	mg/Kg	1	8/20/2020 10:51:04 AM	54566
Surr: DNOP	110	30.4-154	H	%Rec	1	8/20/2020 10:51:04 AM	54566

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

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 180 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Client Sample ID: B-11 15'
Project: Bootes 15 Fed Com 1H
Collection Date: 8/4/2020 10:50:00 AM
Lab ID: 2008781-002 **Matrix:** SOIL **Received Date:** 8/14/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/17/2020 6:14:58 AM	54435
Surr: BFB	107	70-130		%Rec	1	8/17/2020 6:14:58 AM	54435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	61	10	H	mg/Kg	1	8/20/2020 11:39:07 AM	54566
Motor Oil Range Organics (MRO)	70	50	H	mg/Kg	1	8/20/2020 11:39:07 AM	54566
Surr: DNOP	109	30.4-154	H	%Rec	1	8/20/2020 11:39:07 AM	54566

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 181 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008781-003 **Matrix:** SOIL

Client Sample ID: B-11 20'
Collection Date: 8/4/2020 11:00:00 AM
Received Date: 8/14/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/17/2020 6:43:23 AM	54435
Surr: BFB	101	70-130		%Rec	1	8/17/2020 6:43:23 AM	54435
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	120	9.2	H	mg/Kg	1	8/20/2020 12:03:07 PM	54566
Motor Oil Range Organics (MRO)	130	46	H	mg/Kg	1	8/20/2020 12:03:07 PM	54566
Surr: DNOP	108	30.4-154	H	%Rec	1	8/20/2020 12:03:07 PM	54566

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 182 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008781**

25-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **LCS-54566** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54566** RunNo: **71215**

Prep Date: **8/20/2020** Analysis Date: **8/20/2020** SeqNo: **2484368** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.1	70	130			
Surr: DNOP	4.6		5.000		91.4	30.4	154			

Sample ID: **MB-54566** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54566** RunNo: **71215**

Prep Date: **8/20/2020** Analysis Date: **8/20/2020** SeqNo: **2484370** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	30.4	154			

Sample ID: **2008781-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **B-11 10'** Batch ID: **54566** RunNo: **71215**

Prep Date: **8/20/2020** Analysis Date: **8/20/2020** SeqNo: **2485345** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	580	9.9	49.26	317.6	531	47.4	136			SH
Surr: DNOP	5.7		4.926		115	30.4	154			H

Sample ID: **2008781-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **B-11 10'** Batch ID: **54566** RunNo: **71215**

Prep Date: **8/20/2020** Analysis Date: **8/20/2020** SeqNo: **2485346** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	660	9.9	49.70	317.6	690	47.4	136	13.1	43.4	SH
Surr: DNOP	6.1		4.970		122	30.4	154	0	0	H

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 Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

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Released to Imaging: 7/14/2021 9:15:04 AM

Page 183 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008781**

25-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **mb-54435**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **54435**	RunNo: **71117**
Prep Date: **8/15/2020**	Analysis Date: **8/16/2020**	SeqNo: **2479008** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	520		500.0		105	70	130			

Sample ID: **lcs-54435**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **54435**	RunNo: **71117**
Prep Date: **8/15/2020**	Analysis Date: **8/16/2020**	SeqNo: **2479009** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.8	70	130			
Surr: BFB	530		500.0		107	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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM

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Page 184 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: **Talon Artesia** Work Order Number: **2008781** RcptNo: 1

Received By: **Cheyenne Cason** **8/14/2020 8:00:00 AM**

Completed By: **Emily Mocho** **8/14/2020 8:50:50 AM**

Reviewed By: IO 8/14/20

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted?

Checked by: CM 8/14/20

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	1.3	Good	Not Present			

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Chain-of-Custody Record

Client: Talon/LPE

Mailing Address: ON File

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day

☑ Standard ☐ Rush

Project Name: Bootes 15 Fed Com 1H

Project #: 200294.343.01

Project Manager: B Sinclair

Sampler: B Sinclair

On Ice: ☒ Yes ☐ No

# of Coolers: ~~1~~ 1

Cooler Temp(including CF): See Remarks

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2008781	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8-4-20	10:40	Soil	B-11 10'	4 oz jar	ice	001		✓								
	10:50		B-11 15'			002		✓								
	11:00		B-11 20'			003		✓								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/13/20	0900				8/13/20	0900
8/13/20	1900		CMC Courier		8/14/20	0800

Remarks: 1.3+0=1.3c

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Page 186 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 28, 2020

Brandon Sinclair
Talon Artesia
408 West Texas Ave
Artesia, NM 88210
TEL:
FAX:

RE: Bootes 15 Fed Com 1H OrderNo.: 2008C85

Dear Brandon Sinclair:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/25/2020 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Received by OCD: 6/22/2021 12:00:05 PM

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Page 187 of 194

Analytical Report
Lab Order **2008C85**
Date Reported: **8/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008C85-001 **Matrix:** SOIL

Client Sample ID: B-11 25'
Collection Date: 8/19/2020 1:07:00 PM
Received Date: 8/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: **JMR**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/26/2020 5:00:43 PM	54677
Surr: BFB	104	70-130		%Rec	1	8/26/2020 5:00:43 PM	54677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: **BRM**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/26/2020 11:33:14 PM	54682
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/26/2020 11:33:14 PM	54682
Surr: DNOP	86.7	30.4-154		%Rec	1	8/26/2020 11:33:14 PM	54682

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

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Page 188 of 194

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia
Project: Bootes 15 Fed Com 1H
Lab ID: 2008C85-002 **Matrix:** SOIL

Client Sample ID: B-11 30'
Collection Date: 8/19/2020 1:42:00 PM
Received Date: 8/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/26/2020 6:26:39 PM	54677
Surr: BFB	103	70-130		%Rec	1	8/26/2020 6:26:39 PM	54677
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/26/2020 11:43:10 PM	54682
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/26/2020 11:43:10 PM	54682
Surr: DNOP	81.3	30.4-154		%Rec	1	8/26/2020 11:43:10 PM	54682

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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Received by OCD: 6/22/2021 12:00:05 PM
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Page 189 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008C85

28-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **LCS-54659** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54659** RunNo: **71390**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492004** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.2	30.4	154			

Sample ID: **LCS-54682** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **54682** RunNo: **71390**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492007** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	87.0	70	130			
Surr: DNOP	3.8		5.000		75.4	30.4	154			

Sample ID: **MB-54659** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54659** RunNo: **71390**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492008** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		86.6	30.4	154			

Sample ID: **MB-54682** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **54682** RunNo: **71390**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492011** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		90.8	30.4	154			

Qualifiers:

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

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Page 190 of 194

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2008C85**

28-Aug-20

Client: Talon Artesia

Project: Bootes 15 Fed Com 1H

Sample ID: **lcs-54677** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **LCSS** Batch ID: **54677** RunNo: **71405**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492981** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.2	70	130			
Surr: BFB	520		500.0		105	70	130			

Sample ID: **mb-54677** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **54677** RunNo: **71405**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492982** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		103	70	130			

Sample ID: **2008c85-001ams** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **B-11 25'** Batch ID: **54677** RunNo: **71405**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492986** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.18	0	93.4	49.2	122			
Surr: BFB	510		483.6		105	70	130			

Sample ID: **2008c85-001amsd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **B-11 25'** Batch ID: **54677** RunNo: **71405**

Prep Date: **8/25/2020** Analysis Date: **8/26/2020** SeqNo: **2492987** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.80	0	91.6	49.2	122	0.600	20	
Surr: BFB	510		496.0		102	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 Quanitative 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

Received by OCD: 6/22/2021 12:00:05 AM

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Page 191 of 194

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: Talon Artesia | Work Order Number: 2008C85 | RcptNo: 1

Received By: **Cheyenne Cason** 8/25/2020 8:00:00 AM

Completed By: **Juan Rojas** 8/25/2020 8:05:18 AM

Reviewed By: JR 8/25/20

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: CMC 8/25/20

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	4.9	Good				

Received by OCD: 6/22/2021 12:00:05 AM

Released to Imaging: 7/14/2021 9:15:04 AM

Chain-of-Custody Record

Client: Talon / LPE

Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 4-day
☑ Standard ☐ Rush

Project Name: Bootes 15 Fed Com 1H

Project #: 200794.343.01

Project Manager: BLS

Sampler: B Sinclair

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(Including CF): 4.8 + 0.1 = 4.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
8-19-20	13:07	soil	B-11 25'	4 oz jar	ice	2008085-001
8-19-20	13:42	soil	B-11 30'	4 oz jar	ice	-002

Analysis Request

BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
	✓								
	✓								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/24/20	1200				8/24/20	1200
8/24/20	1900		CMC	Courier	8/25/20	0800

Remarks: Bill Devon

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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 11651

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
TALON LPE 408 W Texas Artesia, NM88210	329944	11651	C-141

OCD Reviewer	Condition
chensley	Remediation plan Approved. Remediation due by 6/1/2021.

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 32885

CONDITIONS

Operator: Pima Environmental Services, LLC 1601 N. Turner Hobbs, NM 88240	OGRID: 329999
	Action Number: 32885
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	7/14/2021