

Armando Martinez Operations Lead, Portfolio Operations Central

VIA ELECTRONIC MAIL

January 10, 2023

New Mexico Oil Conservation Division, District II 811 S. First Ct Artesia, NM 88210

Re: SCB 5B to Candelario 4-inch Polyline 2022 Soil Assessment Report 2RP-4737 Eddy County, New Mexico

Dear whom it concerns,

Please find enclosed for your filed, copies of the following:

• SCB 5B to Candelario 4-inch Polyline – 2022 Soil Assessment Report

The 2022 Soil Assessment Report was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Chevron Environmental Management Company (CEMC).

Please do not hesitate to call Sarah Johnson with Arcadis at 432.227.0266 or myself at 575.586.7639, should you have any questions.

Sincerely,

ando may

Armando Martinez

- Encl. SCB 5B to Candelario Polyline 4-inch Polyline, 2RP-4737 2022 Soil Assessment Report
- cc. Amy Barnhill, Chevron/MCBU

Armando Martinez Operations Lead Central Portfolio Operations - Central 354 State Highway 38, Questa, NM 87556-0469 Tel 575 586 7639 Mobile 505 690 5408 Fax 575 586 0811 amarti@chevron.com District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Page 2 of 118

Incident ID	NAB1813056113	
District RP	2RP-4737	
Facility ID	FAB1813055699	
Application ID	pAB1813057038	

Release Notification

Responsible Party

Responsible Party: Chevron USA Inc.	OGRID
Contact Name: Armando Martinez	Contact Telephone: 575.586.7639
Contact email: amarti@chevron.com	Incident # (assigned by OCD): NAB1813056113
Contact mailing address: P.O. Box 469 Questa, NM 87564	

Location of Release Source

Latitude 32.294911

Longitude <u>-104.043545</u> (*NAD 83 in decimal degrees to 5 decimal places*)

Site Name: SCB 5B to Candelario 24-1 SWD 4-Inch Polyline	Site Type: Produced Water Transfer Line
Date Release Discovered: April 6, 2018	API# (if applicable): N/A

Unit Letter	Section	Township	Range	County
С	24	238	28E	Eddy

Surface Owner: State Federal Tribal Private (Name: Mosaic Company)

Nature and Volume of Release

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

Crude Oil	Volume Released (bbls) ~7.2 bbls	Volume Recovered (bbls)	
Produced Water Volume Released (bbls) ~720 bbls		Volume Recovered (bbls) ~385 bbls	
Is the concentration of dissolved chloride in the produced water >10,000 mg/l?		Yes No	
Condensate	Volume Released (bbls)	Volume Recovered (bbls)	
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)	
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)	

Cause of Release: A third party drove over the 4-inch diameter polyline that transfers produced water from SCB 5B to the Candelario SWD #1 disposal well which caused a failure in the line. The landowner, Mosaic Company (Mosaic), used clamps to pinch the polyline on both sides of the damaged area, however the clamps reportedly disengaged over the weekend while unsupervised causing a subsequent release.

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Oil Conservation Division

Incident ID	NAB1813056113
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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? Release was greater than 25 bbls		
🛛 Yes 🗌 No			
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?		
Yes, Josh Turner contacted Mike Bratcher on April 30, 2018 by an unknown means.			

Initial Response

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

 \square The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

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

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:	Armando Martinez	Title:	Project Manager
Signature:	: mit	Date: _	<u>1-10-2023</u>
email: <u>amarti@che</u>	vron.com	Telephone:	575.586.7639
OCD Only			
Received by:		Date: _	

Received by OCD: 1/26/2023 7:41:04 AM State of New Mexico

Oil Conservation Division

Incident ID	NAB1813056113
District RP	2RP-4737
Facility ID	FAB1813055699
Application ID	pAB1813057038

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>25</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🛛 Yes 🗌 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🛛 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🖾 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🛛 Yes 🗌 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🔀 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🛛 Yes 🗌 No
Are the lateral extents of the release within a 100-year floodplain?	🛛 Yes 🗌 No
Did the release impact areas not on an exploration, development, production, or storage site?	🛛 Yes 🗌 No

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

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

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

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

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			Incident ID	NAB1813056113
Page 4	Oil Conservation	Oil Conservation Division	District RP	2RP-4737
			Facility ID	FAB1813055699
			Application ID	pAB1813057038
regulations all operators an public health or the enviro failed to adequately invest	ma	a release notifications and perfi- port by the OCD does not relia at pose a threat to groundwater e operator of responsibility for	orm corrective actions for rele eve the operator of liability sh s, surface water, human health compliance with any other fe <u>lect Manager</u>	eases which may endanger ould their operations have or the environment. In
OCD Only Received by: Joce	lyn Harimon	Date: _	01/30/2023	

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Oil Conservation Division

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

Incident ID	NAB1813056113
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Facility ID	FAB1813055699
Application ID	pAB1813057038

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. *Deferral is being requested for the area located along the southern perimeter of the road previously determined to have soil exceedances that are currently encapsulated by concrete from previous road construction activities. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: <u>Armando Martinez</u> Title: <u>Project Manager</u> Signature: Date: <u>1-10-2023</u> Telephone: <u>57</u>5.586.7639 email: amarti@chevron.com **OCD Only** 01/30/2023 Jocelyn Harimon Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:



Chevron Environmental Management Company

2022 Soil Assessment Report

SCB 5B to Candelario 4-inch Polyline

NMOCD Case No. 2RP-4737

January 10, 2023

2022 Soil Assessment Report

SCB 5B to Candelario 4-inch Polyline NMOCD Case No. 2RP-4737

January 10, 2023

Prepared By:

Arcadis U.S., Inc. 10205 Westheimer Road, Suite 800 Houston Texas 77042 Phone: 713 953 4800 Fax: 713 977 4620 Prepared For: Armando Martinez Operations Lead Central CEMC P.O. Box 469 Questa, NM 87564

Our Ref: 30133896

Sarah Johnson Certified Project Manager

2001 11

Scott Foord, P.G. Program Manager

www.arcadis.com Candelario Polyline Soil Assessment Report 2022_1.9.23

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- Figure 2. Soil Sample Location Map
- Figure 3. Soil Analytical Exceedances Results Map

Appendices

- Appendix A. Initial Release Response Activities and Initial C-141 Form
- Appendix B. Boring Logs
- Appendix C. 2022 Analytical Report
- Appendix D. Cumulative Soil Analytical Results
- Appendix E. Photograph Log

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1 Introduction

Arcadis U.S., Inc. (Arcadis) has prepared this 2022 Soil Assessment Report (Report), on behalf of Chevron Environmental Management Company (CEMC), summarizing soil assessment activities for the South Culebra Bluff (SCB) 5B to Candelario 4-inch Polyline (Site) release.

The Site is located approximately 1.5 miles northeast of Loving in Bureau of Land Management (BLM) legal description Unit C, Section 24, Township 23 South, Range 28 East, Eddy County, New Mexico. The release Site is located approximately 2,951 feet above mean sea level. Arcadis monitors a nearby monitoring well with a recorded depth to groundwater of 25.28 feet below ground surface (bgs) at the Site. The Site is adjacent to the Pecos River. A Site map is presented in **Figure 1**.

2 **Project Summary**

File information indicates that on April 26, 2018, a third-party driver drove over the 4-inch diameter polyline that transfers produced water from SCB 5B to the Candelario SWD #1 disposal well which caused a failure in the line. The landowner, Mosaic Company (Mosaic), used clamps to pinch the polyline on both sides of the damaged area, however the clamps reportedly disengaged over the following weekend causing a subsequent release. Upon determining the ownership of the line, Mosaic notified Rockcliff Energy, LLC (Rockcliff) on April 30, 2018.

The release path extended from the polyline across Fisherman's Lane and split into two separate paths. One path flowed over the edge of the ravine to the northeast, diverging and then merging before entering the river. The secondary path flowed down the south side of Fisherman's Lane, downhill towards the low water crossing, eventually pooling between the forms of a formerly active county roadworks project and spreading to the north where much of the release pooled.

According to the New Mexico Oil Conservation Division (NMOCD) Initial C-141 Form dated April 26, 2018, the release was approximately 720 barrels (bbls) of produced water and 7.2 bbls of crude oil. A summary of the initial release response activities and the initial C-141 Form are provided in **Appendix A**.

3 2022 Soil Assessment

Following the 2021 soil sampling event (further discussed in **Appendix A**), Arcadis and Ms. Terry Gregston with the BLM discussed the path forward on a phone call on June 27, 2022. In agreement with the BLM, Arcadis proposed the collection of additional soil samples within the release area in order to further delineate chloride horizontally and vertically.

On July 11-14, 2022, Arcadis personnel collected 38 soil samples from 18 locations (SB-1 through SB-18) approved by the BLM within the release area. Soil sample locations are presented in **Figure 2**. The soil samples were collected with a hand auger at depths ranging from the surface to 6 feet bgs. Shallow bedrock refusal was encountered at all locations completed to depths less than 6 feet bgs. Soil boring logs are presented in **Appendix B**. The soil samples were collected in four-ounce jars provided by Pace Analytical Laboratory (Pace) located in Mount Juliet, Tennessee and shipped overnight to Pace via FedEx. Upon receival by the laboratory, the soil samples were analyzed for chloride by United States Environmental Protection Agency (USEPA) Method 300.

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Candelario Polyline Soil Assessment Report 2022_1.9.23

4 Soil Analytical Results

The soil sample analytical results were evaluated and compared to the New Mexico Administration Code (NMAC) screening levels for chloride for a site with a depth to groundwater less than 50 feet bgs specified in Table 1 within revised Rule 19.15.29. A summary of the soil sample analytical results is presented in the attached **Table 1**. Copies of the certified analytical reports and chain-of-custody documentation from Pace are presented in **Appendix C**. The soil analytical map is presented in **Figure 3**. Cumulative soil analytical results are presented in **Appendix D**. A photograph log is presented in **Appendix E**.

4.1 Chloride Results

Chloride exceeded the NMAC screening level of 600 milligrams per kilogram (mg/kg) in the following 14 of the 38 samples collected:

SB-03-S-05-220711 – 2,720 mg/kg	SB-23-S-05-220712 – 613 mg/kg
SB-03-S-2-4-220711 – 3,250 mg/kg	SB-25-S-05-220712 - 4,180 mg/kg
SB-05-S-05-220711 – 645 mg/kg	SB-26-S-05-220714 - 41,000 mg/kg
SB-14-S-05-220712 – 819 mg/kg	SB-27-S-05-220714 - 1,820 mg/kg
SB-15-S-05-220712 – 9,990 mg/kg	SB-28-S-05-220714 - 12,700 mg/kg
SB-16-S-05-220712 – 2,140 mg/kg	SB-29-S-05-220714 – 2,340 mg/kg
SB-18-S-05-220712 – 10,700 mg/kg	SB-30-S-05-220714 – 2,800 mg/kg

5 Recommendations

Analytical results associated with the recent soil assessment activities conducted in 2022 indicate that the horizontal and vertical extent of chloride impact in soil has not been fully delineated below the NMAC screening level of 600 mg/kg. Additional soil assessment will be required.

Given the shallow depth of bedrock in the area of the release near the Pecos River, it is recommended that the portion of the release area located north of the road with chloride concentrations exceeding 600 mg/kg be excavated of impacted soil down to the bedrock, followed by hydro-excavation to remove any remnant chloride impacts.

At the request of NMOCD during the virtual meeting held on September 14, 2022, CEMC will request deferral for the remaining areas located along the southern perimeter of the road previously determined to have soil exceedances that are currently encapsulated by concrete from previous road construction activities.

Tables

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Table 12022 Soil Analytical ResultsChevron Environmental Management CompanySCB-5B to Candelario PolylineEddy County, New Mexico

Sample I.D. No.	Sample Depth (feet bgs)	Date	Chloride
-			(mg/Kg)
NMAC S			600
Ur	nits		mg/kg
SB-01-S-05-220711	0 - 0.5	07/11/22	<10.4
SB-01-S-2-4-220711	2 - 4	07/11/22	21.9 J
SB-01-S-4-6-220711	4 - 6	07/11/22	30.6
SB-02-S-05-220711	0 - 0.5	07/11/22	<10.3
SB-02-S-2-4-220711	2 - 4	07/11/22	52.6
SB-02-S-4-6-220711	4 - 6	07/11/22	114
SB-03-S-05-220711	0 - 0.5	07/11/22	2,720
SB-03-S-2-4-220711	2 - 4	07/11/22	3,250
SB-04-S-05-220711	0 - 0.5	07/11/22	<10.4
SB-05-S-05-220711	0 - 0.5	07/11/22	645
SB-06-S-05-220711	0 - 0.5	07/11/22	460
SB-07-S-05-220711	0 - 0.5	07/11/22	15.0 J P1
SB-08-S-05-220712	0 - 0.5	07/12/22	<12.7
SB-09-S-05-220712	0 - 0.5	07/12/22	38.4
SB-10-S-05-220712	0 - 0.5	07/12/22	91.4
SB-11-S-0-5-220712	0 - 0.5	07/12/22	<11.0
SB-12-S-05-220711	0 - 0.5	07/11/22	68.7
SB-13-S-05-220712	0 - 0.5	07/12/22	527
SB-14-S-05-220712	0 - 0.5	07/12/22	819
SB-15-S-05-220712	0 - 0.5	07/12/22	9,990
SB-16-S-0-5-220712	0 - 0.5	07/12/22	2,140
SB-17-S-05-220712	0 - 0.5	07/12/22	354
SB-18-S-05-220712	0 - 0.5	07/12/22	10,700
SB-19-S-05-220713	0 - 0.5	07/13/22	256
SB-20-S-05-220713	0 - 0.5	07/13/22	143
SB-21-S-05-220713	0 - 0.5	07/13/22	404
SB-22-S-05-220713	0 - 0.5	07/13/22	490
SB-23-S-05-220713	0 - 0.5	07/13/22	613
SB-24-S-05-220713	0 - 0.5	07/13/22	539
SB-25-S-0-5-220714	0 - 0.5	07/14/22	4.180
SB-26-S-05-220714	0 - 0.5	07/14/22	41,000
SB-27-S-05-220714	0 - 0.5	07/14/22	1,820
SB-28-S-05-220714	0 - 0.5	07/14/22	12,700
SB-29-S-05-220714	0 - 0.5	07/14/22	2,340
SB-30-S-05-220714	0 - 0.5	07/14/22	2,800
SB-31-S-05-220714	0 - 0.5	07/14/22	523
SB-32-S-05-220714	0 - 0.5	07/14/22	186
SB-33-S-05-220714	0 - 0.5	07/14/22	317
22 00 0 0 0 .0 LL0114	0.0		V 17

Legend:

Bold/Italics = Analytes exceed NMAC Standards

'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)

mg/kg: milligram per kilogram

NMAC : New Mexico Administration Code

J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.

P1: RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Notes:

1. Chloride were analyzed by USEPA Method 300.0

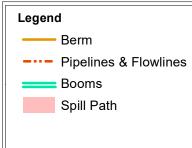
2. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)



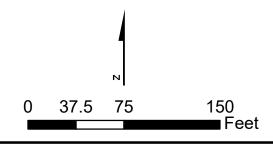
Figures

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Notes: 1. Datum: D_WGS_1984 2. Site Location: 32.295202, -104.043007

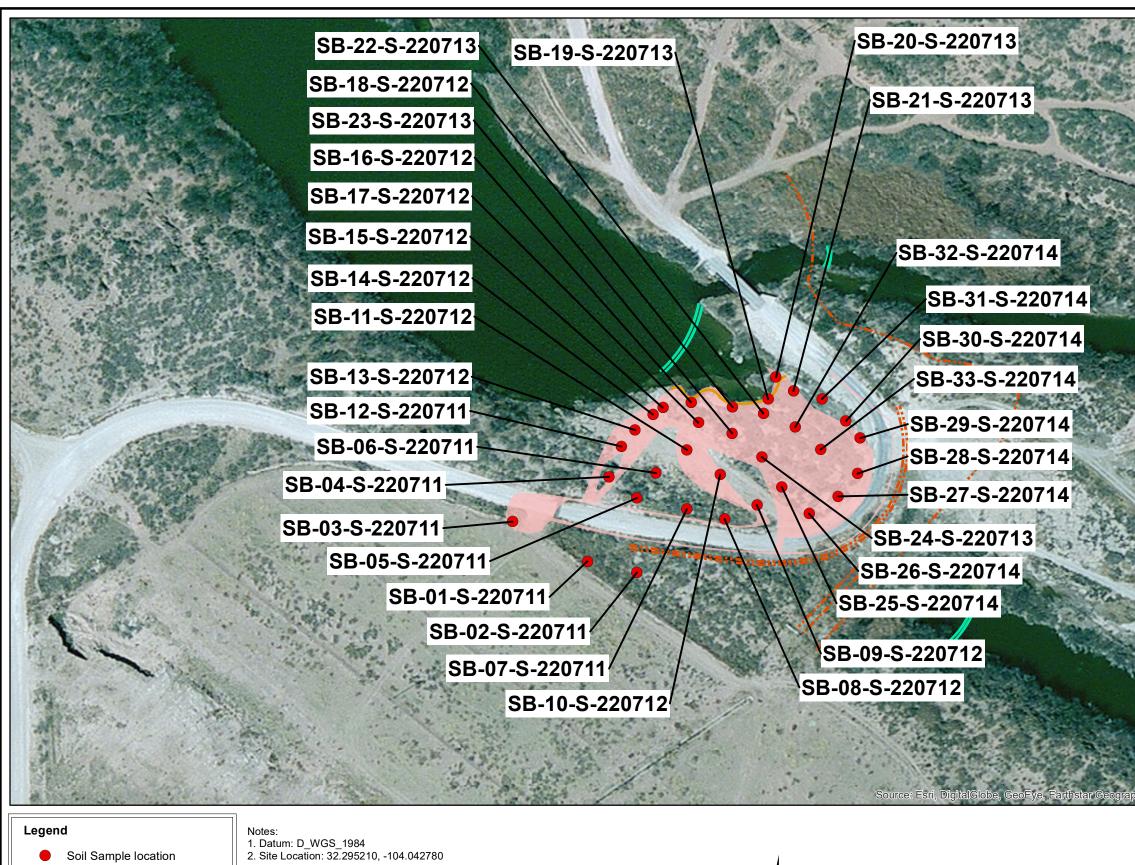


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Chevron Environmental Management Company Candelario 4 Polyline - 2RP-4737 Eddy County, New Mexico

SITE LOCATION MAP





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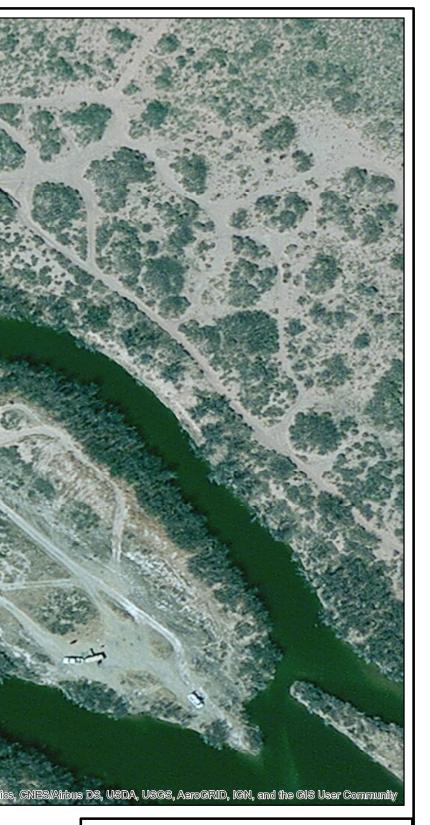
Feet

---- Pipelines & Flowlines

Berm

Booms

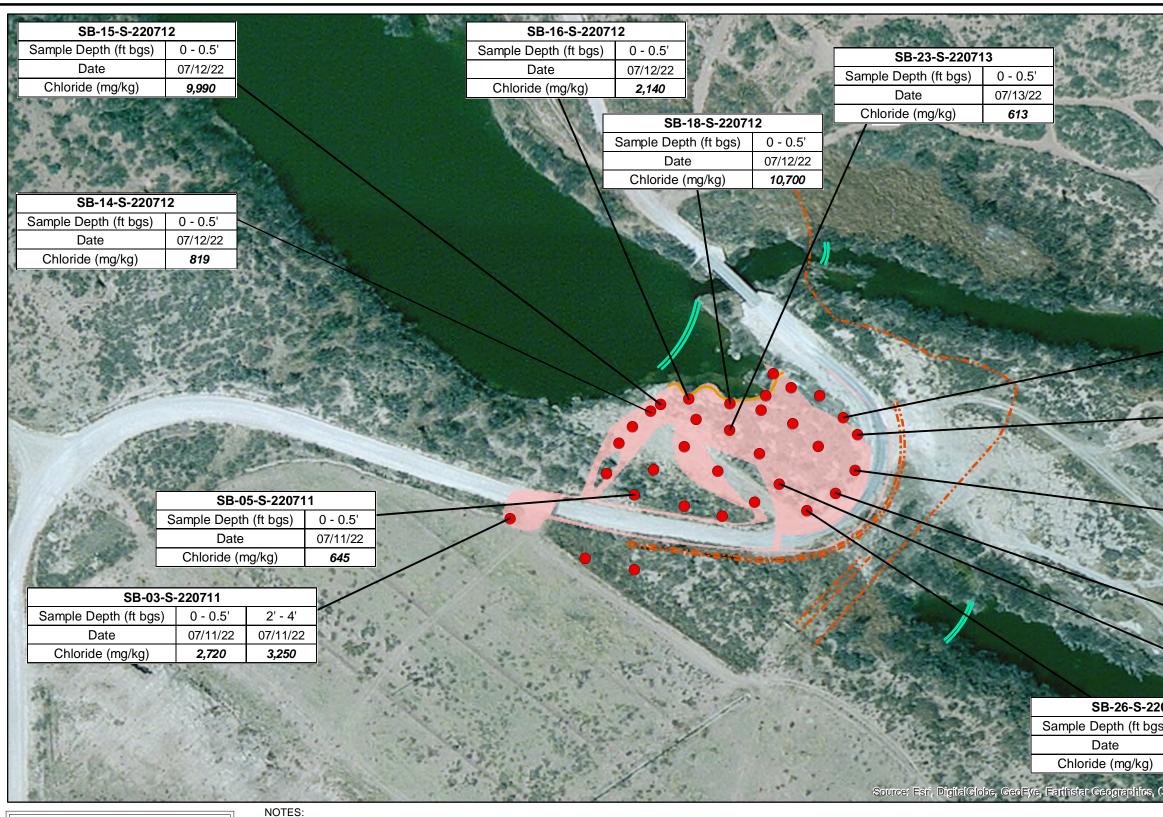
Spill Path

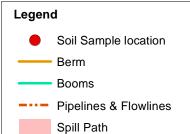


Chevron Environmental Management Company Candelario 4 Polyline - 2RP-4737 Eddy County, New Mexico

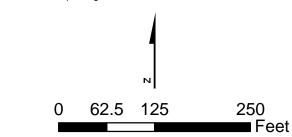
SOIL SAMPLE LOCATION MAP







- 1. **BOLD** = Analytes exceeding NMAC standard.
- 2. '<' indicates the analyte was not detected at or
- above the Method Detection Limit.
- 3. mg/kg = Milligram per Kilogram.
 4. NMAC = New Mexico Administration Code.
- " ' " = Indicates one foot.
- 6. J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- 7. SB = Soil Boring sample.
- SD = Son Boring Sample.
 Chloride analyzed by United States Environmental Protection Agency Method 300.0.
 Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2).
- 10. P1 = RPD value not applicable for sample concentrations less than 5 times the reporting limit.



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Carlot and	and the	SB-30-S-22071	4
a mus	Wanter of	Sample Depth (ft bgs)	0 - 0.5'
	X. 6	Date	07/14/22
	WORKER.	Chloride (mg/kg)	2,800
And all		BOAT COME LOTERS AND	21 Mar I done I go The and
line-	11 march	SB-29-S-22071	a.C. (mail 2)
		Sample Depth (ft bgs)	0 - 0.5'
all an	Sec.	Date	07/14/22
Concession of		Chloride (mg/kg)	2,340
1	1	C. Million	AT 25 - 250
1.24	Since .	and the second	B
8 V)			
ST. CHER	3. 7	SB-28-S-2207	
Contra Contra	Chiff of	Sample Depth (ft bgs)	0 - 0.5'
A.C.	AL A	Date	07/14/22
	1 de	Chloride (mg/kg)	12,700
-	2000	Service and the service of the servi	
1	200		Verweit
	18	SB-27-S-2207	14
2		Sample Depth (ft bgs)	0 - 0.5'
-		Date	07/14/22
- she	and and	Chloride (mg/kg)	1,820
0744			
20714	0.51	SB-25-S-2207	2 m m
,	- 0.5'	Sample Depth (ft bgs)	0 - 0.5'
	/14/22	Date	07/14/22
41	1,000	Chloride (mg/kg)	4,180
CNES/Afr	tue DS, US	DA, USGS, AcroGRID, IGN, and th	ne Gl& User Community
		Chevron Environmental Manag Candelario 4 Polyline - Eddy County, New I	2RP-4737
	E	SOIL ANALY EXCEEDANCES RE	-
	C	ARCAD	DIS 3



Initial Release Response Activities and Initial C-141 Form



Initial Release Response Activities

According to available information, Souder Miller and Associates (SMA), on behalf of Rockcliff, mobilized to the Site to initiate emergency response activities. Talon LPE (Talon) was contacted to place booms in the river to provide containment around the two points of entry as well as downstream (three total). SMA worked with onsite teams to remove impacted material near the northern riverbank and collected soil confirmation samples for laboratory analysis. Surface water samples were also collected for laboratory analysis (SMA, July 2018). The Bureau of Land Management (BLM), the United States Army Corps of Engineers, the New Mexico Interstate Stream Commission, and the New Mexico Department of Game and Fish visited the Site to monitor first response efforts on April 30, 2018.

Between May 1 and 7, 2018, SMA monitored the removal of free-standing fluid and delineation activities associated with the release. SMA collected additional surface water samples, completed boom and berm inspections, and performed a biological survey. No evidence of impacted wildlife was observed (SMA, July 2018). Additional soil samples were also collected for laboratory analysis.

Road improvements along Fisherman's Lane were ongoing at the time of the release. According to file information (SMA, July 2018), the area surrounding the road was excavated and backfilled with clean material for the safety of the public and the construction company. On May 15, 2018, SMA met with Rockcliff, BLM, and Sedona Contracting, Inc. for a status update. While on-site, BLM reportedly gave verbal approval to pour concrete within the forms and continue road construction. Rockcliff obtained written correspondence from both the BLM and New Mexico Oil Conservation Division (NMOCD) stating that they agreed the county road construction project could continue.

Due to the varying geology of the area, a background sample was taken for each National Cooperative Soil Survey (NRCS) soil type represented in the release area in addition to the background samples collected relative to each group of samples. These release response activities were described in the SMA *Remediation Report* dated July 4, 2018. The report included a proposed remediation plan involving hydro excavation and/or excavation of remaining impacted areas. The work plan was conditionally approved by the BLM in email correspondence dated July 11, 2018.

In July 2018, SMA oversaw delineation and excavation efforts within the source area. Soil samples were collected. Following verbal approval from the BLM, the excavation was backfilled with clean material to restore the road and surrounding area to its previous contours (SMA, September 2018).

According to file information, SMA completed the hydro-excavation per the approved work plan in August 2018. SMA personnel and their contractors placed 50 feet of absorbent booms and re-established berms with clean soil around the work area ("cell") to prevent runoff into the river. A vacuum truck was placed at the lowest lying area of each boomed cell to collect residual fluids during hydro-excavating activities. According to the waste manifests, 1,196.48 tons of soil was excavated and disposed of at Lea Land, LLC. In Carlsbad, New Mexico.

SMA remediated/treated a total of five cells with hydro-excavation and collected composite bedrock samples from each cell following completion of hydro-excavation activities. Due to the varying geology in the area, SMA compared each sample result to its associated background sample (SMA, September 2018). Most of the field samples collected on August 23 and August 24, 2018, following the hydro-excavation



activities, showed a decrease in chloride concentrations compared to the initially reported action concentrations. Chloride concentrations in three of the five cells exhibited concentrations above background concentrations in the area and the natural chloride concentration of the Pecos River.

On August 27, 2019, Arcadis submitted a Site Status report to the NMOCD requesting a review and comment regarding the conclusions from the SMA reports. On September 19, 2019, Robert Hamlet with the NMOCD approved SMA's remediation report with conditions.

Per NMOCD requested conditions in an email response dated September 19, 2020, on March 23-25, 2020, Arcadis personnel installed four soil borings surrounding each historical soil sample location (SW-3, SW-5, SW-7, SW-9, SW-15, SW-17, SW-27, SW-29, and SW-30) with a hand auger to further horizontal delineation within the release areas. Soil samples were collected at depths ranging from the surface to 4 feet bgs. The soil samples were analyzed for chloride by United States Environmental Protection Agency (USEPA) Method 300. In addition, per NMOCD request, all samples collected surrounding SW-5 were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-GRO), TPH as diesel (TPH-DRO), and TPH as oil (TPH-ORO), by USEPA Method 8015.

Following the 2020 soil sampling event, Arcadis conducted a virtual meeting with the Bureau of Land Management (BLM) to discuss the potential path forward for the Site. In accordance with the BLM, Arcadis performed a background sampling event in order to determine if a Site-specific screening level for chloride could be proposed for BLM concurrence and use with future assessment activities at the Site.

On August 3-5, 2021, Arcadis personnel collected 61 soil samples from 15 locations (SB-1 through SB-15) approved by BLM outside of the release area to determine the naturally occuring background chloride concentrations in the soil. The soil samples were collected with a hand auger at depths ranging from the surface to 6 feet bgs. The soil samples were analyzed for chloride by USEPA Method 300.

		REC	CEIVED	Page 21 of
istrict I 625 N. French Dr., Hobbs, NM 88240	State of]	New Mexico		Form C-141
istrict II	Energy Minerals a	and Natural ResourcesMAY	082018	Revised April 3, 201
istrict III		vation Division		o appropriate District Office in
000 Rio Brazos Road, Aztec, NM 87410 istrict IV	1220 South	St. Francis Dr.	ARTESIA O	ordance with 19.15.29 NMAC
220 S. St. Francis Dr., Santa Fe, NM 87505		, NM 87505		
fAB1813055699 Releas		and Corrective Act	ion	
NAB1813056113	#371115	OPERATOR	🛛 Initia	Report 🔲 Final Rep
Name of Company: Rockcliff Operating New N	Aexico LLC	Contact: John Turner	Second Second	
Address: 1301 McKinney St, Suite 1300, Houst	ton, TX 77010	Telephone No.: 903-643-3791		
Facility Name : SCB 5B to Candelario 24-1 SW	D 4" Polyline	Facility Type: Produced Water	Transfer Line	
Surface Owner: The Mosaic Company	Mineral Owner: I	BLM	API No.	NA
	LOCATION	NOF RELEASE		
Unit Letter Section Township Range Fe			ast/West Line	County
C 24 23s 28e				Eddy
Latitude	32.294911 Loi	ngitude104.043545NAI	0 83	
	NATURE	OF RELEASE		
Type of Release: Produced Saltwater/Oil		Volume of Release: PW ~720 bbls, Oil ~7.2 bbls		ecovered: ~ 385 bbls
Source of Release: 4" Polyline – Produced Water Tra	ansfer Line	Date and Hour of Occurrence: 4/26/18	Date and I 4/30/18, 0	Iour of Discovery 823hrs
Was Immediate Notice Given?		If YES, To Whom?		
	Not Required	Mike Bratcher NMOCD & Nat		Center
By Whom? John Turner Was a Watercourse Reached?		Date and Hour: 4/30/18 0853 h If YES, Volume Impacting the		
		III I LO, VOIUNE Impacting me	watercourse.	
Yes □ No If a Watercourse was Impacted, Describe Fully.* Yes – Pecos River. Point of Release was approxima the bluff, then flowed toward the river. Describe Cause of Problem and Remedial Action Ta	tely 150 feet from the ken.* On 4-26-18, it	Unknown – but appears to be n river, on the west side of the blut appears that a 3 rd party ran over th	ff. Release fluids	t transfers produced water
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Operator/Responsible Party,

The OCD has received the form C-141 you provided on 5/8/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 28/2018 has been assigned. Please refer to this case number in all future correspondence.

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

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

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District <u>2</u> office in <u>ARTESIA</u> on or before <u>6/8/2018</u>. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.

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

• Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

• Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C₆ thru C₃₆), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.
- Composite sampling is not generally allowed.

• Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

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

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

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

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

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

Jim Griswold OCD Environmental Bureau Chief 1220 South St. Francis Drive Santa Fe, New Mexico 87505 505-476-3465 jim.griswold@state.nm.us

Bratcher, Mike, EMNRD

From:	John Turner < John.Turner@Rockcliffenergy.com>
Sent:	Tuesday, May 8, 2018 4:25 PM
То:	Bratcher, Mike, EMNRD; Tucker, Shelly; Weaver, Crystal, EMNRD; Gregston, Terry;
	Holcomb, Sarah, NMENV; Ellington, Brent, OSE
· Cc:	Nick Koch; Mike Martin; Darrell Taylor; Brian Borque; Jamie Robinson; Greg McCain
Subject:	SCB 5B to Candelario 24-1 SWD 4" Polyline C-141 Release Notification - Rockcliff
-	Energy Operating New Mexico LLC
Attachments:	SCB_5B_to_Candelarie_Polyline_Release_NMOCD_C-141_5-8-18.pdf

Please find attached the initial Form C-141, Release Notification and Corrective Action, for the release that occurred on Rockcliff Operating New Mexico LLC's 4" produced water transfer polyline near Fishermans Lane discovered on April 30, 2018.

If you have any questions or concerns please do not hesitate to contact me.

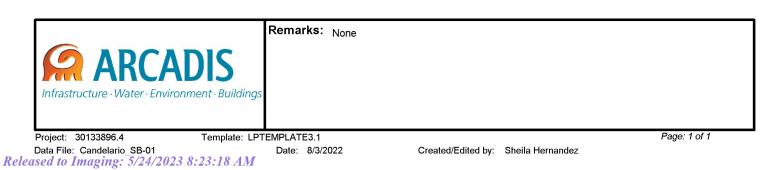
Thank you,

John Turner Rockcliff Energy, LLC Sr. Environmental Specialist 342 Johnny Clark Rd Longview, TX 75603 O: (903) 475-1865 C: (903) 261-4673 jturner@rockcliffenergy.com

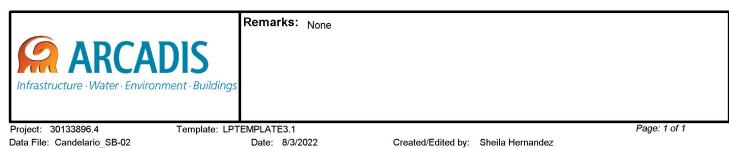


Boring Logs

Date Start/Finish: 7/11/2022 Drilling Company: N/A Driller's Name: N/A Drilling Method: Hand Auger Sampling Method: Discrete/Grab Rig Type: N/A							Latitude: N/A Longitude: N/A Casing Elevation: Not Surveyed Borehole Depth: 6' Surface Elevation: Not Surveyed Descriptions By: Daniel McGee	Client: Che Cor Location: S	ring ID: SB-01 Chevron Environmental Management Company n: SCB 5B to Candelario Polyline Loving, NM	
DEPTH	Sample Run Number	Sample/Int/Type	Recovery (feet)	DIA	USCS Code	Geologic Column	Stratigraphic Description		Well/Boring Construction	
x 0=		0- 0.5'					Sand			
-			2							
-										
-		2-4'	2		SP					
-										
) –5 –		4-6'	2							
							End of boring @ 6'			



Date Start/Finish: 7/11/2022 Drilling Company: N/A Driller's Name: N/A Drilling Method: Hand Auger Sampling Method: Discrete/Grab Rig Type: N/A							Latitude: N/A Longitude: N/A Casing Elevation: Not Surveyed Borehole Depth: 6' Surface Elevation: Not Surveyed Descriptions By: Daniel McGee	 Well/Boring ID: SB-02 Client: Chevron Environmental Management Company Location: SCB 5B to Candelario Polyline Loving, NM
ДЕРТН	Sample Run Number	Sample/Int/Type	Recovery (feet)	DIA	USCS Code	Geologic Column	Stratigraphic Description	Well/Boring Construction
r 0-		0- 0.5'					Sand	
-			2					
-		2-4'	2		SP			
-5 - 5		4-6'	2					
							End of boring @ 6'	





2022 Analytical Report

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Arcadis - Chevron -	NM	
Sample Delivery Group:	L1515393	
Samples Received:	07/15/2022	
Project Number:	30133896	
Description:	Candelario Polyline	
Site:	CANDELARIO POLYLINE	
Report To:	Sarah Johnson	
	1004 N Big Spring Street	
	Suite 121	
	Midland, TX 79701	

Entire Report Reviewed By:

Jason Romer Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SB-01-S-05-220711 L1515393-01 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 12:55	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 19:46	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-01-S-2-4-220711 L1515393-02 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 13:05	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 20:46	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-01-S-4-6-220711 L1515393-03 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 13:10	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 21:31	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-02-S-05-220711 L1515393-04 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 13:25	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 21:46	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-02-S-2-4-220711 L1515393-05 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 13:30	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 22:00	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-02-S-4-6-220711 L1515393-06 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 13:35	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 22:15	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-03-S-05-220711 L1515393-07 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 14:50	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 5	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 22:30	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN

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SB-03-S-2-4-220711 L1515393-08 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 15:00	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 5	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 22:45	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-04-S-05-220711 L1515393-09 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 15:15	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 23:00	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-05-S-05-220711 L1515393-10 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 15:25	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896157 WG1899057	1 1	07/18/22 08:56 07/21/22 12:19	07/18/22 09:04 07/21/22 23:15	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-07-S-05-220711 L1515393-11 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 15:30	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/21/22 23:30	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-06-S-05-220711 L1515393-12 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 16:15	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 00:32	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-12-S-05-220711 L1515393-13 Solid			Collected by Daniel McGee	Collected date/time 07/11/22 16:30	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 00:47	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-08-S-05-220712 L1515393-14 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 09:40	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 01:02	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN

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SB-09-S-05-220712 L1515393-15 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 10:10	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 01:16	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-10-S-05-220712 L1515393-16 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 10:40	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 01:31	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-11-S-05-220712 L1515393-17 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 11:30	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 01:46	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-13-S-05-220712 L1515393-18 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 12:15	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 02:01	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-15-S-05-220712 L1515393-19 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 13:20	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 10	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 02:16	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-14-S-05-220712 L1515393-20 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 12:55	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896159 WG1899057	1 1	07/18/22 08:39 07/21/22 12:19	07/18/22 08:47 07/22/22 02:31	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-16-S-05-220712 L1515393-21 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 13:50	Received da 07/15/22 09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1900713	1 5	07/18/22 08:23 07/26/22 12:02	07/18/22 08:36 07/27/22 22:20	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN

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SB-17-S-05-220712 L1515393-22 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 14:50	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 1	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 22:28	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-18-S-05-220712 L1515393-23 Solid			Collected by Daniel McGee	Collected date/time 07/12/22 15:40	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 100	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 22:37	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-19-S-05-220713 L1515393-24 Solid			Collected by Daniel McGee	Collected date/time 07/13/22 10:00	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 1	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 22:47	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-20-S-05-220713 L1515393-25 Solid			Collected by Daniel McGee	Collected date/time 07/13/22 10:25	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 1	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 22:56	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-21-S-05-220713 L1515393-26 Solid			Collected by Daniel McGee	Collected date/time 07/13/22 11:15	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 1.01	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 23:25	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-22-S-05-220713 L1515393-27 Solid			Collected by Daniel McGee	Collected date/time 07/13/22 13:10	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 1	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 23:34	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-23-S-05-220713 L1515393-28 Solid			Collected by Daniel McGee	Collected date/time 07/13/22 14:00	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 23:44	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN

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SB-24-S-05-220713 L1515393-29 Solid			Collected by Daniel McGee	Collected date/time 07/13/22 14:40	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 1.03	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/22/22 23:53	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-25-S-05-220714 L1515393-30 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 09:40	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896160 WG1899386	1 5	07/18/22 08:23 07/22/22 16:55	07/18/22 08:36 07/23/22 00:03	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-26-S-05-220714 L1515393-31 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 10:00	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896161 WG1899386	1 100	07/18/22 12:36 07/22/22 16:55	07/18/22 12:47 07/23/22 00:12	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-27-S-05-220714 L1515393-32 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 10:30	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896161 WG1899386	1 5	07/18/22 12:36 07/22/22 16:55	07/18/22 12:47 07/23/22 00:31	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-28-S-05-220714 L1515393-33 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 11:00	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896161 WG1899386	1 100	07/18/22 12:36 07/22/22 16:55	07/18/22 12:47 07/23/22 00:41	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-29-S-05-220714 L1515393-34 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 11:20	Received date/time 07/15/22 09:00	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896161 WG1899386	1 5.05	07/18/22 12:36 07/22/22 16:55	07/18/22 12:47 07/23/22 00:50	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN
SB-30-S-05-220714 L1515393-35 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 11:40	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0	WG1896161 WG1899386	1 5	07/18/22 12:36 07/22/22 16:55	07/18/22 12:47 07/23/22 01:19	CMK LBR	Mt. Juliet, TN Mt. Juliet, TN

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SDG: L1515393 DATE/TIME: 07/28/22 18:02

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SAMPLE SUMMARY

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SB-31-S-05-220714 L1515393-36 Solid			Collected by Daniel McGee	Collected date/time 07/14/22 12:40	Received da 07/15/22 09:	
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1896161	1	07/18/22 12:36	07/18/22 12:47	СМК	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1899386	1	07/22/22 16:55	07/23/22 01:29	LBR	Mt. Juliet, TN
			Collected by	Collected date/time	Received da	te/time
SB-32-S-05-220714 L1515393-37 Solid			Daniel McGee	07/14/22 13:00	07/15/22 09:	00
Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Total Solids by Method 2540 G-2011	WG1896161	1	date/time 07/18/22 12:36	date/time 07/18/22 12:47	СМК	Mt. Juliet, TN
-	WG1896161 WG1899386	1 1			CMK LBR	
Total Solids by Method 2540 G-2011 Wet Chemistry by Method 300.0		1 1	07/18/22 12:36	07/18/22 12:47		Mt. Juliet, TN
-		1	07/18/22 12:36 07/22/22 16:55	07/18/22 12:47 07/23/22 01:38	LBR	Mt. Juliet, TN te/time
Wet Chemistry by Method 300.0		1 1 Dilution	07/18/22 12:36 07/22/22 16:55 Collected by	07/18/22 12:47 07/23/22 01:38 Collected date/time	LBR Received da	Mt. Juliet, TN te/time
Wet Chemistry by Method 300.0 SB-33-S-05-220714 L1515393-38 Solid	WG1899386		07/18/22 12:36 07/22/22 16:55 Collected by Daniel McGee	07/18/22 12:47 07/23/22 01:38 Collected date/time 07/14/22 13:30	LBR Received da 07/15/22 09:	Mt. Juliet, TN te/time 00
Wet Chemistry by Method 300.0 SB-33-S-05-220714 L1515393-38 Solid	WG1899386		07/18/22 12:36 07/22/22 16:55 Collected by Daniel McGee Preparation	07/18/22 12:47 07/23/22 01:38 Collected date/time 07/14/22 13:30 Analysis	LBR Received da 07/15/22 09:	Mt. Juliet, TN te/time 00

SDG: L1515393 DATE/TIME: 07/28/22 18:02

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CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer Project Manager



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SAMPLE RESULTS - 01 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	88.7		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	U		10.4	22.5	1	07/21/2022 19:46	WG1899057		



SDG: L1515393

SAMPLE RESULTS - 02 L1515393

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1

Total Solids by Method 2540 G-2011

	-	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte		%			date / time	—	2
Total Solids		76.3		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time		4	Cn
Chloride	21.9	J	12.1	26.2	1	07/21/2022 20:46	WG1899057		

SAMPLE RESULTS - 03 L1515393

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	83.0		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	30.6		11.1	24.1	1	07/21/2022 21:31	WG1899057		CII

SAMPLE RESULTS - 04 L1515393

1

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	89.5		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	U		10.3	22.4	1	07/21/2022 21:46	WG1899057		

SAMPLE RESULTS - 05 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	87.5		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	52.6		10.5	22.8	1	07/21/2022 22:00	WG1899057		CII



SAMPLE RESULTS - 06

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	76.2		1	07/18/2022 09:04	WG1896157	Tc

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		
Chloride	114		12.1	26.2	1	07/21/2022 22:15	WG1899057	

SAMPLE RESULTS - 07 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	93.4		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	2720		49.3	107	5	07/21/2022 22:30	WG1899057		

SAMPLE RESULTS - 08 L1515393

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	94.7		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	3250		48.6	106	5	07/21/2022 22:45	WG1899057		CII

SAMPLE RESULTS - 09 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	88.7		1	07/18/2022 09:04	WG1896157	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	U		10.4	22.5	1	07/21/2022 23:00	WG1899057		



SAMPLE RESULTS - 10 L1515393

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	80.8		1	07/18/2022 09:04	WG1896157	¯Тс

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	645		11.4	24.8	1	07/21/2022 23:15	WG1899057		



SAMPLE RESULTS - 11 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	77.1		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time		4	Cn
Chloride	15.0	<u>J P1</u>	11.9	25.9	1	07/21/2022 23:30	WG1899057		CII

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SAMPLE RESULTS - 12 L1515393

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	95.9		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	460		9.59	20.9	1	07/22/2022 00:32	WG1899057		

SDG: L1515393

SAMPLE RESULTS - 13 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	95.7		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	68.7		9.61	20.9	1	07/22/2022 00:47	WG1899057		



SAMPLE RESULTS - 14 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	 Ср
Analyte	%			date / time		2
Total Solids	72.3		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	U		12.7	27.7	1	07/22/2022 01:02	WG1899057		CII



SAMPLE RESULTS - 15 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	85.1		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	38.4		10.8	23.5	1	07/22/2022 01:16	WG1899057		



SAMPLE RESULTS - 16 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	- Ср
Analyte	%			date / time		2
Total Solids	82.8		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	91.4		11.1	24.1	1	07/22/2022 01:31	WG1899057		CII

SDG: L1515393

SAMPLE RESULTS - 17

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Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	83.4		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0

	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	L
Analyte	mg/kg		mg/kg	mg/kg		date / time		4
Chloride	U		11.0	24.0	1	07/22/2022 01:46	WG1899057	

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SDG: L1515393 DATE/TIME: 07/28/22 18:02 PAGE: 27 of 63

SAMPLE RESULTS - 18 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	85.0		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0

Wet Chemistry	Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch			
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn	
Chloride	527		10.8	23.5	1	07/22/2022 02:01	WG1899057			



SDG: L1515393

SAMPLE RESULTS - 19 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	83.4		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry by Method 300.0

Wet Chemistry	Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch			
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn	
Chloride	9990		110	240	10	07/22/2022 02:16	WG1899057			

SDG: L1515393

SAMPLE RESULTS - 20 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	83.7		1	07/18/2022 08:47	WG1896159	Tc

Wet Chemistry	Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch			
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn	
Chloride	819		11.0	23.9	1	07/22/2022 02:31	WG1899057		CII	



SAMPLE RESULTS - 21 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	— Ср
Analyte	%			date / time		2
Total Solids	75.8		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry by Method 300.0

Wet Chemistry	Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch			
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn	
Chloride	2140		60.7	132	5	07/27/2022 22:20	WG1900713		CII	

SDG: L1515393

SAMPLE RESULTS - 22 L1515393

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1

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	82.9		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry	Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch			
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn	
Chloride	354		11.1	24.1	1	07/22/2022 22:28	WG1899386		CII	



SAMPLE RESULTS - 23 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	86.0		1	07/18/2022 08:36	WG1896160	¯Тс

Wet Chemistry by Method 300.0

Wet Chemistry	Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch			
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn	
Chloride	10700		1070	2320	100	07/22/2022 22:37	WG1899386		CII	

SDG: L1515393

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SAMPLE RESULTS - 24 L1515393

1

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	81.5		1	07/18/2022 08:36	WG1896160	ЪС

Wet Chemistry by Method 300.0

³ Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	256		11.3	24.6	1	07/22/2022 22:47	WG1899386		CII



SDG: L1515393

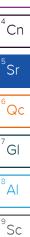
SAMPLE RESULTS - 25 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	81.7		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	143		11.3	24.5	1	07/22/2022 22:56	WG1899386		CII



SDG: L1515393

SAMPLE RESULTS - 26 L1515393

1

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	82.1		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	404		11.3	24.6	1.01	07/22/2022 23:25	WG1899386		CII



SAMPLE RESULTS - 27 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	84.2		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	490		10.9	23.8	1	07/22/2022 23:34	WG1899386		

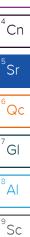
SAMPLE RESULTS - 28 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	84.4		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	613		10.9	23.7	1	07/22/2022 23:44	WG1899386		



SDG: L1515393

SAMPLE RESULTS - 29 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	85.8		1	07/18/2022 08:36	<u>WG1896160</u>	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	539		11.1	24.0	1.03	07/22/2022 23:53	WG1899386		CII

SDG: L1515393

SAMPLE RESULTS - 30 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	93.6		1	07/18/2022 08:36	WG1896160	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴Cn
Chloride	4180		49.2	107	5	07/23/2022 00:03	WG1899386		



SDG: L1515393



SAMPLE RESULTS - 31 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	93.8		1	07/18/2022 12:47	WG1896161	Tc

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	41000		980	2130	100	07/23/2022 00:12	WG1899386		



SAMPLE RESULTS - 32 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	87.0		1	07/18/2022 12:47	WG1896161	ЪС

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	1820		52.8	115	5	07/23/2022 00:31	WG1899386		CII

SAMPLE RESULTS - 33 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	92.2		1	07/18/2022 12:47	<u>WG1896161</u>	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	12700		998	2170	100	07/23/2022 00:41	WG1899386		CII



SDG: L1515393

SAMPLE RESULTS - 34 L1515393

1

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	- Cp
Analyte	%			date / time		2
Total Solids	89.7		1	07/18/2022 12:47	WG1896161	Tc

Wet Chemistry by Method 300.0

Wet Chemistry by Method 300.0									³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch		
Analyte	mg/kg		mg/kg	mg/kg		date / time			⁴ Cn
Chloride	2340		51.8	113	5.05	07/23/2022 00:50	WG1899386		CII



SDG: L1515393

SAMPLE RESULTS - 35 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	94.0		1	07/18/2022 12:47	WG1896161	Tc

Wet Chemistry by Method 300.0

Wet Chemistry	by Method 300	0.0						³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		 ⁴Cn
Chloride	2800		48.9	106	5	07/23/2022 01:19	WG1899386	CII

SAMPLE RESULTS - 36 L1515393

1

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	92.6		1	07/18/2022 12:47	WG1896161	Tc

Wet Chemistry by Method 300.0

Wet Chemistry	by Method 300	0.0						³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		 ⁴ Cn
Chloride	523		9.93	21.6	1	07/23/2022 01:29	WG1899386	CII

SDG: L1515393

DATE/TIME: 07/28/22 18:02

SAMPLE RESULTS - 37 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	C	р
Analyte	%			date / time		2	
Total Solids	89.4		1	07/18/2022 12:47	WG1896161	Ťτ	С

Wet Chemistry by Method 300.0

Wet Chemistry	by Method 300	0.0						³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		 ⁴ Cn
Chloride	186		10.3	22.4	1	07/23/2022 01:38	WG1899386	

SAMPLE RESULTS - 38 L1515393

Total Solids by Method 2540 G-2011

	Result	Qualifier	Dilution	Analysis	Batch	Ср
Analyte	%			date / time		2
Total Solids	81.6		1	07/18/2022 12:47	WG1896161	Tc

Wet Chemistry by Method 300.0

Wet Chemistry	by Method 300	0.0						³ Ss
	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
Analyte	mg/kg		mg/kg	mg/kg		date / time		 ⁴Cn
Chloride	317		11.6	25.2	1.03	07/23/2022 01:48	WG1899386	CII

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Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1515393-01,02,03,04,05,06,07,08,09,10

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Method Blank (MB)

18/22 09:04				
MB Result	MB Qualifier	MB MDL	MB RDL	
%		%	%	
0.00100				
-	MB Result %	MB Result <u>MB Qualifier</u> %	MB Result <u>MB Qualifier</u> MB MDL N % % %	MB Result MB Qualifier MB MDL MB RDL % % %

L1515393-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1515393-05 Original Sample (OS) • Duplicate (DUP) (OS) L1515393-05 07/18/22 09:04 • (DUP) R3816375-3 07/18/22 09:04								⁴ Cn
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits		⁵Sr
Total Solids	87.5	87.7	1	0.233		10		⁶ Qc

Laboratory Control Sample (LCS)

(LCS) R3816375-2 07/18	(LCS) R3816375-2 07/18/22 09:04								
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier				
Analyte	%	%	%	%					
Total Solids	50.0	50.0	100	85.0-115					

SDG: L1515393

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Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1515393-11,12,13,14,15,16,17,18,19,20

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Method Blank (MB)

Method Blank (MB) 1 (MB) R3816372-1 07/18/22 08:47 1								
Analyte	%		%	%	Тс			
Total Solids	0.00200							
					³ Ss			

L1515393-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1515393-15 Orig							
· · · ·	Original Result			DUP RPD	DUP Qualifier	DUP RPD .imits	
Analyte	%	%		%		6	
Total Solids	85.1	83.5	1	1.85		0	

Laboratory Control Sample (LCS)

(LCS) R3816372-2 07/18/	22 08:47				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

SDG: L1515393

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Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1515393-21,22,23,24,25,26,27,28,29,30

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Method Blank (MB)

		8:36	(MB) R3816371-1 07/18/2
2	lifier MB MDL	MB Result MB Qua	
2	%	%	Analyte
		0.00200	Total Solids
3			

L1515393-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1515393-25 Origi							 ⁴ Cn
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	UP RPD mits	⁵ Sr
Total Solids	81.7	81.9	1	0.262		,	⁶ Qc

Laboratory Control Sample (LCS)

(LCS) R3816371-2 07/18	3/22 08:36				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

SDG: L1515393

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Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY L1515393-31,32,33,34,35,36,37,38

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Method Blank (MB)

(MB) R3816421-1 07/	18/22 12:47				
	MB Result	MB Qualifier	MB MDL	MB RDL	
Analyte	%		%	%	
Total Solids	0.00300				

L1515393-35 Original Sample (OS) • Duplicate (DUP)

Laboratory Control Sample (LCS)

(LCS) R3816421-2 07/18	8/22 12:47				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	%	%	%	%	
Total Solids	50.0	49.9	99.9	85.0-115	

SDG: L1515393

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Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY L1515393-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

Method Bidh					1
(MB) R3818172-1 (7/21/22 19:17				
	MB Result	MB Qualifier	MB MDL	MB RDL	2
Analyte	mg/kg		mg/kg	mg/kg	-
Chloride	U		9.20	20.0	- L

L1515393-01 Original Sample (OS) • Duplicate (DUP)

L1515393-01 Ori	iginal Sample ((OS) • Dup) icate (ا	DUP)		
(OS) L1515393-01 07/2	/21/22 19:46 • (DUP)	, R3818172-3 (07/21/22 2	.0:01		
	Original Result (dry)	t DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	U	U	1	0.000		20

L1515393-11 Original Sample (OS) • Duplicate (DUP)

L1515393-11 (Driginal Sample (OS) • Dupl	licate (D	UP)			
(OS) L1515393-11	07/21/22 23:30 • (DUP)	R3818172-6 (07/21/22 2	3:45			
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	JP RPD nits	
Analyte	mg/kg	mg/kg		%			
Chloride	15.0	25.4	1	51.5	<u>J P1</u>		

Laboratory Control Sample (LCS)

(LCS) R3818172-2 07/21/2	22 19:31				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	197	98.6	90.0-110	

L1515393-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1515393-01 07/21/22 19:46 • (MS) R3818172-4 07/21/22 20:16 • (MSD) R3818172-5 07/21/22 20:31												
	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	564	U	559	551	99.1	97.7	1	80.0-120			1.44	20

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Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY L1515393-22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38

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Method Blank (MB)

54 B Result MB Qualifier			
2 Decult MD Qualifier			
B Result MB Qualifier	MB MDL	MB RDL	
g/kg	mg/kg	mg/kg	
	9.20	20.0	
-		kg mg/kg r	kg mg/kg mg/kg

L1515393-31 Original Sample (OS) • Duplicate (DUP)

L1515393-31 Or	<u> </u>	· · ·		· ·		
OS) L1515393-31 07/	(DUP) 23/22 00:12 • (DUP)		07/23/22 (00:22		
	Original Result (dry)	(dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	41000	37200	100	9.56		20

Laboratory Control Sample (LCS)

(LCS) R3818531-2 07/2	2/22 20:03				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	208	104	90.0-110	

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Wet Chemistry by Method 300.0

QUALITY CONTROL SUMMARY L1515393-21

Method Blank (MB)

(MB) R3820224-1 07	7/27/22 21:35			
	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Chloride	U		9.20	20.0

L1515433-58 Original Sample (OS) • Duplicate (DUP)

(OS) L1515433-58 07/2	<u> </u>					
	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Chloride	75.8	63.5	1	17.6		20

L1515443-04 Original Sample (OS) • Duplicate (DUP)

L1515443-04 Origin	nal Sample	(OS) • Dup	olicate (DUP)			
(OS) L1515443-04 07/28/	22 04:18 • (DUP) R3820224-6	6 07/28/2	2 04:33			
	Original Result (dry)	DUP Result (dry)	Dilution	DUP RPD	DUP Qualifier	DUP RPD imits	
Analyte	mg/kg	mg/kg		%		, ວ	
Chloride	U	20.7	1	200	<u>J P1</u>	0	

Laboratory Control Sample (LCS)

(LCS) R3820224-2 07/27	7/22 21:50				
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Chloride	200	207	103	90.0-110	

L1515433-58 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1515433-58 07/28/2	2 01:04 • (MS) I	R3820224-4 C	07/28/22 01:34	• (MSD) R3820	0224-5 07/28/	/22 01:49						
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Chloride	500	75.8	640	624	113	110	1	80.0-120			2.54	20

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resul reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
D1	

P1

PROJECT: 30133896

RPD value not applicable for sample concentrations less than 5 times the reporting limit.

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Received by OCD: 1/26/2023 7:41:04 AMCCCREDITATIONS & LOCATIONS

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Alabama	40660	Nebraska	NE-OS-15-05
Maska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
ırkansas	88-0469	New Jersey–NELAP	TN002
alifornia	2932	New Mexico ¹	TN00003
olorado	TN00003	New York	11742
onnecticut	PH-0197	North Carolina	Env375
lorida	E87487	North Carolina ¹	DW21704
ieorgia	NELAP	North Carolina ³	41
eorgia ¹	923	North Dakota	R-140
daho	TN00003	Ohio-VAP	CL0069
linois	200008	Oklahoma	9915
ndiana	C-TN-01	Oregon	TN200002
owa	364	Pennsylvania	68-02979
Cansas	E-10277	Rhode Island	LAO00356
entucky 16	KY90010	South Carolina	84004002
entucky ²	16	South Dakota	n/a
ouisiana	AI30792	Tennessee ¹⁴	2006
ouisiana	LA018	Texas	T104704245-20-18
laine	TN00003	Texas ⁵	LAB0152
laryland	324	Utah	TN000032021-11
lassachusetts	M-TN003	Vermont	VT2006
lichigan	9958	Virginia	110033
linnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
lissouri	340	Wisconsin	998093910
Iontana	CERT0086	Wyoming	A2LA
2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
PA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

SDG: L1515393 DATE/TIME: 07/28/22 18:02



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Arcadis - Chevron - NM			Accounts	s Payable		Pres										
				Big Spring St	reet	Chk									P	ACP.
1004 N Big Spring Street			Suite 121												PEOPLE	ADVANCING SCIENCE
Suite 121 Midland. TX 79701			Midland,	, TX 79701												
Report to:			Email To:												- Contraction Production	JLIET, TN
Sarah Johnson			sarah.john	son@arcadis.c	n@arcadis.com;william.foord@ar										12065 Lebanon Rd Mo Submitting a sample vi	
Project Description: Candelario Polyline		City/State Collected:	Carlska	id, NI	1 Please PT MT	Circle: CT ET	es								Pace Terms and Condit	
Phone: 432-687-5400	Client Projec	1# 3896		Lab Project #	[#] NM-CANDEI	LARIO	4ozClr-NoPres								SDG # 19	15 593
Collected by (print):	Site/Facility I		NE	P.O. #			lozClr								Acctnum: CHI	TVARCNINA
Collected by (signature):		(Lab MUST Be	the second	Quote #											Template: T19	
1 the		Day Five I ay 5 Day			aulto Manda I		300								Prelogin: P93	
Immediately Packed on Ice N Y Y	Two Da	ay 10 Da	ay (Rad Only)	1	sults Needed	No. of	CHLORIDE-300,TS								РМ: 526 - Chri РВ: ВР	6125/22
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	HLOI								Shipped Via: F Remarks	edEX Ground Sample # (lab only)
53-01-5-0-5-220711	6	SS	····	7-11-2	2 125	5 1	x									-01
53-01-5-2-4-220711	6	SS		7-11-	22 1305	1	X									-02
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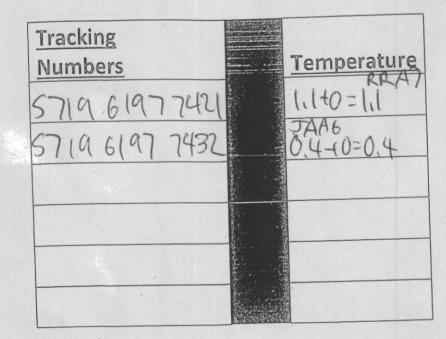
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33-21-5-05-220713		SS		7-13-2	2 1113	1	X							-26
SB-22-5-0-5-2207B	6	SS		7-13-20		1	X							-27
53-23-5-0-5-220713	6	SS		7-13-22		1	X							-20
58-24-5-0-5-220713	G	SS		7-13-0		1	X						1	-27
58-25-5-0-5-220714	G	SS		7-14		1	X						3.000	-30
513-26-5-0-5-220714	G	SS		7-14-		1	X							-31
8-27-5-0-5-220714	G	SS		7-14-0		1	X							- 32
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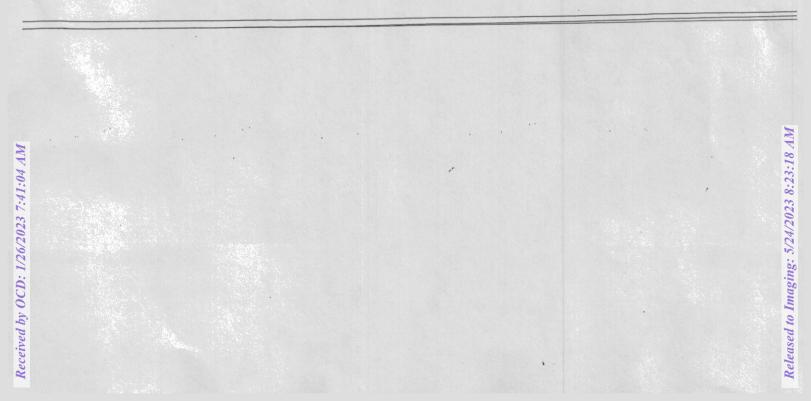
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3-31-5-0-5-20714	6	SS		7-111-22	1240	1	X						- 36		
3-32-5-0-5-220714	6	SS		7-14-27		1	X						- 37		
53-33-5-0-5-220714	6	SS		7-14-27	1330	1	X						-38		
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Cumulative Soil Analytical Results

Appendix D Cumualtive Soil Analytical Results Chevron Environmental Management Company SCB 5B to Candelario Polyline Eddy County, New Mexico

Sample I.D. No. Sample (feet bgs) Date Total TPH Chloride NMAC Standards 100 600 Units mg/kg mg/kg SW-3A 0°- 6" 03/24/20 NA 1,950 B SW-3B 0°- 6" 03/24/20 NA 1,950 B SW-3B 0°- 6" 03/24/20 NA 1,450 B SW-3C 0°- 6" 03/24/20 NA 1,4450 B SW-5A 0°- 6" 03/24/20 NA 1,450 B SW-5B 0°- 6" 03/24/20 NA 3,440 SW-5D 0°- 6" 03/24/20 NA 3,400 SW-7A 0°- 6" 03/23/20 NA 2,580 SW-7D 0°- 6" 03/23/20 NA 2,800 J SW-7B 0°- 6" 03/23/20 NA 4,887 SW-9A 0°- 6" 03/23/20 NA 4,887 SW-9B 2" 03/23/20 NA 4,89 SW-9B 2" 03/23/20<					
NMAC Standards 100 600 Units mg/kg mg/kg mg/kg SW-3A 0"-6" 03/24/20 NA 1950 B SW-3B 0"-6" 03/24/20 NA 916 B SW-3C 0"-6" 03/24/20 NA 34.4 SW-3D 0"-6" 03/24/20 NA 1790 B SW-5A 0"-6" 03/24/20 74 1.450 B SW-5B 0"-6" 03/24/20 73.1 J 194 SW-5C 0"-6" 03/23/20 NA 258 SW-7A 0"-6" 03/23/20 NA 2600 J SW-7D 0"-6" 03/23/20 NA 4380 SW-7D 0"-6" 03/23/20 NA 4387 SW-9A 2' 03/23/20 NA 4387 SW-9B 2' 03/23/20 NA 44887 SW-9B 2' 03/23/20 NA 621 SW-9D 0"-6" 03/23/20 NA	Sample I.D. No.	Depth	Date		
Units mg/kg mg/kg SW-3A 0"-6" 03/24/20 NA 1,950 B SW-3B 0"-6" 03/24/20 NA 916 B SW-3C 0"-6" 03/24/20 NA 34.4 SW-3D 0"-3" 03/24/20 NA 134.4 SW-5A 0"-6" 03/24/20 NA 144 SW-5C 0"-6" 03/24/20 74 1,450 B SW-5C 0"-6" 03/24/20 73.1 J 194 SW-7A 0"-6" 03/23/20 NA 3,400 SW-7B 0"-6" 03/23/20 NA 2,800 J SW-7D 0"-6" 03/23/20 NA 4,800 J SW-9A 0"-6" 03/23/20 NA 4,800 J SW-9B 2" 03/23/20 NA 4,800 J SW-9B 2" 03/23/20 NA 6,21 SW-9D 0"-6" 03/23/20 NA 2,200 SW-9D 0"-6" 03/23/20<				(mg/Kg)	(mg/Kg)
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SW-3B 0"-6" 03/24/20 NA 916 B SW-3C 0"-6" 03/24/20 NA 134.4 SW-3D 0"-6" 03/24/20 NA 1,790 B SW-5A 0"-6" 03/24/20 SP 9,250 SW-5B 0"-6" 03/24/20 74 1,450 B SW-5D 0"-6" 03/24/20 70 144 SW-5D 0"-6" 03/23/20 NA 3,400 SW-7D 0"-6" 03/23/20 NA 2,609 SW-7D 0"-6" 03/23/20 NA 2,600 J SW-7D 0"-6" 03/23/20 NA 438 SW-7D 0"-6" 03/23/20 NA 438 SW-9A 2' 03/23/20 NA 44 03/23/20 NA 621 3/23/20 NA 429 SW-9A 2' 03/23/20 NA 2,200 3/23/20 NA 42,00 SW-9D 0'-6" 03/23/20 <t< td=""><td>Un</td><td>its</td><td></td><td>mg/kg</td><td></td></t<>	Un	its		mg/kg	
SW-3C 0"-6" 03/24/20 NA 34.4 SW-3D 0"-3" 03/24/20 NA 1,790 B SW-5A 0"-6" 03/24/20 74 1,450 B SW-5C 0"-6" 03/24/20 74 1,450 B SW-5C 0"-6" 03/24/20 73.1 J 194 SW-7A 0"-6" 03/23/20 NA 3,400 SW-7B 0"-6" 03/23/20 NA 509 J SW-7D 0"-6" 03/23/20 NA 599 J SW-7D 0"-6" 03/23/20 NA 438 0"-6" 03/23/20 NA 438 SW-9B 2" 03/23/20 NA 449 2" 03/23/20 NA 621 3W-9B 2" 03/23/20 NA 622 SW-9B 2" 03/23/20 NA 622 SW-9D 0"-6" 03/23/20 NA 1,500 SW-9D 0"-6" 03/23/20 NA </td <td>SW-3A</td> <td>0"- 6"</td> <td>03/24/20</td> <td>NA</td> <td>1,950 B</td>	SW-3A	0"- 6"	03/24/20	NA	1,950 B
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SW-9A 2' 03/23/20 NA 438 SW-9B 2' 03/23/20 NA 1,340 SW-9B 2' 03/23/20 NA 44887 0"-6" 03/23/20 NA 449 0"-6" 03/23/20 NA 689 SW-9C 2' 03/23/20 NA 689 SW-9D 0"-6" 03/23/20 NA 621 4' 03/23/20 NA 622 SW-9D 0"-6" 03/23/20 NA 1,590 SW-15A 0"-6" 03/23/20 NA 1,130 SW-15B 1'6" 03/23/20 NA 1,130 SW-15C 0"-6" 03/23/20 NA 413 0"-6" 03/24/20 NA 4133 0"-6" 03/24/20 NA 1,690 SW-17A 0"-6" 03/24/20 NA 1,690 SW-17D 0"-6" 03/24/20 NA 419 SW-17D <t< td=""><td>500-70</td><td></td><td></td><td></td><td>2 800 1</td></t<>	500-70				2 800 1
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SW-9B 2' 03/23/20 NA 887 4' 03/23/20 NA 449 0"-6" 03/23/20 NA 689 SW-9C 2' 03/23/20 NA 689 SW-9D 0"-6" 03/23/20 NA 629 SW-9D 0"-6" 03/23/20 NA 789 SW-9D 0"-6" 03/23/20 NA 621 SW-15A 2' 03/23/20 NA 622 SW-15B 0"-6" 03/23/20 NA 1,590 SW-15C 0"-6" 03/23/20 NA 2,090 SW-15C 1' 03/24/20 NA 413 O"-6" 03/24/20 NA 1,690 SW-17D 2' 03/24/20 NA 1,690 SW-17B 0"-6" 03/24/20 NA 419 SW-17D 0"-6" 03/25/20 NA 3,520 SW-27B 0"-6" 03/25/20 NA 6,430		_			
4' 03/23/20 NA 449 0"-6" 03/23/20 NA 689 SW-9C 2' 03/23/20 NA 689 SW-9D 0"-6" 03/23/20 NA 621 4' 03/23/20 NA 789 SW-9D 0"-6" 03/23/20 NA 622 SW-15A 2' 03/23/20 NA 1,590 SW-15B 0"-6" 03/23/20 NA 1,590 SW-15C 0"-6" 03/23/20 NA 413 0"-6" 03/23/20 NA 413 0"-6" 03/24/20 NA 413 0"-6" 03/24/20 NA 1,690 SW-15D 2' 03/24/20 NA 1,690 SW-17A 0"-6" 03/24/20 NA 1,690 SW-17D 0"-6" 03/24/20 NA 3,500 SW-17D 0"-6" 03/24/20 NA 3,66 SW-27A 0"-6" <	SW-9B				
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SW-9C 2' 03/23/20 NA 621 4' 03/23/20 NA 789 SW-9D 0''-6'' 03/23/20 NA 622 SW-15A 2' 03/23/20 NA 622 SW-15B 0''-6'' 03/23/20 NA 1,590 SW-15B 0''-6'' 03/23/20 NA 1,130 SW-15C 0''-6'' 03/23/20 NA 413 0''-6'' 03/23/20 NA 4588 SW-15C 0''-6'' 03/24/20 NA 413 0''-6'' 03/24/20 NA 1,690 SW-17D 2' 03/24/20 NA 1,690 SW-17A 0''-6'' 03/24/20 NA 419 J SW-17D 0''-6''' 03/24/20 NA 419 J SW-17D 0''-6''' 03/24/20 NA 3,520 SW-27A 0''-6''' 03/25/20 NA 3,520 SW-27D 0''-6''' 03/25/20		-			
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SW-9D 0"-6" 03/23/20 NA 2,200 SW-15A 0"-6" 03/23/20 NA 622 SW-15A 2' 03/23/20 NA 1,590 SW-15B 0"-6" 03/23/20 NA 1,130 SW-15B 0"-6" 03/23/20 NA 2,090 SW-15C 1'6" 03/23/20 NA 568 SW-15D 2' 03/24/20 NA 413 SW-15D 2' 03/24/20 NA 1,690 SW-17D 0"-6" 03/24/20 NA 1,690 SW-17D 0"-6" 03/24/20 NA 419.J SW-17D 0"-6" 03/24/20 NA 419.J SW-17D 0"-6" 03/24/20 NA 419.J SW-17D 0"-6" 03/25/20 NA 3,520 SW-27A 0"-6" 03/25/20 NA 6,330 SW-27D 0"-6" 03/25/20 NA 6,240 SW-29A	311-90				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	SW/ OD				
SW-15A 2' 03/23/20 NA 1,590 SW-15B 0"-6" 03/23/20 NA 1,130 SW-15B 1'6" 03/23/20 NA 2,090 SW-15C 0"-6" 03/23/20 NA 2,090 SW-15C 0"-6" 03/23/20 NA 413 0"-6" 03/24/20 NA 413 SW-15D 2' 03/24/20 NA 413 SW-15D 2' 03/24/20 NA 1,690 SW-17A 0"-6" 03/24/20 NA 1,690 SW-17B 0"-6" 03/24/20 NA 419 J SW-17D 0"-6" 03/24/20 NA 419 J SW-27A 0"-6" 03/25/20 NA 3,520 SW-27B 0"-6" 03/25/20 NA 10,900 SW-27D 0"-6" 03/25/20 NA 6,930 SW-29D 0"-6" 03/25/20 NA 6,240 SW-29D 0"-6"	SW-9D				
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	SW-15A				-
SW-13B 1'6" 03/23/20 NA 2,090 SW-15C 0"-6" 03/23/20 NA 568 1' 03/23/20 NA 413 SW-15D 2' 03/24/20 NA 7,020 SW-15D 2' 03/24/20 NA 3,590 4' 03/24/20 NA 1690 SW-17A 0"-6" 03/24/20 NA 121 SW-17B 0"-6" 03/24/20 NA 419 J SW-17C 0"-6" 03/24/20 NA 419 J SW-17D 0"-6" 03/24/20 NA 981 B SW-17D 0"-6" 03/24/20 NA 366 SW-27A 0"-6" 03/25/20 NA 10,900 SW-27D 0"-6" 03/25/20 NA 6,930 SW-29A 0"-6" 03/25/20 NA 6,240 SW-29B 0"-6" 03/25/20 NA 16,400 SW-29D 0"-6" 03/25/20					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	SW-15B				
SW-15C 1' 03/23/20 NA 413 0"-6" 03/24/20 NA 7,020 SW-15D 2' 03/24/20 NA 3,590 4' 03/24/20 NA 1690 SW-17A 0"-6" 03/24/20 NA 1690 SW-17B 0"-6" 03/24/20 NA 419 J SW-17C 0"-6" 03/24/20 NA 419 J SW-17D 0"-6" 03/24/20 NA 419 J SW-17D 0"-6" 03/24/20 NA 981 B SW-17D 0"-6" 03/24/20 NA 366 SW-27A 0"-6" 03/25/20 NA 3650 SW-27D 0"-6" 03/25/20 NA 6,930 SW-27D 0"-6" 03/25/20 NA 6,240 SW-29A 0"-6" 03/25/20 NA 4,630 F1 SW-29D 0"-6" 03/25/20 NA 2,910 SW-30A 0"-6" 03/24/20 <td></td> <td></td> <td></td> <td></td> <td></td>					
SW-15D 0"- 6" 03/24/20 NA 7,020 SW-15D 2' 03/24/20 NA 3,590 4' 03/24/20 NA 1,690 SW-17A 0"- 6" 03/24/20 NA 1,21 SW-17B 0"- 6" 03/24/20 NA 419.J SW-17C 0"- 6" 03/24/20 NA 981.B SW-17D 0"- 6" 03/24/20 NA 981.6 SW-17D 0"- 6" 03/24/20 NA 366 SW-27A 0"- 6" 03/25/20 NA 3,520 SW-27B 0"- 6" 03/25/20 NA 6,930 SW-27D 0"- 6" 03/25/20 NA 6,930 SW-29A 0"- 6" 03/25/20 NA 6,240 SW-29B 0"- 6" 03/25/20 NA 4,630 F1 SW-29C 0"- 6" 03/25/20 NA 2,910 SW-30A 0"- 6" 03/24/20 NA 2,2800 SW-30B	SW-15C				
SW-15D 2' 03/24/20 NA 3,590 4' 03/24/20 NA 1,690 SW-17A 0"- 6" 03/24/20 NA 121 SW-17B 0"- 6" 03/24/20 NA 419 J SW-17D 0"- 6" 03/24/20 NA 419 J SW-17D 0"- 6" 03/24/20 NA 981 B SW-17D 0"- 6" 03/24/20 NA 981 B SW-17D 0"- 6" 03/24/20 NA 366 SW-27A 0"- 6" 03/25/20 NA 3,520 SW-27B 0"- 6" 03/25/20 NA 6,930 SW-27D 0"- 6" 03/25/20 NA 6,930 SW-29A 0"- 6" 03/25/20 NA 16,400 SW-29B 0"- 6" 03/25/20 NA 4,630 F1 SW-29C 0"- 6" 03/25/20 NA 2,910 SW-30A 0"- 6" 03/24/20 NA 2,830 SW-30B					
4' 03/24/20 NA 1,690 SW-17A 0"- 6" 03/24/20 NA 121 SW-17B 0"- 6" 03/24/20 NA 419 J SW-17C 0"- 6" 03/24/20 NA 419 J SW-17D 0"- 6" 03/24/20 NA 981 B SW-17D 0"- 6" 03/24/20 NA 981 C SW-27A 0"- 6" 03/25/20 NA 366 SW-27B 0"- 6" 03/25/20 NA 10,900 SW-27D 0"- 6" 03/25/20 NA 6,930 SW-27D 0"- 6" 03/25/20 NA 6,240 SW-29A 0"- 6" 03/25/20 NA 16,400 SW-29B 0"- 6" 03/25/20 NA 16,400 SW-29C 0"- 6" 03/25/20 NA 16,400 SW-29D 0"- 6" 03/25/20 NA 2,910 SW-30A 0"- 6" 03/24/20 NA 2,910 SW-30B	SW-15D	2'		NA	
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	SW-17C	0"- 6"	03/24/20	NA	981 B
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	SW-17D		03/24/20	NA	366
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	SW-27A		03/25/20	NA	3,520
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		0"- 6"			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $					
$\frac{\text{SW-29C}}{\text{1'6''}} \frac{03/25/20}{03/25/20} \text{NA} 4,630 \text{ F1}} \\ \frac{\text{SW-29D}}{\text{SW-30A}} \frac{0"-6"}{03/24/20} \text{NA} 22,910} \\ \frac{\text{SW-30B}}{\text{SW-30B}} \frac{0"-6"}{03/24/20} \text{NA} 22,800} \\ \frac{\text{SW-30B}}{\text{SW-30C}} \frac{0"-6"}{03/24/20} \text{NA} 13,400} \\ \frac{\text{SW-30C}}{\text{SW-30D}} \frac{0"-6"}{03/24/20} \text{NA} 8,200} \\ \frac{\text{SW-30D}}{\text{SW-30D}} \frac{0"-6"}{03/24/20} \text{NA} 8,200} \\ \frac{0-0.5'}{03/24/20} \text{NA} 4,730} \\ \frac{0-0.5'}{08/03/21} \text{NA} 2,830} \\ \frac{0.5'-2'}{2'-4'} 08/03/21} \text{NA} 2,220} \\ \frac{2'-4'}{2'-4'} 08/03/21} \text{NA} 2,290} \\ \frac{\text{SB-02}}{2} \frac{0-0.5'}{08/03/21} \text{NA} 32.2} \\ \end{array}$	SW-29B				
$\frac{1'6''}{SW-29D} = \frac{03/25/20}{0''-6''} = \frac{03/25/20}{NA} = \frac{4,630}{4,630} \frac{11}{11}$ $\frac{1'6''}{SW-29D} = \frac{03/25/20}{NA} = \frac{1}{2,910}$ $\frac{1'6''}{SW-30A} = \frac{0''-6''}{03/24/20} = \frac{03/24/20}{NA} = \frac{1}{1,400}$ $\frac{1}{SW-30C} = \frac{0''-6''}{03/24/20} = \frac{03/24/20}{NA} = \frac{1}{1,400}$ $\frac{1}{SW-30D} = \frac{0''-6''}{03/24/20} = \frac{03/24/20}{NA} = \frac{1}{1,400}$ $\frac{1}{SW-30D} = \frac{0''-6''}{03/24/20} = \frac{03/24/20}{NA} = \frac{1}{1,400}$ $\frac{1}{SW-30D} = \frac{0''-6''}{03/24/20} = \frac{1}{1,400}$ $\frac{1}{SB-01} = \frac{1}{1,400} = \frac{1}{1,400}$ $\frac{1}{SB-02} = \frac{1}{1,400} = \frac{1}{1,400} = \frac{1}{1,400}$ $\frac{1}{SB-02} = \frac{1}{1,400} = \frac{1}{1,400} = \frac{1}{1,400}$ $\frac{1}{SB-02} = \frac{1}{1,400} = \frac{1}{1,400} = \frac{1}{1,400} = \frac{1}{1,400}$ $\frac{1}{SB-02} = \frac{1}{1,400} = \frac$	SW-29C				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		-			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $					
$\frac{\text{SW-30C}}{\text{SW-30D}} = \frac{0"-6"}{0"-6"} = \frac{03/24/20}{03/24/20} = \frac{\text{NA}}{\text{NA}} = \frac{8,200}{4,730}$ $\frac{0"-6"}{03/24/20} = \frac{0.3/24/20}{\text{NA}} = \frac{4,730}{4,730}$ $\frac{0-0.5'}{08/03/21} = \frac{0.3}{1000} = \frac{0.5'-2'}{08/03/21} = \frac{0.3}{1000} = \frac{0.5'-2'}{2'-4'} = \frac{08/03/21}{08/03/21} = \frac{0.5}{1000} = \frac{0.5'-2'}{10000} = \frac{0.5'-2'}{08/03/21} = \frac{0.5'-2'}{1000000000000000000000000000000000000$	SW-30A			NA	
SW-30D 0"- 6" 03/24/20 NA 4,730 SB-01 0 - 0.5' 08/03/21 NA 2,830 0.5' - 2' 08/03/21 NA 2,220 2' - 4' 08/03/21 NA 2,660 4' - 6' 08/03/21 NA 2,290 SB-02 0 - 0.5' 08/03/21 NA 32.2	SW-30B		03/24/20	NA	13,400
SB-01 0 - 0.5' 08/03/21 NA 2,830 0.5' - 2' 08/03/21 NA 2,220 2' - 4' 08/03/21 NA 2,660 4' - 6' 08/03/21 NA 2,290 SB-02 0 - 0.5' 08/03/21 NA 32.2	SW-30C		03/24/20	NA	8,200
SB-01 0.5' - 2' 08/03/21 NA 2,220 2' - 4' 08/03/21 NA 2,660 4' - 6' 08/03/21 NA 2,290 SB-02 0 - 0.5' 08/03/21 NA 32.2	SW-30D	0"- 6"	03/24/20	NA	4,730
SB-01 2' - 4' 08/03/21 NA 2,660 4' - 6' 08/03/21 NA 2,290 SB-02 0 - 0.5' 08/03/21 NA 32.2		0 - 0.5'	08/03/21	NA	2,830
SB-01 2' - 4' 08/03/21 NA 2,660 4' - 6' 08/03/21 NA 2,290 SB-02 0 - 0.5' 08/03/21 NA 32.2	05.04	0.5' - 2'	08/03/21	NA	2,220
4' - 6' 08/03/21 NA 2,290 SB-02 0 - 0.5' 08/03/21 NA 32.2	SB-01				
SB-02 0 - 0.5' 08/03/21 NA 32.2					
38-02	AT	-			
1 0.5'-2' 08/03/21 NA 1 35.21	SB-02	0.5' - 2'	08/03/21	NA	35.2

Appendix D Cumualtive Soil Analytical Results Chevron Environmental Management Company SCB 5B to Candelario Polyline Eddy County, New Mexico

Sample I.D. No.	Sample Depth (feet bgs)	Date		Chloride
			(mg/Kg)	(mg/Kg)
NMAC SI			100	600
Un		00/00/04	mg/kg	mg/kg
CD 02	0 - 0.5'	08/03/21	NA	29.5 J
SB-03	0.5' - 2' 2' - 2.5'	08/03/21	NA NA	16.9 J 17.3 J
		08/03/21 08/03/21	NA	<10.2
	0 - 0.5' 0.5' - 2'	08/03/21	NA	26.3
SB-04	2' - 4'	08/03/21	NA	12.5 J
	4' - 6'	08/03/21	NA	77.3
	0 - 0.5'	08/03/21	NA	<10.3
	0.5' - 2'	08/03/21	NA	354
SB-05	2' - 4'	08/03/21	NA	242
	4' - 6'	08/03/21	NA	333
	0 - 0.5'	08/03/21	NA	221
	0.5' - 2'	08/03/21	NA	52
SB-06	2' - 4'	08/03/21	NA	220
	4' - 6'	08/03/21	NA	845
	0 - 0.5'	08/04/21	NA	<11.1
SB-07	0.5' - 2'	08/04/21	NA	<9.94
30-07	2' - 4'	08/04/21	NA	<9.59
	4' - 6'	08/04/21	NA	<9.51
	0 - 0.5'	08/04/21	NA	12 J
SB-08	0.5' - 2'	08/04/21	NA	26.7
02.00	2' - 4'	08/04/21	NA	24.4 J
	4' - 6'	08/04/21	NA	102
	0 - 0.5'	08/04/21	NA	23.6 J
SB-08D	0.5' - 2'	08/04/21	NA	<10.4
	2' - 4' 4' - 6'	08/04/21	NA	59.4
	-	08/04/21	NA	44.4
	0 - 0.5' 0.5' - 2'	08/04/21 08/04/21	NA NA	<11.7 <11.9
SB-09	2' - 4'	08/04/21	NA	<11.9
	<u>2 - 4</u> 4' - 6'	08/04/21	NA	16.4 J
	0 - 0.5'	08/04/21	NA	19.3 J
	0.5' - 2'	08/04/21	NA	19.4 J
SB-10	2' - 4'	08/04/21	NA	14.1 J
	4' - 6'	08/04/21	NA	9.96 J
	0 - 0.5'	08/04/21	NA	12.7 J
00.44	0.5' - 2'	08/04/21	NA	307
SB-11	2' - 4'	08/04/21	NA	98.5
	4' - 6'	08/04/21	NA	625
	0 - 0.5'	08/04/21	NA	11.5 J
SB-12	0.5' - 2'	08/04/21	NA	<11.2
50-12	2' - 4'	08/04/21	NA	34.8
	4' - 6'	08/04/21	NA	19.5 J
	0 - 0.5'	08/05/21	NA	22.4
SB-13	0.5' - 2'	08/05/21	NA	11.3 J
	2' - 4'	08/05/21	NA	42.3
	4' - 6'	08/05/21	NA	48.7
	0 - 0.5'	08/05/21	NA	<9.57
SB-14	0.5' - 2'	08/05/21	NA	17.6 J
	2' - 4'	08/05/21	NA	<9.29
	4' - 6'	08/05/21	NA	<9.33

Appendix D Cumualtive Soil Analytical Results Chevron Environmental Management Company SCB 5B to Candelario Polyline Eddy County, New Mexico

Sample I.D. No.	Sample Depth (feet bgs)	Date	Total TPH (mg/Kg)	Chloride (mg/Kg)
NMAC St	andards		100	600
Un			mg/kg	mg/kg
	0 - 0.5'	08/05/21	NA	31.5
00.45	0.5' - 2'	08/05/21	NA	16.1 J
SB-15	2' - 4'	08/05/21	NA	10 J
	4' - 6'	08/05/21	NA	16.5 J
SB-01-S-05-220711	0 - 0.5	07/11/22	NA	<10.4
SB-01-S-2-4-220711	2 - 4	07/11/22	NA	21.9 J
SB-01-S-4-6-220711	4 - 6	07/11/22	NA	30.6
SB-02-S-05-220711	0 - 0.5	07/11/22	NA	<10.3
SB-02-S-2-4-220711	2 - 4	07/11/22	NA	52.6
SB-02-S-4-6-220711	4 - 6	07/11/22	NA	114
SB-03-S-05-220711	0 - 0.5	07/11/22	NA	2,720
SB-03-S-2-4-220711	2 - 4	07/11/22	NA	3,250
SB-04-S-05-220711	0 - 0.5	07/11/22	NA	<10.4
SB-05-S-05-220711	0 - 0.5	07/11/22	NA	645
SB-06-S-05-220711	0 - 0.5	07/11/22	NA	460
SB-07-S-05-220711	0 - 0.5	07/11/22	NA	15.0 J P1
SB-08-S-05-220712	0 - 0.5	07/12/22	NA	<12.7
SB-09-S-05-220712	0 - 0.5	07/12/22	NA	38.4
SB-10-S-05-220712	0 - 0.5	07/12/22	NA	91.4
SB-11-S-05-220712	0 - 0.5	07/12/22	NA	<11.0
SB-12-S-05-220711	0 - 0.5	07/11/22	NA	68.7
SB-13-S-05-220712	0 - 0.5	07/12/22	NA	527
SB-14-S-05-220712	0 - 0.5	07/12/22	NA	819
SB-15-S-05-220712	0 - 0.5	07/12/22	NA	9,990
SB-16-S-05-220712	0 - 0.5	07/12/22	NA	2,140
SB-17-S-05-220712	0 - 0.5	07/12/22	NA	354
SB-18-S-05-220712	0 - 0.5	07/12/22	NA	10,700
SB-19-S-05-220713	0 - 0.5	07/13/22	NA	256
SB-20-S-05-220713	0 - 0.5	07/13/22	NA	143
SB-21-S-05-220713	0 - 0.5	07/13/22	NA	404
SB-22-S-05-220713	0 - 0.5	07/13/22	NA	490
SB-23-S-05-220713	0 - 0.5	07/13/22	NA	613
SB-24-S-05-220713	0 - 0.5	07/13/22	NA	539
SB-25-S-05-220714	0 - 0.5	07/14/22	NA	4,180
SB-26-S-05-220714	0 - 0.5	07/14/22	NA	41,000
SB-27-S-05-220714	0 - 0.5	07/14/22	NA	1,820
SB-28-S-05-220714	0 - 0.5	07/14/22	NA	12,700
SB-29-S-05-220714	0 - 0.5	07/14/22	NA	2,340
SB-30-S-05-220714	0 - 0.5	07/14/22	NA	2,800
SB-31-S-05-220714	0 - 0.5	07/14/22	NA	523
SB-32-S-05-220714	0 - 0.5	07/14/22	NA	186
SB-33-S-05-220714	0 - 0.5	07/14/22	NA	317
00-00-0-0-0-0-2207 14	0-0.5	01/14/22	11/4	317

Appendix D Cumualtive Soil Analytical Results Chevron Environmental Management Company SCB 5B to Candelario Polyline Eddy County, New Mexico

Sample I.D. No.	Sample Depth (feet bgs)	Date	Total TPH	Chloride
			(mg/Kg)	(mg/Kg)
NMAC St	100	600		
Uni	mg/kg	mg/kg		

Legend:

Bold/Italics = Analytes exceed NMAC Standards

'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)

mg/kg: milligram per kilogram

NMAC : New Mexico Administration Code

Total TPH: Total petroleum hydrocarbons [sum of gasoline range organics (C6-C10), diesel range organics (C10-C28), and C28-C36]

"'": Indicates one foot

" : Indicated inches

NA: Not analyzed

J: The compound was positively identified; however, the associated numerical value is an estimated concentration only.

B: The compound has been found in the sample as well as its associated blank, its presence in the sample may be a suspect.

F1: MS and/or MSD recovery exceeds control limits.

D: Duplicate Sample

P1: RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Notes:

1. Chloride were analyzed by USEPA Method 300.0

2. TPH were analyzed by USEPA Method 8015B

3. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)



Photograph Log

Chevron USA Inc New Mexico



Photo: 1

ARCADIS

Date: 07-11-2022

Description: Proposed locations

Location: Candelario Polyline

Direction: South



Photo: 2

Date: 07-11-2022

Description: Proposed locations

Location: Candelario Polyline

Direction: North

Chevron USA Inc New Mexico



Photo: 3

ARCADIS

Date: 07-11-2022

Description: Proposed locations

Location: Candelario Polyline

Direction: West



Photo: 4

Date: 07-11-2022

Description: Proposed locations

Location: Candelario Polyline

Direction: East

Chevron USA Inc New Mexico





Photo: 5

Date: 07-11-2022

Description: SB-01

Location: Candelario Polyline

Direction: South



Photo: 6

Date: 07-11-2022

Description: SB-02

Location: Candelario Polyline

Direction: South

Chevron USA Inc New Mexico





Photo: 7

Date: 07-11-2022

Description: SB-03

Location: Candelario Polyline

Direction: South



Photo: 8

Date: 07-11-2022

Description: SB-04

Location: Candelario Polyline

Direction: West

Chevron USA Inc New Mexico





Photo: 9

Date: 07-11-2022

Description: SB-05

Location: Candelario Polyline

Direction: South



Photo: 10

Date: 07-11-2022

Description: SB-07

Location: Candelario Polyline

Direction: South

Chevron USA Inc New Mexico





Photo: 11

Date: 07-11-2022

Description: SB-06

Location: Candelario Polyline

Direction: South



Photo: 12

Date: 07-11-2022

Description: SB-12

Location: Candelario Polyline

Direction: North

Chevron USA Inc New Mexico



Photo: 13

ARCADIS

Date: 07-12-2022

Description: SB-08

Location: Candelario Polyline

Direction: Southwest



Photo: 14

Date: 07-12-2022

Description: SB-09

Location: Candelario Polyline

Direction: Southwest

Chevron USA Inc New Mexico





Photo: 15

Date: 07-12-2022

Description: SB-10

Location: Candelario Polyline

Direction: Southwest



Photo: 16

Date: 07-12-2022

Description: SB-11

Location: Candelario Polyline

Direction: East

Chevron USA Inc New Mexico





Photo: 17

Date: 07-12-2022

Description: SB-13

Location: Candelario Polyline

Direction: Northeast



Photo: 18 Date: 07-12-2022

Description: SB-14

Location: Candelario Polyline

Direction: Northeast

Chevron USA Inc New Mexico





Photo: 19

Date: 07-12-2022

Description: SB-15

Location: Candelario Polyline

Direction: Southeast



Photo: 20

Date: 07-12-2022

Description: SB-16

Location: Candelario Polyline

Direction: West

Chevron USA Inc New Mexico





Photo: 21

Date: 07-12-2022

Description: Sb-17

Location: Candelario Polyline

Direction: South



Photo: 22

Date: 07-12-2022

Description: Sb-18

Location: Candelario Polyline

Direction: North



Chevron USA Inc New Mexico



Photo: 23

Date: 07-13-2022

Description: SB-19

Location: Candelario Polyline

Direction: South



Photo: 24

Date: 07-13-2022

Description: SB-20

Location: Candelario Polyline

Direction: South

Chevron USA Ir New Mexico





Photo: 25

Date: 07-13-2022

Description: SB-21

Location: Candelario Polyline

Direction: South



Photo: 26

Date: 07-13-2022

Description: SB-22

Location: Candelario Polyline

Direction: Southeast

Chevron USA Ir New Mexico



Photo: 27

ARCADIS

Date: 07-13-2022

Description: SB-23

Location: Candelario Polyline

Direction: South



Photo: 28

Date: 07-13-2022

Description: SB-24

Location: Candelario Polyline

Direction: West







Photo: 29

Date: 07-13-2022

Description: SB-25

Location: Candelario Polyline

Direction: North



Photo: 30

Date: 07-13-2022

Description: SB-26

Location: Candelario Polyline

Direction: North

Chevron USA Ir New Mexico





Photo: 31

Date: 07-13-2022

Description: SB-27

Location: Candelario Polyline

Direction: East



Photo: 32

Date: 07-13-2022

Description: SB-28

Location: Candelario Polyline

Direction: East

Chevron USA Inc New Mexico





Photo: 33

Date: 07-13-2022

Description: SB-29

Location: Candelario Polyline

Direction: East



Photo: 34

Date: 07-13-2022

Description: SB-30

Location: Candelario Polyline

Direction: Northeast

Chevron USA Ir New Mexico





Photo: 35

Date: 07-13-2022

Description: SB-31

Location: Candelario Polyline

Direction: North

Photo: 36

Date: 07-13-2022

Description: SB-32

Location: Candelario Polyline

Direction: North

Chevron USA Inc New Mexico



Photo: 37

ARCADIS

Date: 07-13-2022

Description: SB-33

Location: Candelario Polyline

Direction: North Arcadis U.S., Inc. 10205 Westheimer Road, Suite 800 Houston Texas 77042 Phone: 713 953 4800 Fax: 713 977 4620 www.arcadis.com

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

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

District III

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

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

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

CONDITIONS

Operator:	OGRID:
CHEVRON U S A INC	4323
6301 Deauville Blvd	Action Number:
Midland, TX 79706	179780
	Action Type:
	[C-141] Release Corrective Action (C-141)
CONDITIONS	

Created By	Condition	Condition Date
rhamlet	Thank you for the 2022 Soil Assessment Report. The report will be placed in the OCD Permitting Incident file for future reference. A remediation plan was approved for this incident on September 19th, 2019. Please refer to conditional approval and continue to remediate the site. Please contact the New Mexico OCD or the BLM If you have any questions.	5/24/2023

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Action 179780