

SITE INFORMATION

Report Type: Work Plan 2RP-5417

General Site Information:

Site:	RJ Unit #108				
Company:	COG Operating LLC				
Section, Township and Range	Unit F	Sec. 27	T 17S	R 29E	
Lease Number:					
County:	Eddy County				
GPS:	32.808046			-104.06373	
Surface Owner:	Federal				
Mineral Owner:					
Directions:	From the intersection of Lovington Hwy and Valley Gas Rd turn South on Valley Gas Rd and go .59 miles and turn east and go .57 miles and turn south and go .40 miles and arrive on site				

Release Data:

Date Released:	4/17/2019
Type Release:	Produced Water
Source of Contamination:	Braden Head blowout
Fluid Released:	>13,690 bbls Produced water
Fluids Recovered:	13,690 bbls produced water

Official Communication:

Name:	Ike Tavaréz		Clair Gonzales
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		901 West Wall Street
	600 W. Illinois Ave.		Suite 100
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 687-8110
Fax:	(432) 684-7137		
Email:	itavarez@concho.com		Clair.Gonzales@tetrattech.com

Site Characterization

Depth to Groundwater:	76' bgs
Floodplain:	Within Floodplain

Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	100 mg/kg	600 mg/kg

304DR-190924-C-1410



September 10, 2019

Mr. Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Work Plan for the COG Operating, LLC, RJ Unit #108, Unit F, Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico. 2RP-5417

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating, LLC (COG) to assess a release that occurred at the RJ Unit #108, Unit F, Section 27, Township 17 South, Range 29 East, Eddy County, New Mexico (Site). The spill site coordinates are 32.808046°, -104.063730°. The site location is shown on **Figures 1 and 2**.

Background

According to the State of New Mexico C-141 Initial Report, the release was discovered on April 17, 2019 and released greater than 13,690 barrels of produced water due to a fitting on the Braden head blowing out. A vacuum truck was dispatched to remove all freestanding fluids, recovering approximately 13,690 barrels of produced water. As shown on **Figure 3**, the release occurred on pad and pasture impacting an area measuring approximately 400' x 1,500'. The C-141 form is included in Appendix A.

Site Characterization

A site characterization was performed for the site and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, wetlands, incorporated municipal boundaries, or subsurface mines are located within the specified distances. However, the site is located within a floodplain area and is in a low karst potential area.

The nearest water well is reported in Section 22 on the New Mexico Office of the State Engineer's (NMOSE) database, approximately 0.90 miles North of the site, and has a reported depth to groundwater of 79 feet below surface. The USGS database lists one well located in Section 35, approximately 1.25 miles to the southeast, has a reported depth to groundwater of 152 feet below surface. The USGS database also lists one well in Section 29, approximately 1.60 miles to the southwest of the site, with a reported depth to groundwater of 210 feet below

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surface. Additionally, two monitor wells (2" and 4") were found approximately 2.85 miles east of the site (32.813690, -104.018250), that were not listed with the USGS or NMOSE database. COG personnel gauged the monitor wells and found that the 2" well was dry with a total depth of 157' below surface. The 4" monitor well gauged showed a static water level of 266' below surface but could not measure the total depth of the well. The site characterization data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based on the site characterization, the proposed RRAL for TPH is 100 mg/kg (GRO + DRO + MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 600 mg/kg.

Initial Soil Assessment

Geo-Probe Installation and Sampling

On May 9-10, 2019, Talon personnel were onsite to evaluate and sample the release area. A total of twenty (20) Geoprobe bores (BH-1 through BH-20) were installed in the release footprint to total depths ranging from 0-1' and 12' below surface. Selected soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The sampling results are summarized in Table 1. The sample locations are shown on **Figure 4**.

Referring to Table 1, none of the samples collected showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits, with the exception of BH-13, which showed a TPH concentration of 539 mg/kg at 2.0' below surface. However, all boreholes showed elevated chloride concentrations. The areas of BH-12, BH-14, and BH-19 were not vertically defined at 600 mg/kg chlorides at depths ranging from 7.0' to 11.0' below surface. The remaining boreholes were vertically defined to 600 mg/kg at depths ranging from 2.0' to 12.0' below surface.

Horizontal and Overspray Sampling

On May 15, 2019, Talon personnel returned to the site to collect additional samples to assess the overspray area and establish horizontal delineation of the release footprint. A total of twenty (20) auger holes (S-1 through S-20) were installed to total depths 0-1' and 2.0' below surface. Auger holes (S-1 through S-8) were installed in the overspray area to the northeast of the pad and auger holes (S-9 through S-20) were installed around the perimeter of the release footprint for horizontal delineation. The soil samples were collected and submitted to the laboratory for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B,

and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The sampling results are summarized in Table 1. The sample locations are shown on **Figure 5**.

Referring to Table 1, none of the samples collected showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. Additionally, none of the samples showed any significant chloride concentrations, with concentrations ranging from <16.0 mg/kg to 160 mg/kg and the release footprint was horizontally defined.

Additional Soil Assessment and Re-Evaluation

Borehole Installation and Sampling

Due to recent heavy rains, Tetra Tech personnel returned to the site between June 1-12, 2019 to install boreholes at the site. The additional assessment was performed in order to re-evaluate the subsurface soils to determine if the heavy rains affected the chlorides distribution or concentrations in the subsurface soils.

A total of twenty-four (24) boreholes (BH-1 through BH-24) were installed in the release footprint to total depths ranging from 0-1' to 40.0' below surface. The soil samples were collected and submitted to the laboratory for chloride by EPA method 300.0. The drilling logs are included in Appendix C. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix D. The sampling results are summarized in Table 2. The sample locations are shown on **Figure 4 and 6**.

North and South Draw Areas

As shown in Figure 4, a total of seven (7) boreholes (BH-12, BH-13, BH-17, BH-18, BH-19, BH-20, and BH-24) were installed along the north draw area and eight (8) boreholes (BH-5, BH-6, BH-7, BH-8, BH-9, BH-10, BH-11, and BH-22) were installed along the south draw area. A chloride concentration distribution Cross-Section (A-A') of these areas are shown on **Figure 7A**.

The north draw area shows the heaviest chloride load, with concentrations exceeding 5,000 mg/kg, in the areas of BH-12, BH-13, BH-17, BH-18, BH-19, and BH-20 in the subsurface soils at depths ranging between 4.0' and 12.0' below surface. However, the areas of BH-12 and BH-13 showed chloride concentrations below 600 mg/kg in the shallow soils from surface to 3.0'-4.0' below surface before increasing with depth to chloride highs of 9,800 mg/kg at 5.0' and 8,660 mg/kg at 6.0' below surface, respectively. The area of BH-24 did not show any chloride concentrations above the RRALs. All of the boreholes in this north draw area were vertically defined to below 600 mg/kg at depths ranging from 9.0' to 35.0' below surface.

The south draw area showed the heaviest chloride loads, with concentrations above 5,000 mg/kg, in the areas of BH-5, BH-6, BH-8, BH-9, and BH-10 in the subsurface soils at depths ranging from surface to 12.0' below surface. The areas of BH-7, BH-8, BH-9, BH-10, and BH-11 did not show a significant chloride impact in the shallow soil from approximately 3.0' to 4.0' below surface before increasing with depth. The area of BH-22 did not show any elevated chloride concentrations above the RRALs. All of the boreholes in the south area were vertically defined to below 600 mg/kg at depths ranging from 6.0' to 25.0' below surface

Pad Area

A total of five (5) boreholes (BH-1, BH-2, BH-3, BH-4, and BH-23) were installed on the pad area. A chloride concentration distribution Cross-Section (B-B') of these areas is shown on **Figure 8A**.

Referring to Figure 8A, the heaviest chloride loads, with chloride concentrations exceeding 5,000 mg/kg, are in the shallow soils in the areas of BH-2, BH-3, and BH-23 at depths ranging from surface to 3.0' below surface. The areas of BH-1 and BH-4 showed chloride highs of 1,620 mg/kg at 4.0' and 3,280 mg/kg at 0-1', respectively, before declining with depth to below the RRALs at 5.0' below surface. All boreholes were vertically defined to below 600 mg/kg at depths ranging from 4.0' and 8.0' below surface.

South Pad Area/Pasture

A total of four (4) boreholes (BH-14, BH-15, BH-16, and BH-21) were installed in the south pad/pasture area. A chloride concentration distribution Cross-Section (C-C') of these areas is also shown on **Figure 8A**.

Referring to Figure 8A, the heaviest chloride loads, with concentrations exceeding 5,000 mg/kg, are in the area of BH-21 to a depth of 20.0' below surface. Upon further review, the historical aerial photographs appear to show a closed reserve pit in the area. The area of BH-14 showed a chloride high of 4,320 mg/kg at surface and was vertically defined to below 600 mg/kg at 8.0' below surface. The areas of BH-14 and BH-16 did not show any elevated chloride concentrations above the RRALs.

Proposed Work Plan

North and South Draw Areas

In the north draw area, COG proposes to excavate the areas as shown on **Figures 7B and 9A**. To remove some of elevated chlorides, the areas of boreholes (BH-12, BH-13 and, BH-17) will be excavated to a depth of approximately 7.0'-8.0' below surface and 4.0' in the areas of boreholes (BH-18, BH-19, and BH-20). Once excavated to the appropriate depth, the north area will be capped with a 20-mil liner and backfilled with clean soil. All of the material will be hauled to proper disposal.

In the south draw area, COG proposes to excavate the areas as shown on **Figures 7B and 9A**. The areas of boreholes (BH-5 and BH-6) will be excavated to an approximate depth of 7.0'-8.0' below surface and transported to proper disposal. In addition, the areas of boreholes (BH-7, BH-8, BH-9, BH-10, BH-11, and BH-12) will be excavated to a depth of approximately 4.0' below surface. The south draw area will be capped with a 20-mil liner at 4.0' below surface.



South Draw Area - Stockpile Sampling and Evaluation

As shown in **Figure 7B**, the top 4.0' of material did not show a significant chloride impact to the shallow soils in the areas of boreholes (BH-7, BH-8, BH-9, BH-10, BH-11, and BH-12). This area will be excavated to a depth of approximately 4.0' below surface. The excavated material will be segregated into approximately 50-75 cubic yard stockpiles and sampled for chloride analysis evaluation. Based on the sampling results, the stockpile material will be placed back into the excavated areas, if chloride concentrations are below 600 mg/kg. If the material exceeds 600 mg/kg, the excavated soil will be transported to proper disposal and the excavation will be backfilled with clean soil.

Pad Area

Based on the laboratory results, COG proposes to excavate the areas as shown on the on **Figure 8B and 9B**. The areas of BH-1, BH-2, BH-4, and BH-23 will be excavated to a depth of 1.0' below surface. The area of BH-3 will be excavated to a depth of 4.0' below surface. The excavated areas will be backfilled with clean soil. All of the material will be hauled to proper disposal.

South Pad Area/Pasture

In the south pad area, COG proposes to excavate the areas as shown on **Figure 8B and 9B**. The area of BH-21, which appears to be in the area of a closed reserve pit, will be excavated to a depth of 4.0' below surface and capped with a 20-mil liner to prevent further vertical migration of the deeper impacts. The area of BH-15 will be excavated to a depth of 4.0' below surface. The excavated areas will be backfilled with clean soil. All of the material will be hauled to proper disposal.

Liner Variance and Alternative Sampling Plan

Per rule 19.15.29.14, COG requests a variance to install a 20-mil liner at 4.0' in the closed reserve pit for the area of BH-21 and in the North and South Draw areas (BH-5, BH-6, BH-7, BH-8, BH-9, BH-11, BH-12, BH-13, and BH-17, BH-18, BH-19, and BH-20) to prevent vertical migration of the deeper chloride concentrations detected. Composite sidewall samples will be collected every 2,500 square feet (50' x 50' areas) in the North and South Draw areas. In addition, composite sidewall and bottom hole samples will be collected every 900 square feet (30' x 30') on the Pad and South Pad/Pasture areas. All of the composite samples will be analyzed for chlorides by EPA method 300.0.

An active Plains Pipeline (buried line) is located along the North and South Draw release areas. For proper capping of the impacted areas, the 20-mil liner will be placed underneath the Plains Pipeline. The location of the Plains Pipeline is shown on **Figure 4 and 9A**.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. Also, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns for onsite personnel. As such, COG will excavate the impacted soils to the maximum extent practicable.



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Once the excavation is complete, the areas will be backfilled with clean material to surface grade. COG estimates approximately 27,000 cubic yards will be excavated, and the remediation to be implemented 90 days after the work plan is approved.

Conclusion

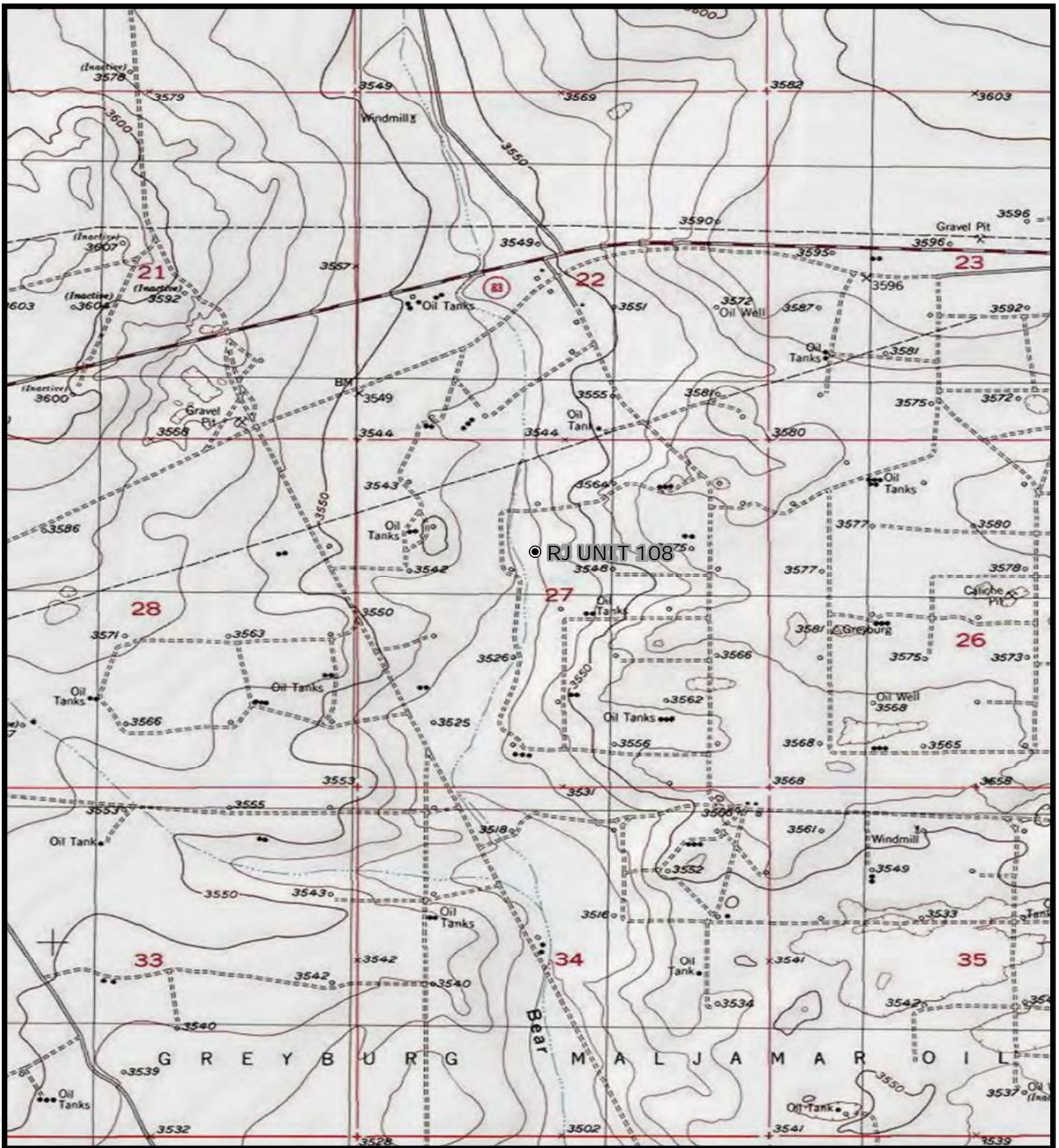
Once the remediation activities have been completed, a final report will be submitted. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Clair Gonzales, P.G.
Project Manager

cc:
Ike Tavarez - COG

Figures



● RJ UNIT 108

Date: 7/24/2019 Document Path: C:\Users\MIST\MORGAWI\Desktop\project folder\212C-MD-01821 COG RU 808 CROSS SECTION\MD212C-MD-01821 COG RU CROSS SECTION FIG. 2.mxd

● SITE LOCATION



0 1,000 2,000

Approximate Scale in Feet

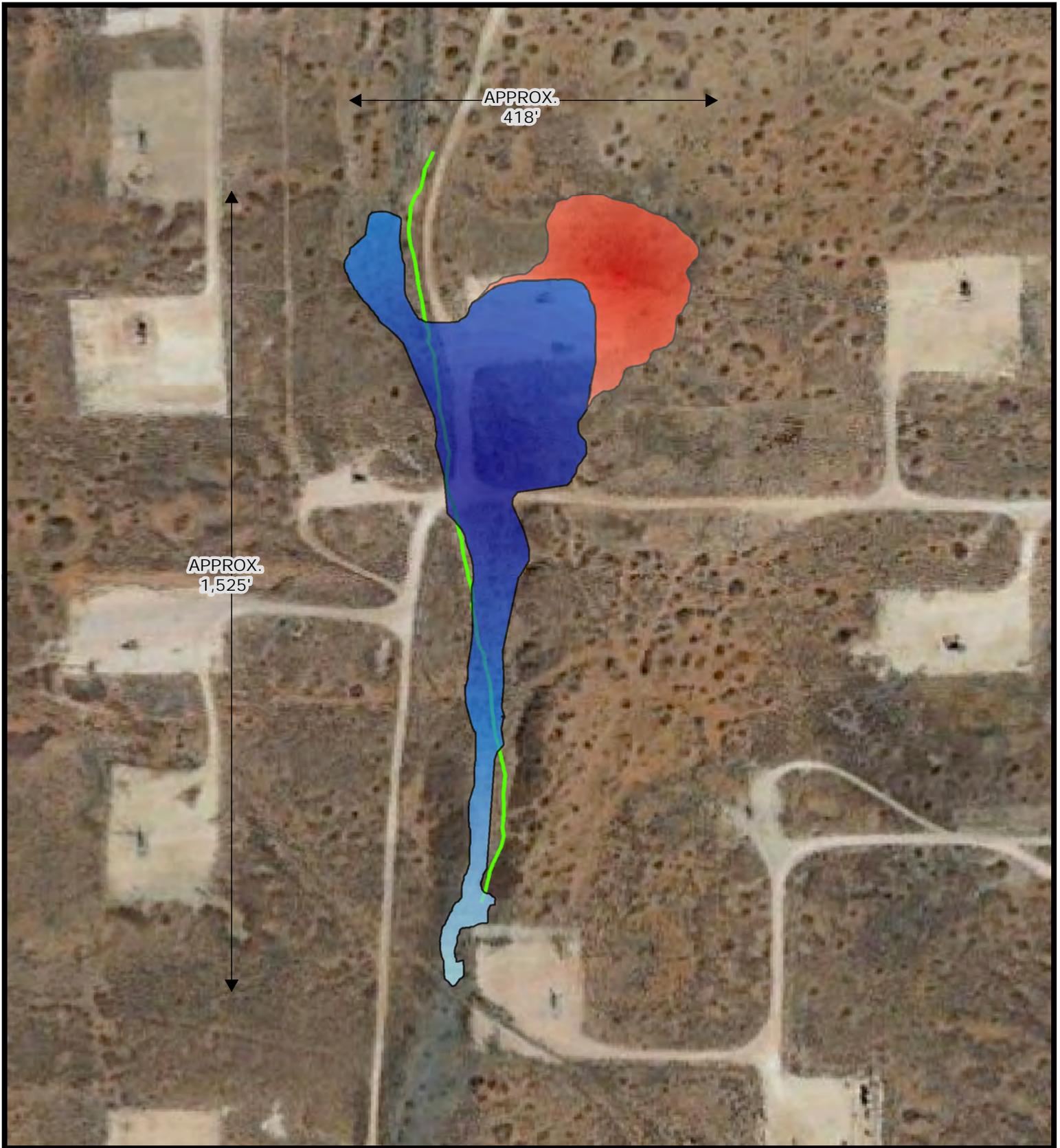


TOPOGRAPHIC MAP
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°,-104.063730°
 EDDY COUNTY, NEW MEXICO



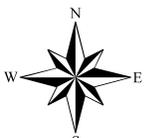
FIGURE
2

Service Layer Credits: Copyright:© 2013 National Geographic Society, iCubed



Date: 8/22/2019 Document Path: H:\GIS\CONCHO RESOURCES - COG\212C-MD-01821 COG R\108 CROSS SECTION\MXD\212C-MD-01821 COG R\108 CROSS SECTION FIG. 3.mxd

- PLAINS PIPELINE
- AFFECTED SPILL AREA
- OVERSPRAY SPILL AREA



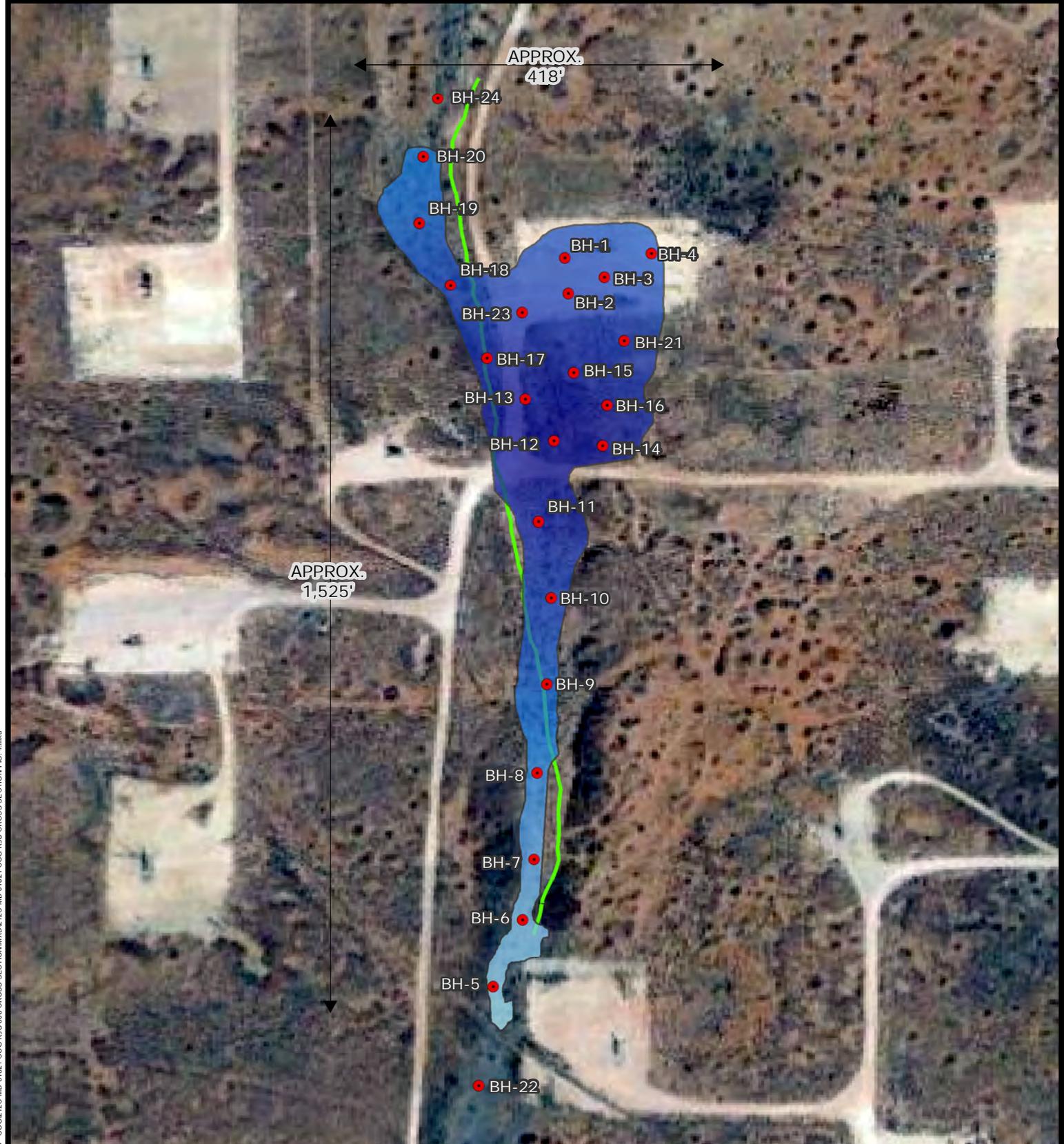
0 125 250
Approximate Scale in Feet

SITE MAP
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°, -104.063730°
 EDDY COUNTY, NEW MEXICO



FIGURE
3

Source: "New Mexico", 32°48'28.97"N, 104°3'49.43"W, GOOGLE EARTH, December 2016, July 23, 2019



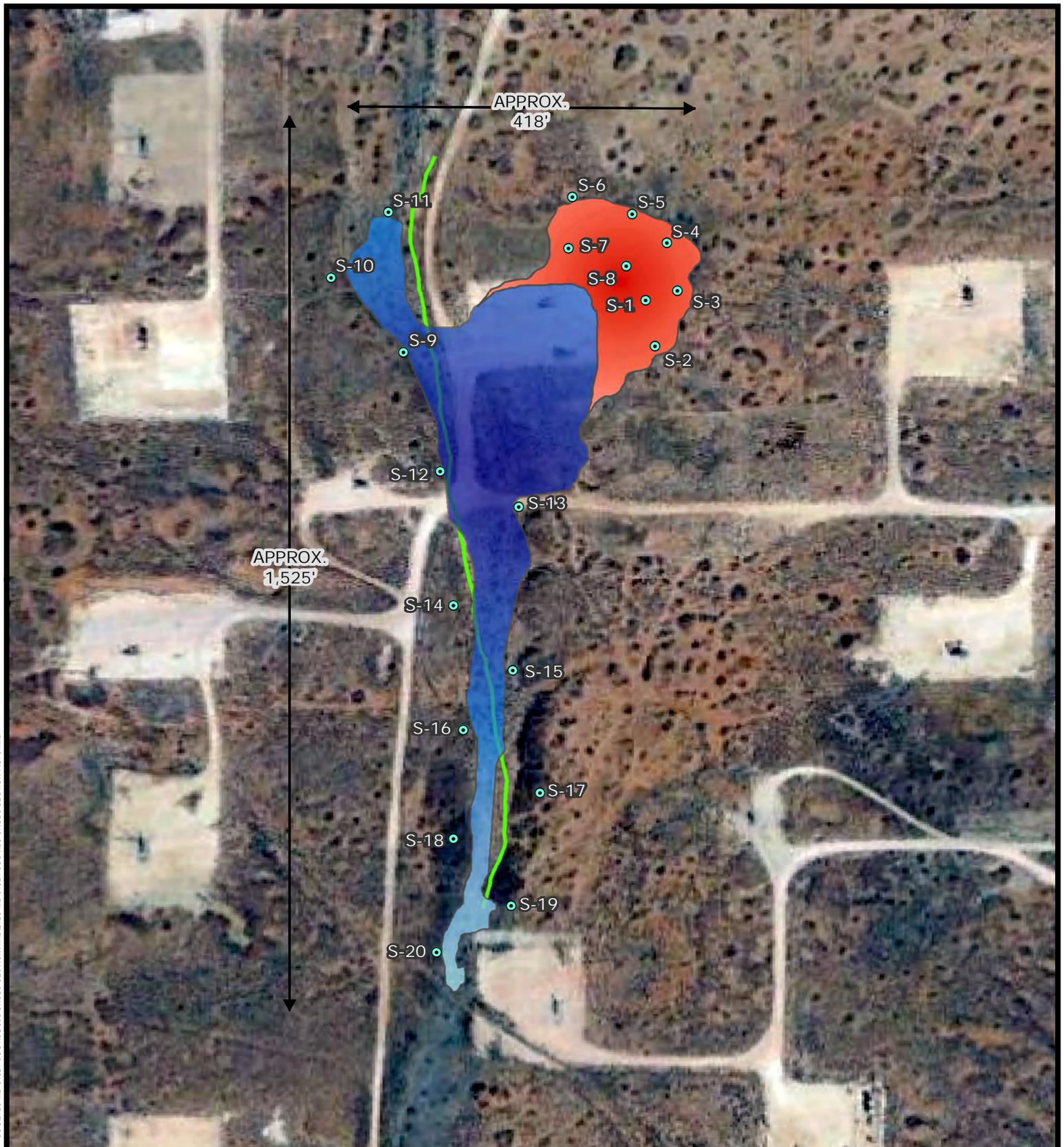
- BOREHOLE SAMPLE LOCATION
- PLAINS PIPELINE
- AFFECTED SPILL AREA



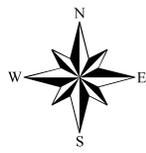
SPILL ASSESSMENT MAP - BOREHOLE LOCATIONS
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°, -104.063730°
 EDDY COUNTY, NEW MEXICO



FIGURE
4



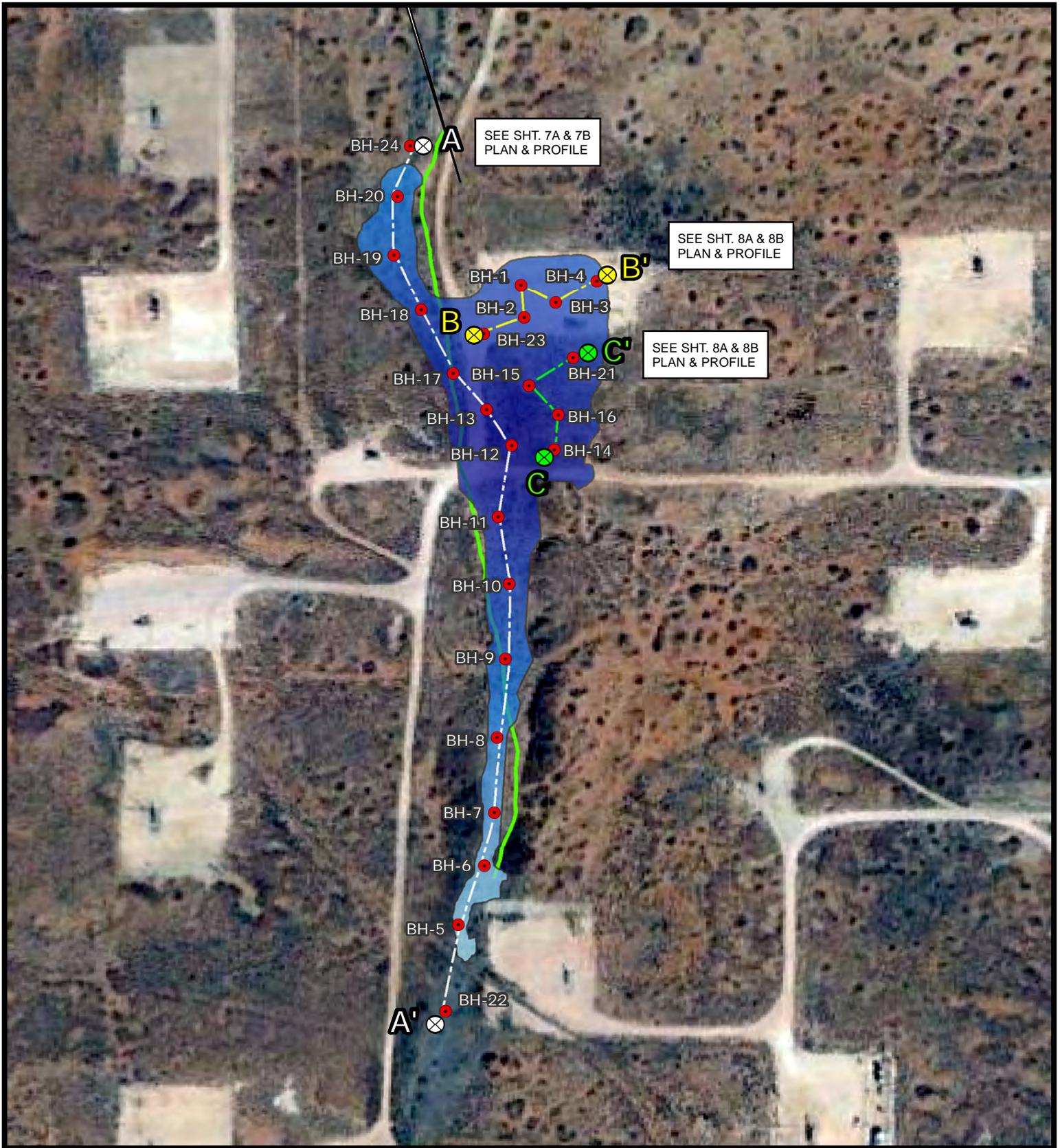
- HORIZONTAL SAMPLE LOCATIONS
- PLAINS PIPELINE
- OVERSPRAY AFFECTED AREA
- AFFECTED SPILL AREA



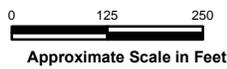
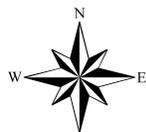
SPILL ASSESSMENT MAP-HORIZONTAL SAMPLE LOCATIONS
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°, -104.063730°
 EDDY COUNTY, NEW MEXICO



FIGURE
5



- BOREHOLE SAMPLE LOCATIONS
- DENOTES CROSS SECTION LINE
- PLAINS PIPELINE
- AFFECTED SPILL AREA

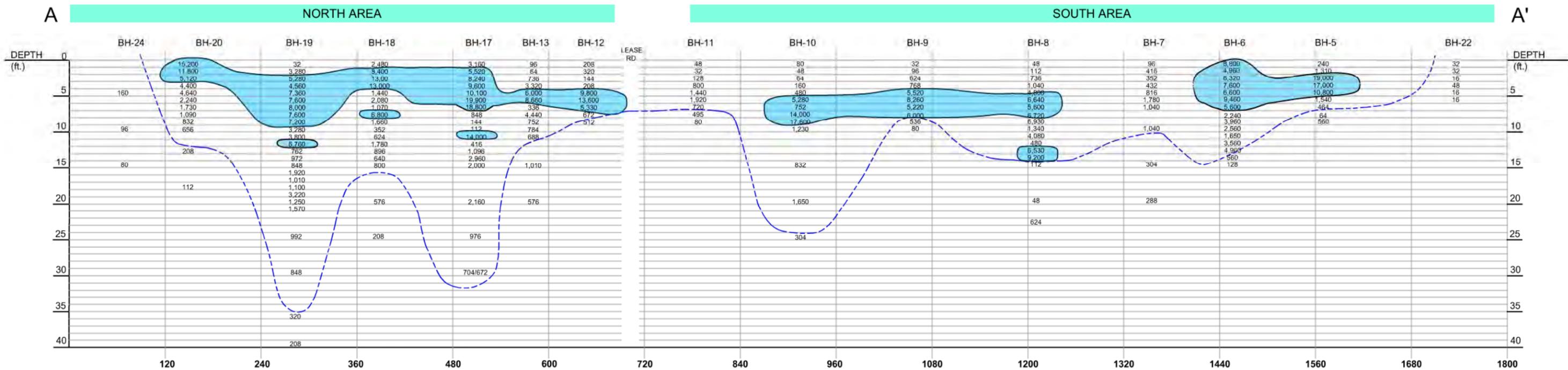


SITE MAP- BOREHOLE LOCATIONS A-A', B-B' & C-C'
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°, -104.063730°
 EDDY COUNTY, NEW MEXICO



FIGURE
6

CROSS SECTION A-A'



HORIZ. SCALE 1"=120'

LEGEND

- >5000 PPM CHLORIDE
- >600 PPM CHLORIDE

NOTES:

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 (432) 682-4559



NORTH

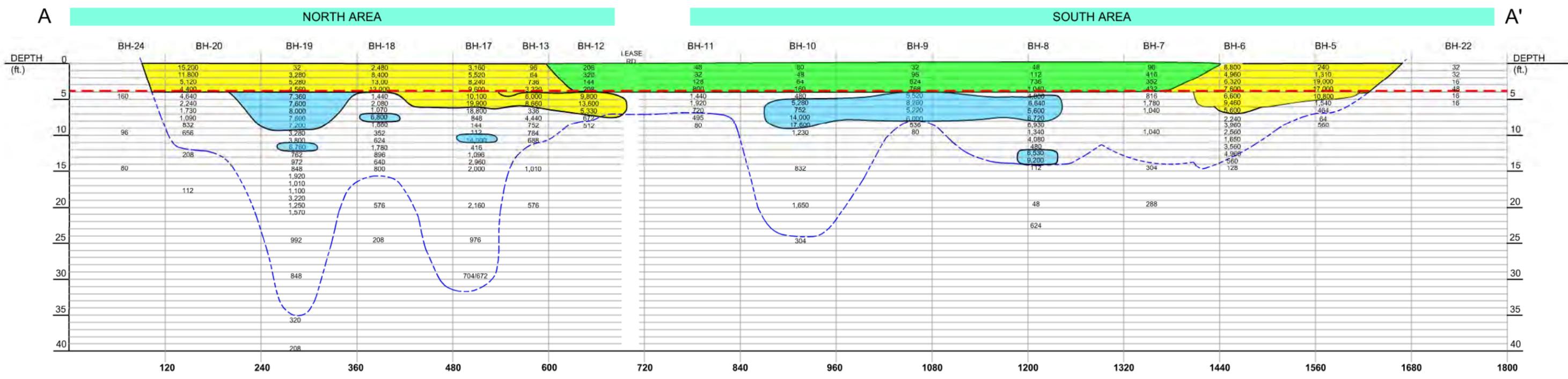
0 40 120ft

FIGURE 7A
 CROSS SECTION A-A'
 CHLORIDE CONCENTRATION DISTRIBUTION(mg/kg)
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°,-104.063730°
 EDDY COUNTY, NEW MEXICO

Project: 212C-MD-01821
 Date: 8/20/2019

Fig. FIGURE 7A

CROSS SECTION A-A'



HORIZ. SCALE 1"=120'

LEGEND

- PROPOSED EXCAVATION
- PROPOSED EXCAVATION / SAMPLE / PLACE MATERIAL BACK INTO EXCAVATED AREA
- >5000 PPM CHLORIDE
- >600 PPM CHLORIDE
- LINER

NOTES:

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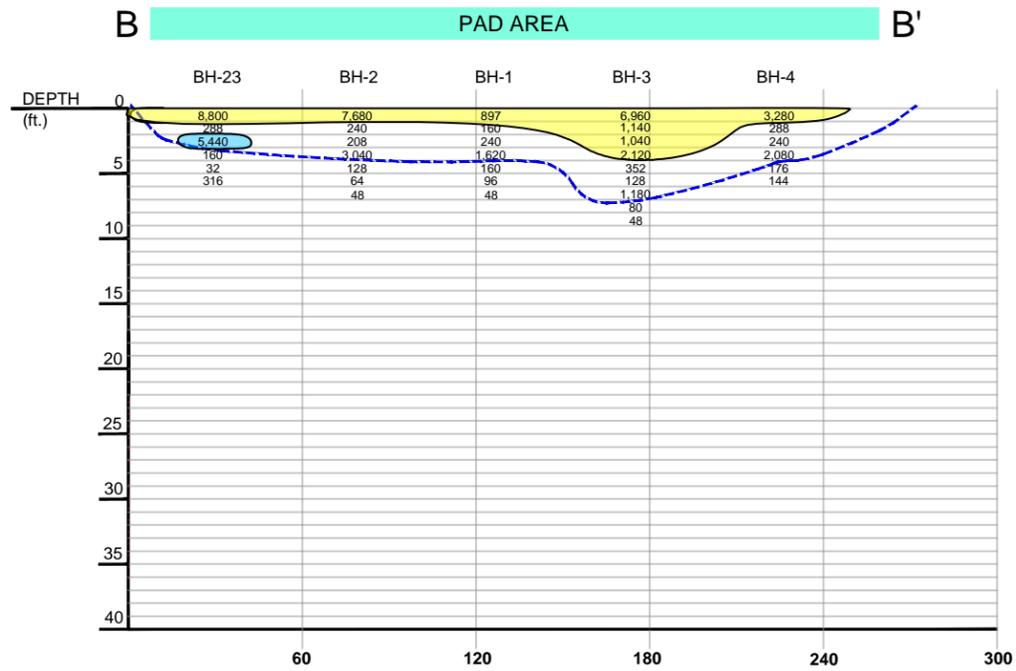


NORTH

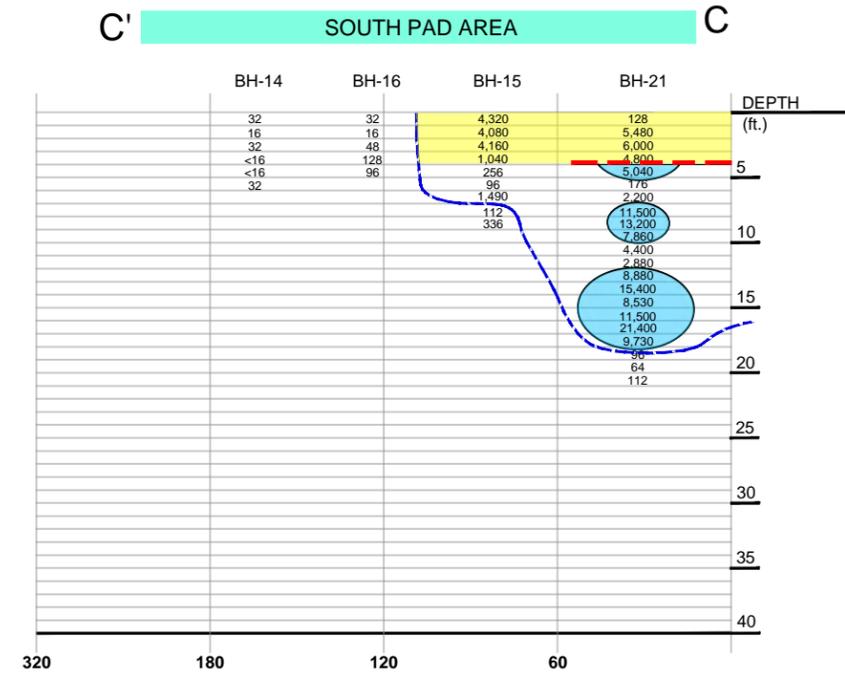
FIGURE 7B
 CROSS SECTION A-A'
 PROPOSED EXCAVATION MAP
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°,-104.063730°
 EDDY COUNTY, NEW MEXICO

Project: 212C-MD-01821
 Date: 8/20/2019
 File: FIGURE 7B

CROSS SECTION B-B'



CROSS SECTION C-C'



HORIZ. SCALE 1"=60'

LEGEND

- PROPOSED EXCAVATION
- >5000 PPM CHLORIDE
- >600 PPM CHLORIDE
- LINER

NOTES:

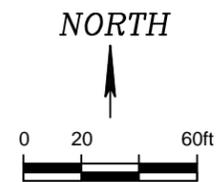


FIGURE 8B
 CROSS SECTION B-B' & C-C'
 PROPOSED EXCAVATION MAP
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°, -104.063730°
 EDDY COUNTY, NEW MEXICO

Project: 212C-MD-01821
 Date: 8/19/2019
 File: FIGURE 8B

SECTION A-A'



LEGEND

- BOREHOLE SAMPLE LOCATION
- PLAINS PIPELINE
- 4.0' PROPOSED EXCAVATION
- 7.0'-8.0' PROPOSED EXCAVATION
- LINER

NOTES:

Tt TETRA TECH
 901 W. Wall St. Ste. 100,
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NORTH

0 40 120ft

FIGURE 9A

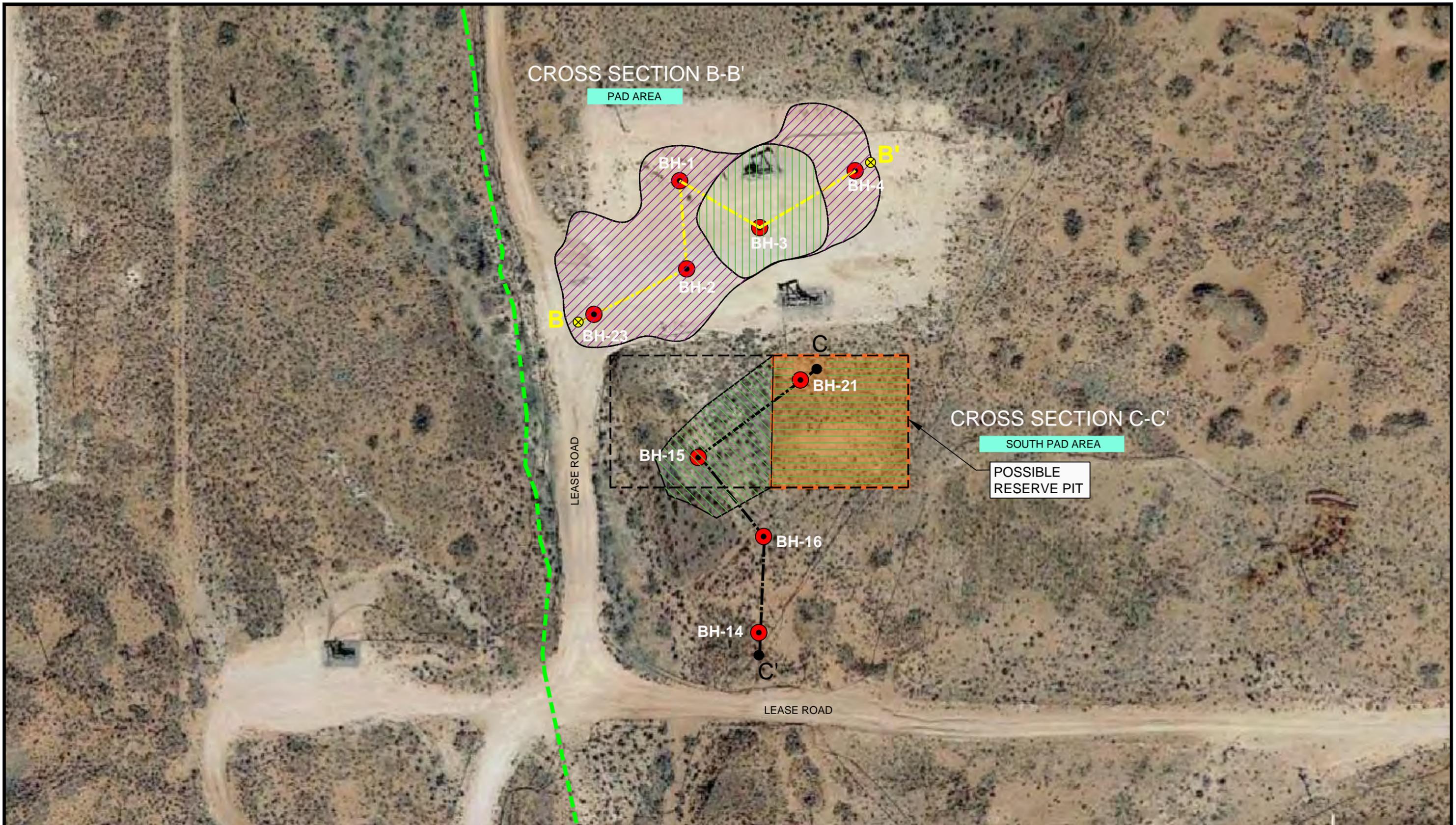
PROPOSED EXCAVATION PASTURE MAP
 RJ UNIT 108
 PROPERTY LOCATED AT 32.808046°,-104.063730°
 EDDY COUNTY, NEW MEXICO

Project: 212C-MD-01821

Date: 8/22/2019

Fig: FIGURE 7A





LEGEND	
	BOREHOLE SAMPLE LOCATION
	PLAINS PIPELINE
	1'.0' PROPOSED EXCAVATION
	4.0' PROPOSED EXCAVATION
	LINER

NOTES:

TETRA TECH
901 W. Wall St. Ste. 100,
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CONCHO

NORTH

FIGURE 9B

PROPOSED EXCAVATION PAD & SOUTH PAD MAP
RJ UNIT 108
PROPERTY LOCATED AT 32.808046°,-104.063730°
EDDY COUNTY, NEW MEXICO

Project: 212C-MD-01821
Date: 8/20/2019
File: FIGURE 9B

Tables

Table 2
COG
RJ Unit #108 (4.17.19)
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)	
			In-Situ	Removed	GRO	DRO	MRO	Total							
BH-17	7/2/2019	0-1	X		-	-	-	-	-	-	-	-	-	3,160	
	"	2	X		-	-	-	-	-	-	-	-	-	5,520	
	"	3	X		-	-	-	-	-	-	-	-	-	8,240	
	"	4	X		-	-	-	-	-	-	-	-	-	9,600	
	"	5	X		-	-	-	-	-	-	-	-	-	10,100	
	"	6	X		-	-	-	-	-	-	-	-	-	19,800	
	"	7	X		-	-	-	-	-	-	-	-	-	18,800	
	"	8	X		-	-	-	-	-	-	-	-	-	848	
	"	9	X		-	-	-	-	-	-	-	-	-	144	
	"	10	X		-	-	-	-	-	-	-	-	-	112	
	"	11	X		-	-	-	-	-	-	-	-	-	14,000	
	"	12	X		-	-	-	-	-	-	-	-	-	416	
	"	13	X		-	-	-	-	-	-	-	-	-	1,090	
	"	14	X		-	-	-	-	-	-	-	-	-	2,960	
BH-17	7/11/2019	10	X		-	-	-	-	-	-	-	-	-	1,520	
	"	15	X		-	-	-	-	-	-	-	-	-	2,000	
	"	20	X		-	-	-	-	-	-	-	-	-	2,160	
	"	25	X		-	-	-	-	-	-	-	-	-	976	
	"	30	X		-	-	-	-	-	-	-	-	-	704	
														Re-run	672

Table 2
COG
RJ Unit #108 (4.17.19)
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Soil Status		TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	MRO	Total						
BH-22	7/2/2019	0-1	X		-	-	-	-	-	-	-	-	-	32.0
	"	2	X		-	-	-	-	-	-	-	-	-	32.0
	"	3	X		-	-	-	-	-	-	-	-	-	16.0
	"	4	X		-	-	-	-	-	-	-	-	-	48.0
	"	5	X		-	-	-	-	-	-	-	-	-	16.0
	"	6	X		-	-	-	-	-	-	-	-	-	16.0
BH-23	7/1/2019	0-1	X		-	-	-	-	-	-	-	-	-	8,800
	"	2	X		-	-	-	-	-	-	-	-	-	288
	"	3	X		-	-	-	-	-	-	-	-	-	80.0
	"	4	X		-	-	-	-	-	-	-	-	-	5,440
	"	5	X		-	-	-	-	-	-	-	-	-	160
	"	6	X		-	-	-	-	-	-	-	-	-	32.0
BH-24	7/12/2019	5	X		-	-	-	-	-	-	-	-	-	160
	"	10	X		-	-	-	-	-	-	-	-	-	96.0
	"	15	X		-	-	-	-	-	-	-	-	-	80.0

(-) Not Analyzed

 Proposed Excavation Depths

 Proposed Liner Depth

Photos

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View South – Pad Area



View North – Pad Area

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View South – South Pad Area



Looking South – South Pad Area

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View South – South Pad Area



Looking North – South Pad Area

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View South – North Pasture Area



View North – North Pasture Area

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View North – North Pasture Area



View South – South Pasture Area

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View South – South Pasture Area



View South – South Pasture Area

COG Operating LLC
RJ Unit 108
Eddy County, New Mexico



TETRA TECH



View North – South Pasture Area



View South – South Pasture Area

Appendix A

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: _____ Title: _____ Signature: <u>Debra J. Grant</u> Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: <u>Amalia Baramante</u> Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature:  _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Appendix B

Water Well Data
Average Depth to Groundwater (ft)
RJ Unit #108
Eddy County, New Mexico

16 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Artesia

16 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14 220	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

dry

16 South 30 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South 30 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South 28 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South 29 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

18 South 30 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

- 88** New Mexico State Engineers Well Reports
- 105** USGS Well Reports
- 90** Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
 Geology and Groundwater Resources of Eddy County, NM (Report 3)
- 34** NMOCD - Groundwater Data
- 123** Tetra Tech installed temporary wells and field water level
- 143** NMOCD Groundwater map well location

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

(A CLW in the (R POD has been
 POD suffix indicates the replaced,
 POD has been replaced O orphaned,
 no longer serves a C the file is (quarters are 1 NW 2 NE 3 SW 4 SE)
 water right file.) closed) (quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

OD Number	Code	OD Sub-basin	County	4 1	4 2	4 3	Sec	Tws	Rng	5873 0	3 31585	DepthWell	DepthWater	Water Column
RA_11807.POD1		RA	ED	1	2	3	22	17S	29E			131	7	55

Average Depth to Water: **7 feet**
 Minimum Depth: **7 feet**
 Maximum Depth: **7 feet**

Record Count: 1

LSS Search:

Township: 17S **Range:** 29E

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

7/11/19 12:25 PM

WATER COLUMN/ AVERAGE DEPTH
 TO WATER

COG RJU Unit #108

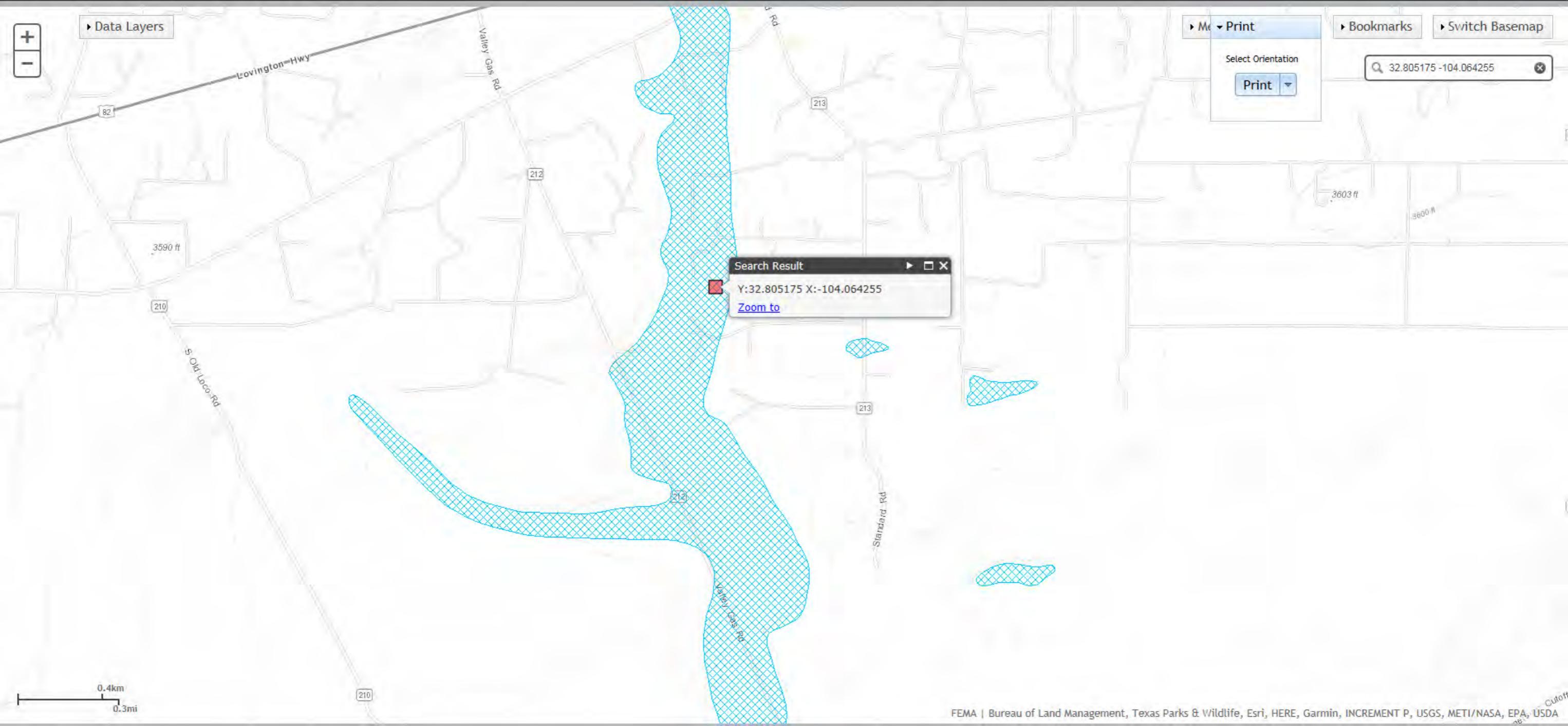
Legend

- High
- Low
- Medium

82 Lovington Hwy

32.805175 -104.064255





Data Layers

Print

Select Orientation

Print

Bookmarks

Switch Basemap

32.805175 -104.064255

Search Result

Y:32.805175 X:-104.064255

[Zoom to](#)



Appendix C



Borehole ID:
BH-7

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.805175 -104.064255
Elevation : NA

Date : Wednesday, July 10, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------	----------------------------

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------	----------------------------

0		Brown Silty/Sand (Soft)		
5		Brown Silty/Clay with Caliche (soft) nodules (Loose)	1,200	OL
		Dense Layer of Caliche		
		Interbedded Layers of Caliche with clay	500	520
10		Brown Soft Sand w/ Caliche nodules		
		Interbedded gravel layer with Fine sands		
15		Dense layer of gravel with cobble with loose fine brown sand	295	400
20		Red Fine sand with gravel & cobble (0.5" to 1.5")	440	400
		Total Depth Drilled: 20'		

50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining



Borehole ID:
BH-8

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.805175 -104.064255
Elevation : NA

Date : Wednesday, July 10, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0				
5		Fine Brown Silty Sand (loose)		
10		Fine Brown Silty Sandwith Clay (loose)	5,610	
15		Fine Sand with interbedded gravel ↓		
15		Fine Brown Sand with Gravel (loose)	105	
20		Brown Fine sand with gravel (loose)	97	120
25		Damp Gravel with Clay (loose)	425	400
30				
35				
40				
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65		↓ ↓ ↓ ↓		
70				
75				
Comments:				

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining



Borehole ID:
BH-10

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.805717-104.063998
Elevation : NA

Date : Wednesday, July 10, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0		Fine Brown Silty Sand with clay (loose)		
5		Fine Brown Silty Sand with clay (loose)	4,510	
		Damp Green Fine Sand (loose)		
10		Fine Brown/Green Silty Sandwith Clay (Moist) (loose)	1,110	
15		Coarse Brown Sand with Clay (Damp) (loose)	600	
20		Brown Coasre sand with Clay & gravel (Loose)	1,720	840
		Layer Gypsum (Dense)		
25		Fine Gypsum with Sand (Dense)	860	400
		Total Depth Drilled: 25'		

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining



Borehole ID:
BH-14

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.807518 -104.063798
Elevation : NA

Date : Thursday, July 11, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------	----------------------------

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------	----------------------------

0		Red Silty/ Sand (Dry) (Loose)		
5		Fine Red Silty/Sand	49	
		Grey Sand with Clay		
10		Grey / Brown sand with Clay (Loose)	107	
		Red Clay nodules intermittent		
15		Red Clay nodules with fine sand with gypsum.	900	240
20				
25				
30		Total Depth Drilled: 15'		
35				
40				
45				
50				

50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining



Borehole ID:
BH-16

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.807635 -104.063770
Elevation : NA

Date : Thursday, July 11, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0		Red Silty/ Sand (Dry) (Loose)		
5		Fine Red Silty/Sand	150	
		Grey Sand with Clay		
10		Grey / Brown sand with Clay (Loose)	2,710	
		Red Clay nodules intermittent		
15		Red sand with Clay nodules Dense	942	1,200
20		Black/Brown Silty sand with clay Dense	2,160	O.L
		Dense layer of gravel		
25		Dense Layer of Gravel and sand	322	120
		Total Depth Drilled: 25'		

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining



Borehole ID:
BH-18

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.805113 -104.064490
Elevation : NA

Date : Thursday, July 11, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0		Red Silty/ Sand (Mosit) (Loose)		
5		Red Silty/ Clay with gravel (Mosit) (Loose) Dense layer of clay with gravel (Moist)		
10		Red Clay nodules very moist and dense Very dense layer of clay		
15		Moist Dense layer of red clay nodules wth gravel Fine Red Silty sand with clay nodules (Loose) (Dry)		
20		Fine Brown Silty Sand with Clay (Loose) Fine Powdery redish silty sand (Loose) with clay	695	510
25		Fine Powdery redish silty sand (Loose) with clay	372	240
30				
35		Total Depth: 25'		
40				
45				
50				

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining



Borehole ID:
BH-19

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.806234 -104.064098
Elevation : NA

Date : Friday, July 12, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
0		Loose Brown Sand		
5		Loose Brown Silty sand with clay (Loose) (Dry) Layer of Gravel		
10		Red clay nodules with gravel (Dense) (Slightly Damp) fine red silty sand (Loose) (Dry)		
15		Fine Red sand with Clay and Gravel (Dense) (Slightly damp) Dense layer of Gravel		
20		Fine Red Sand with clay and gravel (Dense) (Slightly damp) Large Cobble (1"-2") tan sand (dense) (Dry)	642	
25		Pink Sand with Gravel & cobble (1" - 2") (Dense slightly damp)	962	
30		Fine Brown silty sand with Gravel (loose) (Slightly damp)	772	800
35		Gravel with Red isg Fine sand (Loose) (Slightly damp)	420	
40		Gravel with Red Sand (Loosing pressure)	290	240
45		Total Depth: 40'		

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
* H.S. = Heavy Staining

* L.O. = Low Odor
* L.S. = Low Staining



Borehole ID:
BH-20

**Soil Drilling Log with
Field Testing Results**

Project Name : COG RJU Unit #108
Project No. : 212C-MD-01821
Location : Eddy County, New Mexico
Coordinates : 32.808745 -104.064615
Elevation : NA

Date : Friday, July 12, 2019
Sampler : Conner Moehring
Driller : Scarborough Drilling
Method : Air Rotary

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------	----------------------------

Depth (ft.)	WL	Soil Description	Chloride Field Test (ppm)	Field Titration Test (ppm)
-------------	----	------------------	---------------------------	----------------------------

0		Red loose sand (Dry)		
5		Fine loose red clay with red sand (Dense) (Slightly damp)		
10		Moderately damp red clay nodules (Dense)	725	
		Grey Sand with clay (Dense) (Dry)		
15		Grey gravel with Cobble With clay and sand (Dry)(Loose)	315	
20		Fine grey sand with gravel (Loose)(Dry)	306	240
		Total Depth: 20'		
25				
30				
35				
40				
45				
50				

50				
55				
60				
65				
70				
75				
		Comments:		

* H.O. = Heavy Odor
 * H.S. = Heavy Staining

* L.O. = Low Odor
 * L.S. = Low Staining

Appendix D

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-1 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 9:00:00 AM

Lab ID: 1905679-001

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	12000	60	E	mg/Kg	20	5/16/2019 11:31:12 AM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/16/2019 9:08:50 PM	44940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 9:08:50 PM	44940
Surr: DNOP	126	70-130		%Rec	1	5/16/2019 9:08:50 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/17/2019 10:16:56 AM	44917
Surr: BFB	82.1	73.8-119		%Rec	1	5/17/2019 10:16:56 AM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/17/2019 10:16:56 AM	44917
Toluene	ND	0.049		mg/Kg	1	5/17/2019 10:16:56 AM	44917
Ethylbenzene	ND	0.049		mg/Kg	1	5/17/2019 10:16:56 AM	44917
Xylenes, Total	ND	0.098		mg/Kg	1	5/17/2019 10:16:56 AM	44917
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	1	5/17/2019 10:16:56 AM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-1 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 9:05:00 AM

Lab ID: 1905679-002

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	260	60		mg/Kg	20	5/16/2019 12:08:25 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/16/2019 9:33:22 PM	44940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 9:33:22 PM	44940
Surr: DNOP	151	70-130	S	%Rec	1	5/16/2019 9:33:22 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/17/2019 11:27:22 AM	44917
Surr: BFB	76.2	73.8-119		%Rec	1	5/17/2019 11:27:22 AM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/17/2019 11:27:22 AM	44917
Toluene	ND	0.049		mg/Kg	1	5/17/2019 11:27:22 AM	44917
Ethylbenzene	ND	0.049		mg/Kg	1	5/17/2019 11:27:22 AM	44917
Xylenes, Total	ND	0.098		mg/Kg	1	5/17/2019 11:27:22 AM	44917
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	5/17/2019 11:27:22 AM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-2 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 9:50:00 AM

Lab ID: 1905679-008

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1900	60		mg/Kg	20	5/16/2019 12:45:39 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2019 9:57:55 PM	44940
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/16/2019 9:57:55 PM	44940
Surr: DNOP	159	70-130	S	%Rec	1	5/16/2019 9:57:55 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/17/2019 11:50:44 AM	44917
Surr: BFB	78.4	73.8-119		%Rec	1	5/17/2019 11:50:44 AM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/17/2019 11:50:44 AM	44917
Toluene	ND	0.050		mg/Kg	1	5/17/2019 11:50:44 AM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/17/2019 11:50:44 AM	44917
Xylenes, Total	ND	0.099		mg/Kg	1	5/17/2019 11:50:44 AM	44917
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	5/17/2019 11:50:44 AM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-2 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 10:00:00 AM

Lab ID: 1905679-009

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	160	60		mg/Kg	20	5/16/2019 12:58:03 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/16/2019 10:22:36 PM	44940
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/16/2019 10:22:36 PM	44940
Surr: DNOP	131	70-130	S	%Rec	1	5/16/2019 10:22:36 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/17/2019 12:14:15 PM	44917
Surr: BFB	78.9	73.8-119		%Rec	1	5/17/2019 12:14:15 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/17/2019 12:14:15 PM	44917
Toluene	ND	0.050		mg/Kg	1	5/17/2019 12:14:15 PM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/17/2019 12:14:15 PM	44917
Xylenes, Total	ND	0.10		mg/Kg	1	5/17/2019 12:14:15 PM	44917
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	5/17/2019 12:14:15 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-3 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 11:00:00 AM

Lab ID: 1905679-015

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7400	60	E	mg/Kg	20	5/16/2019 1:35:17 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/16/2019 10:47:07 PM	44940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 10:47:07 PM	44940
Surr: DNOP	166	70-130	S	%Rec	1	5/16/2019 10:47:07 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/17/2019 12:37:46 PM	44917
Surr: BFB	79.8	73.8-119		%Rec	1	5/17/2019 12:37:46 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/17/2019 12:37:46 PM	44917
Toluene	ND	0.049		mg/Kg	1	5/17/2019 12:37:46 PM	44917
Ethylbenzene	ND	0.049		mg/Kg	1	5/17/2019 12:37:46 PM	44917
Xylenes, Total	ND	0.099		mg/Kg	1	5/17/2019 12:37:46 PM	44917
Surr: 4-Bromofluorobenzene	95.3	80-120		%Rec	1	5/17/2019 12:37:46 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-3 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 11:10:00 AM

Lab ID: 1905679-016

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	920	60		mg/Kg	20	5/16/2019 1:47:41 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2019 11:11:43 PM	44940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 11:11:43 PM	44940
Surr: DNOP	131	70-130	S	%Rec	1	5/16/2019 11:11:43 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/17/2019 1:01:10 PM	44917
Surr: BFB	80.1	73.8-119		%Rec	1	5/17/2019 1:01:10 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/17/2019 1:01:10 PM	44917
Toluene	ND	0.050		mg/Kg	1	5/17/2019 1:01:10 PM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/17/2019 1:01:10 PM	44917
Xylenes, Total	ND	0.10		mg/Kg	1	5/17/2019 1:01:10 PM	44917
Surr: 4-Bromofluorobenzene	96.0	80-120		%Rec	1	5/17/2019 1:01:10 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-3 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 11:20:00 AM

Lab ID: 1905679-017

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	650	60		mg/Kg	20	5/15/2019 1:02:28 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-3 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 11:30:00 AM

Lab ID: 1905679-018

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1800	60		mg/Kg	20	5/16/2019 7:35:58 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-3 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 11:40:00 AM

Lab ID: 1905679-019

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	160	59		mg/Kg	20	5/17/2019 7:18:45 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-3 8'

Project: RJ Unit 108

Collection Date: 5/9/2019 11:50:00 AM

Lab ID: 1905679-020

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	170	60		mg/Kg	20	5/17/2019 8:20:48 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-3 10'

Project: RJ Unit 108

Collection Date: 5/9/2019 12:00:00 PM

Lab ID: 1905679-021

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	130	60		mg/Kg	20	5/17/2019 8:33:13 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-4 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 12:10:00 PM

Lab ID: 1905679-022

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1400	60		mg/Kg	20	5/16/2019 2:00:06 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/16/2019 11:36:21 PM	44940
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/16/2019 11:36:21 PM	44940
Surr: DNOP	135	70-130	S	%Rec	1	5/16/2019 11:36:21 PM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/16/2019 4:43:39 PM	44917
Surr: BFB	89.2	73.8-119		%Rec	1	5/16/2019 4:43:39 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 4:43:39 PM	44917
Toluene	ND	0.050		mg/Kg	1	5/16/2019 4:43:39 PM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/16/2019 4:43:39 PM	44917
Xylenes, Total	ND	0.10		mg/Kg	1	5/16/2019 4:43:39 PM	44917
Surr: 4-Bromofluorobenzene	87.8	80-120		%Rec	1	5/16/2019 4:43:39 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-4 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 12:20:00 PM

Lab ID: 1905679-023

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	170	60		mg/Kg	20	5/16/2019 2:37:20 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/17/2019 12:01:06 AM	44940
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/17/2019 12:01:06 AM	44940
Surr: DNOP	99.5	70-130		%Rec	1	5/17/2019 12:01:06 AM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/16/2019 5:06:21 PM	44917
Surr: BFB	88.1	73.8-119		%Rec	1	5/16/2019 5:06:21 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 5:06:21 PM	44917
Toluene	ND	0.050		mg/Kg	1	5/16/2019 5:06:21 PM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/16/2019 5:06:21 PM	44917
Xylenes, Total	ND	0.099		mg/Kg	1	5/16/2019 5:06:21 PM	44917
Surr: 4-Bromofluorobenzene	84.8	80-120		%Rec	1	5/16/2019 5:06:21 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-5 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 1:30:00 PM

Lab ID: 1905679-029

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	26000	60	E	mg/Kg	20	5/16/2019 2:49:45 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/17/2019 12:25:36 AM	44940
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/17/2019 12:25:36 AM	44940
Surr: DNOP	103	70-130		%Rec	1	5/17/2019 12:25:36 AM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/16/2019 5:28:58 PM	44917
Surr: BFB	83.6	73.8-119		%Rec	1	5/16/2019 5:28:58 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 5:28:58 PM	44917
Toluene	ND	0.050		mg/Kg	1	5/16/2019 5:28:58 PM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/16/2019 5:28:58 PM	44917
Xylenes, Total	ND	0.099		mg/Kg	1	5/16/2019 5:28:58 PM	44917
Surr: 4-Bromofluorobenzene	80.0	80-120	S	%Rec	1	5/16/2019 5:28:58 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-5 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 1:40:00 PM

Lab ID: 1905679-030

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	9700	60	E	mg/Kg	20	5/16/2019 3:02:10 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/17/2019 1:14:35 AM	44940
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/17/2019 1:14:35 AM	44940
Surr: DNOP	103	70-130		%Rec	1	5/17/2019 1:14:35 AM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2019 5:51:39 PM	44917
Surr: BFB	88.1	73.8-119		%Rec	1	5/16/2019 5:51:39 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/16/2019 5:51:39 PM	44917
Toluene	ND	0.049		mg/Kg	1	5/16/2019 5:51:39 PM	44917
Ethylbenzene	ND	0.049		mg/Kg	1	5/16/2019 5:51:39 PM	44917
Xylenes, Total	ND	0.098		mg/Kg	1	5/16/2019 5:51:39 PM	44917
Surr: 4-Bromofluorobenzene	87.4	80-120		%Rec	1	5/16/2019 5:51:39 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-5 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 1:50:00 PM

Lab ID: 1905679-031

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4200	60	E	mg/Kg	20	5/15/2019 1:27:17 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-5 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 2:00:00 PM

Lab ID: 1905679-032

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3200	60	E	mg/Kg	20	5/17/2019 10:24:46 AM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-5 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 2:10:00 PM

Lab ID: 1905679-033

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/16/2019 8:13:12 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-6 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 2:40:00 PM

Lab ID: 1905679-036

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	40000	60	E	mg/Kg	20	5/16/2019 3:14:35 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/17/2019 1:39:16 AM	44940
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/17/2019 1:39:16 AM	44940
Surr: DNOP	101	70-130		%Rec	1	5/17/2019 1:39:16 AM	44940
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2019 6:14:21 PM	44917
Surr: BFB	89.9	73.8-119		%Rec	1	5/16/2019 6:14:21 PM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 6:14:21 PM	44917
Toluene	ND	0.049		mg/Kg	1	5/16/2019 6:14:21 PM	44917
Ethylbenzene	ND	0.049		mg/Kg	1	5/16/2019 6:14:21 PM	44917
Xylenes, Total	ND	0.098		mg/Kg	1	5/16/2019 6:14:21 PM	44917
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	1	5/16/2019 6:14:21 PM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-6 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 2:50:00 PM

Lab ID: 1905679-037

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7700	60	E	mg/Kg	20	5/16/2019 3:26:59 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2019 4:46:56 PM	44941
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 4:46:56 PM	44941
Surr: DNOP	99.5	70-130		%Rec	1	5/16/2019 4:46:56 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2019 2:55:02 AM	44917
Surr: BFB	86.8	73.8-119		%Rec	1	5/16/2019 2:55:02 AM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 2:55:02 AM	44917
Toluene	ND	0.049		mg/Kg	1	5/16/2019 2:55:02 AM	44917
Ethylbenzene	ND	0.049		mg/Kg	1	5/16/2019 2:55:02 AM	44917
Xylenes, Total	ND	0.099		mg/Kg	1	5/16/2019 2:55:02 AM	44917
Surr: 4-Bromofluorobenzene	87.3	80-120		%Rec	1	5/16/2019 2:55:02 AM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-6 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 3:00:00 PM

Lab ID: 1905679-038

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3000	60	E	mg/Kg	20	5/15/2019 1:39:42 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-6 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 3:10:00 PM

Lab ID: 1905679-039

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	12000	60	E	mg/Kg	20	5/17/2019 11:14:24 AM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-6 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 3:20:00 PM

Lab ID: 1905679-040

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2100	59		mg/Kg	20	5/16/2019 8:25:37 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-6 8'

Project: RJ Unit 108

Collection Date: 5/9/2019 3:30:00 PM

Lab ID: 1905679-041

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7500	59	E	mg/Kg	20	5/17/2019 8:45:38 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-6 10'

Project: RJ Unit 108

Collection Date: 5/9/2019 3:40:00 PM

Lab ID: 1905679-042

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	110	60		mg/Kg	20	5/17/2019 8:58:02 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-7 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 3:50:00 PM

Lab ID: 1905679-043

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	23000	60	E	mg/Kg	20	5/16/2019 3:39:24 PM	44963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/17/2019 12:15:41 PM	44950
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/17/2019 12:15:41 PM	44950
Surr: DNOP	95.8	70-130		%Rec	1	5/17/2019 12:15:41 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/16/2019 3:17:53 AM	44917
Surr: BFB	84.8	73.8-119		%Rec	1	5/16/2019 3:17:53 AM	44917
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 3:17:53 AM	44917
Toluene	ND	0.050		mg/Kg	1	5/16/2019 3:17:53 AM	44917
Ethylbenzene	ND	0.050		mg/Kg	1	5/16/2019 3:17:53 AM	44917
Xylenes, Total	ND	0.099		mg/Kg	1	5/16/2019 3:17:53 AM	44917
Surr: 4-Bromofluorobenzene	84.3	80-120		%Rec	1	5/16/2019 3:17:53 AM	44917

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-7 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:00:00 PM

Lab ID: 1905679-044

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	18000	60	E	mg/Kg	20	5/15/2019 1:52:07 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-7 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:10:00 PM

Lab ID: 1905679-045

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	11000	60	E	mg/Kg	20	5/15/2019 2:04:32 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-7 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:15:00 PM

Lab ID: 1905679-046

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7000	60	E	mg/Kg	20	5/17/2019 11:26:48 AM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-7 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:20:00 PM

Lab ID: 1905679-047

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	280	60		mg/Kg	20	5/16/2019 8:38:02 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-8 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:35:00 PM

Lab ID: 1905679-050

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	22000	60	E	mg/Kg	20	5/16/2019 12:09:12 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/16/2019 5:59:49 PM	44941
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/16/2019 5:59:49 PM	44941
Surr: DNOP	96.2	70-130		%Rec	1	5/16/2019 5:59:49 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 9:53:07 AM	44922
Surr: BFB	88.2	73.8-119		%Rec	1	5/15/2019 9:53:07 AM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 9:53:07 AM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 9:53:07 AM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 9:53:07 AM	44922
Xylenes, Total	ND	0.098		mg/Kg	1	5/15/2019 9:53:07 AM	44922
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	5/15/2019 9:53:07 AM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-8 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:40:00 PM

Lab ID: 1905679-051

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	16000	60	E	mg/Kg	20	5/16/2019 12:21:37 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2019 6:24:17 PM	44941
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 6:24:17 PM	44941
Surr: DNOP	98.7	70-130		%Rec	1	5/16/2019 6:24:17 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 11:01:35 AM	44922
Surr: BFB	86.9	73.8-119		%Rec	1	5/15/2019 11:01:35 AM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 11:01:35 AM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 11:01:35 AM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 11:01:35 AM	44922
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2019 11:01:35 AM	44922
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	5/15/2019 11:01:35 AM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-8 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:45:00 PM

Lab ID: 1905679-052

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	5300	60	E	mg/Kg	20	5/15/2019 2:16:57 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-8 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:50:00 PM

Lab ID: 1905679-053

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	33000	60	E	mg/Kg	20	5/17/2019 11:39:13 AM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-8 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 4:55:00 PM

Lab ID: 1905679-054

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/16/2019 8:50:27 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-9 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:10:00 PM

Lab ID: 1905679-057

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	33000	60	E	mg/Kg	20	5/16/2019 12:34:01 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/16/2019 6:48:53 PM	44941
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/16/2019 6:48:53 PM	44941
Surr: DNOP	102	70-130		%Rec	1	5/16/2019 6:48:53 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 12:09:51 PM	44922
Surr: BFB	86.2	73.8-119		%Rec	1	5/15/2019 12:09:51 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 12:09:51 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 12:09:51 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 12:09:51 PM	44922
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2019 12:09:51 PM	44922
Surr: 4-Bromofluorobenzene	86.5	80-120		%Rec	1	5/15/2019 12:09:51 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-9 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:15:00 PM

Lab ID: 1905679-058

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	8800	60	E	mg/Kg	20	5/16/2019 12:46:25 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/16/2019 7:38:19 PM	44941
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/16/2019 7:38:19 PM	44941
Surr: DNOP	96.7	70-130		%Rec	1	5/16/2019 7:38:19 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 12:32:39 PM	44922
Surr: BFB	87.5	73.8-119		%Rec	1	5/15/2019 12:32:39 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 12:32:39 PM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 12:32:39 PM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 12:32:39 PM	44922
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2019 12:32:39 PM	44922
Surr: 4-Bromofluorobenzene	88.1	80-120		%Rec	1	5/15/2019 12:32:39 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-9 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:20:00 PM

Lab ID: 1905679-059

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4900	60	E	mg/Kg	20	5/15/2019 2:54:11 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-9 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:25:00 PM

Lab ID: 1905679-060

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	13000	60	E	mg/Kg	20	5/17/2019 12:16:27 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-9 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:30:00 PM

Lab ID: 1905679-061

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	180	60		mg/Kg	20	5/16/2019 9:02:51 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-10 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:45:00 PM

Lab ID: 1905679-064

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	14000	59	E	mg/Kg	20	5/16/2019 12:58:50 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2019 8:03:06 PM	44941
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/16/2019 8:03:06 PM	44941
Surr: DNOP	107	70-130		%Rec	1	5/16/2019 8:03:06 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 12:55:23 PM	44922
Surr: BFB	88.1	73.8-119		%Rec	1	5/15/2019 12:55:23 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 12:55:23 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 12:55:23 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 12:55:23 PM	44922
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2019 12:55:23 PM	44922
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	5/15/2019 12:55:23 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-10 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:50:00 PM

Lab ID: 1905679-065

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4600	60	E	mg/Kg	20	5/16/2019 1:11:14 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/16/2019 8:27:52 PM	44941
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/16/2019 8:27:52 PM	44941
Surr: DNOP	126	70-130		%Rec	1	5/16/2019 8:27:52 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 1:18:05 PM	44922
Surr: BFB	86.7	73.8-119		%Rec	1	5/15/2019 1:18:05 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 1:18:05 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 1:18:05 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 1:18:05 PM	44922
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2019 1:18:05 PM	44922
Surr: 4-Bromofluorobenzene	87.5	80-120		%Rec	1	5/15/2019 1:18:05 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-10 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 5:55:00 PM

Lab ID: 1905679-066

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	6300	60	E	mg/Kg	20	5/15/2019 3:06:35 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-10 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:00:00 PM

Lab ID: 1905679-067

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	10000	60	E	mg/Kg	20	5/17/2019 12:28:51 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-10 6'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:05:00 PM

Lab ID: 1905679-068

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	230	60		mg/Kg	20	5/16/2019 9:15:15 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-11 0-1'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:30:00 PM

Lab ID: 1905679-073

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	17000	60	E	mg/Kg	20	5/16/2019 1:23:39 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/16/2019 9:17:21 PM	44941
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/16/2019 9:17:21 PM	44941
Surr: DNOP	110	70-130		%Rec	1	5/16/2019 9:17:21 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2019 1:40:47 PM	44922
Surr: BFB	86.8	73.8-119		%Rec	1	5/15/2019 1:40:47 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 1:40:47 PM	44922
Toluene	ND	0.048		mg/Kg	1	5/15/2019 1:40:47 PM	44922
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2019 1:40:47 PM	44922
Xylenes, Total	ND	0.097		mg/Kg	1	5/15/2019 1:40:47 PM	44922
Surr: 4-Bromofluorobenzene	87.0	80-120		%Rec	1	5/15/2019 1:40:47 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-11 2'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:35:00 PM

Lab ID: 1905679-074

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	10000	60	E	mg/Kg	20	5/15/2019 3:19:00 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-11 3'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:40:00 PM

Lab ID: 1905679-075

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	12000	60	E	mg/Kg	20	5/15/2019 3:31:25 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-11 4'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:45:00 PM

Lab ID: 1905679-076

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	23000	60	E	mg/Kg	20	5/17/2019 12:41:16 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-11 8'

Project: RJ Unit 108

Collection Date: 5/9/2019 6:55:00 PM

Lab ID: 1905679-078

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	20000	60	E	mg/Kg	20	5/17/2019 9:10:27 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-11 10'

Project: RJ Unit 108

Collection Date: 5/9/2019 7:00:00 PM

Lab ID: 1905679-079

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/17/2019 9:22:51 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-12 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:10:00 AM

Lab ID: 1905679-080

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	27000	60	E	mg/Kg	20	5/16/2019 1:36:04 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/16/2019 10:06:32 PM	44941
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/16/2019 10:06:32 PM	44941
Surr: DNOP	109	70-130		%Rec	1	5/16/2019 10:06:32 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 2:03:29 PM	44922
Surr: BFB	87.7	73.8-119		%Rec	1	5/15/2019 2:03:29 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 2:03:29 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 2:03:29 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 2:03:29 PM	44922
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2019 2:03:29 PM	44922
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	5/15/2019 2:03:29 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-12 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:15:00 AM

Lab ID: 1905679-081

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	9400	60	E	mg/Kg	20	5/16/2019 2:38:07 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/16/2019 10:55:50 PM	44941
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/16/2019 10:55:50 PM	44941
Surr: DNOP	120	70-130		%Rec	1	5/16/2019 10:55:50 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 2:26:11 PM	44922
Surr: BFB	86.5	73.8-119		%Rec	1	5/15/2019 2:26:11 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 2:26:11 PM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 2:26:11 PM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 2:26:11 PM	44922
Xylenes, Total	ND	0.098		mg/Kg	1	5/15/2019 2:26:11 PM	44922
Surr: 4-Bromofluorobenzene	87.2	80-120		%Rec	1	5/15/2019 2:26:11 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-12 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:20:00 AM

Lab ID: 1905679-082

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	12000	60	E	mg/Kg	20	5/15/2019 3:43:50 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-12 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:25:00 AM

Lab ID: 1905679-083

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	14000	59	E	mg/Kg	20	5/17/2019 12:53:41 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-12 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:30:00 AM

Lab ID: 1905679-084

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	21000	60	E	mg/Kg	20	5/16/2019 10:04:52 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-12 8'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:35:00 AM

Lab ID: 1905679-085

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	13000	60	E	mg/Kg	20	5/17/2019 9:35:16 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-12 10'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:40:00 AM

Lab ID: 1905679-086

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4800	60	E	mg/Kg	20	5/17/2019 9:47:40 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-13 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:45:00 AM

Lab ID: 1905679-087

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	22000	60	E	mg/Kg	20	5/16/2019 2:50:31 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/17/2019 11:36:31 AM	44941
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/17/2019 11:36:31 AM	44941
Surr: DNOP	105	70-130		%Rec	1	5/17/2019 11:36:31 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 3:34:25 PM	44922
Surr: BFB	92.4	73.8-119		%Rec	1	5/15/2019 3:34:25 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 3:34:25 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 3:34:25 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 3:34:25 PM	44922
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2019 3:34:25 PM	44922
Surr: 4-Bromofluorobenzene	87.9	80-120		%Rec	1	5/15/2019 3:34:25 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-13 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:50:00 AM

Lab ID: 1905679-088

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	11000	60	E	mg/Kg	20	5/16/2019 3:02:56 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	69	9.4		mg/Kg	1	5/17/2019 12:25:10 PM	44941
Motor Oil Range Organics (MRO)	470	47		mg/Kg	1	5/17/2019 12:25:10 PM	44941
Surr: DNOP	112	70-130		%Rec	1	5/17/2019 12:25:10 PM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 3:57:11 PM	44922
Surr: BFB	86.5	73.8-119		%Rec	1	5/15/2019 3:57:11 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 3:57:11 PM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 3:57:11 PM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 3:57:11 PM	44922
Xylenes, Total	ND	0.098		mg/Kg	1	5/15/2019 3:57:11 PM	44922
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	5/15/2019 3:57:11 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-13 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 8:55:00 AM

Lab ID: 1905679-089

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	12000	60	E	mg/Kg	20	5/15/2019 3:56:15 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-13 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:00:00 AM

Lab ID: 1905679-090

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3800	60	E	mg/Kg	20	5/17/2019 1:06:05 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-13 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:05:00 AM

Lab ID: 1905679-091

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/16/2019 10:17:17 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-14 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:20:00 AM

Lab ID: 1905679-094

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	17000	59	E	mg/Kg	20	5/17/2019 1:18:30 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/17/2019 12:09:33 AM	44941
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/17/2019 12:09:33 AM	44941
Surr: DNOP	104	70-130		%Rec	1	5/17/2019 12:09:33 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 4:42:39 PM	44922
Surr: BFB	86.6	73.8-119		%Rec	1	5/15/2019 4:42:39 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 4:42:39 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 4:42:39 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 4:42:39 PM	44922
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2019 4:42:39 PM	44922
Surr: 4-Bromofluorobenzene	87.0	80-120		%Rec	1	5/15/2019 4:42:39 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-14 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:25:00 AM

Lab ID: 1905679-095

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	13000	61	E	mg/Kg	20	5/17/2019 1:30:55 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/17/2019 12:34:09 AM	44941
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/17/2019 12:34:09 AM	44941
Surr: DNOP	109	70-130		%Rec	1	5/17/2019 12:34:09 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 5:05:21 PM	44922
Surr: BFB	88.0	73.8-119		%Rec	1	5/15/2019 5:05:21 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 5:05:21 PM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 5:05:21 PM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 5:05:21 PM	44922
Xylenes, Total	ND	0.098		mg/Kg	1	5/15/2019 5:05:21 PM	44922
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	5/15/2019 5:05:21 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-14 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:30:00 AM

Lab ID: 1905679-096

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	13000	60	E	mg/Kg	20	5/15/2019 4:08:39 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-14 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:35:00 AM

Lab ID: 1905679-097

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	28000	60	E	mg/Kg	20	5/17/2019 1:43:19 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-14 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:40:00 AM

Lab ID: 1905679-098

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	17000	59	E	mg/Kg	20	5/16/2019 10:29:42 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-14 8'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:45:00 AM

Lab ID: 1905679-099

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	22000	60	E	mg/Kg	20	5/17/2019 10:00:05 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-14 10'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:50:00 AM

Lab ID: 1905679-100

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	20000	60	E	mg/Kg	20	5/17/2019 10:12:30 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-15 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 9:55:00 AM

Lab ID: 1905679-101

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	15000	60	E	mg/Kg	20	5/17/2019 1:55:44 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/17/2019 12:58:39 AM	44941
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 12:58:39 AM	44941
Surr: DNOP	106	70-130		%Rec	1	5/17/2019 12:58:39 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2019 5:28:01 PM	44922
Surr: BFB	88.5	73.8-119		%Rec	1	5/15/2019 5:28:01 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 5:28:01 PM	44922
Toluene	ND	0.048		mg/Kg	1	5/15/2019 5:28:01 PM	44922
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2019 5:28:01 PM	44922
Xylenes, Total	ND	0.096		mg/Kg	1	5/15/2019 5:28:01 PM	44922
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	5/15/2019 5:28:01 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-15 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 10:00:00 AM

Lab ID: 1905679-102

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3100	60	E	mg/Kg	20	5/17/2019 2:08:08 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/17/2019 1:23:11 AM	44941
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/17/2019 1:23:11 AM	44941
Surr: DNOP	104	70-130		%Rec	1	5/17/2019 1:23:11 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2019 5:50:41 PM	44922
Surr: BFB	87.1	73.8-119		%Rec	1	5/15/2019 5:50:41 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 5:50:41 PM	44922
Toluene	ND	0.048		mg/Kg	1	5/15/2019 5:50:41 PM	44922
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2019 5:50:41 PM	44922
Xylenes, Total	ND	0.097		mg/Kg	1	5/15/2019 5:50:41 PM	44922
Surr: 4-Bromofluorobenzene	86.9	80-120		%Rec	1	5/15/2019 5:50:41 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-15 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 10:05:00 AM

Lab ID: 1905679-103

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	6400	60	E	mg/Kg	20	5/15/2019 4:21:03 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-15 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 10:10:00 AM

Lab ID: 1905679-104

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	3200	59	E	mg/Kg	20	5/17/2019 2:45:21 PM	44991

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-15 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 10:15:00 AM

Lab ID: 1905679-105

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/16/2019 10:42:06 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-16 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 10:30:00 AM

Lab ID: 1905679-108

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1100	60		mg/Kg	20	5/17/2019 3:22:35 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/17/2019 1:47:47 AM	44941
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 1:47:47 AM	44941
Surr: DNOP	145	70-130	S	%Rec	1	5/17/2019 1:47:47 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 6:13:19 PM	44922
Surr: BFB	85.1	73.8-119		%Rec	1	5/15/2019 6:13:19 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 6:13:19 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 6:13:19 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 6:13:19 PM	44922
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2019 6:13:19 PM	44922
Surr: 4-Bromofluorobenzene	80.9	80-120		%Rec	1	5/15/2019 6:13:19 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-16 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 10:35:00 AM

Lab ID: 1905679-109

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	5/17/2019 3:35:00 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/17/2019 2:12:13 AM	44941
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/17/2019 2:12:13 AM	44941
Surr: DNOP	103	70-130		%Rec	1	5/17/2019 2:12:13 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 6:35:59 PM	44922
Surr: BFB	97.2	73.8-119		%Rec	1	5/15/2019 6:35:59 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 6:35:59 PM	44922
Toluene	ND	0.049		mg/Kg	1	5/15/2019 6:35:59 PM	44922
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 6:35:59 PM	44922
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2019 6:35:59 PM	44922
Surr: 4-Bromofluorobenzene	88.3	80-120		%Rec	1	5/15/2019 6:35:59 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-17 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:10:00 AM

Lab ID: 1905679-115

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	24000	60	E	mg/Kg	20	5/17/2019 3:47:24 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/17/2019 2:36:45 AM	44941
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/17/2019 2:36:45 AM	44941
Surr: DNOP	104	70-130		%Rec	1	5/17/2019 2:36:45 AM	44941
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 6:58:41 PM	44922
Surr: BFB	88.5	73.8-119		%Rec	1	5/15/2019 6:58:41 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 6:58:41 PM	44922
Toluene	ND	0.050		mg/Kg	1	5/15/2019 6:58:41 PM	44922
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 6:58:41 PM	44922
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2019 6:58:41 PM	44922
Surr: 4-Bromofluorobenzene	86.7	80-120		%Rec	1	5/15/2019 6:58:41 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-17 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:15:00 AM

Lab ID: 1905679-116

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	18000	60	E	mg/Kg	20	5/17/2019 3:59:49 PM	44991
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/17/2019 12:37:53 PM	44950
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/17/2019 12:37:53 PM	44950
Surr: DNOP	101	70-130		%Rec	1	5/17/2019 12:37:53 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2019 7:21:19 PM	44922
Surr: BFB	88.4	73.8-119		%Rec	1	5/15/2019 7:21:19 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 7:21:19 PM	44922
Toluene	ND	0.048		mg/Kg	1	5/15/2019 7:21:19 PM	44922
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2019 7:21:19 PM	44922
Xylenes, Total	ND	0.097		mg/Kg	1	5/15/2019 7:21:19 PM	44922
Surr: 4-Bromofluorobenzene	88.5	80-120		%Rec	1	5/15/2019 7:21:19 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-17 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:20:00 AM

Lab ID: 1905679-117

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	9700	60	E	mg/Kg	20	5/15/2019 4:45:52 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-17 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:30:00 AM

Lab ID: 1905679-119

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	33000	60	E	mg/Kg	20	5/16/2019 10:54:31 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-17 8'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:35:00 AM

Lab ID: 1905679-120

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	74000	60	E	mg/Kg	20	5/17/2019 10:49:44 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-17 10'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:40:00 AM

Lab ID: 1905679-121

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	6000	60	E	mg/Kg	20	5/17/2019 11:02:09 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-18 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:45:00 AM

Lab ID: 1905679-122

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	42000	60	E	mg/Kg	20	5/17/2019 10:47:17 AM	44993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/17/2019 12:59:57 PM	44950
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/17/2019 12:59:57 PM	44950
Surr: DNOP	102	70-130		%Rec	1	5/17/2019 12:59:57 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2019 8:29:30 PM	44922
Surr: BFB	85.3	73.8-119		%Rec	1	5/15/2019 8:29:30 PM	44922
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 8:29:30 PM	44922
Toluene	ND	0.048		mg/Kg	1	5/15/2019 8:29:30 PM	44922
Ethylbenzene	ND	0.048		mg/Kg	1	5/15/2019 8:29:30 PM	44922
Xylenes, Total	ND	0.097		mg/Kg	1	5/15/2019 8:29:30 PM	44922
Surr: 4-Bromofluorobenzene	84.8	80-120		%Rec	1	5/15/2019 8:29:30 PM	44922

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-18 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:50:00 AM

Lab ID: 1905679-123

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	15000	60	E	mg/Kg	20	5/17/2019 10:59:42 AM	44993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	9.5	9.3		mg/Kg	1	5/17/2019 1:44:02 PM	44950
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 1:44:02 PM	44950
Surr: DNOP	106	70-130		%Rec	1	5/17/2019 1:44:02 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2019 10:45:24 PM	44925
Surr: BFB	91.1	73.8-119		%Rec	1	5/15/2019 10:45:24 PM	44925
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/15/2019 10:45:24 PM	44925
Toluene	ND	0.049		mg/Kg	1	5/15/2019 10:45:24 PM	44925
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2019 10:45:24 PM	44925
Xylenes, Total	ND	0.098		mg/Kg	1	5/15/2019 10:45:24 PM	44925
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	5/15/2019 10:45:24 PM	44925

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-18 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 11:55:00 AM

Lab ID: 1905679-124

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1800	60		mg/Kg	20	5/15/2019 5:23:06 AM	44918

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-18 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:00:00 PM

Lab ID: 1905679-125

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2200	60		mg/Kg	20	5/17/2019 11:12:06 AM	44993

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-18 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:05:00 PM

Lab ID: 1905679-126

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	310	61		mg/Kg	20	5/16/2019 11:06:56 PM	44983

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1905679

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-19 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:20:00 PM

Lab ID: 1905679-129

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	12000	60	E	mg/Kg	20	5/17/2019 11:49:20 AM	44993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/17/2019 2:05:59 PM	44950
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 2:05:59 PM	44950
Surr: DNOP	90.8	70-130		%Rec	1	5/17/2019 2:05:59 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2019 11:53:21 PM	44925
Surr: BFB	87.5	73.8-119		%Rec	1	5/15/2019 11:53:21 PM	44925
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/15/2019 11:53:21 PM	44925
Toluene	ND	0.050		mg/Kg	1	5/15/2019 11:53:21 PM	44925
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2019 11:53:21 PM	44925
Xylenes, Total	ND	0.10		mg/Kg	1	5/15/2019 11:53:21 PM	44925
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	1	5/15/2019 11:53:21 PM	44925

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-19 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:25:00 PM

Lab ID: 1905679-130

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	22000	60	E	mg/Kg	20	5/17/2019 12:01:45 PM	44993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/17/2019 2:28:03 PM	44950
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 2:28:03 PM	44950
Surr: DNOP	99.9	70-130		%Rec	1	5/17/2019 2:28:03 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/16/2019 1:01:28 AM	44925
Surr: BFB	90.8	73.8-119		%Rec	1	5/16/2019 1:01:28 AM	44925
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 1:01:28 AM	44925
Toluene	ND	0.050		mg/Kg	1	5/16/2019 1:01:28 AM	44925
Ethylbenzene	ND	0.050		mg/Kg	1	5/16/2019 1:01:28 AM	44925
Xylenes, Total	ND	0.099		mg/Kg	1	5/16/2019 1:01:28 AM	44925
Surr: 4-Bromofluorobenzene	90.0	80-120		%Rec	1	5/16/2019 1:01:28 AM	44925

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-19 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:35:00 PM

Lab ID: 1905679-132

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	40000	61	E	mg/Kg	20	5/17/2019 11:14:34 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-19 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:40:00 PM

Lab ID: 1905679-133

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1500	60		mg/Kg	20	5/17/2019 11:26:58 PM	45015

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-20 0-1'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:45:00 PM

Lab ID: 1905679-134

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	15000	59	E	mg/Kg	20	5/17/2019 12:14:10 PM	44993
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/17/2019 2:50:08 PM	44950
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 2:50:08 PM	44950
Surr: DNOP	101	70-130		%Rec	1	5/17/2019 2:50:08 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/16/2019 1:24:00 AM	44925
Surr: BFB	94.0	73.8-119		%Rec	1	5/16/2019 1:24:00 AM	44925
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 1:24:00 AM	44925
Toluene	ND	0.050		mg/Kg	1	5/16/2019 1:24:00 AM	44925
Ethylbenzene	ND	0.050		mg/Kg	1	5/16/2019 1:24:00 AM	44925
Xylenes, Total	ND	0.099		mg/Kg	1	5/16/2019 1:24:00 AM	44925
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	5/16/2019 1:24:00 AM	44925

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-20 2'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:50:00 PM

Lab ID: 1905679-135

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7700	60	E	mg/Kg	20	5/16/2019 3:15:20 PM	44964
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/17/2019 3:34:13 PM	44950
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/17/2019 3:34:13 PM	44950
Surr: DNOP	100	70-130		%Rec	1	5/17/2019 3:34:13 PM	44950
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2019 1:46:40 AM	44925
Surr: BFB	94.4	73.8-119		%Rec	1	5/16/2019 1:46:40 AM	44925
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/16/2019 1:46:40 AM	44925
Toluene	ND	0.049		mg/Kg	1	5/16/2019 1:46:40 AM	44925
Ethylbenzene	ND	0.049		mg/Kg	1	5/16/2019 1:46:40 AM	44925
Xylenes, Total	ND	0.098		mg/Kg	1	5/16/2019 1:46:40 AM	44925
Surr: 4-Bromofluorobenzene	95.4	80-120		%Rec	1	5/16/2019 1:46:40 AM	44925

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-20 3'

Project: RJ Unit 108

Collection Date: 5/10/2019 12:55:00 PM

Lab ID: 1905679-136

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	970	60		mg/Kg	20	5/18/2019 12:04:11 AM	44920

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-20 4'

Project: RJ Unit 108

Collection Date: 5/10/2019 1:00:00 PM

Lab ID: 1905679-137

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	21000	60	E	mg/Kg	20	5/18/2019 12:16:35 AM	45016

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-20 6'

Project: RJ Unit 108

Collection Date: 5/10/2019 1:05:00 PM

Lab ID: 1905679-138

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	14000	61	E	mg/Kg	20	5/18/2019 12:29:00 AM	45016

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Talon Artesia

Client Sample ID: BH-20 8'

Project: RJ Unit 108

Collection Date: 5/10/2019 1:10:00 PM

Lab ID: 1905679-139

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	560	60		mg/Kg	20	5/18/2019 12:41:25 AM	45016

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-20 10'

Project: RJ Unit 108

Collection Date: 5/10/2019 1:15:00 PM

Lab ID: 1905679-140

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	730	59		mg/Kg	20	5/18/2019 1:18:39 AM	45016

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1905679**

Date Reported:

CLIENT: Talon Artesia

Client Sample ID: BH-20 12'

Project: RJ Unit 108

Collection Date: 5/10/2019 1:20:00 PM

Lab ID: 1905679-141

Matrix: SOIL

Received Date: 5/14/2019 9:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	550	60		mg/Kg	20	5/18/2019 1:31:03 AM	45016

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		

Chain-of-Custody Record

Client: LaLor

Mailing Address: 408 W. Texas
Artesia, NM 88210

Phone #: 631-6977

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation
 NELAP Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name:
R5 Unit #108

Project #:
700778-118.01

Project Manager:
Chris Jones

Sampler: CSJ

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/13/19	1040	Soil	BH-2 8'	Jar	Ice	19056079
	1050	"	" 10'			-013
	1100		BH-3 0-1'			-014
	1110	"	" 2'			-015
	1120	"	" 3'			-016
	1130	"	" 4'			-017
	1140	"	" 6'			-018
	1150	"	" 8'			-019
	1200	"	" 10'			-020
	1210		BH-4 0-1'			-021
	1220	"	" 2'			-022
	1230	"	" 3'			-023
						-024

Date: _____ Time: _____

Relinquished by: BR

Date: 5/13/19 Time: 1330

Relinquished by: Currie

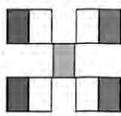
Date: 5-14-19 Time: 9:10

Received by: CSJ

Date: 5/13/19 Time: 1330

Received by: Currie

Date: 5-14-19 Time: 9:10



HALL ENVIRONMENTAL ANALYSIS LABORATORY
 www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Analysis Request	Remarks
BTEX + MTBE + TMBs (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 ³⁻ , SO ₄ ²⁻)	✓
8081 Pesticides / 8082 PCB's	✓
8260B (VOA)	✓
8270 (Semi-VOA)	✓ Chlorides (300)
Air Bubbles (Y or N)	

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

Mailing Address: 408 W. Tores

Phone #: 631-6577

email or Fax#: C

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

Accreditation: NELAP Other

EDD (Type): _____

Turn-Around Time: Standard Rush

Project Name: COG

RJ Unit 108

Project #: 700778-118-01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9° / 1.7° / 2.2°

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5-09-19	1240	Soil	BH-4	Jer	Ice	1905679
	1250	"	"			-025
	100	"	"			-026
	110	"	"			-027
	130	BH-5	0-1'			-028
	140	"	2'			-029
	150	"	3'			-030
	200	"	4'			-031
	210	"	6'			-032
	220	"	8'			-033
	230	"	10'			-034
						-035

Analysis Request	Remarks
BTEX + MTBE + TMBs (8021)	<input checked="" type="checkbox"/>
BTEX + MTBE + TPH (Gas only)	<input checked="" type="checkbox"/>
TPH 8015B (GRO / DRO / MRO)	<input checked="" type="checkbox"/>
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 ³⁻ , SO ₄ ²⁻)	
8081 Pesticides / 8082 PCB's	
8260B (VOA)	
8270 (Semi-VOA)	chlorides (300)
Air Bubbles (Y or N)	

Date: _____ Time: _____

Relinquished by: for disk

Date: 5/13/19 Time: 1900

Received by: [Signature] Date: 5/13/19 Time: 1350

Received by: [Signature] Date: 5-14-19 Time: 9:10

Remarks: _____

9.3613



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

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

Mailing Address: 408 W Texas
Artesia NM 88210

Phone #: 631-6977

email or Fax#: _____

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

Accreditation
 NELAP Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: COG

RJ Unit 108

Project #: 700778-118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

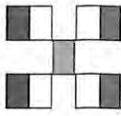
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
<u>5/19/19</u>	<u>240</u>	<u>Soil</u>	<u>BH-6 0-1'</u>	<u>Jer</u>	<u>Ice</u>	<u>1905679</u>
	<u>250</u>		<u>" 2'</u>			<u>-036</u>
	<u>300</u>		<u>" 3'</u>			<u>-038</u>
	<u>310</u>		<u>" 4'</u>			<u>-039</u>
	<u>320</u>		<u>" 6'</u>			<u>-040</u>
	<u>330</u>		<u>" 8'</u>			<u>-041</u>
	<u>340</u>		<u>" 10'</u>			<u>-042</u>
	<u>350</u>	<u>BH-7</u>	<u>0-1'</u>			<u>-043</u>
	<u>400</u>		<u>" 2'</u>			<u>-044</u>
	<u>410</u>		<u>" 3'</u>			<u>-045</u>
	<u>415</u>		<u>" 4'</u>			<u>-046</u>
	<u>420</u>		<u>" 6'</u>			<u>-047</u>

Date	Time	Relinquished by:	Relinquished by:
		<u>[Signature]</u>	<u>[Signature]</u>
		<u>[Signature]</u>	<u>[Signature]</u>

Date: _____ Time: _____

Date: 5/13/19 Time: 1330

Date: 5-14-19 Time: 9:10



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 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
<input checked="" type="checkbox"/> BTEX + MTBE + TMB's (8021)	
<input checked="" type="checkbox"/> BTEX + MTBE + TPH (Gas only)	
<input checked="" type="checkbox"/> TPH 8015B (GRO / DRO / MRO)	
<input type="checkbox"/> TPH (Method 418.1)	
<input type="checkbox"/> EDB (Method 504.1)	
<input type="checkbox"/> PAH's (8310 or 8270 SIMS)	
<input type="checkbox"/> RCRA 8 Metals	
<input type="checkbox"/> Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	
<input type="checkbox"/> 8081 Pesticides / 8082 PCB's	
<input type="checkbox"/> 8260B (VOA)	
<input type="checkbox"/> 8270 (Semi-VOA)	<u>Chlorides (300)</u>
<input type="checkbox"/> Air Bubbles (Y or N)	

Remarks:

[Signature]

[Signature]

P. 4813

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: Talou

Mailing Address: 408 W Texas
Artesia NM 88210

Phone #: 631-6977

email or Fax#: _____

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

Accreditation
 NELAP Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: COG
RJ Unit 108

Project #: 700778-118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 17°C / 2.2°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/19	425	Soil	BH-7	Jar	ICE	1905679
	430	"	"			-049
	435	BH-8	0-1'			-050
	440	"	"			-051
	445	"	"			-052
	450	"	"			-053
	455	"	"			-054
	500	"	"			-055
	505	"	"			-056
	510	BH-9	0-1'			-057
	515	"	"			-058
	520	"	"			-059

Date: _____ Time: _____

Relinquished by: Bear Janku

Date: 5/13/19 Time: 1900

Received by: [Signature] Date: 5/13/19 Time: 1330

Received by: [Signature] Date: 5-14-19 Time: 9:10



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

Analysis Request

BTEX + MTBE + TMBs (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)	R CRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCBs	8260B (VOA)	8270 (Semi-VOA)	Chlorides (300)	Air Bubbles (Y or N)
/	/	/	/	/	/	/	/	/	/	/	/	/

Remarks: _____

P. S. J. 13

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

Mailing Address: 408 W. Texas
Artesia NM 88210

Phone #: 631-6977

email or Fax#: _____

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

Accreditation
 NELAP Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: COG

RJ Unit 108

Project #: 700778-118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/13/19	525	Soil	BH-9	Jar	Ice	1905679
	530	"	6'			-04860
	535	"	8'			-062
	540	"	10'			-063
	545	BH-10	0-1'			-064
	550	"	2'			-065
	555	"	3'			-066
	600	"	4'			-067
	605	"	6'			-068
	610	"	8'			-069
	615	"	10'			-070
	620	"	12'			-071

Project Manager: _____

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

Container Type and #

Preservative Type

HEAL No.

Date: 5/13/19 Time: 190

Relinquished by: [Signature]

Date: 5/13/19 Time: 1330

Received by: [Signature]

Date: 5-14-19 Time: 9:10

Received by: [Signature]

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Analysis Request

BTEX + MTBE + TMBs (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 ³⁻ , SO ₄ ²⁻)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides	Air Bubbles (Y or N)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

Remarks:

P. 6 of 13

Chain-of-Custody Record

Client: Talar

Mailing Address: 408 W. Texas
Artesia NM 88210

Phone #: 631-6577

email or Fax#: _____

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

Accreditation
 NELAP
 Other _____

EDD (Type) _____

Turn-Around Time:
 Standard
 Rush

Project Name: COG

RJ Unit 108

Project #: 700778.118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5-19-19	625	Soil	BH-10 14'	Jar	Ice	1905679
	630		BH-11 6-1'			-072
	635		" 2'			-073
	640		" 3'			-074
	645		" 4'			-075
	650		" 6'			-076
	655		" 8'			-077
	700		" 10'			-078
						-079

Analysis Request	BTX + MTBE + TMS (8021)	BTX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCA 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)
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								<u>Chlorides (300)</u>	

Date: _____ Time: _____

Relinquished by: Carlin

Date: 5/13/19 Time: 1330

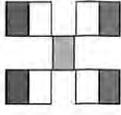
Date: 5-14-19 Time: 9:10

Received by: [Signature] Date: 5/13/19 Time: 1330

Received by: Carrier Date: 5-14-19 Time: 9:10

Remarks: _____

P-7 of 13



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Chain-of-Custody Record

Client: Tyson

Mailing Address: 408 W Texas

Phone #: 631-6977

email or Fax#: _____

QA/QC Package: Level 4 (Full Validation)

Standard Other _____

Accreditation NELAP Other _____

EDD (Type) _____

Turn-Around Time: Standard Rush

Project Name: COG

RJ Unit 108

Project #: 700778-118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
<u>5-20-19</u>		<u>ENH</u>	<u>5/14/19</u>			<u>1905679</u>
	<u>0810</u>	<u>Soil</u>	<u>BH-12</u>	<u>Jar</u>	<u>Ice</u>	<u>-080</u>
	<u>815</u>		<u>"</u>			<u>-081</u>
	<u>820</u>		<u>"</u>			<u>-082</u>
	<u>825</u>		<u>"</u>			<u>-083</u>
	<u>830</u>		<u>"</u>			<u>-084</u>
	<u>835</u>		<u>"</u>			<u>-085</u>
	<u>840</u>		<u>"</u>			<u>-086</u>
	<u>845</u>		<u>BH-13</u>			<u>-087</u>
	<u>850</u>		<u>"</u>			<u>-088</u>
	<u>855</u>		<u>"</u>			<u>-089</u>
	<u>900</u>		<u>"</u>			<u>-090</u>
	<u>905</u>		<u>"</u>			<u>-091</u>

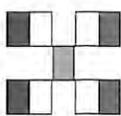
Date: _____ Time: _____

Relinquished by: [Signature]

Date: 5/13/19 Time: 1330

Received by: [Signature]

Date: 5-14-19 Time: 9:10



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

Analysis Request

<input checked="" type="checkbox"/> BTEX + MTBF + TMB's (8021)	
<input checked="" type="checkbox"/> BTEX + MTBE + TPH (Gas only)	
<input checked="" type="checkbox"/> TPH 8015B (GRO / DRO / MRO)	
<input type="checkbox"/> TPH (Method 418.1)	
<input type="checkbox"/> EDB (Method 504.1)	
<input type="checkbox"/> PAH's (8310 or 8270 SIMS)	
<input type="checkbox"/> RCRA 8 Metals	
<input type="checkbox"/> Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	
<input type="checkbox"/> 8081 Pesticides / 8082 PCB's	
<input type="checkbox"/> 8260B (VOA)	
<input type="checkbox"/> 8270 (Semi-VOA)	<u>Chlorides (300)</u>
<input type="checkbox"/> Air Bubbles (Y or N)	

Remarks: _____

p. 8 of 13

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

Mailing Address: 408 W. Texas
Artesia NM 88220

Phone #: 631-6977

email or Fax#:

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

Accreditation
 NELAP Other

EDD (Type)

Turn-Around Time:
 Standard Rush

Project Name: COE

RJ Unit 108

Project #: 700778.118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

HEAL No. 1905679

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5-20-19	910	SOIL	BH-13 8'	Jar	Ice	-092
	915		10'			-093
	920		BH-14 0-1'			-094
	925		2'			-095
	930		3'			-096
	935		4'			-097
	940		6'			-098
	945		8'			-099
	950		10'			-100
	955		BH-15 0-1'			-101
	1000		2'			-102
	1005		3'			-103

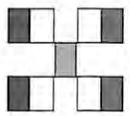
Date: _____ Time: _____

Relinquished by: [Signature]

Date: 5/13/19 Time: 1330

Relinquished by: [Signature]

Date: 5-14-19 Time: 9:10



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Analysis Request

BTEX + MTBE + TMBs (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 ³⁻ , SO ₄ ²⁻)	
8081 Pesticides / 8082 PCB's	
8260B (VOA)	
8270 (Semi-VOA)	
Aldehydes (305)	
Air Bubbles (Y or N)	

Remarks:

p. 9 of 13

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: Telco

Mailing Address: 408 W. Texas
Artesia NM 88210

Phone #: 631-6577

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation
 NELAP Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: COG
RJ Unit 108

Project #: 700778-118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/20/19	100	SOIL	BH-15	Jar	Ice	1905679
	1015	"	6'			-104
	1020	"	8'			-105
	1025	"	10'			-106
	1030	BH-16	0-1'			-107
	1035		2'			-108
	1040		3'			-109
	1045		4'			-110
	1055		6'			-111
	1100		8'			-112
	1105		10'			-113
						-114

Analysis Request	Remarks:
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)	

Date: _____ Time: _____

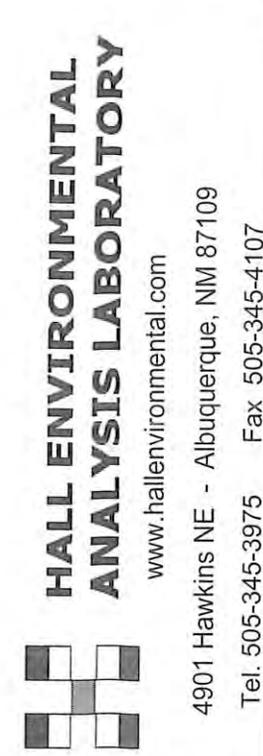
Relinquished by: _____

Date: 5/13/19 Time: 1900

Relinquished by: [Signature]

Received by: [Signature] Date: 5/13/19 Time: 1330

Received by: [Signature] Date: 5-14-19 Time: 9:10



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.

P. 10 of 13

Chain-of-Custody Record

Client: Taylor

Mailing Address: 408 W. Texas
Artesia NM 88210

Phone #: 631-6577

email or Fax#: _____

QA/QC Package: Level 4 (Full Validation)

Accreditation: Standard Other _____

NELAP Other _____

EDD (Type) _____

Turn-Around Time: Standard Rush

Project Name: COG

RJ Unit 108

Project #: 700778-118.01

Project Manager: C Jones

Sampler: C Jones

On Ice: Yes No

Sample Temperature: 0.9°C / 1.7°C / 2.2°C

HEAL No. 1905679

Date	Time	Matrix	Sample Request ID
<u>5-20-19</u>		<u>EUM 5/14/19</u>	
	<u>1110</u>	<u>Soil BH-17</u>	<u>0-1'</u>
	<u>1115</u>	"	<u>2'</u>
	<u>1120</u>	"	<u>3'</u>
	<u>1125</u>	"	<u>4'</u>
	<u>1130</u>	"	<u>5'</u>
	<u>1135</u>	"	<u>8'</u>
	<u>1140</u>	"	<u>10'</u>
	<u>1145</u>	<u>BH-18</u>	<u>0-1'</u>
	<u>1150</u>	"	<u>2'</u>
	<u>1155</u>	"	<u>3'</u>
	<u>1200</u>	"	<u>4'</u>
	<u>1205</u>	"	<u>6'</u>

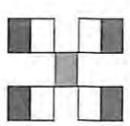
Date: _____ Time: _____

Relinquished by: _____

Date: 5/13/19 Time: 1330

Relinquished by: Carrier

Date: 5-14-19 Time: 9:10



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

Analysis Request

Analysis Request	Analysis Request
<input checked="" type="checkbox"/> BTEX + MTBE + TMBs (8021)	<input checked="" type="checkbox"/> BTEX + MTBE + TPH (Gas only)
<input checked="" type="checkbox"/> TPH 8015B (GRO / DRO / MRO)	<input checked="" type="checkbox"/> TPH (Method 418.1)
<input checked="" type="checkbox"/> EDB (Method 504.1)	<input checked="" type="checkbox"/> PAHs (8310 or 8270 SIMS)
<input checked="" type="checkbox"/> RCRA 8 Metals	<input checked="" type="checkbox"/> Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
<input checked="" type="checkbox"/> 8081 Pesticides / 8082 PCB's	<input checked="" type="checkbox"/> 8260B (VOA)
<input checked="" type="checkbox"/> 8270 (Semi-VOA)	<input checked="" type="checkbox"/> Air Bubbles (Y or N)

Remarks: _____

P 1108 13

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
 Mailing Address: 408 W Texas Artesia NM 88210
 Phone #: 687-6977
 email or Fax#: _____
 QA/QC Package: Standard Level 4 (Full Validation)
 Accreditation: NELAP Other _____
 EDD (Type) _____

Turn-Around Time: Standard Rush
 Project Name: COG
RJ Unit 108
 Project #: 700778.118.01
 Project Manager: C Jones
 Sampler: C Jones
 On Ice: Yes No
 Sample Temperature: 0.9°C / 1.7°C / 2.2°C



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

Analysis Request	
BTEX + MTBE + TMS (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)	

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5-20-19	1210	Soil	BH-18	Jar	Ice	-127
	1215		"			-128
	1220		BH-19			-129
	1225		"			-130
	1230		"			-131
	1235		"			-132
	1240		"			-133
	1245		BH-20			-134
	1250		"			-135
	1255		"			-136
	100		"			-137
	105		"			-138

Date: _____ Time: _____ Relinquished by: _____
 Date: 5/13/19 Time: 1330 Received by: [Signature]
 Date: 5-14-19 Time: 9:10 Received by: [Signature]

Remarks: _____
p. 12 of 13

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.



May 22, 2019

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: RJU #108

Enclosed are the results of analyses for samples received by the laboratory on 05/21/19 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/21/2019	Sampling Date:	05/20/2019
Reported:	05/22/2019	Sampling Type:	Soil
Project Name:	RJU #108	Sampling Condition:	** (See Notes)
Project Number:	700778.118.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BH - 12 10' (H901824-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	05/22/2019	ND	400	100	400	0.00	

Sample ID: BH - 14 10' (H901824-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18000	16.0	05/22/2019	ND	400	100	400	0.00	

Sample ID: BH - 14 11' (H901824-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10700	16.0	05/22/2019	ND	400	100	400	0.00	

Sample ID: BH - 17 10' (H901824-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6400	16.0	05/22/2019	ND	432	108	400	7.69	QM-07

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

 Received: 05/21/2019
 Reported: 05/22/2019
 Project Name: RJU #108
 Project Number: 700778.118.01
 Project Location: COG - EDDY CO NM

 Sampling Date: 05/20/2019
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: BH - 17 11' (H901824-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/22/2019	ND	432	108	400	7.69	

Sample ID: BH - 19 6' (H901824-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1360	16.0	05/22/2019	ND	432	108	400	7.69	

Sample ID: BH - 19 7' (H901824-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	05/22/2019	ND	432	108	400	7.69	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager



May 22, 2019

CHRIS JONES

TALON LPE

408 W. TEXAS AVE.

ARTESIA, NM 88210

RE: RJU #108

Enclosed are the results of analyses for samples received by the laboratory on 05/21/19 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

Received:	05/21/2019	Sampling Date:	05/20/2019
Reported:	05/22/2019	Sampling Type:	Soil
Project Name:	RJU #108	Sampling Condition:	** (See Notes)
Project Number:	700778.118.01	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BH - 12 10' (H901824-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	05/22/2019	ND	400	100	400	0.00	

Sample ID: BH - 14 10' (H901824-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18000	16.0	05/22/2019	ND	400	100	400	0.00	

Sample ID: BH - 14 11' (H901824-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10700	16.0	05/22/2019	ND	400	100	400	0.00	

Sample ID: BH - 17 10' (H901824-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6400	16.0	05/22/2019	ND	432	108	400	7.69	QM-07

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TALON LPE
 CHRIS JONES
 408 W. TEXAS AVE.
 ARTESIA NM, 88210
 Fax To: (575) 745-8905

 Received: 05/21/2019
 Reported: 05/22/2019
 Project Name: RJU #108
 Project Number: 700778.118.01
 Project Location: COG - EDDY CO NM

 Sampling Date: 05/20/2019
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Tamara Oldaker

Sample ID: BH - 17 11' (H901824-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/22/2019	ND	432	108	400	7.69	

Sample ID: BH - 19 6' (H901824-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1360	16.0	05/22/2019	ND	432	108	400	7.69	

Sample ID: BH - 19 7' (H901824-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	05/22/2019	ND	432	108	400	7.69	

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



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: Talon		P.O. #:		BILL TO		ANALYSIS REQUEST											
Project Manager: C. Jones		Company: Talon															
Address: 408 W. Texas		Attn:															
City: Artesia State: NM zip: 88410		Address:															
Phone #: 631-6977 Fax #:		City:															
Project #: 200778.118.01 Project Owner: COG		State:															
Project Name: RJ Unit #108		Phone #:															
Project Location: Eddy, NM		Zip:															
Sampler Name: Brandon Sinclair		Fax #:															
FOR LAB USE ONLY																	
Lab I.D. H901824	Sample I.D.	(G)RAB OR (C)OMP.	MATRIX			PRESERV.	SAMPLING										
		# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME				
		1	BH-12	10'	6							5-10-19	1000	✓	Chlorides		
		2	BH-14	10'									1100				
		3	BH-17	11'									1200				
		4	BH-17	10'									1210				
		5	BH-19	11'									100				
6	BH-19	6'									110						
7		7'															

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

Relinquished By: _____ Date: **5-21-19** Received By: **Jamora Dantley**

Relinquished By: _____ Date: **6:05** Received By: _____

Delivered By: (Circle One) **UPS** - Bus - Other: _____

Sample Condition: Cool Intact Yes No Yes No No No No No No

CHECKED BY: _____ (Initials)

REMARKS: **RUSH**

Phone Result: Yes No No No No No No

Fax Result: Yes No No No No No No

ADD'l Phone #: _____

ADD'l Fax #: _____

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



July 05, 2019

CLAIR GONZALES

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: RJ UNIT #108

Enclosed are the results of analyses for samples received by the laboratory on 07/03/19 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 1 (0-1') (H902291-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 1 (2') (H902291-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 1 (3') (H902291-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 1 (4') (H902291-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1620	16.0	07/04/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 1 (5') (H902291-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 1 (6') (H902291-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 1 (7') (H902291-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 2 (0-1') (H902291-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7680	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 2 (2') (H902291-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/04/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 2 (3') (H902291-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 2 (4') (H902291-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 2 (5') (H902291-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 2 (6') (H902291-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 2 (7') (H902291-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/04/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 3 (0-1') (H902291-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6960	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (2') (H902291-16)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (3') (H902291-17)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (4') (H902291-18)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (5') (H902291-19)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/04/2019	ND	400	100	400	3.92	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 3 (6') (H902291-20)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (7') (H902291-21)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (8') (H902291-22)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 3 (9') (H902291-23)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 4 (0-1') (H902291-24)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	07/04/2019	ND	400	100	400	3.92	

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Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 4 (2') (H902291-25)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 4 (3') (H902291-26)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 4 (4') (H902291-27)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	07/04/2019	ND	400	100	400	3.92	QM-07

Sample ID: BORE HOLE # 4 (5') (H902291-28)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 4 (6') (H902291-29)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/04/2019	ND	400	100	400	3.92	

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 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 5 (0-1') (H902291-30)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (2') (H902291-31)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1310	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (3') (H902291-32)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19000	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (4') (H902291-33)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17000	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (5') (H902291-34)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10800	16.0	07/04/2019	ND	400	100	400	3.92	

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 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 5 (6') (H902291-35)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1540	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (7') (H902291-36)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (8') (H902291-37)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 5 (9') (H902291-38)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (0-1') (H902291-39)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	07/04/2019	ND	400	100	400	3.92	

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 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 6 (2') (H902291-40)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4960	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (3') (H902291-41)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6320	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (4') (H902291-42)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (5") (H902291-43)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6660	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (6') (H902291-44)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9460	16.0	07/04/2019	ND	400	100	400	3.92	

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Analytical Results For:

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 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 6 (7') (H902291-45)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (8') (H902291-46)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3960	16.0	07/04/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (9') (H902291-47)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	07/05/2019	ND	400	100	400	3.92	QM-07

Sample ID: BORE HOLE # 6 (10') (H902291-48)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1650	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (11') (H902291-49)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	07/05/2019	ND	400	100	400	3.92	

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Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 6 (12') (H902291-50)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4960	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (13') (H902291-51)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (14') (H902291-52)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 6 (15') (H902291-53)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 7 (0-1') (H902291-54)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/05/2019	ND	400	100	400	3.92	

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Analytical Results For:

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 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 7 (2') (H902291-55)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 7 (3') (H902291-56)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 7 (4') (H902291-57)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 7 (5') (H902291-58)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 7 (6') (H902291-59)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1780	16.0	07/05/2019	ND	400	100	400	3.92	

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 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 7 (7') (H902291-60)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 8 (0-1') (H902291-61)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 8 (2') (H902291-62)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 8 (3') (H902291-63)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 8 (4') (H902291-64)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	07/05/2019	ND	400	100	400	3.92	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 8 (5') (H902291-65)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 8 (6') (H902291-66)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6640	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 8 (7') (H902291-67)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5600	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 8 (8') (H902291-68)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6720	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 8 (9') (H902291-69)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6930	16.0	07/05/2019	ND	416	104	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 8 (10') (H902291-70)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 8 (11') (H902291-71)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 8 (12') (H902291-72)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 8 (13') (H902291-73)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6530	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 8 (14') (H902291-74)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9200	16.0	07/05/2019	ND	416	104	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 9 (0-1') (H902291-75)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (2') (H902291-76)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (3') (H902291-77)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (4') (H902291-78)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (5') (H902291-79)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5520	16.0	07/05/2019	ND	416	104	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 9 (6') (H902291-80)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8260	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (7') (H902291-81)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5920	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (8') (H902291-82)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6000	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (9') (H902291-83)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 9 (10') (H902291-84)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/05/2019	ND	416	104	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 10 (0-1') (H902291-85)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 10 (2') (H902291-86)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 10 (3') (H902291-87)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 10 (4') (H902291-88)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 10 (5') (H902291-89)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	07/05/2019	ND	400	100	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 10 (6') (H902291-90)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5280	16.0	07/05/2019	ND	400	100	400	0.00	

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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # H902291

(LAB USE ONLY)

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		YEAR: 2019	DATE	TIME	WATER	SOIL	HCL	HNO ₃			ICE
1	Borehole #1 (0-1')		7/1/19		X			X		1	2
2	Borehole #1 (2')				X			X		1	2
3	Borehole #1 (3')				X			X		1	2
4	Borehole #1 (4')				X			X		1	2
5	Borehole #1 (5')				X			X		1	2
6	Borehole #1 (6')				X			X		1	2
7	Borehole #1 (7')				X			X		1	2
8	Borehole #2 (0-1')				X			X		1	2
9	Borehole #2 (2')				X			X		1	2
10	Borehole #2 (3')				X			X		1	2

Relinquished by: *Bernie Myrdal* Date: 7/3/19 Time: Received by: *Jessica Aldred* Date: 7-3-19 Time: 12:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

<input type="checkbox"/>	BTEX 8021B	<input type="checkbox"/>	BTEX 8260B
<input type="checkbox"/>	TPH TX1005 (Ext to C35)	<input type="checkbox"/>	
<input type="checkbox"/>	TPH 8015M (GRO - DRO - ORO - MRO)	<input type="checkbox"/>	
<input type="checkbox"/>	PAH 8270C	<input type="checkbox"/>	
<input type="checkbox"/>	Total Metals Ag As Ba Cd Cr Pb Se Hg	<input type="checkbox"/>	
<input type="checkbox"/>	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	<input type="checkbox"/>	
<input type="checkbox"/>	TCLP Volatiles	<input type="checkbox"/>	
<input type="checkbox"/>	TCLP Semi Volatiles	<input type="checkbox"/>	
<input type="checkbox"/>	RCI	<input type="checkbox"/>	
<input type="checkbox"/>	GC/MS Vol. 8260B / 624	<input type="checkbox"/>	
<input type="checkbox"/>	GC/MS Semi. Vol. 8270C/625	<input type="checkbox"/>	
<input type="checkbox"/>	PCB's 8082 / 608	<input type="checkbox"/>	
<input type="checkbox"/>	NORM	<input type="checkbox"/>	
<input type="checkbox"/>	PLM (Asbestos)	<input type="checkbox"/>	
<input type="checkbox"/>	Chloride	<input type="checkbox"/>	
<input type="checkbox"/>	Chloride Sulfate TDS	<input type="checkbox"/>	
<input type="checkbox"/>	General Water Chemistry (see attached list)	<input type="checkbox"/>	
<input type="checkbox"/>	Anion/Cation Balance	<input type="checkbox"/>	

Hold

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: **#97**

3.4e

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 692-4559
Fax (432) 692-3946

Client Name: COG		Site Manager: Clair Gonzales	
Project Name: RU Unit 108 (4.17.19)		Project #: Pending	
Project Location: Eddy Co, NM		Project #: Pending	
Invoice to: Attn: COG - Ike Taveres		Sampler Signature: Conner Moehring	
Receiving Laboratory: Cardinal		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX				PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)
		YEAR: 2019	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None		
11	Borehole #2 (4')		7/16/19		X			X			1	2
12	Borehole #2 (5')				X			X			1	2
13	Borehole #2 (6')				X			X			1	2
14	Borehole #2 (7')				X			X			1	2
15	Borehole #3 (0-1')				X			X			1	2
16	Borehole #3 (2')				X			X			1	2
17	Borehole #3 (3')				X			X			1	2
18	Borehole #3 (4')				X			X			1	2
19	Borehole #3 (5')				X			X			1	2
20	Borehole #3 (6')				X			X			1	2

Relinquished by: <i>Conner Moehring</i> 7/3/19	Date: 7/3/19	Time:	Received by: <i>Conner Moehring</i> 7-3-19 12:15	Date: 7-3-19	Time: 12:15
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
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ORIGINAL COPY

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	

LAB USE ONLY

Sample Temperature: #97

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

342

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19) Project #: Pending

Project Location: Eddy Co, NM (country, state)

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # H962291 (LAB USE ONLY)

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD			# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE			None
21	Borehole #3 (7')	7/1/19		X				X		1	2
22	Borehole #3 (8')			X				X		1	2
23	Borehole #3 (9')			X				X		1	2
24	Borehole #4 (0-1')			X				X		1	2
25	Borehole #4 (2')			X				X		1	2
26	Borehole #4 (3')			X				X		1	2
27	Borehole #4 (4')			X				X		1	2
28	Borehole #4 (5')			X				X		1	2
29	Borehole #4 (6')			X				X		1	2
30	Borehole #5 (0-1')	7/2/19		X				X		1	2

Relinquished by: *Conner Moehring* Date: 7/31/19 Time: *12:15*

Relinquished by: *Jessica Chalkley* Date: 7-3-19 Time: *12:15*

Received by: _____ Date: _____ Time: _____

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Push Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: *34°C*

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 582-4559
Fax (432) 582-9946

Client Name: COG		Site Manager: Clair Gonzales	
Project Name: RJ Unit 108 (4.17.19)		Project #: Pending	
Project Location: Eddy Co, NM (county, state)		Project #: Pending	
Invoice to: COG - Ike Taveres		Sampler Signature: Conner Moehring	
Receiving Laboratory: Cardinal		Comments:	

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
31	Borehole #5 (2')	1/2/19		X				X	1
32	Borehole # 5								2
33	Borehole # 5								
34	Borehole #5								
35	Borehole #5								
36	Borehole #5								
37	Borehole #5								
38	Borehole #5								
39	Borehole #5								
40	Borehole #6								

Relinquished by: Conner Moehring	Date: 7/3/19	Time: 12:15
Relinquished by:	Date:	Time:
Relinquished by:	Date:	Time:

Received by: Jessica Blalock	Date: 7-3-19	Time: 12:15
Received by:	Date:	Time:
Received by:	Date:	Time:

Received by:	Date:	Time:
Received by:	Date:	Time:

LAB USE ONLY

Sample Temperature: **3.4°C**

REMARKS:

STANDARD

RUSH: Same Day **24 hr** 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # H902291 (LAB USE ONLY)

SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃		
41 Borehole # 6 (3')	7/2/19		X			X	1	2
42 Borehole # 6 41'								
43 Borehole # 6 5'								
44 Borehole # 6 6'								
45 Borehole # 6 7'								
46 Borehole # 6 5'								
47 Borehole # 6 9'								
48 Borehole # 6 10'								
49 Borehole # 6 11'								
50 Borehole # 6 12'								

Received by: [Signature] Date: 7-31-19 Time: 12:15

Received by: [Signature] Date: 7-31-19 Time: 12:15

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: 34.2

#97

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19) Project #: Pending

Project Location: Eddy Co, NM (county, state)

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Corner Moehring

Comments:

LAB USE ONLY ()

LAB # AP02291

SAMPLE IDENTIFICATION

Borehole #	Depth	DATE	TIME	MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	
				WATER	SOIL	HCL	HNO ₃	ICE	None			
S1	Borehole # 6 (13')	7/2/19			X				X		1	
S2	Borehole # 6 (14')										2	
S3	Borehole # 6 (15')											
S4	Borehole # 7 (0-1')											
S5	Borehole # 7 2'											
S6	Borehole # 7 3'											
S7	Borehole # 7 4'											
S8	Borehole # 7 5'											
S9	Borehole # 7 6'											
LD	Borehole # 7 7'											

Relinquished by: *Ernie Myrdal* Date: 7/3/19 Time: *7:31 PM*

Received by: *Juanita Chavez* Date: 7-3-19 Time: 12:15

Relinquished by: Date: Time:

Received by: Date: Time:

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: *#97*

3.42

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

LAB # H902291
(LAB USE ONLY)

SAMPLE IDENTIFICATION

Borehole #	DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None	PRESERVATIVE METHOD	# CONTAINERS	FILTERED (Y/N)
71	7/2/19		X				X			1	2
72											
73											
74											
75											
76											
77											
78											
79											
80											

Relinquished by: *Conner Moehring* Date: 7/31/19 Time: *7:31 PM*

Received by: *Conner Moehring* Date: 7/31/19 Time: *12:15*

Relinquished by: Date: Time:

Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

Sample Temperature: *34.2*

REMARKS:

STANDARD

RUSH: Same Day *24 hr* 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19)

Project Location: (county, state) Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB USE ONLY ()

1992291 LAB #

SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
	DATE	TIME	WATER	SOIL	HCL	HNO ₃		
81	Benchhole # 9 (7')	7/21/19	X			X	1	
82							2	
83								
84	Benchhole # 10 (6-1')							
85								
86								
87								
88								
89								
90								

Relinquished by: *Conner Moehring* Date: 7/31/19 Time: Received by: *Ike Taveres* Date: 7-31-19 Time: 12:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: *34°C*

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



July 05, 2019

CLAIR GONZALES

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: RJ UNIT #108

Enclosed are the results of analyses for samples received by the laboratory on 07/03/19 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly legible.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 10 (7') (H902292-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 10 (8') (H902292-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 10 (9') (H902292-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17600	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (0-1') (H902292-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/05/2019	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 11 (2') (H902292-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (3') (H902292-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (4') (H902292-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (5') (H902292-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (6') (H902292-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1920	16.0	07/05/2019	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 11 (7') (H902292-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (8') (H902292-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 11 (9') (H902292-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 12 (0-1') (H902292-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 12 (2') (H902292-16)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	07/05/2019	ND	400	100	400	0.00	

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*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 12 (3') (H902292-17)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 12 (4') (H902292-18)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 12 (5') (H902292-19)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9800	16.0	07/05/2019	ND	416	104	400	0.00	QM-07

Sample ID: BORE HOLE # 12 (6') (H902292-20)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13600	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 12 (7') (H902292-21)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5330	16.0	07/05/2019	ND	416	104	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 12 (8') (H902292-22)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 12 (9') (H902292-23)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (0-1') (H902292-24)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (2') (H902292-25)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (3') (H902292-26)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	07/05/2019	ND	416	104	400	0.00	

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Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 13 (4') (H902292-27)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3320	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (5') (H902292-28)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6000	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (6') (H902292-29)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8660	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (7') (H902292-30)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (8') (H902292-31)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	07/05/2019	ND	416	104	400	0.00	

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Analytical Results For:

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Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 13 (9') (H902292-32)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 13 (10') (H902292-33)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 14 (0-1') (H902292-34)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 14 (2') (H902292-35)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 14 (3') (H902292-36)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	416	104	400	0.00	

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Analytical Results For:

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Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 14 (4') (H902292-37)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 14 (5') (H902292-38)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/05/2019	ND	416	104	400	0.00	

Sample ID: BORE HOLE # 14 (6') (H902292-39)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (0-1') (H902292-40)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4320	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (2') (H902292-41)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4080	16.0	07/05/2019	ND	416	104	400	3.77	

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 TETRA TECH
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 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 15 (3') (H902292-42)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (4') (H902292-43)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (5') (H902292-44)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (6') (H902292-45)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (7') (H902292-46)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1490	16.0	07/05/2019	ND	416	104	400	3.77	

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Analytical Results For:

 TETRA TECH
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 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 15 (8') (H902292-47)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 15 (9') (H902292-48)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 16 (0-1') (H902292-49)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 16 (2') (H902292-50)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 16 (3') (H902292-51)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/05/2019	ND	416	104	400	3.77	

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Analytical Results For:

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 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 16 (4') (H902292-52)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 16 (5') (H902292-53)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 16 (6') (H902292-54)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 17 (0-1') (H902292-55)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3160	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 17 (2') (H902292-56)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5520	16.0	07/05/2019	ND	416	104	400	3.77	

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 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 17 (3') (H902292-57)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8240	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 17 (4') (H902292-58)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9600	16.0	07/05/2019	ND	416	104	400	3.77	

Sample ID: BORE HOLE # 17 (5') (H902292-59)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10100	16.0	07/05/2019	ND	400	100	400	0.00	QM-07

Sample ID: BORE HOLE # 17 (6') (H902292-60)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19800	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 17 (7') (H902292-61)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18800	16.0	07/05/2019	ND	400	100	400	0.00	

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 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/02/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 17 (8') (H902292-62)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	848	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 17 (9') (H902292-63)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 17 (10') (H902292-64)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 17 (11') (H902292-65)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 17 (12') (H902292-66)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	07/05/2019	ND	400	100	400	0.00	

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*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 17 (13') (H902292-67)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1090	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 17 (14') (H902292-68)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2960	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (0-1') (H902292-69)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (2') (H902292-70)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (3') (H902292-71)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13000	16.0	07/05/2019	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 18 (4') (H902292-72)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8130	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (5') (H902292-73)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (6') (H902292-74)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (7') (H902292-75)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (8') (H902292-76)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6800	16.0	07/05/2019	ND	400	100	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 18 (9') (H902292-77)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1360	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (10') (H902292-78)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/05/2019	ND	400	100	400	0.00	

Sample ID: BORE HOLE # 18 (11') (H902292-79)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/05/2019	ND	400	100	400	3.92	QM-07

Sample ID: BORE HOLE # 18 (12') (H902292-80)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1790	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 18 (13') (H902292-81)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	07/05/2019	ND	400	100	400	3.92	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 18 (14') (H902292-82)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 18 (15') (H902292-83)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (0-1') (H902292-84)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (2') (H902292-85)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (3') (H902292-86)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5200	16.0	07/05/2019	ND	400	100	400	3.92	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 19 (4') (H902292-87)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (5') (H902292-88)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7360	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (6') (H902292-89)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (7') (H902292-90)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	07/05/2019	ND	400	100	400	3.92	

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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report



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

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveriez

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # H902222 (LAB USE ONLY)

Borehole #	Depth	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
1	Borehole # 10 (7')	7/2/19		X				1	
2	8'							1	
3	9'							1	
4	10'							1	
5	Borehole # 11 (0-1')							1	
6	2'							1	
7	3'							1	
8	4'							1	
9	5'							1	
10	6'							1	

Reinquisitioned by: *Erwin Mordeno* Date: 7/31/19 Time: Received by: *Juanita Rodriguez* Date: 7-3-19 Time: 12:15

Reinquisitioned by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS: STANDARD RUSH: Same Day 24 hr 48 hr 72 hr

Sample Temperature: #97

3.42

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # **HP02702** SAMPLE IDENTIFICATION

LAB # (LAB USE ONLY)	Borehole #	Depth	SAMPLING		DATE	TIME	MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
			YEAR: 2019				WATER	SOIL	HCL	HNO ₃		
	11	7'1"			7/3/19		X		X		1	
	12	8'									2	
	13	9'										
	14	10'										
	15	Borehole #12 (0-1')			7/1/19							
	16	2'										
	17	3'										
	18	4'										
	19	5'										
	20	6'										

Relinquished by: *Conner Moehring* Date: 7/3/19 Time: Received by: *Jessica Roberts* Date: 7/31/19 Time: 2:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: **3.42**

#97

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19) Project #: Pending

Project Location: Eddy Co, NM

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # HQD2292
(LAB USE ONLY)

SAMPLE IDENTIFICATION

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			ICE
21	Batch # 12 (7')	7/1/19		X				X	1	2
22										
23										
24	Batch # 13 (0-1')	7/2/19								
25										
26										
27										
28										
29										
30										

Relinquished by: *Gene M... 7/3/19* Date: 7/3/19 Time: *12:15*

Received by: *James Blakely 7-3-19* Date: 7-3-19 Time: 12:15

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

Sample Temperature: *3.4°C*

REMARKS:

STANDARD

RUSH: Same Day *24 hr* 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
31	Borehole # 13 (8')	7/2/14		X			X	1	2
32	9'								
33	10'								
34	Borehole # 14 (0-1')	7/1/14							
35	2'								
36	3'								
37	4'								
38	5'								
39	6'								
40	Borehole # 15 (0-1')								

Relinquished by: *Ben Winkler* Date: 7/3/14 Time: *12:15*

Relinquished by: *Jessica Blackbe* Date: 7-3-14 Time: *12:15*

Received by: *Jessica Blackbe* Date: 7-3-14 Time: *12:15*

Received by: Date: Time:

Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

REMARKS:
 STANDARD
 RUSH: Same Day 24 hr 48 hr 72 hr
 Rush Charges Authorized
 Special Report Limits or TRRP Report

Sample Temperature
#97
3.42

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # **HP02202** (LAB USE ONLY)

SAMPLE IDENTIFICATION

LAB #	Description	DATE	TIME	MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
				WATER	SOIL	HCL	HNO ₃		
41	Boichole #15 (2')	7/1/14		X			X	1	2
42				X					
43									
44									
45									
46									
47									
48									
49	Boichole #16 (0-1')								
50									

Relinquished by: *Armin Myrdal* Date: 7/3/14 Time: *7:31 PM*

Received by: *Jamara Roberts* Date: 7-3-14 Time: 12:15

Relinquished by: Date: Time:

Received by: Date: Time:

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: *#37*

LAB USE ONLY: *\$3.40*

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19) Project #: Pending

Project Location: Eddy Co, NM Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # HPO2292

SAMPLE IDENTIFICATION

LAB #	SAMPLE IDENTIFICATION	SAMPLING		DATE	TIME	MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		YEAR: 2019				WATER	SOIL	HCL	HNO ₃		
51	Barcode #16 (3')			7/1/14			X		X	1	2
52	4'										
53	5'										
54	6'										
55	Barcode # 17 (6-1')			7/2/14							
56	2'										
57	3'										
58	4'										
59	5'										
60	6'										

Relinquished by: *Conner Moehring* Date: 7/3/14 Time: Received by: *Clair Gonzales* Date: 7/3/14 Time: 7:34/12:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B BTEX 8260B

TPH TX1005 (Ext to C35)

TPH 8015M (GRO - DRO - ORO - MRO)

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

RCI

GC/MS Vol. 8260B / 624

GC/MS Semi. Vol. 8270C/625

PCB's 8082 / 608

NORM

PLM (Asbestos)

Chloride

Chloride Sulfate TDS

General Water Chemistry (see attached list)

Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: 3.4°C

Hold

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG
Site Manager: Clair Gonzales
Project Name: RU Unit 108 (4.17.19)

Project Location: Eddy Co, NM
Project #: Pending
Project (county, state):
Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal
Sampler Signature: Conner Moehring
Comments:

LAB # HQ022022
(LAB USE ONLY)

SAMPLE IDENTIFICATION

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
101	Borehole # 17 (7')	7/2/19		X		X		1	Z
102	8'								
103	9'								
104	10'								
105	11'								
106	12'								
107	13'								
108	14'								
109	Borehole # 18 (0-1')								
110	21'								

Relinquished by: *Erwin Argueta* Date: 7/3/19 Time:
Received by: *Conner Moehring* Date: 7-3-19 Time: 12:15
Relinquished by: Date: Time:
Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

BTEX 8021B	BTEX 8260B
TPH TX1005 (Ext to C35)	
TPH 8015M (GRO - DRO - ORO - MRO)	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8260B / 624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082 / 608	
NORM	
PLM (Asbestos)	
Chloride	X
Chloride Sulfate TDS	
General Water Chemistry (see attached list)	
Anion/Cation Balance	
Hold	

LAB USE ONLY
Sample Temperature: 3.4°C #97
REMARKS:
 STANDARD
 RUSH: Same Day (24 hr) 48 hr 72 hr
 Rush Charges Authorized
 Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: **COG** Site Manager: **Clair Gonzales**
Project Name: **RJ Unit 108 (4.17.19)**

Project Location: **Eddy Co, NM** Project #: **Pending**

Invoice to: **Attn: COG - Ike Taveres**

Receiving Laboratory: **Cardinal** Sampler Signature: **Conner Moehring**

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	
		YEAR: 2019	DATE	TIME	WATER	SOIL	HCL			HNO ₃
91	Borehole # 19 (3')		7/2/19		X			X	1	Z
92	4'									
93	5'									
94	6'									
95	7'									
96	8'									
97	9'									
98	10'									
99	11'									
80	12'									

Relinquished by: **Conner Moehring** Date: **7/3/19** Time: **12:15**
Received by: **Jessica Chastain** Date: **7-3-19** Time: **12:15**

Relinquished by: _____ Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

Sample Temperature: **3.4°**

REMARKS:

STANDARD

RUSH: Same Day **24 hr** 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name:

COG

Site Manager:

Clair Gonzales

Project Name:

RJ Unit 108 (4.17.19)

Project Location:

(county, state) Eddy Co, NM

Project #:

Pending

Invoice to:

Attn: COG - Ike Taveres

Receiving Laboratory:

Cardinal

Sampler Signature:

Conner Moehring

Comments:

LAB #

(LAB USE ONLY)

SAMPLE IDENTIFICATION

LAB #	Borehole #	Depth	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
			DATE	TIME	WATER	SOIL	HCL	HNO ₃		
81	Borehole # 18	(13')	7/2/19		X		X		1	
82		(14')								
83		(15')								
84	Borehole # 19	(0-1)								
85		2'								
86		3'								
87		4'								
88		5'								
89		6'								
90		7'								

Relinquished by: *Conner Moehring*

Date: 7/3/19

Received by: *Sanjivana*

Date: 7-3-19 12:55

Relinquished by:

Received by:

Relinquished by:

Received by:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

Hold

REMARKS:

- STANDARD
- RUSH: Same Day
- Rush Charges Authorized
- Special Report Limits or TRRP Report

Sample Temperature

LAB USE ONLY
#197
3.40

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



July 05, 2019

CLAIR GONZALES

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: RJ UNIT #108

Enclosed are the results of analyses for samples received by the laboratory on 07/03/19 12:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 19 (8') (H902293-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (9') (H902293-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7200	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (10') (H902293-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (11') (H902293-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3800	16.0	07/05/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 19 (12') (H902293-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6260	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (13') (H902293-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (14') (H902293-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (15') (H902293-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	848	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (16') (H902293-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1920	16.0	07/05/2019	ND	400	100	400	3.92	QM-07

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*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 19 (17') (H902293-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (18') (H902293-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1100	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (19') (H902293-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3320	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (20') (H902293-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 19 (21') (H902293-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1570	16.0	07/05/2019	ND	400	100	400	3.92	

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*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 20 (0-1') (H902293-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15200	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (2') (H902293-16)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11800	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (3') (H902293-17)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5120	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (4') (H902293-18)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (5') (H902293-19)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	07/05/2019	ND	400	100	400	3.92	

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*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 20 (6') (H902293-20)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (7') (H902293-21)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1730	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (8') (H902293-22)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1090	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (9') (H902293-23)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (10') (H902293-24)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	944	16.0	07/05/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 20 (11') (H902293-25)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 20 (12') (H902293-26)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 21 (0-1') (H902293-27)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 21 (2') (H902293-28)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5840	16.0	07/05/2019	ND	400	100	400	3.92	

Sample ID: BORE HOLE # 21 (3') (H902293-29)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6000	16.0	07/05/2019	ND	400	100	400	7.69	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 21 (4') (H902293-30)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (5') (H902293-31)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5040	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (6') (H902293-32)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (7') (H902293-33)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (8') (H902293-34)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11500	16.0	07/05/2019	ND	400	100	400	7.69	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 21 (9') (H902293-35)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13200	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (10') (H902293-36)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7860	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (11') (H902293-37)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (12') (H902293-38)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (13') (H902293-39)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8880	16.0	07/05/2019	ND	400	100	400	7.69	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/01/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 21 (14') (H902293-40)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15400	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (15') (H902293-41)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8530	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (16') (H902293-42)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11500	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (17') (H902293-43)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21400	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 21 (18') (H902293-44)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9730	16.0	07/05/2019	ND	400	100	400	7.69	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 22 (0-1') (H902293-45)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 22 (2') (H902293-46)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 22 (3') (H902293-47)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 22 (4') (H902293-48)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/05/2019	ND	400	100	400	7.69	

Sample ID: BORE HOLE # 22 (5') (H902293-49)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/05/2019	ND	432	108	400	0.00	

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Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/03/2019	Sampling Date:	07/02/2019
Reported:	07/05/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	(4/17/19)	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 22 (6') (H902293-50)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 23 (0-1') (H902293-51)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 23 (2') (H902293-52)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 23 (3') (H902293-53)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 23 (4') (H902293-54)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	07/05/2019	ND	432	108	400	0.00	

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

Analytical Results For:

 TETRA TECH
 CLAIR GONZALES
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

 Received: 07/03/2019
 Reported: 07/05/2019
 Project Name: RJ UNIT #108
 Project Number: (4/17/19)
 Project Location: COG - EDDY CO NM

 Sampling Date: 07/01/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BORE HOLE # 23 (5') (H902293-55)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 23 (6') (H902293-56)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 23 (7') (H902293-57)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/05/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 13 (11') (H902293-58)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	688	16.0	07/05/2019	ND	432	108	400	0.00	

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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4559
Fax (432) 682-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃		
1	Borehole # 14 (8')	7/2/14		X				X	
2	9'								
3	10'								
4	11'								
5	12'								
6	13'								
7	14'								
8	15'								
9	16'								
10	17'								

Relinquished by: *Green mycelly* Date: 7/3/14 Time: Received by: *Jessica R. ...* Date: 7-3-19 Time: 12:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRAP Report

Sample Temperature: #97

346

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 682-4359
Fax (432) 682-3946

Client Name:	COG	Site Manager:	Clair Gonzales
Project Name:	RJ Unit 108 (4.17.19)	Project #:	Pending
Project Location: (county, state)	Eddy Co, NM	Sampler Signature:	Conner Moehring
Invoice to:	Attn: COG - Ike Taveres	Comments:	Cardinal
Receiving Laboratory:	Cardinal	LAB #	HA022913

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	REMARKS:
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			
11	Batch # 19 (15')	7/2/19		X		X		1	2	BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance
12	15									
13	20'									
14	21'									
15	Batch # 20 (10-1')									
16	2'									
17	3'									
18	4'									
19	5'									
20	6'									

ORIGINAL COPY

Relinquished by: *Conner Moehring* Date: 7/3/19 Time: 3:40

Received by: *Conner Moehring* Date: 7-3-19 Time: 12:15

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 582-4559
Fax (432) 582-9946

Client Name: COG		Site Manager: Clair Gonzales	
Project Name: RU Unit 108 (4.17.19)		Project #: Pending	
Project Location: Eddy Co, NM		Project #: Pending	
Invoice to: Attn: COG - Ike Taveres		Sampler Signature: Conner Moehring	
Receiving Laboratory: Cardinal		Sampler Signature: Conner Moehring	
Comments:			

LAB #	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			
21	Bench # 20	7/2/19		X				1	2	BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance
22										
23										
24										
25										
26										
27	Bench # 21 (0-1')	7/2/19								
28										
29										
30										

Relinquished by: *Conner Moehring* Date: 7/3/19 Time: 12:15
 Received by: *Clair Gonzales* Date: 7-3-19 Time: 12:15

ORIGINAL COPY

LAB USE ONLY

REMARKS: STANDARD RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized Special Report Limits or TRRP Report

Sample Temperature: 3.4°C

(Circle or Specify Method No.)

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

Analysis Request of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 882-4559
Fax (432) 882-5946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RJ Unit 108 (4.17.19) Project #: Pending

Project Location: Eddy Co, NM

Invoice to: Attn: COG - Ike Taveres

Receiving Laboratory: Cardinal Sampler Signature: Corner Moehring

Comments:

LAB # **HC02293** SAMPLE IDENTIFICATION

LAB USE ONLY	Batch #	Depth	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)
			DATE	TIME	WATER	SOIL	HCL	HNO ₃		
	31	6'	7/1/19		X			X	1	2
	32	7'								
	33	8'								
	34	9'								
	35	10'								
	36	11'								
	37	12'								
	38	13'								
	39	14'								
	40									

Relinquished by: *Carson myadling* Date: 7/3/19 Time: Received by: *James Aldridge* Date: 7-3-19 Time: 12:15

Relinquished by: Date: Time: Received by: Date: Time:

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day 24 hr 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: **3.4°** #97

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 882-4559
Fax (432) 882-3946

Client Name: COG Site Manager: Clair Gonzales

Project Name: RU Unit 108 (4.17.19)

Project Location: Eddy Co, NM Project #: Pending

Invoice to: Attn: COG - Ike Taverrez

Receiving Laboratory: Cardinal Sampler Signature: Conner Moehring

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	ANALYSIS REQUEST (Circle or Specify Method No.)
		DATE	TIME	WATER	SOIL	HCL	HNO ₃			
41	Booth # 21 (15')	7/11/14		X			X	1	2	BTEX 8021B BTEX 8260B TPH TX1005 (Ext to C35) TPH 8015M (GRO - DRO - ORO - MRO) PAH 8270C Total Metals Ag As Ba Cd Cr Pb Se Hg TCLP Metals Ag As Ba Cd Cr Pb Se Hg TCLP Volatiles TCLP Semi Volatiles RCI GC/MS Vol. 8260B / 624 GC/MS Semi. Vol. 8270C/625 PCB's 8082 / 608 NORM PLM (Asbestos) Chloride Chloride Sulfate TDS General Water Chemistry (see attached list) Anion/Cation Balance
42	16'									
43	17'									
44	18'									
45	Booth # 22 (6-1')	7/2/14								
46	2'									
47	3'									
48	4'									
49	5'									
50	6'									

Relinquished by: *Conner Moehring* Date: 7/3/14 Time: Received by: *Jessica [Signature]* Date: 7-3-14 Time: 12:15

Relinquished by: Date: Time: Received by: Date: Time:

Relinquished by: Date: Time: Received by: Date: Time:

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day (24 hr) 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: *3.4°C* #97

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____

ORIGINAL COPY

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W. Wall Street, Ste 100
Midland, Texas 79705
Tel (432) 582-4559
Fax (432) 582-3946

Client Name:

COG

Site Manager:

Clair Gonzales

Project Name:

RJ Unit 108 (4.17.19)

Project Location:

Eddy Co, NM

Project #:

Pending

Invoice to:

Attn: COG - Ike Taverrez

Receiving Laboratory:

Cardinal

Sampler Signature:

Conner Moehring

Comments:

HP02293

SAMPLE IDENTIFICATION

LAB #

(LAB USE ONLY)

SAMPLING

MATRIX

PRESERVATIVE METHOD

YEAR: 2019

DATE

TIME

WATER

SOIL

HCL

HNO₃

ICE

None

CONTAINERS

FILTERED (Y/N)

51	Borehole # 23 (0-1')	7/1/19		X						1	
52											
53											
54											
55											
56											
57											
58	Borehole #13 (11')	7-2-19									

Relinquished by: *Conner Moehring* Date: 7/3/19 Time: *3:42*

Received by: *James R. Moore* Date: 7-3-19 Time: *3:42*

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

ANALYSIS REQUEST
(Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance
- Hold

LAB USE ONLY

REMARKS:

- STANDARD
- RUSH: Same Day *24 hr* 48 hr 72 hr
- Rush Charges Authorized
- Special Report Limits or TRRP Report

Sample Temperature

#97

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____



July 15, 2019

MIKE CARMONA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: RJ UNIT #108

Enclosed are the results of analyses for samples received by the laboratory on 07/12/19 11:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/10/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 7 (5') (H902402-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5680	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 7 (10') (H902402-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 7 (15') (H902402-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 7 (20') (H902402-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/15/2019	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/10/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 8 (10') (H902402-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6800	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 8 (15') (H902402-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 8 (20') (H902402-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 8 (25') (H902402-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 10 (5') (H902402-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4240	16.0	07/15/2019	ND	432	108	400	3.77	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/10/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 10 (10') (H902402-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 10 (15') (H902402-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 10 (20') (H902402-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1650	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 10 (25') (H902402-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 13 (10') (H902402-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	07/15/2019	ND	432	108	400	3.77	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/10/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 13 (15') (H902402-15)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 13 (20') (H902402-16)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 21 (15') (H902402-17)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 21 (20') (H902402-18)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 21 (25') (H902402-19)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/15/2019	ND	432	108	400	3.77	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/10/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 21 (30') (H902402-20)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 14 (5') (H902402-21)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 14 (10') (H902402-22)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 14 (15') (H902402-23)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 16 (5') (H902402-24)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/15/2019	ND	432	108	400	3.77	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/11/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 16 (10') (H902402-25)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	07/15/2019	ND	432	108	400	3.77	

Sample ID: BORE HOLE # 16 (15') (H902402-26)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 16 (20') (H902402-27)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 16 (25') (H902402-28)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 17 (15') (H902402-29)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	07/15/2019	ND	432	108	400	0.00	

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/11/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 17 (20') (H902402-30)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2160	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 17 (25') (H902402-31)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 17 (30') (H902402-32)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 18 (15') (H902402-33)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 18 (20') (H902402-34)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	07/15/2019	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/11/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 18 (25') (H902402-35)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 19 (20') (H902402-36)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 19 (25') (H902402-37)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 19 (30') (H902402-38)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	848	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 19 (35') (H902402-39)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	07/15/2019	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/12/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 19 (40') (H902402-40)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 20 (10') (H902402-41)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 20 (15') (H902402-42)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 20 (20') (H902402-43)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 24 (5') (H902402-44)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/15/2019	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/12/2019	Sampling Date:	07/12/2019
Reported:	07/15/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C-MD-01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: BORE HOLE # 24 (10') (H902402-45)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 24 (15') (H902402-46)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/15/2019	ND	432	108	400	0.00	

Sample ID: BORE HOLE # 17 (10') (H902402-47)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	07/15/2019	ND	432	108	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: _____ P.O. #: _____
 Project Manager: _____ Company: _____
 Address: _____ Attn: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: RJ UNIT #108 State: _____ Zip: _____
 Project Location: _____ Phone #: _____
 Sampler Name: _____ Fax #: _____

FOR LAB USE ONLY

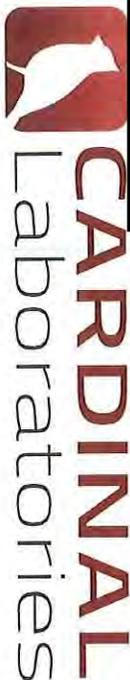
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
<u>H902402</u>	Benchole # 10 (15')		X	X						X	7/10/19		Chlorides	
	12 (20')		X	X						X				
	13 (25')		X	X						X				
	14 Benchole # 13 (10')		X	X						X				
	15 (15')		X	X						X				
	16 (20')		X	X						X				
	17 Benchole # 21 (15')		X	X						X				
	18 (10')		X	X						X				
	19 (15')		X	X						X				
	20 (30')		X	X						X				

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Relinquished By: Conny Wally Date: 7-12-19 Received By: Jessica DeWitte
 Time: 11:55

Delivered By: (Circle One) UPS 546 #497 Sample Condition: Intact Cool Yes No Yes No No
 CHECKED BY: (Initials) JD

REMARKS: Bush!



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: _____ P.O. #: _____
 Project Manager: _____ Company: _____
 Address: _____ Attn: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: RJ UNIT #108 State: _____ Zip: _____
 Project Location: _____ Phone #: _____
 Sampler Name: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
<u>H902402</u>	Bottle # 14 (5')		1	X						7/11/14		Chlorides
<u>22</u>	Bottle # 15 (5')		1	X								
<u>23</u>	Bottle # 16 (5')		1	X								
<u>24</u>	Bottle # 17 (5')		1	X								
<u>25</u>	Bottle # 18 (5')		1	X								
<u>26</u>	Bottle # 19 (5')		1	X								
<u>27</u>	Bottle # 20 (5')		1	X								
<u>28</u>	Bottle # 21 (5')		1	X								
<u>29</u>	Bottle # 22 (5')		1	X								
<u>30</u>	Bottle # 23 (5')		1	X								

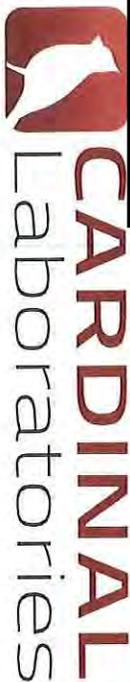
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Relinquished By: Dennis Murphy Date: 12-19 Received By: Juliana Black
 Time: 11:55

Delivered By: (Circle One) UPS 542 #497
 Sampler - UPS - Bus - Other: _____
 CHECKED BY: YO.

Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____

REMARKS: Busk!!



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: _____ P.O. #: _____
 Project Manager: _____ Company: _____
 Address: _____ Attn: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: RJ UNIT State: _____ Zip: _____
 Project Location: _____ Phone #: _____
 Sampler Name: _____ Fax #: _____

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL			
<u>HPD2402</u>	<u>Borchole # 17 (25')</u>		1	X								7/11/19		Chlorides
<u>31</u>	<u>(30')</u>		1	X										
<u>32</u>	<u>Borchole # 18 (15')</u>		1	X										
<u>33</u>	<u>(20')</u>		1	X										
<u>34</u>	<u>(25')</u>		1	X										
<u>35</u>	<u>Borchole # 19 (20')</u>		1	X								7/12/19		
<u>36</u>	<u>(25')</u>		1	X										
<u>37</u>	<u>(30')</u>		1	X										
<u>38</u>	<u>(35')</u>		1	X										
<u>39</u>	<u>(40')</u>		1	X										

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Relinquished By: Ben Reynolds Date: 7-12-19 Received By: Juanita Alarcon
 Time: _____ Date: 7-11-19 Received By: VP.
 Time: _____

Delivered By: (Circle One) UPS 5:45 #67
 Sampler - UPS - Bus - Other: _____
 Sample Condition: Cool Intact
 CHECKED BY: (Initials) VP.

REMARKS: Bush!!
 Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____



July 25, 2019

MIKE CARMONA

TETRA TECH

901 WEST WALL STREET , STE 100

MIDLAND, TX 79701

RE: RJ UNIT #108

Enclosed are the results of analyses for samples received by the laboratory on 07/25/19 9:07.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/25/2019	Sampling Date:	07/25/2019
Reported:	07/25/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: AH # 24 (0-1') (H902547-01)

BTEX 8260B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	07/25/2019	ND	1.90	95.0	2.00	1.52	
Toluene*	<0.025	0.025	07/25/2019	ND	2.11	105	2.00	0.800	
Ethylbenzene*	<0.025	0.025	07/25/2019	ND	2.14	107	2.00	0.447	
Total Xylenes*	<0.075	0.075	07/25/2019	ND	6.86	114	6.00	1.54	
Total BTEX	<0.150	0.150	07/25/2019	ND					

Surrogate: Dibromofluoromethane 96.5 % 90.4-111

Surrogate: Toluene-d8 103 % 85.3-114

Surrogate: 4-Bromofluorobenzene 101 % 80.1-121

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	07/25/2019	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	07/25/2019	ND	187	93.7	200	2.27	
DRO >C10-C28*	<10.0	10.0	07/25/2019	ND	176	87.9	200	3.10	
EXT DRO >C28-C36	<10.0	10.0	07/25/2019	ND					

Surrogate: 1-Chlorooctane 82.5 % 41-142

Surrogate: 1-Chlorooctadecane 89.9 % 37.6-147

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/25/2019	Sampling Date:	07/25/2019
Reported:	07/25/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: AH # 24 (1-1.5') (H902547-02)

BTEX 8260B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	07/25/2019	ND	1.90	95.0	2.00	1.52		
Toluene*	<0.025	0.025	07/25/2019	ND	2.11	105	2.00	0.800		
Ethylbenzene*	<0.025	0.025	07/25/2019	ND	2.14	107	2.00	0.447		
Total Xylenes*	<0.075	0.075	07/25/2019	ND	6.86	114	6.00	1.54		
Total BTEX	<0.150	0.150	07/25/2019	ND						

Surrogate: Dibromofluoromethane 95.7 % 90.4-111

Surrogate: Toluene-d8 102 % 85.3-114

Surrogate: 4-Bromofluorobenzene 95.1 % 80.1-121

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/25/2019	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	07/25/2019	ND	187	93.7	200	2.27		
DRO >C10-C28*	<10.0	10.0	07/25/2019	ND	176	87.9	200	3.10		
EXT DRO >C28-C36	<10.0	10.0	07/25/2019	ND						

Surrogate: 1-Chlorooctane 90.7 % 41-142

Surrogate: 1-Chlorooctadecane 98.9 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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



Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 TETRA TECH
 MIKE CARMONA
 901 WEST WALL STREET , STE 100
 MIDLAND TX, 79701
 Fax To: (432) 682-3946

Received:	07/25/2019	Sampling Date:	07/25/2019
Reported:	07/25/2019	Sampling Type:	Soil
Project Name:	RJ UNIT #108	Sampling Condition:	Cool & Intact
Project Number:	212C - MD - 01821	Sample Received By:	Tamara Oldaker
Project Location:	COG - EDDY CO NM		

Sample ID: AH # 24 (2-2.5') (H902547-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/25/2019	ND	416	104	400	3.92	

Sample ID: AH # 24 (3-3.5') (H902547-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	07/25/2019	ND	416	104	400	3.92	

Sample ID: AH # 24 (4-4.5') (H902547-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	07/25/2019	ND	416	104	400	0.00	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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 SM450Cl-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



Celey D. Keene, Lab Director/Quality Manager

Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

9011W Wall Street, Ste 100
 Midland, Texas 79705
 Tel (432) 682-4559
 Fax (432) 682-3946

Client Name: **CONCHO** Site Manager: **MIKE CAMERON**

Project Name: **RJ UNIT 108**

Project Location: **EDDY COUNTY** Project #: **212C-WD-01821**

Invoice to: **COO-LIKE TAVAREZ**

Receiving Laboratory: **CARDINAL** Sampler Signature: **COVER WERTHINS**

Comments:

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING		MATRIX		PRESERVATIVE METHOD				# CONTAINERS	FILTERED (Y/N)	
		DATE	TIME	WATER	SOIL	HCL	HNO ₃	ICE	None			
												YEAR: 2019
1	AH# 24 (0-1')	7/25/15		X				X			1	2
2	AH# 24 (1-1.5')	7/25/15		X				X			1	2
3	AH# 24 (2-2.5')	7/25/15		X				X			1	2
4	AH# 24 (3-3.5')	7/25/15		X				X			1	2
5	AH# 24 (4-4.5')	7/25/15		X				X			1	2

Relinquished by: **Comm** Date: **7/25/15** Time: **0907**
 Received by: **Juanita Delatorre** Date: **7/25/15** Time: **0907**

Relinquished by: Date: Time:
 Received by: Date: Time:

ANALYSIS REQUEST
 (Circle or Specify Method No.)

- BTEX 8021B
- BTEX 8260B
- TPH TX1005 (Ext to C35)
- TPH 8015M (GRO - DRO - ORO - MRO)
- PAH 8270C
- Total Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Metals Ag As Ba Cd Cr Pb Se Hg
- TCLP Volatiles
- TCLP Semi Volatiles
- RCI
- GC/MS Vol. 8260B / 624
- GC/MS Semi. Vol. 8270C/625
- PCB's 8082 / 608
- NORM
- PLM (Asbestos)
- Chloride
- Chloride Sulfate TDS
- General Water Chemistry (see attached list)
- Anion/Cation Balance

LAB USE ONLY

REMARKS:

STANDARD

RUSH: Same Day **24 hr** 48 hr 72 hr

Rush Charges Authorized

Special Report Limits or TRRP Report

Sample Temperature: **3.9°C #97**

Corrected 4.3°C

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #: