Oil Conservation Division

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Incident ID	nAPP2208733407
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?		
Did this release impact groundwater or surface water?		
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.

- X Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- X Field data
- X Data table of soil contaminant concentration data
- \underline{X} Depth to water determination
- X Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- X Boring or excavation logs
- $\overline{\mathbf{X}}$ Photographs including date and GIS information
- X Topographic/Aerial maps
- $\overline{\mathbf{X}}$ 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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Page 1 of 290

Page 3

Received by OCD: 10/10/2	2022 8:04:48 AM			Page 2 of 290
101111 (-141			Incident ID	nAPP2208733407
Page 4	Oil Conservation Division	l	District RP	
			Facility ID	
			Application ID	
I hereby certify that the inforegulations all operators are public health or the enviror failed to adequately investi addition, OCD acceptance and/or regulations. Printed Name: Dale V Signature: Dale U	ormation given above is true and complete to th e required to report and/or file certain release no ument. The acceptance of a C-141 report by the gate and remediate contamination that pose a th of a C-141 report does not relieve the operator of Woodall	e best of my knowledge a otifications and perform co OCD does not relieve the reat to groundwater, surfa of responsibility for compl 	nd understand that purso prrective actions for rele e operator of liability sho ce water, human health liance with any other feo ofessional	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
email: dale.woodall	@dvn.com	Telephone: 57	5-748-1838	
OCD Only				
Received by: Joce	lyn Harimon	Date:10/	(10/2022	

Received by OCD: 10/10/2022 8:04:48 AM Form C-141 State of New Mexico

X Detailed description of proposed remediation technique

Oil Conservation Division

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

In aidant ID	A DD22007222407
Incluent ID	nAPP2208/3340/
District RP	
Facility ID	
Application ID	

Page 3 of 290

Remediation Plan

X Scaled sitemap with GPS coordinates showing delineation points X Estimated volume of material to be remediated X Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC X Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Dale Woodall Title: EHS Professional Signature: Dale Woodall Date: 10/10/2022 Telephone: 575-748-1838 dale.woodall@dvn.com email: **OCD Only** Jocelyn Harimon Date: 10/10/2022 Received by: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

Oil Conservation Division

Incident ID	nAPP2208733407
District RP	
Facility ID	
Application ID	

Page 4 of 290

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

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

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

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

 \mathbf{X} Description of remediation activities

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

Printed Name: Dale Woodall	Title:EHS Professional
Signature: Dale Woodall	Date: 10/10/2022
email: <u>dale.woodall@dvn.com</u>	Telephone: 575-748-1838
OCD Only	
Received by: Jocelyn Harimon	Date:
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.
Closure Approved by:	Date:10/26/2022
Printed Name: Jennifer Nobui	Title: Environmental Specialist A



July 19, 2022

Vertex Project #: 22E-01101

Spill Closure Report:	Gaucho Unit 6H CTB		
	Section 17, Township 22 South, Range 34 East		
	API: N/A		
	County: Lea		
	Incident Reports: nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP2201348579		
Prepared For:	Devon Energy Production Company		
	6488 Seven Rivers Highway		
	Artesia, New Mexico 88210		

New Mexico Oil Conservation Division – District 1 – Hobbs 1625 North French Drive Hobbs, New Mexico 88210

Devon Energy Production Company (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment for multiple releases that occurred at Gaucho Unit 6H CTB, incidents nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP2201348579 (hereafter referred to as "Gaucho"). Devon provided spill notifications to the New Mexico Oil Conservation District (NMOCD) District 1, via submission of initial C-141 Release Notifications (Attachment 1). This letter provides a description of the spill assessment and includes a request for spill closure. The spill area is located at N 32.386493, W -103.486060.

Background

The site is located approximately 15 miles southwest of Oil Center, New Mexico (Google Inc., 2022). The legal location for the site is Section 17, Township 22 South and Range 34 East in Lea County, New Mexico. The spill area is located on Bureau of Land Management (BLM) property. An aerial photograph and site schematic are included in Figures 1 and 2 (Attachment 2).

The *Geological Map of New Mexico* indicates the surface geology at Gaucho is comprised of Qep – eolian and piedmont deposits that include eolian sands interlaid with piedmont-slope deposits (New Mexico Bureau of Geology and Mineral Resources, 2022). The Natural Resources Conservation Service *Web Soil Survey* characterizes the soil at the site as Kermit soils and Dune land, characterized by fine sand. It tends to be excessively drained with low to very low runoff and low available moisture levels in the soil profile (United States Department of Agriculture, Natural Resources Conservation Service, 2022).

The surrounding landscape is associated with plains, hills, and dunes typical of elevations of 2,842 to 4,500 feet above sea level. The climate is semi-arid, with average annual precipitation ranging between 8 and 13 inches. Historically, the plant community was dominated by a mixture of grasses, shrubs and forbs. Sand bluestem and giant dropseed are the dominant grasses; sand shinnery oak and soapweed yucca are the dominant shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2022). Limited to no vegetation is allowed to grow on the vertex.ca

Devon Energy Production Company	2022 Spill Assessment and Closure
Gaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP2201	1348579 July 2022

compacted facility pad.

There is no surface water located on-site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 of the New Mexico Administrative Code (NMAC), is an intermittent stream, located 1 mile southeast of the site (United States Fish and Wildlife Service; National Wetlands Inventory, 2021). There are no continuously flowing watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features at Gaucho as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Incident Descriptions

nKJ1602628821

The first release occurred on January 22, 2016, due to a separator clamp being turned on while a leak was being repaired. The spill was reported on January 25, 2016, and involved the release of approximately 30 barrels (bbl.) of produced water on the pad site near the heater treater. Approximately 20 bbl. of free fluid was removed during initial spill clean-up.

nOY1727243107

The second release occurred on September 14, 2017, due to an oil tank running over. The spill was reported on September 14, 2017, and involved the release of approximately 30 bbl. of oil into the secondary lined containment. Approximately 30 bbl. of free fluid was removed during initial spill clean-up.

nAPP2201348579

The third release occurred on December 28, 2021, due to fluid running out of the tube from the heater. The spill was reported on January 12, 2022, and involved the release of approximately 7 bbl. into the secondary lined containment and outside of containment onto the engineered pad. Approximately 5 bbl. of free fluid was removed during initial spill clean-up.

nAPP2208733407

The fourth release occurred on March 25, 2022, due to high line pressure causing the oil dump to hang open sending gas to the oil tank. The spill was reported on March 28, 2022, involved the release of approximately 8 bbl. into the secondary lined containment and onto the engineered pad. Approximately 7 bbls. Of free fluid was removed during initial spill clean-up.

All releases were assessed through remediation efforts at the same time. The NMOCD C-141 Reports nKJ1602628821, nOY1727243107, nAPP2201348579, and nAPP2208733407 are included in Attachment 1. The characterization schematic is presented on Figure 1 (Attachment 2). Field screening and laboratory analysis from the initial site visit are presented in Table 2 (Attachment 3). The Daily Field Report (DFRs), site photographs and Daily Soil Sampling Reports (DSSs) are included in Attachment 4.

Closure Criteria Determination

The depth to groundwater was determined using information from the United States Geological Survey National Water Information Mapping System and Office of the State Engineers Water Rights Database. A 0.5-mile search radius was

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Devon Energy Production Company	2022	Spill Assessment and Closure
Gaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821, nAF	PP2201348579	July 2022

used to determine groundwater depth. The closest recorded depth to groundwater was determined to be 605 feet below ground surface (bgs) and 0.8 miles from Gaucho (New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System, 2022). Documentation used in Closure Criteria Determination research is included in Attachment 5.

Closure Criteria Worksheet			
Site Name: Gaucho Unit 6H CTB			
Spil	l Coordinates:	X: 32.3862648	Y: -103.4856415
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	605	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	5,309	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	15,378	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	18,491	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	4,225	feet
	ii) Within 1000 feet of any fresh water well or spring	4,225	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	8,106	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
10	Within a 100-year Floodplain	Undetermined	year
11	Soil Type	Fine sand	
12	Ecological Classification	Sandhills	
13	Geology	Eolian and piedmont deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

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Devon Energy Production Company	2022 Spill Assessment and Closure
Gaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP220134	348579 July 2022

Based on data included in the closure criteria determination worksheet, the release at Gaucho is not subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 of the New Mexico Administrative Code (NMAC; New Mexico Oil Conservation Division, 2018). The nearest depth to groundwater reference is more than 0.5 miles from the site; therefore, the closure criteria for the incident assume the most stringent conditions (depth to groundwater <50 feet bgs) and are determined to be associated with the following constituent concentration limits as presented in Table 1.

Table 1. Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit	
	Chloride	600 mg/kg	
	TPH (GRO+DRO+MRO)	100 mg/kg	
< 50 feet	BTEX	50 mg/kg	
	Benzene	10 mg/kg	

¹Total dissolved solids (TDS)

²Total petroleum hydrocarbons (TPH) = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO) ³Benzene, toluene, ethylbenzene, and xylenes (BTEX)

Remedial Actions Taken

An initial site inspection of the spill area was completed on May 18, 2022, which identified the areas of the spill specified in the initial C-141 Reports and estimated the approximate impacted area. The impacted area near the tank battery containment was determined to be approximately 18 feet long and 8 feet wide, and approximately 73 feet long and 70 feet wide near the heater treater; the total affected area for the release area was determined to be 82 square feet for the area near the tank battery containment and 1,953 square feet for the release area near the heater treater. Laboratory results from initial characterization are provided in Table 2 and Table 3 (Attachment 3). The DFRs and DSSs associated with the site inspections are included in Attachment 4. Aerial site schematics are included on Figures 1 and 2 (Attachment 2).

Remediation efforts began on June 16, 2022, and were completed on July 8, 2022. Vertex personnel supervised the excavation of impacted soils. Field screening was completed for the guidance of excavation and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and EC Meter (chlorides). Field screening results were used to identify areas requiring further remediation from those areas showing concentrations below determined closure criteria levels. Soils were removed to a depth of 0.5 feet bgs, 4 feet bgs, 5 feet bgs, and 6 feet bgs in the excavation area near the heater treater and a depth of 4 feet bgs in the excavation near the tank battery containment. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. Field screening results are presented in Attachment 3, as well as in the DFRs in Attachment 4.

Notification that a liner inspection and confirmation sampling was scheduled to be completed was provided to the NMOCD on June 17, 2022 (Attachment 6). Visual observation of the liner was completed on all sides and the base of the containment, around equipment, and of all seams in the liner. Confirmatory composite samples were collected from

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Devon Energy Production Company	2022 9	pill Assessment and Closure
Gaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821	, nAPP2201348579	July 2022

the base and walls of the excavation in 200 square foot increments. A total of 16 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Hall Environmental Analysis Laboratory under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Tables 4 and 5 (Attachment 3) and the laboratory data report is included in Attachment 7. All confirmatory samples collected and analyzed were below closure criteria for the site. As evidenced in the DFR (Attachment 3) liner integrity was confirmed.

Notification that additional confirmation sampling was scheduled to be completed was provided to the NMOCD on July 5, 2022 (Attachment 6). Additional confirmatory samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 13 additional samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Hall Environmental Analysis Laboratory under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Tables 4 and 5 (Attachment 3) and the laboratory data report is included in Attachment 7. All confirmatory samples collected and analyzed were below closure criteria for the site. An aerial view of excavation and confirmatory sample locations are presented in Figures 3 and 4 (Attachment 2).

Closure Request

The spill area was fully delineated, remediated and backfilled with local soils by July 8, 2022. Confirmatory Sample and Liner Inspection Notification emails are included in Attachment 6. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations "under 50 feet to groundwater". Based on these findings, Devon Energy Production Company requests that this spill be closed.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 575.361.9880 or mpeppin@vertex.ca.

Monica Peppin PROJECT MANAGER, REPORTING

July 19, 2022

Date

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Devon Energy Production Company2022 Spill Assessment and ClosureGaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP2201348579July 2022

Attachments

- Attachment 1. NMOCD C-141 Release Notifications
- Attachment 2. Figures
- Attachment 3. Tables
- Attachment 4. Daily Field Report(s) with Photographs and Daily Soil Sampling Report(s)
- Attachment 5. Closure Criteria for Soils Impacted by a Release Research Determination Documentation
- Attachment 6. Confirmatory Samples and Liner Inspection Notification
- Attachment 7. Laboratory Data Reports and Chain of Custody Forms

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Devon Energy Production Company	2022 Spill Assessment and Closure
Gaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP22013	348579 July 2022

References

- Google Inc. (2022). *Google Earth Pro (Version 7.3.4)* [Software]. Retrieved from http://www.google.com/earth on March 1, 2022.
- New Mexico Bureau of Geology and Mineral Resources. (2022). *Interactive Geologic Map*. Retrieved from http://geoinfo.nmt.edu.
- New Mexico Energy, Minerals and Natural Resources Department. (2022). *Coal Mine Resources in New Mexico*. Retrieved from http://www.emnrd.state.nm.us/MMD/gismapminedata.html
- New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2022a). Water Column/Average Depth to Water Report. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html.
- New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2022b). Point of Diversion Location Report. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html.
- New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2022c). *Well Log/Meter Information Report*. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html
- New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.
- United States Department of Agriculture, Natural Resources Conservation Service. (2022). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.
- United States Department of Homeland Security, FEMA Flood Map Service Center. (2020). *Flood Map Number* 35025C1625D. Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20 mexico#searchresultsanchor.
- United States Department of the Interior, Bureau of Land Management. (2018). *CFO Karst Public*. https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html.
- United States Fish and Wildlife Service. (2022). *National Wetlands Inventory*. Retrieved from https://www.fws.gov/wetlands/data/Mapper.html.

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Devon Energy Production Company	2022 Spill Assessment and Closure
Gaucho Unit 6H CTB, nOY1727243107, nAPP2208733407, nKJ1602628821, nAPP220	J1348579 July 2022

Limitations

This report has been prepared for the sole benefit of Devon Energy Production Company. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and Bureau of Land Management, without the express written consent of Vertex Resource Services Inc. (Vertex) and Devon Energy Production Company. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

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ATTACHMENT 1

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

)

Volume/Weight Recovered (provide units)

Incident ID	nKJ1602628821
District RP	1RP-4116
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137	
Contact Name Dale Woodall	Contact Telephone 575-748-1838	
Contact email dale.woodall@dvn.com	Incident # (assigned by OCD) nKJ1602628821	
Contact mailing address 6488 Seven Rivers Hwy Artesia, NM 88210		

Location of Release Source

Latitude 32.3862562

Longitude -103.4856777 (NAD 83 in decimal degrees to 5 decimal places)

Site Name Gaucho Unit 6H	Site Type Gas Well
Date Release Discovered 01/22/2016	API# (<i>if applicable</i>) 30-025-34789

Unit Letter	Section	Township	Range	County
Р	17	22S	34E	Lea

Surface Owner: State X Federal Tribal Private (Name: _

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Released (bbls) Volume Recovered (bbls) X Produced Water Volume Released (bbls) Volume Recovered (bbls) 20 bbls 30 bbls Is the concentration of dissolved chloride in the Yes No produced water >10,000 mg/l? Condensate Volume Released (bbls) Volume Recovered (bbls) Natural Gas Volume Released (Mcf) Volume Recovered (Mcf) Other (describe) Volume/Weight Released (provide units)

Cause of Release

While repairing leak on separator clamp was turned to open position resulting in produced water release. Clamp was turned to closed position to prevent further release. New clamp and vertical ball valve were installed. Approximate size of affected area 60X80.

Daga	^
гаge	4

Oil Conservation Division

Incident ID	nKJ1602628821
District RP	1RP-4116
Facility ID	
Application ID	

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? >25 bbls	
X Yes 🗌 No		
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?		
Kelly Miller via email to BLM 1/25/16 7:45 AM and OCD 1/25/16 11:25 AM		

Initial Response

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

 $\overline{\mathbf{X}}$ The source of the release has been stopped.

 $\overline{\mathbf{X}}$ The impacted area has been secured to protect human health and the environment.

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

X 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: Dale Woodall	Title: EHS Professional
Signature:	Date:
email:dale.woodall@dvn.com	Telephone: <u>575-748-1838</u>
OCD Only	
Received by:	Date:
Received by:	Date:

Incident ID	nKJ1602628821
District RP	1RP-4116
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</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 X 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 X 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 X 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.

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

Page 3

Received by OCD: 10/10/20	22 8:04:48 AM			Page 17 of 290
101111 (-141			Incident ID	nKJ1602628821
Page 4	Oil Conservation Division		District RP	1RP-4116
			Facility ID	
			Application ID	
I hereby certify that the infor regulations all operators are r public health or the environm failed to adequately investiga addition, OCD acceptance of and/or regulations. Printed Name: <u>Dale W</u> Signature: <u>Dale W</u> email: <u>dale.woodall@dt</u>	mation given above is true and complete to the required to report and/or file certain release not nent. The acceptance of a C-141 report by the ite and remediate contamination that pose a thr 'a C-141 report does not relieve the operator o <u>oodall</u> vn.com	e best of my knowledge a tifications and perform of OCD does not relieve the reat to groundwater, surfa f responsibility for comp 	nd understand that purs orrective actions for rele e operator of liability sh ace water, human health liance with any other fe Cessional	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only				
Received by:		Date:		

Received by OCD: 10/10/2022 8:04:48 AM Form C-141 State of New Mexico

Oil Conservation Division

Incident ID	nKJ1602628821
District RP	1RP-4116
Facility ID	
Application ID	

Remediation Plan

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

X Detailed description of proposed remediation technique

X Scaled sitemap with GPS coordinates showing delineation points

 $\overline{\mathbf{X}}$ Estimated volume of material to be remediated

Page 5

X Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

X 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 con	firmed as part of any request for deferral of remediation.			
Contamination must be in areas immediately under or around prodeconstruction.	oduction equipment where remediation could cause a major facility			
Extents of contamination must be fully delineated.				
Contamination does not cause an imminent risk to human health	, the environment, or groundwater.			
I hereby certify that the information given above is true and complet rules and regulations all operators are required to report and/or file c which may endanger public health or the environment. The acceptan liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local la	e to the best of my knowledge and understand that pursuant to OCD ertain release notifications and perform corrective actions for releases nee of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, neceptance of a C-141 report does not relieve the operator of aws and/or regulations.			
Printed Name: Dale Woodall	Title: EHS Professional			
Signature: Dale Woodall	Date: <u>10/10/2022</u>			
email: <u>dale.woodall@dvn.com</u> Telephone: <u>575-748-1838</u>				
OCD Only				
Received by:	Date:			
Approved Approved with Attached Conditions of A	Approval Denied Deferral Approved			
Signature:	Date:			

•

Page 6

Oil Conservation Division

Incident ID	nKJ1602628821
District RP	1RP-4116
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

 \overline{X} A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

X Description of remediation activities

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

Printed Name: Dale Woodall	Title:EHS Professional
Signature: Dale Woodall	Date: <u>10/10/2022</u>
email:dale.woodall@dvn.com	Telephone:575-748-1838
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible /or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

State of New Mexico **Energy Minerals and Natural Resources**

Form C-141 Revised August 8, 2011

Page 20 of 290

Oil Conservation Division 1220 South St. Francis Dr.

1220 S. St. Fran	cis Dr., Santa	a Fe, NM 8750	5	Sa	inta Fe	e, NM 875	505				
	Release Notification and Corrective Action										
						OPERA	TOR		🛛 Initi	al Report 🛛 🖂	Final Repo
Name of Co	o mpany D	evon Energ	y Product	ion Company	(Contact H	ubert Perry, Pro	duction l	Foreman		
Address 64	88 Seven	Rivers Hwy	Artesia, l	NM 88210	r	Telephone	No.575-513-963	37			
Facility Na	me Gauch	no Unit 6H				Facility Ty	pe Oil				
Surface Ov	vner Feder	ral		Mineral	Owner	Federal			API No	30-025-34789	
				LOCA	TION	N OF REI	LEASE				
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/W	ast/West Line County		
Р	17	228	34E	660	, second s	South	660	Ea	ast	Lea	
			Latitude	: 32.3862648			Longitude:-102	3.485641	15		
				NAT	URE	OF REL	EASE				
Type of Rele	ease Oil			1 11 1		Volume of	f Release 30BBL	S	Volume I	Recovered 30BB	LS
Source of Re Oil Tank	elease					Date and 1 9/14/2017	Hour of Occurre @ 5:00 AM	nce	Date and 9/14/2017	Hour of Discove	ry
Was Immed	iate Notice	Given?	a			If YES, To	o Whom?				
		X	Yes] No 📋 Not Re	equired	OCD-Oliv	1a Yu Iv Tucker				
By Whom?	Mike Shoe	maker, EHS	Profession	al		Date and	Hour				
J		···· , ···				BLM- She	lly 9/14/2017 @ 1	11:05 PM			
XX 7 XX 7 4	D	1 10				OCD- Oliv	/ia Yu 9/14/2017	@ 11:08	PM		
was a wate	rcourse Re	ached?	Yes 🖂	No		If YES, V	olume Impacting	g the Wat	ercourse		
If a Wataraa	The second se	mnostad Da	aniha Ful	-		H REG	CEIVED				
N/A	ourse was I	inpacted, De	scribe rui	ly.*		By C)livia Vu a	+ 11-5	6 am	Son 20 20	17
Describe Ca	use of Prob	olem and Rei	nedial Ac	tion Taken.*		by C			o ani,	Sep 23, 20	
While comple	eting routin	e route the lea	ase operato	or found the oil ta	nk runniı	ng over revie	wed Cygnet and l	had not re	ceived an	y alarms. The ope	erator
switched out truck was dis	of that tank	and into the fluit the fluit into th	next tank t uids.	o stop any further	release.	The oil stor	age tank had over	riowed in	ito the line	ed containment. A	vacuum
	parenea to i										
	4.00	1.01									
Describe Are	ea Affected	of oil was re	p Action '	l' aken. * result of the oil t	onk runn	ing over Ar	provimately 30B	BISofoi	il was reco	overed via the dist	natched
vacuum truck	x. All fluid	staved inside	the lined S	SPCC containmen	t. Once	fluids were r	removed the liner	was visi	ually inst	pected by Devon	i field staff
for any pinh	oles or pu	nctures and	none wer	e found. Based	on this i	nspection th	here is no evider	nce that	the spill f	fluids left contai	nment.
• 1						1			1		
I hereby certi	fy that the	information a	iven above	is true and comp	lete to th	he best of my	knowledge and u	Inderstand	that nurs	uant to NMOCD	rules and
regulations al	ll operators	are required t	to report a	nd/or file certain r	elease no	otifications a	nd perform correct	tive actio	ons for rele	eases which may e	endanger
public health	or the envi	ronment. The	e acceptan	ce of a C-141 repo	ort by the	e NMOCD m	arked as "Final R	eport" do	es not reli	eve the operator of	of liability
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health											
or the environ	or local lay	adition, NM(ws and/or reg	JCD accept	otance of a C-141	report do	bes not reliev	e the operator of	responsib	nity for co	ompliance with an	y other
icuciui, state,							OIL CON	SERV	ATION	DIVISION	
Signature: Dana DeLaRosa											

Signatures Dave De la Para	<u>OIL CONSERVATION I</u>	<u>OIL CONSERVATION DIVISION</u>			
Signature: Dana Deza Kosa		1			
Printed Name: Dana DeLaRosa	Approved by Environmental Specialist:				
Title: Field Admin Support	Approval Date: 9/29/2017 Expiration D	Vate:			
E-mail Address: dana.delarosa@dvn.com	Conditions of Approval:	Attached			
Date: 09/27/17 Phone: 575.746.5594	Please inspect liner in question. Provide				
* Attach Additional Sheets If Necessary	NMOCD with a concise report of the				
	inspection with affirmation the liner has	nOY1727243107			
Released to Imaging: 10/26/2022 1:55:11 PM	and will continue to contain liquids.				

Released to Imaging: 10/26/2022 1:55:11 PM

Page 2

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	>25 bbls
X Yes 🗌 No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Mike Shoemaker via er	mail to Shelly 9/14/17 @ 11:05 PM and Olivia 11:08 PM

Initial Response

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

 $\overline{\mathbf{X}}$ The source of the release has been stopped.

 $\overline{\mathbf{X}}$ The impacted area has been secured to protect human health and the environment.

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

X 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: Dale Woodall	Title: EHS Professional
Signature:	Date:
email:dale.woodall@dvn.com	Telephone: <u>575-748-1838</u>
OCD Only	
Received by:	Date:

Application ID

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</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 X 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 X 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 X 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.

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

Page 3

Received by OCD: 10/1	10/2022 8:04:48 AM			Page 23 of 290
roim C-141			Incident ID	nOY1727243107
Page 4	Oil Conservation Division		District RP	
			Facility ID	
			Application ID	
I hereby certify that the regulations all operators public health or the envi failed to adequately invo addition, OCD acceptan and/or regulations. Printed Name: Signature: email: dale.woodal	information given above is true and complete to the s are required to report and/or file certain release not ironment. The acceptance of a C-141 report by the o estigate and remediate contamination that pose a thr nee of a C-141 report does not relieve the operator of le Woodall Woodall Il@dvn.com	best of my knowledge iffications and perform of OCD does not relieve th eat to groundwater, surf f responsibility for comp 	and understand that purs corrective actions for rele te operator of liability sh face water, human health pliance with any other fe fessional -748-1838	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only				
Received by:		Date:		

Received by OCD: 10/10/2022 8:04:48 AM Form C-141 State of New Mexico

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	nOY1727243107
District RP	
Facility ID	
Application ID	

Remediation Plan

X Detailed description of proposed remediation technique X Scaled sitemap with GPS coordinates showing delineation points $\overline{\mathbf{X}}$ Estimated volume of material to be remediated X Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC X Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Dale Woodall Title: EHS Professional Signature: Dale Woodall ____ Date: _10/10/2022 Telephone: 575-748-1838 email: dale.woodall@dvn.com OCD Only Date: Received by: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

Page 5

Page 6

Oil Conservation Division

Incident ID	nOY1727243107
District RP	
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

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

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

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

X Description of remediation activities

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

Printed Name: Dale Woodall	Title: EHS Professional	
Signature: Dale Woodall	Date: <u>10/10/2022</u>	
email:dale.woodall@dvn.com	Telephone: <u>575-748-1838</u>	
<u>OCD Only</u>		
Received by:	Date:	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Closure Approved by:	Date:	
Printed Name:	Title:	

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

Page 26cof 290

Revised August 24, 2018 Submit to appropriate OCD District office

)

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude	

(NAD 83 in decimal degrees to 5 decimal places)

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

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

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

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

Page	2
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Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

If YES, for what reason(s) does the responsible party consider this a major release?
otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

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:	Title:
Signature: Kendra DeHoyos	Date:
email:	Telephone:
OCD Only	
Received by: Ramona Marcus	Date: <u>1/14/2022</u>

Incident ID	nAPP2201348579
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</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 X 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 X 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.

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

Page 3

Received by OCD: 10/10/20	22 8:04:48 AM				Page 29 of 290
roim C-141				Incident ID	nAPP2201348579
Page 4	Oil Conservation Division			District RP	
				Facility ID	
				Application ID	
I hereby certify that the infor regulations all operators are r public health or the environm failed to adequately investiga addition, OCD acceptance of and/or regulations. Printed Name: <u>Dale W</u> Signature: <u>Dale W</u> email: <u>dale.woodall@c</u>	mation given above is true and complete to the equired to report and/or file certain release not ent. The acceptance of a C-141 report by the tte and remediate contamination that pose a thr a C-141 report does not relieve the operator o coodall dvn.com	e best of my k tifications and OCD does no reat to ground f responsibili 	cnowledge a d perform co ot relieve the lwater, surfa ty for comp <u>EHS Pro</u> 0/10/2022 e: <u>575-</u>	nd understand that purs prrective actions for rele e operator of liability sh ace water, human health liance with any other fe ofessional 748-1838	uant to OCD rules and eases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only					
Received by:		D	ate:		

Received by OCD: 10/10/2022 8:04:48 AM Form C-141 State of New Mexico

Oil Conservation Division

Incident ID	nAPP2201348579
District RP	
Facility ID	
Application ID	

Remediation Plan

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

X Detailed description of proposed remediation technique

Scaled sitemap with GPS coordinates showing delineation points

 $\overline{\mathbf{X}}$ Estimated volume of material to be remediated

Page 5

X Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

X Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

<u>Deferral Requests Only</u> : 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 prodeconstruction.	oduction equipment where remediation could cause a major facility	
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health,	the environment, or groundwater.	
I hereby certify that the information given above is true and complete rules and regulations all operators are required to report and/or file ce which may endanger public health or the environment. The acceptan liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local la	e to the best of my knowledge and understand that pursuant to OCD ertain release notifications and perform corrective actions for releases ace of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, cceptance of a C-141 report does not relieve the operator of ws and/or regulations.	
Printed Name: Dale Woodall	Title:EHS Professional	
Signature: Dale Woodall	Date: <u>10/10/2022</u>	
email:dale.woodall@dvn.com	Telephone: <u>575-748-1838</u>	
OCD Only		
Received by:	Date:	
Approved Approved with Attached Conditions of A	Approval Denied Deferral Approved	
Signature:	Date:	

Page 6

Oil Conservation Division

Incident ID	nAPP2201348579
District RP	
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

 \overline{X} A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

 \mathbf{X} Description of remediation activities

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

Printed Name: Dale Woodall	Title: EHS Professional
Signature: Dale Woodall	Date:10/10/2022
email: <u>dale.woodall@dvn.com</u>	Telephone:575-748-1838
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

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

Page 32 of 290

Revised August 24, 2018 Submit to appropriate OCD District office

)

Incident ID	nAPP2208733407
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Dale Woodall	Contact Telephone 575-748-1838
Contact email dale.woodall@dvn.com	Incident # (assigned by OCD) nAPP2208733407
Contact mailing address 6488 Seven Rivers Hwy Artesia, NM 88	210

Location of Release Source

Latitude

32.3862562

Longitude -103.4856777 (NAD 83 in decimal degrees to 5 decimal places)

Site Name Gaucho Unit 6	Site Type
Date Release Discovered 03/25/2022	API# (<i>if applicable</i>) 30-025-34789

Unit Letter	Section	Township	Range	County
Р	17	228	34E	Lea

Surface Owner: State X Federal Tribal Private (Name: _

Nature and Volume of Release

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

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
X Produced Water	Volume Released (bbls) 8 bbls	Volume Recovered (bbls) 7 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	X 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

Equipment failure caused by high line pressure on well and the oil dump hung open sending gas to oil tank. Produced water was released to the lined containment and to the pad. Leak was stopped. LO went to make sure dumps started working properly and then called trucks to clean up spill. Estimated that 15 bbls were released. 7 bbls recovered.

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?
Yes X No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
,	

Initial Response

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

 \mathbf{X} The source of the release has been stopped.

 \mathbf{X} The impacted area has been secured to protect human health and the environment.

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

X 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.

Title: EHS Professional
Date:
Telephone:575-748-1838
Date:
-

Page 3

Oil Conservation Division

	Page 34 of 29
Incident ID	nAPP2208733407
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?		
Did this release impact groundwater or surface water?		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?		
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?		
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No	
Are the lateral extents of the release overlying a subsurface mine?	Yes X 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?		
Did the release impact areas not on an exploration, development, production, or storage site?		

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.

- X Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- X Field data
- X Data table of soil contaminant concentration data
- \mathbf{X} Depth to water determination
- \overline{X} Determination of water sources and significant watercourses within $\frac{1}{2}$ -mile of the lateral extents of the release
- X Boring or excavation logs
- $\overline{\mathbf{X}}$ Photographs including date and GIS information
- X Topographic/Aerial maps
- $\overline{\mathbf{X}}$ Laboratory data including chain of custody

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

Received by OCD: 10/10/202	22 8:04:48 AM			Page 35 of 290
roim C-141			Incident ID	nAPP2208733407
Page 4	Oil Conservation Division	on Division	District RP	
			Facility ID	
			Application ID	
I hereby certify that the inform regulations all operators are re public health or the environmed failed to adequately investigat addition, OCD acceptance of a and/or regulations. Printed Name: <u>Dale Wo</u> Signature: <u>Dale Wo</u> email: <u>dale.woodall@c</u>	nation given above is true and complete to the equired to report and/or file certain release no ent. The acceptance of a C-141 report by the e and remediate contamination that pose a th a C-141 report does not relieve the operator of odall odall odall	e best of my knowledge a tifications and perform c OCD does not relieve th reat to groundwater, surf of responsibility for comp 	and understand that purs orrective actions for rele e operator of liability sh ace water, human health liance with any other fe rofessional 	auant to OCD rules and eases which may endanger ould their operations have a or the environment. In deral, state, or local laws
OCD Only				
Received by:		Date:		

Received by OCD: 10/10/2022 8:04:48 AM Form C-141 State of New Mexico

Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	nAPP2208733407
District RP	
Facility ID	
Application ID	

Remediation Plan

X Detailed description of proposed remediation technique X Scaled sitemap with GPS coordinates showing delineation points X Estimated volume of material to be remediated X Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC X Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Dale Woodall Title: EHS Professional Signature: Dale Woodall Date: _10/10/2022_ email: dale.woodall@dvn.com Telephone: 575-748-1838 OCD Only Date: Received by: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

Page 5
Page 6

Oil Conservation Division

	Page 37 of 29
Incident ID	nAPP2208733407
District RP	
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u>: Each of the following items must be included in the closure report.

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

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

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

 \mathbf{X} Description of remediation activities

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

Printed Name: Dale Woodall	Title: EHS Professional
Signature: Dale Woodall	Date: <u>10/10/2022</u>
email: <u>dale.woodall@dvn.com</u>	Telephone:575-748-1838
OCD Only	
Received by:	Date:
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws and	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.
Closure Approved by:	Date:
Printed Name:	Title:

ATTACHMENT 2

Received by OCD: 10/10/2022 8:04:48 AM





Released to Imaging: 10/26/2022 1:55:11 PM

Received by OCD: 10/10/2022 8:04:48 AM



Released to Imaging: 10/26/2022 1:55:11 PM

nAPP2208733407

o Unit 6H CTB/Figu

01101



ATTACHMENT 3

Client Name: Devon Energy Production Company Site Name: Gaucho Unit 6 CTB NMOCD Tracking #: nAPP2208733407 Project #: 22E-01101 Lab Report: 2205058

Table 2. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs													
9	Sample Descrip	otion	Fi	eld Screeni	ng			Petrole	eum Hydroo	carbons			
			s			Vol	Volatile Extractable					Inorganic	
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compound (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH22-01	0	4/29/2022	0	16	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-01	2	4/29/2022	0	8	0	-	-	-	-	-	-	-	-
BH22-02	0	4/29/2022	0	20	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-02	2	4/29/2022	0	9	0	-	-	-	-	-	-	-	-
BH22-03	0	4/29/2022	0	42	178	ND	ND	ND	ND	ND	ND	ND	ND
BH22-03	2	4/29/2022	0	21	0	-	-	-	-	-	-	-	-
BH22-04	0	4/29/2022	0	627	1,187	ND	53.6	1300	18000	5400	19300	24700	ND
BH22-04	2	4/29/2022	0	74	1,101	-	-	-	-	-	-	-	-
BH22-04	4	4/29/2022	0	329	168	ND	ND	ND	110	ND	110	110	ND
BH22-04	6	4/29/2022	0	257	0	-	-	-	-	-	-	-	-
BH22-04	8	4/29/2022	0	40	0	ND	ND	ND	ND	ND	ND	ND	ND

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)



Client Name: Devon Energy Production Company Site Name: Gaucho Unit 6 NMOCD Tracking #: nAPP2201348579/NKJ1602628821 Project #: 22E-01101 Lab Reports: 2204C83, 2204D50

	Table	3. Initial Characte	erization S	ample Fie	ld Screen	een and Laboratory Results - Depth to Groundwater <50 feet bgs						-	
	Sample Descrip	otion	Fi	eld Screeni	ng			Petrole	um Hydrod	arbons			
			ş			Vol	atile			Extractable			Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounc (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH22-01	0	4/27/2022	0	407	96	-	-	-	-	-	-	-	-
BH22-01	2	4/27/2022	0	34	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-02	0	4/27/2022	0	-	1,007	-	-	-	-	-	-	-	-
BH22-02	2	4/27/2022	0	32	70	-	-	-	-	-	-	-	-
BH22-03	0	4/27/2022	0	127	282	ND	ND	ND	12	ND	12	12	96
BH22-03	2	4/27/2022	0	38	0	-	-	-	-	-	-	-	-
BH22-04	0	4/27/2022	0	-	2,427	-	-	-	-	-	-	-	-
BH22-04	2	4/27/2022	0	37	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-05	0	4/27/2022	0	1,040	0	-	-	-	-	-	-	-	-
BH22-05	2	4/27/2022	0	6	0	-	-	-	-	-	-	-	-
BH22-06	0	4/27/2022	0	1,520	4	-	-	-	-	-	-	-	-
BH22-06	2	4/27/2022	0	25	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-07	0	4/27/2022	0	137	0	ND	ND	ND	15	ND	15	15	63
BH22-08	0	4/27/2022	0	-	842	-	-	-	-	-	-	-	-
BH22-08	2	4/28/2022	0	58	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-09	0	4/27/2022	0	1,260	0	-	-	-	-	-	-	-	-
BH22-09	2	4/28/2022	0	70	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-10	0	4/27/2022	0	1,340	264	-	-	-	-	-	-	-	-
BH22-10	2	4/28/2022	0	48	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-11	0	4/27/2022	0	106	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-12	0	4/28/2022	0	27	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-13	0	4/28/2022	0	87	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-14	0	4/28/2022	0	69	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-15	0	4/28/2022	0	1,248	0	ND	0.36	120	1100	390	1220	1610	ND
BH22-15	3	4/28/2022	0	490	0	0.16	16.86	980	3600	950	4580	5530	120
BH22-15	6	4/28/2022	0	97	105	ND	ND	ND	ND	ND	ND	ND	ND
BH22-16	0	4/28/2022	0	-	1,122	ND	ND	ND	390	210	390	600	370
BH22-16	2	4/28/2022	0	627	0	-	-	-	-	-	-	-	-
BH22-16	4	4/28/2022	0	524	0	-	-	-	-	-	-	-	-
BH22-16	6	4/28/2022	0	60	0	ND	ND	ND	ND	ND	ND	ND	ND
BH22-17	0	4/28/2022	0	-	2,169	ND	1.42	24	5900	3400	5924	9324	3500
BH22-17	3	4/28/2022	0	-	584	ND	ND	ND	380	210	380	590	440
BH22-17	6	4/28/2022	0	50	0	ND	ND	ND	ND	ND	ND	ND	ND

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)



Client Name: Devon Energy Production Company Site Name: Gaucho Unit 6H CTB NMOCD Tracking #: nOY1727243107, nAPP2201348579 Project #: 22E-01101 Lab Reports:2206D53, 2207428

Table 4. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs													
9	Sample Descrip	otion	Fi	eld Screeni	ng	Petroleum Hydrocarbons							
			s			Vol	atile			Extractable	5		Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compound (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES22-01	4	6/23/2022	0	85	376	ND	ND	ND	ND	ND	ND	ND	ND
WES22-01	0-4	6/23/2022	0	84	258	ND	ND	ND	ND	ND	ND	ND	ND
WES22-02	0-4	6/23/2022	0	28	209	ND	ND	ND	ND	ND	ND	ND	ND
WES22-03	0-4	6/23/2022	0	59	314	ND	ND	ND	ND	ND	ND	ND	ND
WES22-04	0-4	7/7/2022	0	37	ND	ND	ND	ND	ND	ND	ND	ND	180

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Criteria (off-pad)

Client Name: Devon Energy Corporation Site Name: Gaucho Unit 6 NMOCD Tracking #: nKJ1602628821/nAPP2201348579 Project #: 22E-01101 Lab Reports: 2206D57, 2204C83, 2207345, 2204D50

Table 5. Confirmatory Sample Field Screen a						d Laboratory Results - Depth to Groundwater <50 feet bgs							
5	ample Descri	ption	Fi	eld Screeni	ng			Petrole	eum Hydrod	arbons			
			ş			Vol	atile			Extractable	2		Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compound (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics ((MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
	51	C /24 /2022	(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES22-01	5' c'	6/21/2022	0	/9	36	ND	ND	ND	ND	ND		ND	1/0
BE322-02	0	6/21/2022	0	45	30 ND	ND	ND	ND		ND		ND	220
BES22-03	4	6/21/2022	0	110	100	ND		ND					230
BE322-04	0.5	7/7/2022	0	110	109	ND	ND	ND		ND		ND	ND
BE322-03	4	7/7/2022	1	-	108			ND					
BES22-00		7/7/2022	1		, 278	ND	ND	ND		ND	ND	ND	64
BES22-07	0.5'	7/7/2022	0	23	207	ND	ND	ND		ND	ND	ND	230
BES22-00	0.5	7/7/2022	0	30	295	ND	ND	ND	ND	ND	ND	ND	190
BES22-10	4'	7/7/2022	0	37	ND	ND	ND	ND	ND	ND	ND	ND	ND
WES22-01	0-5'	6/21/2022	0	162	ND	ND	ND	ND	ND	ND	ND	ND	ND
WES22-02	0-4'	6/21/2022	0	81	ND	ND	ND	ND	ND	ND	ND	ND	ND
WES22-03	0-4'	6/21/2022	0	42	ND	ND	ND	ND	ND	ND	ND	ND	75
WES22-04	0-6'	6/21/2022	0	120	ND	ND	ND	ND	24	ND	24	24	ND
WES22-05	0-6'	6/21/2022	0	65	186	ND	ND	ND	ND	ND	ND	ND	330
WES22-06	0-3'	6/21/2022	0	48	151	ND	ND	ND	ND	ND	ND	ND	220
WES22-07	0-3'	6/21/2022	0	20	41	ND	ND	ND	ND	ND	ND	ND	100
WES22-08	0-0.5'	6/22/2022	0	94	266	ND	ND	ND	ND	ND	ND	ND	ND
WES22-09	0.5-4'	7/7/2022	0	39	51	ND	ND	ND	ND	ND	ND	ND	200
WES22-10	0.5-6'	7/7/2022	0	46	438	ND	ND	ND	ND	ND	ND	ND	190
WES22-11	5-6'	7/7/2022	0	-	427	ND	ND	ND	ND	ND	ND	ND	190
WES22-12	0-4'	7/7/2022	0	23	ND	ND	ND	ND	ND	ND	ND	ND	67
WES22-13	0-0.5'	7/7/2022	0	32	ND	ND	ND	ND	ND	ND	ND	ND	230
WES22-14	0-0.5'	7/7/2022	0	42	60	ND	ND	ND	ND	ND	ND	ND	210

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)

ATTACHMENT 4



Client:	Devon Energy Corporation	Inspection Date:	4/22/2022
Site Location Name:	Gaucho Unit 006	Report Run Date:	4/22/2022 7:01 PM
Client Contact Name:	Wes Matthews	API #:	30-025-34789
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of ⁻	Times
Arrived at Site	4/22/2022 9:30 AM		
Departed Site	4/22/2022 11:30 AM		
		Field Note	es
9:37 One Call Flaggin	g		
		Next Steps & Recor	nmendations

1 Continue with Delineation









Run on 4/22/2022 7:01 PM UTC



Daily Site Visit Signature

Inspector: Jarod Florez Signature:

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Client:	Devon Energy Corporation	Inspection Date:	4/27/2022
Site Location Name:	Gaucho Unit 006	Report Run Date:	5/2/2022 1:49 PM
Client Contact Name:	Wes Matthews		30-025-34789
Client Contact Phone #:	(575) 748-0176	_	
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	4/27/2022 9:30 AM		
Departed Site	4/27/2022 3:15 PM		

Field Notes

11:33 Arrived on site to begin delineation for the heater treater release

11:32 Collected BH22-01 through BH22-06 at surface and 2'

14:39 BH22-01 was hot on PetroFlag at the surface. Stepped out to BH22-07.

- BH22-02 was hot on EC at the surface. Stepped out to BH22-08.
- BH22-03 was slightly high on PetroFlag at the surface. Being sent to lab for analysis.
- BH22-04 was hot on PetroFlag at the surface. Stepped out to BH22-09.
- BH22-05 was hot on PetroFlag at the surface. Stepped out to BH22-10.
- BH22-06 was hot on PetrFlag at the surface. Stepped out to BH22-11.
- BH22-07 was slightly hot on PetroFlag at the surface. Sent to lab for analysis.
- BH22-08 was hot on EC. Will be stepped out tomorrow.
- BH22-09 was hot on PetroFlag. Will be stepped out tomorrow.
- BH22-10 was hot on PetroFlag. Stepped out tomorrow.
- BH22-11 was slightly hot on PetroFlag. Sent to lab for analysis.

Next Steps & Recommendations

1 Continue delineation tomorrow.



Run on 5/2/2022 1:49 PM UTC

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Released to Imaging: 10/26/2022 1:55:11 PM



Site Photos Viewing Direction: Southwest Viewing Direction: Northwest Release area for heater treater Release area Viewing Direction: Northwest Viewing Direction: Northwest Sample area for BH22-01 Sample area for BH22-02

Run on 5/2/2022 1:49 PM UTC







Daily Site Visit Signature

Inspector: Chance Dixon

Signature:	CD
	Signature

Run on 5/2/2022 1:49 PM UTC

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 4/27/22)

Sampling												
				Field	Screeni	ng			Data Co	ollection		
	-	Hydro	carbon		C	Chloride	-			-		
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)	
BH22-01	0.0	0	407	0.21	23.5	96						
BH22-01	2.0	0	34	0.08	22.9	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark		
BH22-02	0.0	0		0.82	22.8	1007						
BH22-02	2.0	0	32	0.18	23.1	70				\checkmark		
BH22-03	0.0	0	127	0.33	23.2	282		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark		
BH22-03	2.0	0	38	0.08	23.5	0				\checkmark		
BH22-04	0.0	0		1.84	24	2427						
BH22-04	2.0	0	37	0.12	23.8	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark		
BH22-05	0.0	0	1040	0.08	23.5	0				\checkmark		
BH22-05	2.0	0	6	0.04	24.2	0				\checkmark		
BH22-06	0.0	0	1520	0.17	24.3	4						
BH22-06	2.0	0	25	0.08	24.5	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark		
BH22-07	0.0	0	137	0.26	27.4	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark		
BH22-08	0.0	0		0.82	26.6	842				\checkmark		
BH22-09	0.0	0	1260	0.18	28	0				\checkmark		
BH22-10	0.0	0	1340	0.44	27.3	264				\checkmark		

Daily Soil Sampling

V										
VE	RTE	X								
	\checkmark									

							BTEX (EPA SW-846 Method 8021B/8260B),	
BH22-11	0.0	0	106	0.03	28.1	0	Chloride (EPA 300.0), TPH	
							(EPA SW-846 Method	
							8015M)	



Client:	Devon Energy Corporation	Inspection Date:	4/28/2022			
Site Location Name:	Gaucho Unit 006	Report Run Date:	5/2/2022 1:49 PM			
Client Contact Name:	Wes Matthews		30-025-34789			
Client Contact Phone #:	(575) 748-0176	_				
Unique Project ID		– Project Owner:				
Project Reference #		Project Manager:				
		Summary of	Times			
Arrived at Site	4/28/2022 9:05 AM					
Departed Site	4/28/2022 3:15 PM					

Field Notes

9:05 Arrived on site to continue delineation for heater treater release.

12:46 Collected BH22-08 through BH22-10 at 2'. All clean on all field screening.

Collected BH22-12 through BH22-14 at the surface. All clean on all field screening.

Collected BH22-15 through BH22-17 for vertical delineation. BH22-15 and BH22-17 were clean on all field screening at 6' BH22-16 is hot on PetroFlag at 2'. Digging it down.

Next Steps & Recommendations

1 Send samples to lab





Site Photos Viewing Direction: West Viewing Direction: Northwest Sample area for BH22-15 Sample area for BH22-16 Viewing Direction: Northwest Viewing Direction: Southwest Sample area for BH22-14 Sample area for BH22-17

Run on 5/2/2022 1:49 PM UTC







Daily Site Visit Signature

Inspector: Chance Dixon

Signature: Signature

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 4/29/22)

Sampling											
		Field Screening						Data Collection			
		Hydro	carbon		Chloride						
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BH22-08	2.0	0	58	0.10	22.6	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-09	2.0	0	70	0.07	22.5	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-10	2.0	0	48	0.07	22.8	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-12	0.0	0	27	0.06	22.5	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-13	0.0	0	87	0.05	22.4	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-14	0.0	0	69	0.03	22.4	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-15	0.0	0	1248	0.07	22.1	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-15	3.0	0	490	0.08	22.1	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-15	6.0	0	97	0.18	22.3	105		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	



Daily Soil Sampling

BH22-16	0.0	0		0.90	22.8	1122	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	
BH22-16	2.0	0	627	0.10	22.2	0			
BH22-16	4.0	0	524	0.07	22.9	0		✓	
BH22-16	6.0	0	60	0.06	24	0	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	
BH22-17	0.0	0		1.61	22.3	2169	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	
BH22-17	3.0	0		0.53	22.9	584	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	
BH22-17	6.0	0	50	0.07	22.1	0	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	



Client:	Devon Energy Corporation	Inspection Date:	4/29/2022
Site Location Name:	Gaucho Unit 006	Report Run Date:	5/2/2022 1:50 PM
Client Contact Name:	Wes Matthews	API #:	30-025-34789
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of T	Times
Arrived at Site	4/29/2022 9:10 AM		
Departed Site	4/29/2022 11:30 AM		

Field Notes

9:56 Arrived on site to delineate the release outside of the battery

10:17 Collecting BH22-01 through BH22-03 for sides and BH22-04 in the middle for vertical delineation.

11:03 BH22-01 through BH22-03 at 0' and 2' are clean on all field screening.

11:03 BH22-04 was vertically delineated down to 8'.

Next Steps & Recommendations

1 Send samples to lab



Site PhotosViewing Direction: SouthwestViewing Direction: SoutheastColspan="2">Colspan="2"Colspan="2">Colspan="2"<



Daily Site Visit Signature

Inspector: Chance Dixon

Signature: Signature

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 4/29/22)

Sampling											
		Field Screening						Data Collection			
		Hydro	carbon		Chloride						
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BH22-01	0.0	0	16	0.07	22.1	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-01	2.0	0	8	0.07	22.1	0					
BH22-02	0.0	0	20	0.10	22.4	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-02	2.0	0	9	0.07	21.8	0					
BH22-03	0.0	0	42	0.21	21.6	178		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-03	2.0	0	21	0.06	21.6	0				\checkmark	
BH22-04	0.0	0	627	0.90	21.3	1187		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-04	2.0	0	740	0.84	21.3	1101					
BH22-04	4.0	0	329	0.20	21.5	168		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	
BH22-04	6.0	0	257	0.04	21.7	0				\checkmark	
BH22-04	8.0	0	40	0.03	21.3	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark	



Client:	Devon Energy Corporation	Inspection Date:	5/18/2022		
Site Location Name:	ocation Name: Gaucho Unit 006		5/18/2022 7:51 PM		
Client Contact Name:	Wes Matthews	API #:	30-025-34789		
Client Contact Phone #:	(575) 748-0176				
Unique Project ID		Project Owner:			
Project Reference #		Project Manager:			
		Summary of	Times		
Arrived at Site	5/18/2022 11:00 AM				
Departed Site	5/18/2022 11:45 AM				

11:04 On location. Completed safety paperwork, scouting for staining

Next Steps & Recommendations

Field Notes

1 Continue with sampling





Site Photos Viewing Direction: Southeast Viewing Direction: North Discoloration in battery area Discoloration by heater treater Viewing Direction: West Viewing Direction: Southwest Surface staining along surface lines More staining around heater treater








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Daily Site Visit Signature

Inspector: Sally Carttar

Signature:



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Client:	Devon Energy Corporation	Inspection Date:	6/16/2022
Site Location Name:	Gaucho Unit 006	Report Run Date:	6/16/2022 11:13 PM
Client Contact Name:	Wes Matthews	API #:	30-025-34789
Client Contact Phone #:	(575) 748-0176	_	
Unique Project ID		– Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	6/16/2022 7:25 AM		
Departed Site	6/16/2022 3:15 PM		

Field Notes

- 12:55 Completed safety paperwork on arrival. Met Stan Mobley, Bryce Blaylock, and Jerry from Devon and discussed excavation hazards and equipment that cannot move. Bryce Blaylock designated PIC for Devon. Fences will be removed as needed for work and must be replaced at the end of the day. Contractor arrived and we conducted a safety meeting about the work. We all did another walk around the work areas together and confirmed the excavation plan. I swept the work area with the magnetic locator and the contractor did a separate sweep. Material in immediate proximity to equipment will be removed by hand to avoid the risk of line strikes. Equipment that protrudes close to dig area (ground rods, valves) will be marked with T posts to further improve visibility for equipment and personnel.
- **11:37** Release at tank battery will have ground wire exposed by hand. Exposed wire will be the south boundary of excavation. Excavation sidewalls up to 4 feet bgs can be vertical. Excavations beyond 4 feet bgs will require sloped sidewalls.
- **13:08** Devon requested staining around pump jack be covered with chipped rock. A couple inches of chipped rock over the treater area once remediation is completed will blend to the surrounding area.
- **13:32** Hand dig crew arriving the following day. Started excavation at southeast corner of treater release, outside of fence. Base sample and south excavation wall sample field screening results were below NMOCD strictest criteria for chloride and TPH.
- 13:43 Checked containment walls and liner for damage. Walls and liner appear sound. Patches on liner appear sealed.



Page 76 of 290

- **15:05** Uncovered underground cable at west end of excavation. Operator stopped excavation as soon as marking tape above cable was spotted. Spotter dug sand away from cable enough to identify. Some insulation may have been scuffed from outside of cable by backhoe, but it was difficult to determine. Operator did not feel resistance through backhoe.
- **15:12** Upon identifying the cable, the PIC Bryce Blaylock was contacted and informed of the cable. Work was stopped while he contacted people. Bryce called back and asked us to terminate operations for the day. A locator was scheduled be on site first thing the following morning to determine the status of the underground cable.
- **15:11** The excavation was fenced off prior to departing the site.

Next Steps & Recommendations

1 Meet with PIC and line locators tomorrow morning and determine status of underground cable.



Viewing Direction: Northeast Direction: Northeast

East edge of pad facing northeast. Containment berm and liner set up on northeast corner of pad for contaminated material.



West of release point facing east. Will hand-dig close to equipment.

Site Photos





South of release point facing north. Will handdig close to equipment.



East of treater release facing west. Base and sidewall of initial excavation outside fence field screened clean.



East of treaters facing west into excavation. Exposed unmarked buried cable.



East of treaters facing west in excavation. Exposed unmarked buried cable.

Run on 6/16/2022 11:13 PM UTC





Run on 6/16/2022 11:13 PM UTC

tape.









Run on 6/16/2022 11:13 PM UTC

excavation.





West of battery release facing southeast. Will hand-dig ground wire prior to mechanical excavation.



West edge of pad facing southeast. Will handdig under and around lines.



Daily Site Visit Signature

Inspector: Lakin Pullman	$\neg \square$
Signature:	Signature

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 6/16/22)

Sampling											
				Field	Screenii	ng			Data Co	ollection	
		Hydro	carbon		C	hloride					
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	4.0		63	0.31	34.7	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark	
WES22-01	4.0		68	0.40	34.7	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark	

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Client:	Devon Energy Corporation	Inspection Date:	6/17/2022	
Site Location Name:	Gaucho Unit 006	Report Run Date:	6/18/2022 1:07 AM	
Client Contact Name:	Wes Matthews	API #:	30-025-34789	
Client Contact Phone #:	(575) 748-0176			
Unique Project ID		Project Owner:		
Project Reference #		Project Manager:		
		Summary of	Times	
Arrived at Site	6/17/2022 7:27 AM			
Departed Site	6/17/2022 5:09 PM			

Field Notes

- **9:45** Completed safety paperwork on arrival. Met with Stan Mobley, Brice Blaylock, and Jerry Smith with Devon, and Lupe with MMX to discuss buried cable. Cable was confirmed to be abandoned and NOT energized. Plan is to excavate on either side and expose the line by hand.
- **9:48** PIC, Brice Blaylock, attempted to schedule hydrovac but none were available. Proceeded with original hand-dig plan. Work area was swept with magnetic locator again for confirmation.
- 9:47 Confirmed with Devon personnel that chip rock will only be used to cover staining around wellhead at end of project.
- **14:14** One truck available to haul material to Northern Delaware Basin for disposal. Hauled approximately 60 yards of material away due to slow turnaround at disposal. Additional liner and containment was installed northeast corner to stockpile material over the weekend.
- **11:09** Found break in abandoned cable while clearing soil. Excavator was at least 2 feet from the cable, so break was determined to be historical.
- **16:31** Excavator removed material on either side of buried cable and spotter uncovered cable with shovel. Excavation outside the fence halted when volume of contaminated material was close to exceeding storage space.
- **16:33** Area under pipes on west edge of release initially hand-excavated to 1 foot bgs. Base excavation sample BH22-02 field screening results exceeded strictest threshold for TPH. Continued to 2 feet bgs. Field screening results at 2 feet bgs met NMOCD strictest criteria for TPH and chloride.

Run on 6/18/2022 1:07 AM UTC



Page 86 of 290

- **16:40** Hand excavation under pipes at west edge of pad will need to continue south and southeast to connect to the area of mechanical excavation between the treaters. The stained area around the equipment at the release point will be hand-excavated to at least 6 inches bgs and reevaluated. Excavation around treater and anchors just leave several feet of stable soils horizontally to maintain stability and minimize slumping.
- **16:41** At the tank battery release. The ground wire next to the containment wall needs to be exposed via hand-excavation prior to any mechanical work. The ground wire will be the southwest boundary of the excavation.
- 17:07 Placed contaminated material on liner for the weekend. Fenced excavations prior to leaving.

Next Steps & Recommendations

1 Continue treater release excavation. Start battery excavation.



Viewing Direction: Northeast Image: Direction: Direction: Northeast Image: Direction: Direction: Northeast Image: Direction: Direction: Direction: South Image: Direction: Direction: Direction: Direction: South Image: Direction: Directi





West edge of pad facing northeast. Handexcavated under lines to clean soil at 2 feet bgs.

Viewing Direction: South



West edge of pad facing southeast. Excavation will continue southeast to encompass stained area around treater.



West edge of pad facing southwest. Handexcavated under lines to clean soil at 2 feet bgs.

Viewing Direction: Northeast



South of treater facing northeast. Will need to hand-excavate stained material around equipment.





Northeast of treater facing west. Excavation between treaters and equipment can be completed mechanically.





East of treater facing south. Excavation outside fence will continue northeast.



East of treaters facing northeast. Excavation outside fence will continue northeast.



Northeast corner of pad facing northeast. Stored contaminated on liner in containment for the weekend.





2-foot excavation.

Underground cable severed prior to uncovering.

Run on 6/18/2022 1:07 AM UTC



Page 91 of 290



excavation west of buried cable, with exposure

excavation east of fence.

Run on 6/18/2022 1:07 AM UTC

by hand.







Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 6/17/22)

Sampling											
				Field	Screeni	ng	Data Collection		ollection		
		Hydro	Hydrocarbon		C	hloride					
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-02	1.0			0.06	30	0			\checkmark	\checkmark	
BES22-02	4.0		82	0.07	27.7	0			\checkmark	\checkmark	
BES22-03	4.0		54	0.44	34.5	0			\checkmark	\checkmark	
BES22-04	4.0		57	0.61	37.5	67			\checkmark	\checkmark	
WES22-02	1.0		1200	0.24	33	0			\checkmark	\checkmark	
WES22-03	4.0		45	0.25	35.1	0			\checkmark	\checkmark	
WES22-04	1.0		41	0.06	37	0			\checkmark	\checkmark	



Client:	Devon Energy Corporation	Inspection Date:					
Site Location Name:	Gaucho CTB	Report Run Date:	6/21/2022 2:26 AM				
Client Contact Name:	Wes Matthews	- API #:					
Client Contact Phone #:	(575) 748-0176	-					
Unique Project ID		- Project Owner:					
Project Reference #		Project Manager:					
	Summary of Times						
Arrived at Site							
Departed Site	6/20/2022 5:30 PM						
Field Notes							
14:31 Continue excavation							

14:43 Sampling wall areas to finish horizontal extents

Next Steps & Recommendations

1 Finishing hauling out contamination

2 Confirmation sampling





Site Photos Viewing Direction: West Viewing Direction: Southeast Area between separator and heater Pad area Viewing Direction: South Viewing Direction: West DANGER Excavation area Excavation near containment





Excavation near containment

Run on 6/21/2022 2:26 AM UTC



Daily Site Visit Signature

Inspector: Monica Peppin Signature: Signature

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Client:	Devon Energy Corporation	Inspection Date:	6/21/2022			
Site Location Name:	Gaucho Unit 006	Report Run Date:	6/22/2022 9:04 PM			
Client Contact Name:	Wes Matthews	API #:	30-025-34789			
Client Contact Phone #:	(575) 748-0176					
Unique Project ID		Project Owner:				
Project Reference #		Project Manager:				
Summary of Times						
Arrived at Site	6/21/2022 9:00 AM					
Departed Site	6/21/2022 3:20 PM					

Field Notes

11:15 Arrived on site to continue remediation for heater treater and battery releases.

11:16 Collected BH22-02 through BH22-08 for the heater treater. All are clean on all field screening and will be sent to lab for confirmation.

- **11:16** Collected BH22-10 through BH22-13 on the walls of the battery excavation. All are clean on all field screening and will be sent to lab for confirmation.
- 11:34 Having dirty crew hand excavate around the heater treater 6"

12:28 Collected BH22-14 and BH22-15 on the north and south walls of the east side of the excavation. Clean on all field screening

13:45 180 yards of contaminants hauled out

Next Steps & Recommendations

1 Complete hand excavation and confirmation sampling tomorrow



Site Photos Viewing Direction: Southwest Viewing Direction: Northwest Current excavation for battery Current excavation for heater treater Viewing Direction: Northwest Viewing Direction: Southwest Sample area for BH22-14 Sample area for BH22-15

Run on 6/22/2022 9:04 PM UTC







Daily Site Visit Signature

Inspector: Chance Dixon

Signature:	$C\mathcal{D}$
	Signature

Run on 6/22/2022 9:04 PM UTC

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 6/23/22)

Sampling											
				Field	Screeni	ng			Data Co	ollection	
		Hydrocarbon			Chloride						
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	2.0	0	312	0.13	26.8	0				\checkmark	
WES22-01	2.0	0	55	0.35	26.7	160				\checkmark	
WES22-02	2.0	0	36	0.31	26.5	111				\checkmark	
WES22-03	2.0	0	41	0.12	26.9	0				\checkmark	



Client:	Devon Energy Corporation	Inspection Date:	6/22/2022		
Site Location Name:	Gaucho Unit 006	Report Run Date:	6/22/2022 8:57 PM		
Client Contact Name:	Wes Matthews	API #:	30-025-34789		
Client Contact Phone #:	(575) 748-0176				
Unique Project ID		Project Owner:			
Project Reference #		Project Manager:			
Summary of Times					
Arrived at Site	6/22/2022 11:00 AM				
Departed Site					

Field Notes

10:51 On site to complete a liner inspection.

10:55 There does not appear to be any damage on the outside of the wall for the containment.

10:56 Inside of walls do not appear to have any significant damage

11:02 Floor of the liner does not appear to have any significant damages through the battery. It is just heavily stained. There does not appear to be any evidence of a breach around the walls.

Next Steps & Recommendations

1 Write closure report for liner inspection.



Site Photos Viewing Direction: West Viewing Direction: Southeast Outside wall dyke on north side. Inside wall east side Viewing Direction: Northwest Viewing Direction: West Inside wall north side Floor of liner south side

Run on 6/22/2022 8:57 PM UTC









Run on 6/22/2022 8:57 PM UTC








Floor of liner north side



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:	\bigcirc
	Signature

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 6/23/22)

	Sampling													
				Field	Screeniı	ng			Data Co	ollection				
		Hydro	carbon		C	hloride								
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	p EC Chloride (ppm) (ppm) (ppm)		Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)			
BES22-01	4.0	0	85	0.38	22.7	376		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark				
WES22-01	2.0	0	84	0.31	23.1	258		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark				
WES22-02	2.0	0	28	0.27	22.9	209		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark				
WES22-03	2.0	0	59	0.34	22.8	314		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		\checkmark				



Client:	Devon Energy Corporation	Inspection Date:	7/7/2022
Site Location Name:	Gaucho Unit 006	Report Run Date:	7/7/2022 11:25 PM
Client Contact Name:	Wes Matthews	API #:	30-025-34789
Client Contact Phone #:	(575) 748-0176	_	
Unique Project ID		– Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	7/7/2022 7:59 AM		
Departed Site	7/7/2022 2:41 PM		

Field Notes

10:38 Completed safety paperwork on arrival, and attended tailgate meeting when contractor arrived.

- **14:13** Swept excavations with magnetic locator prior to collecting soil samples.
- **14:18** Collected additional confirmation soil samples from base and sidewalls of excavations around treater release point. Confirmation samples were field screened for chloride and TPH. Samples were packaged for laboratory analysis. MMX proceeded to backfill the excavation outside the fence once field screening results passed NMOCD strictest criteria.
- **14:24** MMX used water truck to wet soil prior to backfill, and packed material with roller after placement to maximize compaction. Multiple lifts of backfill were placed and compacted.

Next Steps & Recommendations

1 Check on progress of backfill.



Site Photos Viewing Direction: West Viewing Direction: Northwest and notice the archesi Northeast of battery facing west. Excavations Northeast of battery facing northwest. completed prior to arrival. Excavations completed prior to arrival. Viewing Direction: West Viewing Direction: Southwest South of wellhead facing west. MMX backfilled West of wellhead facing southwest. MMX outside fence. backfilled outside fence.

Run on 7/6/2022 11:25 PM UTC



ERTEX

Page 114 of 290



Northeast of tanks facing west. Prior to leaving site.

Run on 7/6/2022 11:25 PM UTC

used to compact soil.



Daily Site Visit Signature

Inspector: Lakin Pullman Signature:

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 7/7/22)

Sampling													
				Field	Screeni	ng			Data Co	ollection			
		Hydro	carbon		C	Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)		
BES22-05	4.0	0		0.35	27.9	108		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
BES22-06	4.0	1		0.28	27.9	7		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
BES22-07	6.0	1		0.48	28.3	278		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
BES22-08	0.5	0	23	0.56	32.6	207		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
BES22-09	0.5	0	30	0.57	30.9	295		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
BES22-10	4.0	0	37	0.27	30.4	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
WES22-09	4.0	0	39	0.41	31.2	51		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
WES22-10	6.0	0	46	0.57	27.6	438		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			
WES22-11	6.0	0		0.58	28.2	427		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark			



Daily Soil Sampling

WES22-12	4.0	0	23	0.37	32.3	0	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark	
WES22-13	0.5	0	32	0.39	32.1	0	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark	
WES22-14	0.5	0	42	0.44	32	60	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark	



Client:	Devon Energy Corporation	Inspection Date:	7/8/2022
Site Location Name:	Gaucho CTB	Report Run Date:	7/8/2022 1:40 AM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of T	Times
Arrived at Site	7/8/2022 12:33 PM		
Departed Site	7/8/2022 1:42 PM		

Field Notes

13:04 Completed safety paperwork on arrival. Had safety meeting with crew working on site.

13:05 Collected remaining wall excavation confirmation sample from excavation next to battery.

13:07 MMX completed backfill of excavation outside fence and moved on to backfill excavation next to tank battery. MMX proceeded to backfill within fence around treater and under pipes.

Next Steps & Recommendations

1 Complete backfill.



Site Photos Viewing Direction: Southeast Image: Site Photos Viewing Direction: Southeast Image: Site Photos <tr





North of tanks facing northwest. Backfilled excavation next to containment, needs final compaction.

Viewing Direction: Northeast



Northwest of treater facing northeast.. Backfill in progress.



Northwest of treater facing southeast. Backfill in progress.



North of treater facing south. Backfill in progress.





Run on 7/8/2022 1:40 AM UTC



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

Run on 7/8/2022 1:40 AM UTC

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Daily Soil Sampling

Client: Client: Devon Energy Corporation

Location: Site: Gaucho Unit 006

Date: (SD: 7/8/22)

	Sampling														
		Hydro	carbon		C	hloride									
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading Temp EC Chloride Chloride (mS/cm) (°C) (ppm) (ppm)		Lab Analysis	Photo Marked Taken on Sketch		Refusal Depth (ft)						
WES22-04	4.0	0	37	0.38	8 36.5 0			BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)	\checkmark	\checkmark					

ATTACHMENT 5



New Mexico Office of the State Engineer **Point of Diversion Summary**

				(qua (qu	rters are arters ar	1=NW e small	2=N est to	NE 3=SV o largest	V 4=SE))	(NAD8	3 UT	M in meters)		
Well Tag	POD	Number		Q6	4 Q16	Q4 S	lec	Tws	Rng		Х	Y		
	CP (0865 POI	D1	2	2	3 2	20	22S	34E	6418	45	3583118 🧉)	
x Driller Lice	ense:	421		Drill	er Con	npany	:	GLI	ENN'S '	WATER	WE	LL SERVIC	E	
Driller Nan	ne:	GLENN,	CLARK .	A."COI	RKY" ((LD)								
Drill Start	Date:	08/22/1	997	Drill	Finish	Date	:	08	/29/199	97	Plu	g Date:		
Log File Da	te:	09/04/1	997	PCW	Rev I	Date:		10	/18/20	13	Sou	irce:	Shallow	
Pump Type	:	SUBME	ER	Pipe	Discha	arge S	ize	2.	875		Est	imated Yiel	1: 50 GPM]
Casing Size	:	6.63		Dept	h Well	:		88	5 feet		Dej	oth Water:	605 feet	
x	Wate	r Bearing	g Stratific	ations:		Тор	B	ottom	Desci	iption				
						738		870	Sands	tone/Gr	avel	/Conglomera	te	
Х		Cas	ing Perfo	rations	:	Тор	B	ottom						
						734		885						
x	Mete	r Numbe	r:	800			N	leter I	Make:		SF	EAMETRICS		
	Mete	r Serial N	umber:	062018	300476	0	N	leter I	Multipl	ier:	1.0	0000		
	Num	ber of Dia	als:	9			N	leter]	Гуре:		Di	version		
	Unit	of Measu	re:	Barrels	s 42 gal	1.	R	Return	Flow F	Percent:				
	Usag	e Multipl	ier:				R	Readin	g Frequ	iency:	Qu	arterly		
Meter F	x Readin	gs (in Ac	re-Feet)											
Read	Date	Year	Mtr Rea	ading	Flag	Rd	r C	Comme	ent			Mt	r Amount	Onlin
08/27	/1999	1999	1	12170	А	fm							0	
09/27	/1999	1999	1	18665	А	fm							1.993	
07/10	/2000	2000	2	23573	А	mb	Iı	nitial re	eading '	Γrn# 184	4947	,	0	
09/01	/2000	2000		792	А	mb	Iı	nitial re	eading '	Trn# 189	9706		0	
10/09	/2000	2000		3703	А	mb	F	inal re	ading T	`rn# 189	706		0.893	
11/02	/2000	2000	3	33323	А	mb	F	inal re	ading T	rn# 184	947		2.992	
07/23	/2001	2001	3	35004	А	jw							9.606	
08/14	/2001	2001	3	35550	А	jw							0.168	
09/16	/2003	2004	2	44365	А	RP	Г						0	
02/13	/2004	2004	4	54105	А	RP	Г						2.989	
05/28	/2013	2013	3()1812	A	RP	Γh -	nitial re	eading				0	
10/07	/2013	2013	49	94174	A	RP	Г						24.794	
11/11	2013	2013	62	27/89	A	ΚP	1						17.222	
01/01	/2014	2014	77	15387	A	ap							1902.439	
04/01	/2014	2014	115	00295 05210	A	ap							4852.312	
10/01	/2014	2014	135	2000	A	ap							3138.U/8 11052.961	
01/01	/2015	2015	223	02908 06570	A	ap							2140.679	
Imaging: 1	0/26/2	2022 1:55	:11 PM	103/3	A	ap							5140.078	

	(TD Mete	er Amounts:	Year 1999 2000 2001 2004 2013 2014 2015 2016	9 19	Amount 1.993 3.885 9.774 2.989 42.016 9892.829 9425.401 7755.792		
	(TD Mete	er Amounts:	Year 1999 2000 2001 2004 2013 2014 2015	9	Amount 1.993 3.885 9.774 2.989 42.016 9892.829 9425.401		
	(TD Mete	er Amounts:	Year 1999 2000 2001 2004 2013 2014	ç	Amount 1.993 3.885 9.774 2.989 42.016 9892.829		
	(TD Mete	er Amounts:	Year 1999 2000 2001 2004 2013		Amount 1.993 3.885 9.774 2.989 42.016		
	(TD Mete	er Amounts:	Year 1999 2000 2001 2004		Amount 1.993 3.885 9.774 2.989		
	TD Mete	er Amounts:	Year 1999 2000 2001		Amount 1.993 3.885 9.774		
	TD Mete	r Amounts:	Year 1999 2000		Amount 1.993 3.885		
	TD Mete	r Amounts:	Year 1999		Amount 1.993		
	TD Mete	er Amounts:	Year		Amount		
× **Y							
11/3	30/2018	2018	443361	А	ap	3115.917	
09/3	30/2018	2018	201617	А	ap	1645.580	
08/3	30/2018	2018	73947	А	ap	953.127	
08/1	13/2018	2018	0	А	ap	0	
08/1	13/2018	2018	4791140	А	ap	1.830	
07/3	31/2018	2018	4790998	А	ap	0	
06/2	29/2018	2018	4790998	A	ap	319.926	
06/0	01/2018	2018	4766177	A	ap	1393.414	
04/2	30/2018	2018	4658071	A	an	1428 202	
03/2	30/2018	2018	4547266	A	۳۲ an	461 567	
02/2	28/2018	2018	4511456	A	ap	11240.505	
01/3	30/2018	2018	4423832	A	ap an	1743.202	
11/2	30/2017	2017	4326964	A	ap an	1043.748	
10/3	31/2017	2017	4003882	A A	ap	2079.139 1645.749	
U//: 10/2	31/2017	2017	2702272 4063882	A A	ap	20170 120	
05/3	31/2017 31/2017	2017	2002575	A A	ap	/53.142	
05/0	01/2017	2017	3/99022 2857500	A	ap	1001.080	
03/3	51/2017 01/2017	2017	36/0149	A	ap	1552.971	
03/0	02/2017	2017	3549664	A	ap	575.057	
02/0	01/2017	2017	3505049	A	ap	11.923	
12/3	31/2016	2016	3504124	A	ap	1337.319	
12/0	01/2016	2016	3400370	А	ap	1155.451	
10/3	31/2016	2016	3310726	А	ap	990.880	
09/3	30/2016	2016	3233850	А	ap	1567.690	
09/0	01/2016	2016	3112223	А	ap	937.737	
07/3	30/2016	2016	3039470	А	ap	1164.667	
06/0	01/2016	2016	2949111	А	ap	602.048	
04/3	30/2016	2015	2902402	А	ap	1142.897	
11/3	30/2015	2015	2813732	А	ap	463.230	
10/3	30/2015	2015	2777793	А	ap	1185.934	
09/3	30/2015	2015	2685784	А	ap	126.947	
08/3	31/2015	2015	2675935	А	ap	234.869	
07/2	28/2015	2015	2657713	А	ap	319.655	
06/3	30/2015	2015	2632913	А	ap	393.949	
Received by OCD: 10	/10/2022 01/2015	8:04:48 AM	2602349	А	ap	1363.381	Page 126 of 290

Received by C	OCD: 10/10	/2022	8:04:48	20 20	19 20		0 0				Page 127 of 29
x	ת ת ר	Meter Meter Numb	Numbe Serial N	r: Number: als:	806 17466 6	27		Meter Make: Meter Multiplier: Meter Type:	MASTER 100.0000 Diversion		
	t t	Unit o Usage	f Measu Multipl	re: ier:	Gallor	15		Return Flow Percent: Reading Frequency:			
	Meter Re	ading	es (in Ac	re-Feet)							
	Read D)ate	Year	Mtr R	eading	Flag	Rdr	Comment		Mtr Amount On	line
	01/01/1	999	1999		12165	A	fm			0	
	01/15/1	999	1999		21665	А	fm			2.915	
	**YTD) Meto	er Amou	ints: Ye 19	ar 99	А	mount 2.915				
x	Ν	Meter	Numbe	r:	807			Meter Make:	SEAMET	RICS	
	Ν	Meter	Serial N	umber:	03201	900083	7	Meter Multiplier:	1.0000		
	ľ	Numb	er of Dia	als:	8			Meter Type:	Diversion		
	τ	U nit o	f Measu	re:	Barrel	s 42 gal	l.	Return Flow Percent:			
	ι	Usage	Multipl	ier:				Reading Frequency:	Monthly		
	Meter Re	ading	gs (in Ac	re-Feet)							
	Read D	Date	Year	Mtr R	eading	Flag	Rdr	Comment		Mtr Amount On	line
	11/14/1	999	1999		19858	А	fm			0	
	12/14/1	999	1999		21411	А	fm			0.477	
	01/02/2	2019	2018	4	556195	А	RPT			0	
	02/01/2	2019	2019	(504855	А	RPT			6.272	
	08/01/2	2019	2019	ç	949138	А	RPT			44.376	
	09/01/2	2019	2019	10	061141	А	RPT			14.436	
	09/30/2	2019	2019	11	61966	А	RPT			12.996	
	10/31/2	2019	2019	12	259879	А	RPT			12.620	
	11/30/2	019	2019	13	325382	А	RPT			8.443	
	12/31/2	2019	2019	13	325382	А	RPT			0	
	02/01/2	2020	2020	13	869756	А	RPT			5.720	
	03/01/2	2020	2020	14	188098	А	RPT			15.253	
	04/01/2	2020	2020	14	188098	А	RPT			0	
	05/01/2	2020	2020	14	188098	А	RPT			0	
	06/01/2	2020	2020	14	188098	А	RPT			0	
	08/01/2	2020	2020	14	188098	А	RPT			0	
	08/01/2	2020	2020		0	А	RPT			0	
	09/01/2	2020	2020		154	А	RPT			0.020	
	10/01/2	2020	2020		154	А	RPT			0	
	11/01/2	2020	2020		26213	А	WEI	3		3.359 X	
	12/01/2	2020	2020]	44137	А	WEI	3		15.200 X	
	01/01/2	2021	2020]	68842	А	WEI	3		3.184 X	
	07/31/2	2021	2021		390794	А	ad			28.608	
	08/31/2	021	2021	11.014	165926	А	ad			9.684	

Received by OCI	D: 10/10/2022 09/30/2021	8:04:48 AM 2021	584055	А	ad	15.226	Page 128
	10/31/2021	2021	664994	А	ad	10.432	
	**YTD Mete	er Amounts:	Year		Amount		
			1999		0.477		
			2018		0		
			2019		99.143		
			2020		42.736		
			2021		63.950		

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4/5/22 8:39 AM

POINT OF DIVERSION SUMMARY



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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD f been repla O=orphan C=the file closed)	nas iced, ed, is		(qua qua	rter	rs are rs are	1=NW smalle	/ 2=NE est to lar	3=SW 4=SH rgest) (N	E) IAD83 UTM in m	neters)	[]	n feet)		
	,	POD														
POD Number	Cada	Sub-	Country	Q	Q	Q	5	Two	Dng	v	V	DistanceD	onthWallD	Water		
<u>CP 00865 POD1</u>	Code	CP	LE	04 2	10 2	4 3	20	1 ws 22S	Kng 34E	А 641845	¥ 3583118 🌍	1288	885	eptin water C 605	280	
<u>CP 01722 POD1</u>		СР	LE	4	4	2	18	22S	34E	640964	3584949 🥌	1632	1122	785	337	
<u>CP 01362 POD1</u>		СР	LE	3	4	4	18	22S	34E	640809	3584182 🌍	1636	1032	613	419	
<u>CP 01455 POD1</u>		СР	LE	4	1	4	18	22S	34E	640574	3584515 🌍	1886	1033	615	418	
<u>CP 01723 POD1</u>		СР	LE	4	4	1	18	22S	34E	640117	3584905 🌍	2413	1140	785	355	
<u>CP 01721 POD1</u>		СР	LE	4	2	1	18	22S	34E	640181	3585244 🌍	2467	1108	820	288	
<u>CP 01720 POD1</u>		СР	LE	1	3	2	08	22S	34E	642003	3586723 🌍	2502	1190	824	366	
<u>CP 00597 POD1</u>		СР	LE		2	2	08	22S	34E	642410	3587074* 🌍	2814	35			
<u>CP 01725 POD1</u>		СР	LE	1	2	1	18	22S	34E	639914	3585521 🌍	2826	1137	800	337	
<u>CP 00744</u>		СР	LE		1	2	09	22S	34E	643618	3587091* 🌍	3065	460			
<u>CP 01724 POD1</u>		СР	LE	3	1	1	18	22S	34E	639475	3585260 🌍	3131	1172	800	372	
<u>CP 00704</u>		СР	LE		2	4	22	22S	34E	645681	3583097* 🌍	3440	600			
<u>CP 00592 POD1</u>		СР	ED		3	2	13	22S	33E	638834	3585015* 🌍	3687	427			
<u>CP 01803 POD1</u>		СР	LE	1	1	1	34	22S	34E	644357	3580786 🌍	3966	240	180	60	
<u>CP 01826 POD1</u>		СР	LE	1	1	1	34	22S	34E	644379	3580778 🌍	3983	698	180	518	
<u>CP 01740 POD1</u>		СР	LE	1	1	1	34	22S	34E	644402	3580765 🌍	4006	600	560	40	
<u>CP 01706 POD1</u>		СР	LE	4	4	2	32	22S	34E	642603	3580185 🌍	4077	340	282	58	
<u>CP 01705 POD1</u>		СР	LE	4	4	2	32	22S	34E	642588	3580179 🌍	4083	700	305	395	
<u>CP 01829 POD1</u>		СР	LE	4	4	2	32	22S	34E	642559	3580172 🌍	4089	1410	1150	260	
<u>CP 00598 POD1</u>		СР	LE		4	1	23	22S	34E	646480	3583511* 🌍	4105	70			
<u>CP 01683 POD1</u>		СР	LE	2	3	2	23	22S	34E	646949	3583562 🌍	4560	300			
<u>CP 00944 POD1</u>		СР	LE		3	1	03	22S	34E	644531	3588351 🌍	4592	109	70	39	
<u>CP 01684 POD1</u>		СР	LE	2	1	4	23	22S	34E	646932	3583129 🌍	4629	300			
<u>CP 01682 POD1</u>		СР	LE	1	2	2	23	22S	34E	647164	3583992 🌍	4728	294	42	252	
<u>CP 00622</u>		СР	LE	3	4	2	14	22S	34E	647164	3585030* 🌍	4783				
											Avera	ge Depth to Wa	ater:	553 fe	et	
												Minimum D	Depth:	42 fe	et	
												Maximum D	epth:	1150 fe	et	
Record Count: 25																

UTMNAD83 Radius Search (in meters):

.

*UTM location was derived from PLSS - see Help

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4/5/22 8:23 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Gaucho Unit 6H CTB Proximity Map

Nearest Water Well and Depth to Groundwater (DTGW) Reference CP 00865 POD1, Commercial Well Distance: 0.8 miles (4,225 feet) DTGW: 608 feet bgs DTGW Measurement Date: 08/29/1997

Gaucho Unit 6H CTB

Nearest Residence Distance: 3.39 miles (17,900 feet)

CP 00865 POD1

Google Earth



1 mi

National Wetlands Inventory

Intermittent 5,309 feet



April 5, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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- - **Freshwater Pond**

Lake Other Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Pond 15,378 feet



Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- **Freshwater Pond**

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Lake Other Riverine Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



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OSE POD 0.5 mile



4/5/2022, 10:05:15 AM

GIS WATERS PODs

0 Active

0

OSE District Boundary New Mexico State Trust Lands Water Right Regulations

Both Estates

SiteBoundaries

- Pending **Closure Area**
- Plugged •
- Released to Imaging: 10/26/2022 1:55:11 PM



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, U.S. Department of Energy Office of Legacy

New Mexico Office of the State Engineer Water Right Summary

	WR File Number:	CP 00865		Subbasin:	СР	Cross Reference:	-
	Primary Purpose:	COM C	COMMERCIAI	-			
<u>age list</u>	Primary Status:	PMT PI	ERMIT				
	Total Acres:	0		Subfile:	-		Header: -
	Total Diversion:	100		Cause/Case:	-		
	Owner:	MERCHA					
	Contact:	CORKY G					

Documents on File

get im

				Sta	atus		From/			
	Trn #	Doc	File/Act	1	2	Transaction Desc.	То	Acres	Diversion	Consumptive
image	<u>540290</u>	APPRO	2013-05-08	PMT	MTR	CP-865	Т	0	100	100
image	<u>476449</u>	72121	2007-01-26	EXP	EXP	CP 00865	Т		1	
image	<u>476438</u>	COWNE	3 2005-06-16	CHG	PRC	CP 00865	Т		0	
image	<u>476397</u>	72121	2005-04-19	EXP	EXP	CP 00865	Т		3	
image	<u>476395</u>	72121	2004-04-27	EXP	EXP	CP 00865	Т		3	
image	<u>476393</u>	72121	2003-09-18	EXP	EXP	CP 00865	Т		3	
image	<u>476392</u>	72121	2001-07-25	EXP	EXP	CP 00865	Т		3	
image	<u>476388</u>	72121	2000-09-01	EXP	EXP	CP 00865	Т		3	
image	<u>476387</u>	72121	2000-07-10	EXP	EXP	CP 00865	Т		3	
image	<u>476386</u>	72121	<u>1999-12-15</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476369</u>	72121	<u>1999-09-27</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476368</u>	72121	<u>1999-01-15</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476360</u>	72121	<u>1998-11-05</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476357</u>	72121	<u>1998-10-09</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476356</u>	72121	<u>1998-08-07</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476354</u>	72121	<u>1998-07-13</u>	EXP	EXP	CP 00865	Т		3	
image	<u>476353</u>	72121	<u>1997-08-11</u>	PMT	LOG	CP 00865	Т		3	

Current Points of Diversion

		0						(NAD83 UTM	(in meters)		
POD Number <u>CP 00865 POD1</u>	Well Tag	Source Shallow	64 Q 2	2 2	24S 3	ec ' 20	Tws 22S	Rng 34E	X 641845	¥ 3583118 🌍	Other Location Desc

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	
08/28/2012	PMT	0	100	<u>CP 00865 POD1</u>	Shallow

Place of Use

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37 of 29

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4/5/22 8:40 AM

WATER RIGHT SUMMARY



Active & Inactive Points of Diversion (with Ownership Information)

<u>Page 138 of 29</u>0

	6.1	(acre i	ft per annum)				(F nc C	=POD has been replaced and longer serves this file, =the file is closed)	(quarters are 1=) (quarters are sm	NW 2 allest	=NE 3 to large	=SW 4=SE) est)	(NAI	083 UTM in meters])
WR File Nbr <u>CP 00865</u>	Sub basir CP	Use COM	Diversion Owner 100 MERCHANT LIVESTOCK CO	County LE	POD Number CP 00865 POD1	Well Tag		Code Grant	q q q Source 6416 4 Shallow 2 2 3	Sec 20	Tws 22S	Rng 34E	X 641845	¥ 3583118 🌍	Distance 1288
<u>CP 01046</u>	СР	PRO	0 YATES PETROLEUM	LE	<u>CP 00865 POD1</u>				Shallow 2 2 3	20	22S	34E	641845	3583118	1288
<u>CP 01047</u>	СР	PRO	0 NOVA MUD	LE	<u>CP 00865 POD1</u>				Shallow 2 2 3	20	22S	34E	641845	3583118 🧉	1288
<u>CP 01048</u>	СР	PRO	0 GLENN'S WATER WELL SERVICE	LE	<u>CP 00865 POD1</u>				Shallow 2 2 3	20	22S	34E	641845	3583118	1288
<u>CP 01085</u>	СР	PRO	0 GLENN'S WATER WELL SRVC., INC.	LE	CP 00865 POD1				Shallow 2 2 3	20	22S	34E	641845	3583118 🦲	1288
<u>CP 01086</u>	СР	PRO	0 TD WATER SERVICES	LE	CP 00865 POD1				Shallow 2 2 3	20	22S	34E	641845	3583118 🦲	1288
<u>CP 01087</u>	СР	PRO	0 TONYA'S PERMIT SERVICE	LE	<u>CP 00865 POD1</u>				Shallow 2 2 3	20	22S	34E	641845	3583118 🦲	1288
<u>CP 01291</u>	СР	COM	100 ATKINS ENGR ASSOC INC	LE	<u>CP 00865 POD1</u>				Shallow 2 2 3	20	22S	34E	641845	3583118 🦲	1288
<u>CP 01731</u>	СР	COM	450 ROY TAYLOR	LE	<u>CP 01731 POD2</u>	20C94			3 1 4	20	22S	34E	642053	3582883 🦲	1430
<u>CP 01722</u>	СР	COM	100 ATKINS ENGR ASSOC INC	LE	<u>CP 01722 POD1</u>	NA			Artesian 4 4 2	18	22S	34E	640963	3584949 🦲	1632
<u>CP 01362</u>	СР	EXP	0 MERCHANT LIVESTOCK CO	LE	<u>CP 01362 POD1</u>				Artesian 3 4 4	18	22S	34E	640808	3584182	1636
<u>CP 01363</u>	СР	COM	100 ATKINS ENGR ASSOC INC	LE	<u>CP 01362 POD1</u>				Artesian 3 4 4	18	22S	34E	640808	3584182	1636
<u>CP 01453</u>	СР	COM	100 ATKINS ENGR ASSOC INC	LE	<u>CP 01362 POD1</u>				Artesian 3 4 4	18	22S	34E	640808	3584182	1636
<u>CP 01456</u>	СР	PRO	0 COG OPERATING	LE	<u>CP 01362 POD1</u>				Artesian 3 4 4	18	22S	34E	640808	3584182	1636
CP 01457	СР	PRO	0 COG OPERATING	LE	<u>CP 01362 POD1</u>				Artesian 3 4 4	18	22S	34E	640808	3584182	1636
CP 01458	СР	PRO	0 COG OPERATING	LE	CP 01362 POD1				Artesian 3 4 4	18	22S	34E	640808	3584182	1636
CP 01731	СР	COM	450 ROY TAYLOR	LE	CP 01731 POD3	20C93			444	20	22S	34E	642631	3582544	1725
				LE	CP 01731 POD1	20C95			443	20	22S	34E	641803	3582573	1803
CP 01454	СР	COM	200 MERCHANT LIVESTOCK CO	LE	CP 01455 POD1				Artesian 4 1 4	18	22S	34E	640574	3584515	1886
CP 01455	СР	EXP	0 ATKINS ENGR ASSOC INC	LE	CP 01455 POD1				Artesian 4 1 4	18	22S	34E	640574	3584515	1886
CP 01494	СР	PRO	0 COG OPERATING	LE	CP 01455 POD1				Artesian 4 1 4	18	22S	34E	640574	3584515	1886
CP 01495	СР	PRO	0 COG OPERATING	LE	CP 01455 POD1				Artesian 4 1 4	18	228	34E	640574	3584515	1886
CP 01496	СР	PRO	0 COG OPERATING	LE	CP 01455 POD1				Artesian 4 1 4	18	228	34E	640574	3584515	1886
CP 01630	СР	EXP	0 S2W CONTRACTING, LLC	LE	CP 01630 POD2				343	21	228	34E	643130	3582496	1892
				LE	CP 01631 POD1				4 4 4	19	228	34E	640970	3582491	2301
CP 01631	CP	COM	13.5 S2W WATER NM LLC	LE	CP 01631 POD1				4 4 4	19	228	34E	640970	3582491	2301
CP 01723	CP	СОМ	80 MERCHANT LIVESTOCK CO/GWWS INC	LE	CP 01723 POD1	NA			Artesian 4 4 1	18	228	34E	640117	3584905	2413
CP 01711	CP	СОМ	100 S2W WATER NM LLC	LE	CP 01711 POD2	NA			3 3 3	10	228	34E	644432	3585700	2456
CP 01721	CP	сом	40 MERCHANT LIVESTOCK CO/GWWS INC	LE	CP 01721 POD1	NA			Artesian 4 2 1	18	228	34E	640181	3585244	2467
CP 01720	CP	сом	55 MERCHANT LIVESTOCK CO	LE	CP 01720 POD1	NA			Artesian 1 3 2	08	225	34E	642003	3586723	2502
CP 00597	CP	PLS	3 THE MERCHANT LIVESTOCK COMPANY	LE	CP 00597 POD1				Shallow 2.2	08	228	34E	642410	3587074*	2814
<u>CT 00577</u>											220	212	612110		2011
<u>CP 01725</u>	CP	COM	110 MERCHANT LIVESTOCK CO/GWWS INC	LE	<u>CP 01725 POD1</u>	NA			Artesian 1 2 1	18	228	34E	639914	3585521	2826
<u>CP 00864</u>	CP	PRO	0 SANIA FE ENERGY RESOURCES	LE	<u>CP 00864</u>				23	29	228	34E	641676	3581433*	2929
<u>CP 00744</u>	CP	PRO		LE	<u>CP 00744</u>				Shallow 1 2	10	228	34E	643618	358/091*	3065
<u>CP 01724</u>	CP	COM	40 ATKINS ENGRASSOC INC	LE	<u>CP 01724 POD1</u>	NA			Artesian 3 1 1	18	228	34E	639475	3585260	3131
<u>CP 01711</u>	CP	COM	100 S2W WATER NM LLC	LE	<u>CP 01711 POD1</u>	NA			2 3 1	10	228	34E	644445	3586812	3244
<u>CP 00704</u>	CP	PRO	0 APACHE CORPORATION	LE	<u>CP 00704</u>				2 4	22	228	34E	645681	3583097*	3440
<u>CP 00591</u>	CP	PLS	3 THE MERCHANT LIVESTOCK COMPANY	LE	<u>CP 00591 POD1</u>				3 2	13	228	33E	638834	3585015*	3687
<u>CP 00592</u>	СР	PLS	3 THE MERCHANT LIVESTOCK COMPANY	ED	<u>CP 00592 POD1</u>				Shallow 3 2	13	228	33E	638834	3585015*	3687
<u>CP 01624</u>	CP	EXP	0 ATKINS ENGR ASSOC INC	LE	<u>CP 01624 POD1</u>				4 2 2	32	228	34E	642669	3580494	3772
<u>CP 01686</u>	СР	СОМ	100 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01686 POD1</u>	NA			4 2 2	32	22S	34E	642669	3580494	3772
<u>CP 01803</u>	CP	STK	3 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01803 POD1</u>	22473			Shallow 1 1 1	34	228	34E	644356	3580786	3966
<u>CP 01740</u>	CP	COM	303 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01826 POD1</u>	NA			Artesian 1 1 1	34	228	34E	644379	3580778	3983
<u>CP 01826</u>	CP	EXP	0 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01826 POD1</u>	NA			Artesian 1 1 1	34	228	34E	644379	3580778	3983
<u>CP 01740</u>	CP	COM	303 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01740 POD1</u>	NA			Artesian 1 1 1	34	228	34E	644401	3580765	4006
<u>CP 01706</u>	CP	EXP	0 LIMESTONE BASIN PROP RANCH LLC	LE	<u>CP 01706 POD1</u>	NA			Shallow 4 4 2	32	22S	34E	642603	3580185	4077
<u>CP 01686</u>	CP	COM	100 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01705 POD1</u>	20D10			Shallow 4 4 2	32	22S	34E	642587	3580179 🌍	4083
<u>CP 01705</u>	CP	STK	3 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01705 POD1</u>	20D10			Shallow 4 4 2	32	22S	34E	642587	3580179 🌍	4083
Released	to ^{CP} In	agi	ng: 10/26/2022 1:55:11 PM	LE	<u>CP 01829 POD1</u>	NA			Artesian 4 4 2	32	22S	34E	642559	3580172 🌍	4089

Received l	by O	CD: 1	0/10/2022 8:04:48 AM 3 THE MERCHANT LIVESTOCK COMPANY	LE	<u>CP 00598 POD1</u>		Shallow	4 1	23 2	2S 34E	646480	Page 139 of 3583511*	f 290 4105
<u>CP 01683</u>	СР	COM	128 ATKINS ENGR ASSOC INC	LE	<u>CP 01683 POD1</u>	20D30		2 3 2	23 2	28 34E	646949	3583562	4560
<u>CP 00944</u>	СР	EXP	0 ENSTOR GRAMA RIDGE STORAGE	LE	<u>CP 00944 POD1</u>		Shallow	3 1	03 2	2S 34E	644530	3588351 🌍	4592
<u>CP 00964</u>	СР	SAN	1 ENSTOR GRAMA RIDGE TRANSPORATION AND STORAGE LLC	LE	<u>CP 00944 POD1</u>		Shallow	3 1	03 2	2S 34E	644530	3588351 🧉	4592
<u>CP 01684</u>	СР	COM	128 MERCHANT LIVESTOCK CO	LE	<u>CP 01684 POD1</u>	2062C		2 1 4	23 2	28 34E	646932	3583129 🔵	4629
<u>CP 01682</u>	СР	COM	128 MERCHANT LIVESTOCK CO	LE	<u>CP 01682 POD1</u>	2062A	Shallow	1 2 2	23 2	28 34E	647163	3583992 🌍	4728
<u>CP 01685</u>	СР	COM	128 MERCHANT LIVESTOCK CO	LE	<u>CP 01685 POD1</u>	20D2F		1 2 2	23 2	28 34E	647172	3584092 🌍	4732
<u>CP 00622</u>	СР	PRO	0 POGO PRODUCING CO.	LE	<u>CP 00622</u>			3 4 2	14 2	28 34E	647164	3585030* 🌍	4783
<u>CP 01073</u>	СР	COM	85 LIMESTONE BASIN PROPERTIES	LE	<u>CP 01073 POD1</u>		Shallow	3	33 2	28 34E	643327	3579453 🌍	4887
Record Count:	58												
	n!	. C	• · · · · · · · · ·										

UTMNAD83 Radius Search (in meters):

Easting (X): 642443 Northing (Y): 3584260

Radius: 5000

Sorted by: Distance

*UTM location was derived from PLSS - see Help

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

4/5/22 8:23 AM

ACTIVE & INACTIVE POINTS OF DIVERSION



National Wetlands Inventory

Wetland 8106 feet



April 5, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- **Freshwater Pond**

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Lake Other Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Released to Imaging: 10/26/2022 1:55:11 PM

Active Mines in New Mexico





Received by OCD: 10/10/2022 8:04:48 AM National Flood Hazard Layer FIRMette



Legend

Page 144 of 290



Releasea to Imaging: 10/26/2022 9.55:11 PM 1,500

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


United States Department of Agriculture

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lea County, New Mexico



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map	9
Legend	10
Map Unit Legend	11
Map Unit Descriptions	11
Lea County, New Mexico	13
KM—Kermit soils and Dune land, 0 to 12 percent slopes	
References	15

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



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МАР	LEGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest (AOI) Soils Soil Map Unit Polygons	 Spoil Area Stony Spot Very Stony Spot 	The soil surveys that comprise your AOI were mapped at 1:20,000. Warning: Soil Map may not be valid at this scale.
Soil Map Unit Lines Soil Map Unit Points Special Point Features Blowout	Wet Spot Other Special Line Features Water Features	Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.
Image: Second system Borrow Pit Image: Second system Clay Spot Image: Second system Gravel Pit Image: Second system Gravelly Spot	Interstate Highways William William William William William William	Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)
 Landfill Lava Flow Marsh or swamp Mine or Quarry Miscellaneous Water 	Local Roads Background Aerial Photography	Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as
 Perennial Water Rock Outcrop Saline Spot Sandy Spot 		of the version date(s) listed below. Soil Survey Area: Lea County, New Mexico Survey Area Data: Version 18, Sep 10, 2021 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger
 Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot 		Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
КМ	Kermit soils and Dune land, 0 to 12 percent slopes	5.2	100.0%
Totals for Area of Interest		5.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lea County, New Mexico

KM—Kermit soils and Dune land, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpx Elevation: 3,000 to 4,400 feet Mean annual precipitation: 10 to 15 inches Mean annual air temperature: 60 to 62 degrees F Frost-free period: 190 to 205 days Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 46 percent *Dune land:* 44 percent *Minor components:* 10 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Kermit

Setting

Landform: Dunes Landform position (two-dimensional): Shoulder, backslope, footslope Landform position (three-dimensional): Side slope Down-slope shape: Concave, convex, linear Across-slope shape: Convex Parent material: Calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sand *C - 8 to 60 inches:* fine sand

Properties and qualities

Slope: 5 to 12 percent Depth to restrictive feature: More than 80 inches Drainage class: Excessively drained Runoff class: Very low Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr) Depth to water table: More than 80 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum content: 3 percent Gypsum, maximum content: 1 percent Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Sodium adsorption ratio, maximum: 2.0 Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7e Hydrologic Soil Group: A Ecological site: R042XC022NM - Sandhills Hydric soil rating: No

Description of Dune Land

Setting

Landform: Dunes Landform position (two-dimensional): Shoulder, backslope, footslope Landform position (three-dimensional): Side slope Down-slope shape: Concave, convex, linear Across-slope shape: Convex Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 6 inches: fine sand *C - 6 to 60 inches:* fine sand

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8 Hydrologic Soil Group: A Hydric soil rating: No

Minor Components

Pyote

Percent of map unit: 3 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Palomas

Percent of map unit: 3 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Wink

Percent of map unit: 2 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

Maljamar

Percent of map unit: 2 percent Ecological site: R042XC003NM - Loamy Sand Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

USDA Natural Resources Conservation Service

Ecological site R042XC022NM Sandhills

Accessed: 04/05/2022

General information



Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on plains. The soils are calcareous sandy eolian deposits derived from sedimentary rock. Land form of sand dunes or hillslopes. Slopes average 5 to 35 percent. Slopes are complex as the steeper slopes are shorter in length while the more gentle slopes are longer in length. Direction of slopes vary and is usually not significant. Elevations range from 2,842 to 4,500 feet.

Landforms	(1) Plain(2) Hill(3) Dune				
Flooding frequency	None				
Ponding frequency	None				
Elevation	2,842–4,500 ft				
Slope	5–35%				

Table 2. Representative physiographic features

Aspect

Climatic features

The climate of the area is "semi-arid continental". The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity – short duration thunderstorms. Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer. The average frost-free season is 180 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November. Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Because of the texture of this soil, most rainfall is effective. Strong winds blow from the west and southwest from January through June which accelerates soil drying at a time for cool season plant growth.

Climate data was obtained from http://www.wrcc.sage.dri.edu/summary/climsmnm.html web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

 Table 3. Representative climatic features

Frost-free period (average)	220 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced by wetlands or streams.

Soil features

The soils of this site are deep and very deep. Surface textures are fine sand or loamy fine sand. Subsoilis a fine sand or loamy fine sand to a depth of 60 inches or more. These soils have less than 10 percent clay content. These soils are subject to severe wind erosion if vegetative cover is not adequate.

Minimum and maximum values listed below represent the characterist soils for this site.

Characteristic Soils Are: Kermit Aguena

Surface texture	(1) Fine sand(2) Loamy fine sand(3) Loamy sand
Family particle size	(1) Sandy
Drainage class	Well drained to excessively drained
Permeability class	Rapid to very rapid
Soil depth	60–72 in
Surface fragment cover <=3"	0–5%
Surface fragment cover >3"	0%

Table 4. Representative soil features

Available water capacity (0-40in)	3–9 in
Calcium carbonate equivalent (0-40in)	0–7%
Electrical conductivity (0-40in)	0–2 mmhos/cm
Sodium adsorption ratio (0-40in)	0–1
Soil reaction (1:1 water) (0-40in)	7.4–8.4
Subsurface fragment volume <=3" (Depth not specified)	0–5%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

Overview:

The Sandhills site occurs adjacent to or intergrades with the Deep Sand site. The Sandhills site is differentiated from deep sand sites by a steeper average slope, and an increased depth to a soil texture change. Sandhills slopes are usually greater than eight percent, and the soil profile is a fine sand or loamy fine sand to a depth greater than 60 inches. Deep Sand sites have slopes less than eight percent and a textural change can occur at less than 60 inches. The historic plant community of the Sandhills site is a mixture of grasses, shrubs and forbs, with tall grasses dominating in aspect. During years of abundant spring moisture, tall growing forbs occasionally reach aspect dominance. Sand bluestem and giant dropseed are the dominant grasses, with Havard panicum and dropseeds as sub-dominants. Sand shinnery oak and soapweed yucca are the dominant shrubs. Drought favors shinnery by impacting grasses more severly. Shinnery oak's ability to store water and carbohydrates, and its strong negetive leaf water potential enable it to out compete grasses during drought conditions. Changes in historical fire regimes, competition by shrubs, and overgrazing may contribute to this site becoming dominated by sand shinnery oak.

State and transition model

Plant Communities and Transitional Pathways (diagram)





Figure 4.

State 1 Grass/Shrub Mix

Community 1.1 Grass/Shrub Mix

Grass/Shrub Mix: The historic plant community in the northern part of the resource area (SD-3) is dominated by sand bluestem and giant dropseed, with Havard panicum as a sub-dominant. Primary grass dominance may gradually shift moving south across the resource area to a community dominated by giant dropseed and spike dropseed, with mesa dropseed as the sub-dominant grass species. Throughout the resource area sand shinnery oak and soapweed yucca are the dominant shrubs with sand sagebrush as the sub-dominant. As retrogression within this state occurs, plants such as sand bluestem, giant dropseed, Havard panicum, plains bristlegrass, sand paspalum, and fourwing saltbush decrease. This results in an increase in spike dropseed, sand dropseed, mesa dropseed, threeawns sand shinnery oak, and sand sagebrush. Continued loss of grass cover may result in a transition to a sand shinnery oak dominated state.

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Diagnosis: Sand bluestem or giant dropseed are dominant or present in substantial amounts. Spike dropseed, sand dropseed or mesa dropseed may be dominant in some instances. Grass cover is variable, shifting sands and large irregular dunes produce considerable variation in the spatial distribution and composition of the plant community. Grass cover is not continuous, but is fairly uniform across the more stable areas. Large natural bare areas or blowouts are a common feature on the less stable portions of the Sandhills site.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	360	585	810
Shrub/Vine	120	195	270
Forb	120	195	270
Total	600	975	1350

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	10-15%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	20-25%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	45-60%

Figure 6. Plant community growth curve (percent production by month). NM2822, R042XC022NM Sandhills HCPC. R042XC022NM Sandhills HCPC warm season plant community.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	1	3	4	10	10	25	30	12	5	0	0

State 2 Sand Shinnery Oak-Dominated

Community 2.1 Sand Shinnery Oak-Dominated

Additional States:

Sand Shinnery Oak -Dominated: Sand shinnery oak is the dominant species and in dense stands may reduce forage production by as much as 90 percent.1 It often forms a mosaic of dense thickets interspersed with occasional motts of taller oaks, large areas of bare ground, and concentrations of sand sagebrush. Sand shinnery oak is well suited to deep sandy soils. The height and cover of oak decreases as sand depth decreases or clay content increases. The aggressive nature of fall witchgrass and continued loss of more palatable grasses and threeawn species may result in a sand shinnery oak-fall witchgrass community. Burning may result in a community with very little grass or sand shinnery oak (bare). Sand shinnery oak usually recovers due to its ability to sprout aggressively following fire.

Diagnosis: Sand shinnery oak is the dominant species. Grass cover is sparse and patchy. Shrub cover is high. Blowouts and bare areas are common, however, high shrub cover mediates erosion.

Transition to Sand Shinnery Oak Dominated (1a): Climate may play a role in facilitating the spread sand shinnery oak. It is best adapted to those areas that receive and average of 16 inches of annual rainfall; it may therefore gain a competitive advantage during cycles of above average precipitation. Sand shinnery oak spreads mainly by elongation of rhizomes, but in some instances will reproduce by seed. The establishment and survival of seedlings is limited to those years with abundant rainfall during the months of July and August. If fire historically played a part in suppressing the density and distribution of shrubs in desert grasslands, then fire suppression may facilitate a shift to shrub dominance.2 Competition for resources between grasses and shrubs may be a factor in increased densities of sand shinnery oak. 1 Sand shinnery oak has an extensive system of underground roots and stems that can uptake and store water for growth during drier periods, allowing it to increase, at times when grasses decrease. Evidence of competitive suppression of grasses is indicated by increases in herbaceous vegetation following chemical control of sand shinnery oak.1 However, this increase may in part be due to a flush of nutrients made available from the decomposing biomass of woody roots and stems. Loss of grass cover due to overgrazing or drought may give a competitive advantage to sand shinnery oak.

Key indicators of approach to transition:

* A decrease in the tall grass species and the associated increase in threeawns may be indicative of the initial stage of transition to a shrub-dominated state.

* Increased cover of sand shinnery oak.

Transition back to Grass/Shrub Mix (1b) Chemical brush control is an effective means of controlling sand shinnery oak and sand sagebrush. Where large areas of chemical control are planned, increased erosion and the effect on loss of wildlife habitat should be considered. Prescribed grazing will help ensure an adequate deferment period to allow grass recovery and subsequent proper forage utilization. There have been studies that suggest long term browsing by goats can reduce sand shinnery oak, altering production in favor of grasses.3

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass	/Grasslike		<u></u>		
1				195–293	
	sand bluestem	ANHA	Andropogon hallii	195–293	-
	Havard's panicgrass	PAHA2	Panicum havardii	195–293	-
	giant dropseed	SPGI	Sporobolus giganteus	195–293	-
2				146–195	
	spike dropseed	SPCO4	Sporobolus contractus	146–195	-
	sand dropseed	SPCR	Sporobolus cryptandrus	146–195	-
	mesa dropseed	SPFL2	Sporobolus flexuosus	146–195	-
3				49–98	
	thin paspalum	PASE5	Paspalum setaceum	49–98	-
	plains bristlegrass	SEVU2	Setaria vulpiseta	49–98	-
4				29–49	
	threeawn	ARIST	Aristida	29–49	-
	mat sandbur	CELO3	Cenchrus longispinus	29–49	-
	flatsedge	CYPER	Cyperus	29–49	-
5				29–49	
	Grass, perennial	2GP	Grass, perennial	29–49	_

Shrub/Vine

6				49–98	
	Havard oak	QUHA3	Quercus havardii	49–98	-
7	· ·			49–98	
	soapweed yucca	YUGL	Yucca glauca	49–98	-
8	· · ·			29–49	
	sand sagebrush	ARFI2	Artemisia filifolia	29–49	_
9				20–49	
	fourwing saltbush	ATCA2	Atriplex canescens	20–49	_
10		20–49			
	rabbitbrush	CHRYS9	Chrysothamnus	20–49	_
11		-	•	20–49	
	Shrub (>.5m)	2SHRUB	Shrub (>.5m)	20–49	_
Forb					
12				20–49	
	featherplume	DAFO	Dalea formosa	20–49	_
13				29–49	
	sundrops	CALYL	Calylophus	29–49	_
	phlox heliotrope	HECO5	Heliotropium convolvulaceum	29–49	_
	sharpleaf penstemon	PEAC	Penstemon acuminatus	29–49	_
14				20–49	
	touristplant	DIWI2	Dimorphocarpa wislizeni	20–49	_
	lemon beebalm	MOCI	Monarda citriodora	20–49	_
16				29–49	
	hymenopappus	HYMEN4	Hymenopappus	29–49	_
	blazingstar	MENTZ	Mentzelia	29–49	_
	threadleaf ragwort	SEFLF	Senecio flaccidus var. flaccidus	29–49	_
17				20–49	
	sunflower	HELIA3	Helianthus	20–49	_
18		•		20–49	
	buckwheat	ERIOG	Eriogonum	20–49	-
19		<u>.</u>	1	20–49	
	Forb (herbaceous, not grass nor grass-like)	2FORB	Forb (herbaceous, not grass nor grass-like)	20–49	-

Animal community

This site provides habitat which support a resident animal community that is characterized by pronghorn antelope, black-tailed jackrabbit, Ord's kangaroo rat, Northern grasshopper mouse, Southern Plains woodrat, swift fox, roadrunner, meadowlark, lark bunting, ferruginous hawk, lesser prairie chicken, mourning dove, scaled quail, sand dune lizard, marbled whiptail, ornate box turtle, bullsnake and Western diamondback rattlesnake. Grasshopper and vesper sparrows utilize the site during migration. The ferruginous hawk sometimes nests on dunes associated with the site. White-tailed deer are also sometimes associated with this site (Mescalero Sands). Where mesquite invades, resident species of birds such as white-necked raven, roadrunner, pyrrhuloxia, mourning dove, and Harris hawk nest. Where sand hummocks form around shrubs, rodent populations and their predators increase. Fourwing saltbush, shinnery oak, sand sagebrush, and mesquite provide protective cover for scaled quail. Seed, green herbage, and fruit from a variety of grasses, forbs, and shrubs provide food for a number of birds and mammals, including mourning dove, scaled quail, lessor prairie chicken and antelope.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydrolic cover conditions and hydrologic soil groups.

Hydrologic Interpretations Soil Series------ Hydrologic Group Kermit------ A Aguena------ A

Recreational uses

This site offers recreation potential for hiking, horseback riding, nature observation and photography. This site also offers opportunities for hunting of such species as quail, dove and antelope.

Mechanical, off-road vehicle use by dune buggies, four wheelers, or motor bikes is site-destructive, resulting in severe soil movement by wind erosion. Off-road vehicle use should be confined to those areas which are already deterioriated and where intensive management for soil protection can be practiced.

During years of abundant spring moisture, this site desplays a colorful array of wildflowers during May and June. A few showy summer and fall flowers also occur.

Wood products

The plant community associated with this site affords little or no wood products.

Other products

This site is suitable for grazing during all seasons of the year by all kinds and classes of livestock. Where shinnery oak has increased considerably above the amount in the potential plant community cattle loss can occur if grazed during the late bud and early leaf stage. This site responds well to an integrated brush management and grazing management. Brush management is inappropriate in occupied or potential habitat for sand dune lizard. Mismannagement of this site will cause a decrease in Harvard panicum, sand bluestem, giant dropseed, plains bristlegrass, sand paspalum and fourwing saltbush. There will be a corresponding increase in dropseeds, sand sagebrush and shinnery oak. When shinnery oak is not a problem, this site responds best to a system of mangement that rotates the season of use. Grazing management plans should be design to leave adequate residual cover for lesser prairie chicken nesting.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index----- Ac/AUM 100 - 76----- 2.0 - 4.0 75 - 51------ 3.0 - 6.5 50 - 26----- 5.0 - 12.0 25 - 0------ 12.0 - +

Inventory data references

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains (SD-3) Major Land Resource Area of New Mexico. This site has been mapped and correlated with soils in the following soil surveys: South Chaves, Eddy, Lea and Otero Counties.

Other references

Literature Cited:

1. Sears, W.E., C.M. Britton, D.B. Wester, and R.D. Pettit. 1986. Herbicide conversion of a sand shinnery oak (Quercus havardii) community: effects on biomass. J. Range. Manage. 39: 399-403.

2. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2002, September). Fire Effects Information System, [Online]. Available: http://www.fs.fed.us/database/feis/ [accessed 1/07/02].

3.Villena, F. and J.A. Pfister. 1990. Sand shinnery oak as forage for Angora and Spanish goats. J. Range. Manage. 43: 116-122.

Contributors

David Trujillo Don Sylvester

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

- 1. Number and extent of rills:
- 2. Presence of water flow patterns:
- 3. Number and height of erosional pedestals or terracettes:
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):
- 5. Number of gullies and erosion associated with gullies:
- 6. Extent of wind scoured, blowouts and/or depositional areas:

- 7. Amount of litter movement (describe size and distance expected to travel):
- 8. Soil surface (top few mm) resistance to erosion (stability values are averages most sites will show a range of values):
- 9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):
- 10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:
- 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):
- 12. Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant:

Sub-dominant:

Other:

Additional:

- 13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):
- 14. Average percent litter cover (%) and depth (in):
- 15. Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annualproduction):
- 16. Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:

•

ArcGIS Web Map



Qa—Alluvium (Holocene to upper Pleistocene)

QI-Landslide deposits and colluvium (Holocene to Pleistocene) - Landslide deposits on western flanks of Socorro Mountains not shown for clarity

Qpl—Lacustrine and playa deposits (Holocene) — Includes associated alluvial and eolian deposits of major lake basins

Qp—Piedmont alluvial deposits (Holocene to lower Pleistocene)

Qe—Eolian deposits (Holocene to middle Pleistocene)

Released to Imaging a 19/26/2020 Li 55:11 20/26/2020 Li 55:11 20/2

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS

ATTACHMENT 6

Monica Peppin

From:	Dhugal Hanton <vertexresourcegroupusa@gmail.com></vertexresourcegroupusa@gmail.com>
Sent:	Friday, June 17, 2022 10:10 AM
То:	Enviro, OCD, EMNRD; CFO_Spill, BLM_NM; dale.woodall@dvn.com
Cc:	Monica Peppin
Subject:	Gaucho Unit 6 48-HR Notification Multiple Releases

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAPP2201348579 DOR: 12/28/2021 Site Name: Gaucho Unit 6H CTB nKJ1602628821 DOR: 01/22/2015 nAPP2208733407 DOR: 03/25/2022 nOY1727243107 DOR: 09/14/2017

This work will be completed on behalf of Devon Energy Production Company.

On Tuesday, June 21, 2022 at approximately 10:00 a.m., Monica Peppin will be on site to conduct confirmatory sampling and a liner inspection. Sampling may go into June 22, 2022. She can be reached at 575-361-9880. If you need directions to the site, please do not hesitate to contact her.

Thank you,

Monica Peppin

Project Manager

Vertex Resource Services Inc. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 Ext. 711 C 575.361.9880 F

www.vertex.ca

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Monica Peppin

From:	Dhugal Hanton <vertexresourcegroupusa@gmail.com></vertexresourcegroupusa@gmail.com>
Sent:	Tuesday, July 5, 2022 12:11 PM
То:	Enviro, OCD, EMNRD; CFO_Spill, BLM_NM
Cc:	Monica Peppin
Subject:	Gaucho Unit 6 48-HR Notification Multiple Releases

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled confirmatory sampling to be conducted for the following releases:

nAPP2201348579 DOR: 12/28/2021 Site Name: Gaucho Unit 6H CTB nKJ1602628821 DOR: 01/22/2015 nAPP2208733407 DOR: 03/25/2022

This work will be completed on behalf of Devon Energy Production Company.

On Thursday, July 7, 2022 at approximately 12:00 p.m., McKitrick Wier will be on site to conduct additional confirmatory sampling. Sampling may go into July 8, 2022. He can be reached at 575-361-9639. If you need directions to the site, please do not hesitate to contact her.

Thank you,

Monica Peppin

Project Manager

Vertex Resource Services Inc. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 Ext. 711 C 575.361.9880 F

www.vertex.ca

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ATTACHMENT 7



May 13, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX:

RE: Gaucho 6 Battery

OrderNo.: 2205058

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/3/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: Devon Energy

Gaucho 6 Battery

2205058-001

Project:

Lab ID:

Analytical Report Lab Order 2205058

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/13/2022

Client Sample ID: BH22-01 0' Collection Date: 4/29/2022 10:00:00 AM Received Date: 5/3/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: SB
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	5/6/2022 2:06:20 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/6/2022 2:06:20 PM
Surr: DNOP	98.4	51.1-141	%Rec	1	5/6/2022 2:06:20 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/7/2022 12:32:06 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.025	mg/Kg	1	5/5/2022 1:35:14 PM
Toluene	ND	0.050	mg/Kg	1	5/5/2022 1:35:14 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 1:35:14 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/5/2022 1:35:14 PM
Surr: 1,2-Dichloroethane-d4	94.1	70-130	%Rec	1	5/5/2022 1:35:14 PM
Surr: 4-Bromofluorobenzene	97.7	70-130	%Rec	1	5/5/2022 1:35:14 PM
Surr: Dibromofluoromethane	119	70-130	%Rec	1	5/5/2022 1:35:14 PM
Surr: Toluene-d8	91.7	70-130	%Rec	1	5/5/2022 1:35:14 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/5/2022 1:35:14 PM
Surr: BFB	111	70-130	%Rec	1	5/5/2022 1:35:14 PM

Matrix: SOIL

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

Qualifiers:

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

Page 1 of 12

CLIENT: Devon Energy

Project: Gaucho 6 Battery

Analytical Report Lab Order 2205058

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/13/2022 Client Sample ID: BH22-02 0' Collection Date: 4/29/2022 10:10:00 AM

Lab ID: 2205058-002	Matrix: SOIL	Received Date: 5/3/2022 7:00:00 AM				
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RA				Analyst: SB		
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/6/2022 2:30:02 PM	
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/6/2022 2:30:02 PM	
Surr: DNOP	101	51.1-141	%Rec	1	5/6/2022 2:30:02 PM	
EPA METHOD 300.0: ANIONS					Analyst: NAI	
Chloride	ND	60	mg/Kg	20	5/7/2022 12:44:27 AM	
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: JR	
Benzene	ND	0.023	mg/Kg	1	5/5/2022 3:01:03 PM	
Toluene	ND	0.047	mg/Kg	1	5/5/2022 3:01:03 PM	
Ethylbenzene	ND	0.047	mg/Kg	1	5/5/2022 3:01:03 PM	
Xylenes, Total	ND	0.094	mg/Kg	1	5/5/2022 3:01:03 PM	
Surr: 1,2-Dichloroethane-d4	96.0	70-130	%Rec	1	5/5/2022 3:01:03 PM	
Surr: 4-Bromofluorobenzene	93.4	70-130	%Rec	1	5/5/2022 3:01:03 PM	
Surr: Dibromofluoromethane	122	70-130	%Rec	1	5/5/2022 3:01:03 PM	
Surr: Toluene-d8	92.0	70-130	%Rec	1	5/5/2022 3:01:03 PM	
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: JR	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/5/2022 3:01:03 PM	
Surr: BFB	107	70-130	%Rec	1	5/5/2022 3:01:03 PM	

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 12

CLIENT: Devon Energy

Gaucho 6 Battery

Project:

Analytical Report Lab Order 2205058

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/13/2022

Client Sample ID: BH22-03 0' Collection Date: 4/29/2022 10:20:00 AM Received Date: 5/3/2022 7:00:00 AM

Lab ID: 2205058-003	Matrix: SOIL	Received Date: 5/3/2022 7:00:00 AM			
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA				Analyst: SB	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/6/2022 2:53:45 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/6/2022 2:53:45 PM
Surr: DNOP	101	51.1-141	%Rec	1	5/6/2022 2:53:45 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/7/2022 12:56:48 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/5/2022 4:26:29 PM
Toluene	ND	0.049	mg/Kg	1	5/5/2022 4:26:29 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/5/2022 4:26:29 PM
Xylenes, Total	ND	0.098	mg/Kg	1	5/5/2022 4:26:29 PM
Surr: 1,2-Dichloroethane-d4	96.0	70-130	%Rec	1	5/5/2022 4:26:29 PM
Surr: 4-Bromofluorobenzene	96.1	70-130	%Rec	1	5/5/2022 4:26:29 PM
Surr: Dibromofluoromethane	117	70-130	%Rec	1	5/5/2022 4:26:29 PM
Surr: Toluene-d8	92.7	70-130	%Rec	1	5/5/2022 4:26:29 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/5/2022 4:26:29 PM
Surr: BFB	110	70-130	%Rec	1	5/5/2022 4:26:29 PM

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

Qualifiers:

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

Page 3 of 12
Project: Gaucho 6 Battery

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205058 Date Reported: 5/13/2022

Client Sample ID: BH22-04 0' Collection Date: 4/29/2022 10:30:00 AM

Lab ID: 2205058-004	Matrix: SOIL	Rec	eived Date:	5/3/20	22 7:00:00 AM
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	18000	380	mg/Kg	40	5/9/2022 1:19:19 PM
Motor Oil Range Organics (MRO)	5400	1900	mg/Kg	40	5/9/2022 1:19:19 PM
Surr: DNOP	0	51.1-141	S %Rec	40	5/9/2022 1:19:19 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/7/2022 1:09:08 AM
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst: JR
Benzene	ND	0.12	mg/Kg	5	5/5/2022 4:54:59 PM
Toluene	3.2	0.24	mg/Kg	5	5/5/2022 4:54:59 PM
Ethylbenzene	7.4	0.24	mg/Kg	5	5/5/2022 4:54:59 PM
Xylenes, Total	43	4.8	mg/Kg	50	5/6/2022 11:50:12 AM
Surr: 1,2-Dichloroethane-d4	96.2	70-130	%Rec	5	5/5/2022 4:54:59 PM
Surr: 4-Bromofluorobenzene	91.3	70-130	%Rec	5	5/5/2022 4:54:59 PM
Surr: Dibromofluoromethane	114	70-130	%Rec	5	5/5/2022 4:54:59 PM
Surr: Toluene-d8	87.6	70-130	%Rec	5	5/5/2022 4:54:59 PM
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst: JR
Gasoline Range Organics (GRO)	1300	24	mg/Kg	5	5/5/2022 4:54:59 PM
Surr: BFB	100	70-130	%Rec	5	5/5/2022 4:54:59 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 12

Project: Lab ID:

Gaucho 6 Battery

2205058-005

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order **2205058** Date Reported: **5/13/2022**

Client Sample ID: BH22-04 4'
Collection Date: 4/29/2022 10:40:00 AM
Received Date: 5/3/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: SB
Diesel Range Organics (DRO)	110	9.7	mg/Kg	1	5/6/2022 3:17:25 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2022 3:17:25 PM
Surr: DNOP	109	51.1-141	%Rec	1	5/6/2022 3:17:25 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/7/2022 1:21:29 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.025	mg/Kg	1	5/5/2022 5:23:26 PM
Toluene	ND	0.050	mg/Kg	1	5/5/2022 5:23:26 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 5:23:26 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/5/2022 5:23:26 PM
Surr: 1,2-Dichloroethane-d4	94.0	70-130	%Rec	1	5/5/2022 5:23:26 PM
Surr: 4-Bromofluorobenzene	96.3	70-130	%Rec	1	5/5/2022 5:23:26 PM
Surr: Dibromofluoromethane	122	70-130	%Rec	1	5/5/2022 5:23:26 PM
Surr: Toluene-d8	89.6	70-130	%Rec	1	5/5/2022 5:23:26 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/6/2022 11:15:34 PM
Surr: BFB	109	70-130	%Rec	1	5/6/2022 11:15:34 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 12

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Gaucho 6 Battery

Project:

Analytical Report Lab Order 2205058

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2205058 Date Reported: 5/13/2022

Client Sample ID: BH22-04 8' Collection Date: 4/29/2022 10:50:00 AM Received Date: 5/3/2022 7:00:00 AM

Lab ID: 2205058-006	Matrix: SOIL	Received Date: 5/3/2022 7:00:00 AM						
Analyses	Result	RL Qua	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: ED			
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	5/5/2022 10:50:32 PM			
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/5/2022 10:50:32 PM			
Surr: DNOP	95.8	51.1-141	%Rec	1	5/5/2022 10:50:32 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	ND	60	mg/Kg	20	5/7/2022 1:58:31 AM			
EPA METHOD 8260B: VOLATILES SH	IORT LIST				Analyst: JR			
Benzene	ND	0.024	mg/Kg	1	5/5/2022 5:51:51 PM			
Toluene	ND	0.048	mg/Kg	1	5/5/2022 5:51:51 PM			
Ethylbenzene	ND	0.048	mg/Kg	1	5/5/2022 5:51:51 PM			
Xylenes, Total	ND	0.097	mg/Kg	1	5/5/2022 5:51:51 PM			
Surr: 1,2-Dichloroethane-d4	97.5	70-130	%Rec	1	5/5/2022 5:51:51 PM			
Surr: 4-Bromofluorobenzene	97.8	70-130	%Rec	1	5/5/2022 5:51:51 PM			
Surr: Dibromofluoromethane	120	70-130	%Rec	1	5/5/2022 5:51:51 PM			
Surr: Toluene-d8	90.1	70-130	%Rec	1	5/5/2022 5:51:51 PM			
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst: JR			
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/5/2022 5:51:51 PM			
Surr: BFB	112	70-130	%Rec	1	5/5/2022 5:51:51 PM			

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

Qualifiers:

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

Page 6 of 12

Client: Project:	Devon l Gaucho	Energy 6 Battery								
Sample ID:	MB-67318	SampType: n	SampType: mblk TestCode: EPA Method 3							
Client ID:	PBS	Batch ID: 6	Batch ID: 67318 RunNo: 87798							
Prep Date:	5/6/2022	Analysis Date:	5/6/2022	S	SeqNo: 3111	702	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC L	.owLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.3	5							
Sample ID:	LCS-67318	SampType: I	cs	Tes	tCode: EPA	Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 6	7318	F	RunNo: 8779	8				
Prep Date:	5/6/2022	Analysis Date:	5/6/2022	S	SeqNo: 3111	703	Units: mg/K	g		
Analyte		Result PQL	. SPK value	SPK Ref Val	%REC L	.owLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.	5 15.00	0	94.1	90	110			

Qualifiers:

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

2205058

13-May-22

WO#:

Gaucho 6 Battery

Client:

Project:

Client ID:

Prep Date:

Surr: DNOP

Client ID:

Prep Date:

Surr: DNOP

Client ID:

Prep Date:

Analyte

Analyte

Analvte

Sample ID: MB-67279

Sample ID: LCS-67279

Sample ID: LCS-67248

LCSS

5/4/2022

LCSS

5/5/2022

PBS

5/5/2022

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Result

Result

Result

4.7

9.6

SampType: MBLK

Batch ID: 67279

Analysis Date: 5/5/2022

SampType: LCS

Batch ID: 67279

Analysis Date: 5/5/2022

SampType: LCS

Batch ID: 67248

Analysis Date: 5/5/2022

PQL

PQL

PQL

SPK value SPK Ref Val

SPK value SPK Ref Val

SPK value SPK Ref Val

10.00

5.000

	53	10	50.00	0	106	68.9	135			
	5.0		5.000		70.0	51.1	141			
Sample ID: LCS-67260	SampT	ype: LC	S	Те	stCode: El	PA Method	8015M/D: Dies	el Range	Organics	
Client ID: LCSS	Batch	ID: 67	260		RunNo: 8	7762				
Prep Date: 5/4/2022	Analysis D	ate: 5/	5/2022		SeqNo: 3	109550	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Q
Surr: DNOP	3.7		5.000		73.5	51.1	141			
Sample ID: MB-67248	SampT	ype: ME	BLK	Те	stCode: El	PA Method	8015M/D: Dies	el Range	Organics	
Client ID: PBS	Batch	ID: 67	248		RunNo: 8	7762				
Prep Date: 5/4/2022	Analysis D	ate: 5/	5/2022		SeqNo: 3	109553	Units: mg/Kg	J		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Q
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.3		10.00		83.4	51.1	141			
Sample ID: MB-67260	SampT	ype: ME	BLK	Те	stCode: El	PA Method	8015M/D: Dies	el Range	Organics	
Client ID: PBS	Batch	ID: 67	260		RunNo: 8 '	7762				
	Analysis D	ate: 5/	5/2022		SeqNo: 3	109554	Units: %Rec			
Prep Date: 5/4/2022	Analysis D									0
Prep Date: 5/4/2022 Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	<u> </u>
Prep Date: 5/4/2022 Analyte Surr: DNOP	Result 8.4	PQL	SPK value 10.00	SPK Ref Val	%REC 84.4	LowLimit 51.1	HighLimit 141	%RPD	RPDLimit	<u> </u>
Prep Date: 5/4/2022 Analyte Surr: DNOP	Result 8.4	PQL	SPK value 10.00	SPK Ref Val	%REC 84.4	LowLimit 51.1	HighLimit 141	%RPD	RPDLimit	
Prep Date: 5/4/2022 Analyte Surr: DNOP Qualifiers:	Result 8.4	PQL	SPK value 10.00	SPK Ref Val	%REC 84.4	LowLimit 51.1	HighLimit 141	%RPD	RPDLimit	
Prep Date: 5/4/2022 Analyte Surr: DNOP Qualifiers: * Value exceeds Maximum Contami D Sample Diluted Due to Matrix	Result 8.4	PQL	SPK value 10.00	SPK Ref Val	%REC 84.4 etected in the a	LowLimit 51.1	HighLimit 141 Blank	%RPD	RPDLimit	
Prep Date: 5/4/2022 Analyte Surr: DNOP Qualifiers: * Value exceeds Maximum Contami D Sample Diluted Due to Matrix H Holding times for preparation or at H Holding times for preparation	Result 8.4	PQL	SPK value 10.00	B Analyte o E Estimate J Analyte o	%REC 84.4 etected in the a value etected below of the below of the below of	LowLimit 51.1 ssociated Method	HighLimit 141 Blank	%RPD	RPDLimit	
Prep Date: 5/4/2022 Analyte Surr: DNOP Qualifiers: * Value exceeds Maximum Contami D Sample Diluted Due to Matrix H Holding times for preparation or ar ND Not Detected at the Reporting Lim PQL Practical Quanitative Limit	inant Level.	PQL	SPK value 10.00	B Analyte of E Estimate J Analyte of P Sample p RL Reporting	%REC 84.4 value etected below of H Not In Range Limit	LowLimit 51.1 ssociated Method quantitation limits	HighLimit 141 Blank	%RPD	RPDLimit Page 8 of	f 12

220505	WO#:
13-May-2	

Qual

Qual

Qual

Qual

Qual

Qual

TestCode: EPA Method 8015M/D: Diesel Range Organics

Units: %Rec

HighLimit

Units: %Rec

HighLimit

TestCode: EPA Method 8015M/D: Diesel Range Organics

141

Units: mg/Kg

HighLimit

TestCode: EPA Method 8015M/D: Diesel Range Organics

141

%RPD

%RPD

%RPD

RPDLimit

RPDLimit

RPDLimit

RunNo: 87770

%REC

96.5

RunNo: 87770

%REC

94.1

RunNo: 87762

%REC

SeqNo: 3109549

SeqNo: 3108791

SeqNo: 3108790

LowLimit

LowLimit

LowLimit

51.1

51.1

Client: D Project: G	evon Energy aucho 6 Batterv										
											_
Sample ID: LCS-6726	1 SampTyp	e: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch II	Batch ID: 67261 RunNo: 87770									
Prep Date: 5/4/2022	Analysis Date	e: 5/	5/2022	Ş	SeqNo: 31	10540	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DR	D) 41	10	50.00	0	81.4	68.9	135				
Surr: DNOP	4.7		5.000		93.5	51.1	141				
Sample ID: MB-67261	SampTyp	e: MB	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID: PBS	Batch II	D: 67	261	F	RunNo: 8 7	7770					
Prep Date: 5/4/2022	Analysis Date	e: 5/	5/2022	S	SeqNo: 31	110541	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DR) ND	10									
Motor Oil Range Organics (N	IRO) ND	50									
Surr: DNOP	9.8		10.00		98.3	51.1	141				

Qualifiers:

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

Page 9 of 12

2205058

13-May-22

WO#:

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

B Analyte detected	l in	the	associated	M
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Е Estimated value

0.5000

0.5000

0.5000

0.5000

J Analyte detected below quantitation limits Р

Sample pH Not In Range

96.3

94.1

123

90.7

70

70

70

70

RL Reporting Limit

iated Method Blank			

130

130

130

130

Page 10 of 12

0.48

0.47

0.62

0.45

Sample Diluted Due to Matrix Н Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit ND

PQL Practical Quanitative Limit

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

Qualifiers:

* D

% Recovery outside of range due to dilution or matrix interference S

Value exceeds Maximum Contaminant Level.

Project: Gaucho 6	Battery										
Sample ID: 2205058-002ams	Samp	Type: MS	54	Tes	stCode: EF	PA Method	8260B: Volati	les Short I	List		
Client ID: BH22-02 0'	Batc	h ID: 672	237	F	RunNo: 87	7785					
Prep Date: 5/3/2022	Analysis I	Date: 5/	5/2022	:	SeqNo: 3	109313	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.97	0.025	0.9911	0	98.3	63.5	137				
Toluene	0.82	0.050	0.9911	0.01335	81.3	77.6	127				
Ethylbenzene	0.92	0.050	0.9911	0	92.8	77.9	129				
Xylenes, Total	2.6	0.099	2.973	0	88.4	76.8	127				
Surr: 1,2-Dichloroethane-d4	0.45		0.4955		90.3	70	130				
Surr: 4-Bromofluorobenzene	0.46		0.4955		93.7	70	130				
Surr: Dibromofluoromethane	0.58		0.4955		117	70	130				
Surr: Toluene-d8	0.43		0.4955		87.7	70	130				
Sample ID: 2205058-002amsd	Samp	Туре: МS	5D4	Tes	stCode: EF	PA Method	8260B: Volati	les Short I	List		
Client ID: BH22-02 0'	Batch ID: 67237 RunNo: 87785					7785					
Prep Date: 5/3/2022	Analysis I	Analysis Date: 5/5/2022			SeqNo: 3109314			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.94	0.025	0.9940	0	94.6	63.5	137	3.60	20		
Toluene	0.81	0.050	0.9940	0.01335	80.0	77.6	127	1.25	20		
Ethylbenzene	0.85	0.050	0.9940	0	85.3	77.9	129	8.19	20		
Xylenes, Total	2.5	0.099	2.982	0	84.9	76.8	127	3.78	20		
Surr: 1,2-Dichloroethane-d4	0.46		0.4970		92.7	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.46		0.4970		92.5	70	130	0	0		
Surr: Dibromofluoromethane	0.58		0.4970		116	70	130	0	0		
Surr: Toluene-d8	0.45		0.4970		91.4	70	130	0	0		
Sample ID: mb-67237	Samp	Туре: МЕ	BLK	Tes	stCode: EF	PA Method	8260B: Volati	les Short I	List		
Client ID: PBS	Batc	h ID: 672	237	F	RunNo: 8 7	7785					
Prep Date: 5/3/2022	Analysis I	Date: 5/	5/2022	:	SeqNo: 3	109334	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									

WO#: 2205058 13-May-22

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:Devon EnergyProject:Gaucho 6 Battery

Sample ID: LCS-67237	Samp	Гуре: LC	S4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batc	Batch ID: 67237 RunNo: 878				7830						
Prep Date: 5/3/2022	Analysis Date: 5/6/2022			:	SeqNo: 31	111395	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.96	0.025	1.000	0	96.2	80	120					
Toluene	0.84	0.050	1.000	0	84.2	80	120					
Ethylbenzene	0.88	0.050	1.000	0	88.0	80	120					
Xylenes, Total	2.6	0.10	3.000	0	86.6	80	120					
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.3	70	130					
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.7	70	130					
Surr: Dibromofluoromethane	0.58		0.5000		116	70	130					
Surr: Toluene-d8	0.45		0.5000		90.7	70	130					

Qualifiers:

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

WO#: 2205058

13-May-22

Page 188 of 290

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Page	<i>189</i>	of 290
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WO#:	2205058
	12.14 22

13-May-22

Client: Project:	Devon En Gaucho 6	ergy Battery										
Sample ID:	2205058-001ams	Samp	Гуре: МS	;	Tes	tCode: EF	PA Method	8015D Mod: (Gasoline F	lange		
Client ID:	BH22-01 0'	Batcl	h ID: 672	237	F	RunNo: 87	7785					
Prep Date:	5/3/2022	Analysis [Date: 5/	5/2022	S	SeqNo: 31	109349	Units: mg/K	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang	e Organics (GRO)	23	5.0	24.90	1.715	86.2	61.1	127				
Surr: BFB		530		498.0		106	70	130				
Sample ID:	2205058-001amsd	SampT	Гуре: МS	D	Tes	tCode: EF	PA Method	8015D Mod: (Gasoline F	ange		
Client ID:	BH22-01 0'	Batcl	h ID: 672	237	F	RunNo: 87	7785					
Prep Date:	5/3/2022	Analysis [Date: 5/	5/2022	Ş	SeqNo: 31	109350	Units: mg/K	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang	e Organics (GRO)	22	5.0	24.95	1.715	81.9	61.1	127	4.55	20		
Surr: BFB		530		499.0		107	70	130	0	0		
Sample ID:	LCS-67237	SampT	Гуре: LC	s	Tes	tCode: EF	PA Method	8015D Mod: Gasoline Range				
Client ID:	LCSS	Batcl	h ID: 672	237	F	RunNo: 87	7785					
Prep Date:	5/3/2022	Analysis [Date: 5/	5/2022	Ş	SeqNo: 31	109370	Units: mg/K	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang	e Organics (GRO)	24	5.0	25.00	0	94.9	70	130				
Surr: BFB		550		500.0		110	70	130				
Sample ID:	mb-67237	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline F	ange		
Client ID:	PBS	Batcl	h ID: 672	237	F	RunNo: 87	7785					
Prep Date:	5/3/2022	Analysis [Date: 5/	5/2022	S	SeqNo: 31	109371	Units: mg/K	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Rang	e Organics (GRO)	ND	5.0									
Surr: BFB		550		500.0		110	70	130				

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 12

ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmen	ntal Analy 490 Albuquerq 975 FAX: v.hallenvit	sis Laborato 1 Hawkins N 1ue, NM 8710 505-345-410 100mental.co	ry 1E 09 Sar 07 m	Page Sample Log-In Check List				
Client Name: Devon Energy	Work Order Num	ber: 220	5058		RcptNo: 1				
Received By: Juan Rojas	5/3/2022 7:00:00 A	м		(Juan ang	as ²				
Completed By: Sean Livingston	5/3/2022 8:33:14 A	м		< /	· ,				
Reviewed By: WWG 5	.3.22)~L.	Not-				
Chain of Custody									
1. Is Chain of Custody complete?		Yes	\checkmark	No 🗌	Not Present				
2. How was the sample delivered?		Cour	ier						
Log In									
3. Was an attempt made to cool the sampl	es?	Yes	\checkmark	No 🗌					
4. Were all samples received at a temperat	ure of >0° C to 6.0°C	Yes		No 🗌					
5. Sample(s) in proper container(s)?		Yes	\checkmark	No 🗌					
6. Sufficient sample volume for indicated te	st(s)?	Yes		No 🗌					
7. Are samples (except VOA and ONG) pro	perly preserved?	Yes	\checkmark	No 🗌					
8. Was preservative added to bottles?		Yes		No 🔽	NA 🗌				
9. Received at least 1 vial with headspace <	1/4" for AQ VOA?	Yes		No 🗌	NA 🔽				
10. Were any sample containers received br	oken?	Yes		No 🗹					
11. Does paperwork match bottle labels?		Yes	✓	No 🗌	# of preserved bottles checked for pH:				
(Note discrepancies on chain of custody)					(<2 or >12 unless not				
12. Are matrices correctly identified on Chain	of Custody?	Yes		No 🗌	Adjusted?				
14 Were all holding times able to be met?		Yes			Charted has a folio				
(If no, notify customer for authorization.)		Yes	V	NO	Checked by: 31 5 3				
Special Handling (if applicable)									
15. Was client notified of all discrepancies w	ith this order?	Yes		No 🗌	NA 🗹				
Person Notified:	Date:	[
By Whom:	Via:	🗌 eMa	il 🗌 Phon	e 🗌 Fax	In Person				
Regarding:				tear of an and an and a	and a second second second second second				
Client Instructions:									
16. Additional remarks:									
17 Cooler Information									
Cooler No Temp °C Condition	Seal Intact Seal No	Seel De		and De					
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Page 1 of 1

Devon	Z Standard			HALL	ENVIE	RONMENT	AL
	Project Name:						RY
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~	Project #:		Tel 505	-345-3975	Fav 505.	345-4107	2.07.
	225-01101	- 1 M		An	alysis Req	uest	
Fax#:	Project Manager:		(c		¢C	()ı	
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Time Matrix Sample Name	Container Preservative Type and # Type	HEAL NO.	втех Л I 108:Н91 8081 Рез	PAHs by PAHs by 8 AADA	8520 (26 8560 (VC	lioO letoT	
10:00 SOI'T BHZZ-01 0'	402 ICE	100				-	
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0:20 8HZZ-03 0		100					
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me: Relinquished by:	Received by: Via:	Date Time	D,	rect B	NO IL	4D	8
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July 07, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (575) 748-0176 FAX:

RE: Gaucho 6 Battery

OrderNo.: 2206D53

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/24/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Project: Gaucho 6 Battery

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2206D53

Date Reported: 7/7/2022

Client Sample ID: WES22-01 Collection Date: 6/22/2022 9:30:00 AM Received Date: 6/24/2022 8:16:00 AM

Lab ID: 2206D53-001	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 4:43:26 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/30/2022 4:43:26 AM
Surr: DNOP	86.3	51.1-141	%Rec	1	6/30/2022 4:43:26 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/28/2022 5:07:56 PM
Surr: BFB	104	37.7-212	%Rec	1	6/28/2022 5:07:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/28/2022 5:07:56 PM
Toluene	ND	0.047	mg/Kg	1	6/28/2022 5:07:56 PM
Ethylbenzene	ND	0.047	mg/Kg	1	6/28/2022 5:07:56 PM
Xylenes, Total	ND	0.095	mg/Kg	1	6/28/2022 5:07:56 PM
Surr: 4-Bromofluorobenzene	96.3	70-130	%Rec	1	6/28/2022 5:07:56 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/29/2022 7:43:24 PM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 9

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Gaucho 6 Battery

Project:

Analytical Report Lab Order 2206D53

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/7/2022

Client Sample ID: WES22-02 Collection Date: 6/22/2022 9:35:00 AM Received Date: 6/24/2022 8:16:00 AM

Lab ID: 2206D53-002	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 5:07:14 AM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	6/30/2022 5:07:14 AM
Surr: DNOP	105	51.1-141	%Rec	1	6/30/2022 5:07:14 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/29/2022 12:11:18 AM
Surr: BFB	94.2	37.7-212	%Rec	1	6/29/2022 12:11:18 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2022 12:11:18 AM
Toluene	ND	0.048	mg/Kg	1	6/29/2022 12:11:18 AM
Ethylbenzene	ND	0.048	mg/Kg	1	6/29/2022 12:11:18 AM
Xylenes, Total	ND	0.096	mg/Kg	1	6/29/2022 12:11:18 AM
Surr: 4-Bromofluorobenzene	90.9	70-130	%Rec	1	6/29/2022 12:11:18 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/29/2022 8:20:38 PM

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

Qualifiers:

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

Page 2 of 9

Gaucho 6 Battery

Project:

Analytical Report Lab Order 2206D53

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/7/2022

Client Sample ID: WES22-03 Collection Date: 6/22/2022 9:40:00 AM Received Date: 6/24/2022 8:16:00 AM

Lab ID: 2206D53-003	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 5:31:03 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/30/2022 5:31:03 AM
Surr: DNOP	92.6	51.1-141	%Rec	1	6/30/2022 5:31:03 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	6/29/2022 12:34:42 AM
Surr: BFB	95.9	37.7-212	%Rec	1	6/29/2022 12:34:42 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	6/29/2022 12:34:42 AM
Toluene	ND	0.046	mg/Kg	1	6/29/2022 12:34:42 AM
Ethylbenzene	ND	0.046	mg/Kg	1	6/29/2022 12:34:42 AM
Xylenes, Total	ND	0.093	mg/Kg	1	6/29/2022 12:34:42 AM
Surr: 4-Bromofluorobenzene	92.7	70-130	%Rec	1	6/29/2022 12:34:42 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/29/2022 9:22:42 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 3 of 9

Project: Gaucho 6 Battery

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2206D53

Date Reported: 7/7/2022

Client Sample ID: BES22-01 Collection Date: 6/22/2022 9:45:00 AM _

Lab ID: 2206D53-004	Matrix: SOIL	Rece	eived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 5:54:54 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/30/2022 5:54:54 AM
Surr: DNOP	92.1	51.1-141	%Rec	1	6/30/2022 5:54:54 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/29/2022 12:58:10 AM
Surr: BFB	100	37.7-212	%Rec	1	6/29/2022 12:58:10 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2022 12:58:10 AM
Toluene	ND	0.047	mg/Kg	1	6/29/2022 12:58:10 AM
Ethylbenzene	ND	0.047	mg/Kg	1	6/29/2022 12:58:10 AM
Xylenes, Total	ND	0.095	mg/Kg	1	6/29/2022 12:58:10 AM
Surr: 4-Bromofluorobenzene	94.6	70-130	%Rec	1	6/29/2022 12:58:10 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/29/2022 9:35:07 PM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 9

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Client: Project:	Devon Gauch	Energy o 6 Battery										
Sample ID:	MB-68444	SampType: m ł	olk	Tes	tCode: EPA	A Method	300.0: Anions	;				
Client ID:	PBS	Batch ID: 68	444	F	RunNo: 891	43						
Prep Date:	6/29/2022	Analysis Date: 6/	29/2022	S	SeqNo: 316	67724	Units: mg/K	g				
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Chloride		ND 1.5										
Sample ID:	LCS-68444	SampType: Ics	;	Tes	tCode: EPA	A Method	300.0: Anions	;				
Client ID:	LCSS	Batch ID: 68	444	F	RunNo: 891	43						
Prep Date:	6/29/2022	Analysis Date: 6/	29/2022	S	SeqNo: 316	67725	Units: mg/K	g				
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Chloride		14 1.5	15.00	0	92.6	90	110					

Qualifiers:

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

2206D53

07-Jul-22

WO#:

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

11 PM	1:55:	2022	10/26/	Imaging:	to	Released
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Project:	Gaucho 6	Battery									
Sample ID: ME	3-68386	SampT	Гуре: М	IBLK	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PB	S	Batcl	n ID: 6	8386	F	RunNo: 8 9	9114				
Prep Date: 6/	/27/2022	Analysis [Date: 6	5/28/2022	S	SeqNo: 3 [,]	168753	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.6		10.00		96.1	51.1	141			
Sample ID: LC	S-68386	SampT	Гуре: L	cs	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LC	SS	Batcl	n ID: 6	8386	F	RunNo: 8 9	9114				
Prep Date: 6/	/27/2022	Analysis [Date: 6	5/28/2022	S	SeqNo: 34	168754	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.1		5.000		102	51.1	141			
Sample ID: ME	3-68415	SampT	Гуре: М	IBLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PB	S	Batcl	n ID: 6	8415	F	RunNo: 8 9	9114				
Prep Date: 6/	/28/2022	Analysis [Date: 6	5/30/2022	S	SeqNo: 34	170264	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ	nics (DRO)	ND	15	5							
Motor Oil Range Or	rganics (MRO)	ND	50)							
Surr: DNOP		9.5		10.00		94.5	51.1	141			
Sample ID: LC	S-68415	Samp	Type: L	cs	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LC	SS	Batcl	h ID: 6	8415	F	RunNo: 8 !	9114				

Client ID:	LCSS	Batch	n ID: 684	1 15	F	RunNo: 8 9	9114			
Prep Date:	6/28/2022	Analysis D	ate: 6/3	30/2022	S	SeqNo: 31	70265	Units: mg/K	g	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Diesel Range	Organics (DRO)	49	15	50.00	0	98.8	64.4	127		

eser Range Organics (DRO)	49	15	30.00	0	90.0	04.4	121
Surr: DNOP	5.1		5.000		103	51.1	141

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 6 of 9

Qual

- 07-Jul-22
- WO#: 2206D53

Gaucho 6 Battery

Client:

Project:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

- Analyte detected in the associated Method Blank

RL Reporting Limit

- Р Sample pH Not In Range

Value exceeds Maximum Contaminant Level. *

Qualifiers:

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S

Sample ID: Ics-6	58381 Sam	оТуре: L(CS	Tes	tCode: EP	A Method	8015D: Gasoli	ne Range		
Client ID: LCS	s Bat	ch ID: 68	3381	F	RunNo: 89	080				
Prep Date: 6/27	7/2022 Analysis	Date: 6	/28/2022	5	SeqNo: 31	64760	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		196	37.7	212			
Sample ID: mb-6	68381 Sam	оТуре: М	BLK	Tes	tCode: EP	A Method	8015D: Gasoli	ne Range		
Client ID: PBS	Bat	ch ID: 68	3381	F	RunNo: 89	080				
Prep Date: 6/27	7/2022 Analysis	Date: 6	/28/2022	5	SeqNo: 31	64761	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		87.5	37.7	212			
Comple ID: mb 0	60202 Sam			Too		A Mothed		na Danaa		
Sample ID: mb-6	58382 Sam	Jiype. W	DLN	162		A Method	6015D: Gason	ne kange		
Client ID: PBS	Bat	ch ID: 68	3382	F	RunNo: 89	090	6015D: Gason	ne kange		
Client ID: PBS Prep Date: 6/27	58382 Sam Bai 7/2022 Analysis	ch ID: 68 Date: 6	3382 /28/2022	F	RunNo: 89 SeqNo: 31	090 65011	Units: mg/Kg	ne kange		
Client ID: PBS Prep Date: 6/27 Analyte	7/2022 Sam Result	ch ID: 68 Date: 6 PQL	3382 /28/2022 SPK value	F SPK Ref Val	RunNo: 89 SeqNo: 31 %REC	65011 LowLimit	Units: mg/Kç HighLimit	ne kange J %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Orga	7/2022 Sam Result	ch ID: 68 Date: 6 PQL 5.0	3382 /28/2022 SPK value	SPK Ref Val	RunNo: 89 SeqNo: 31 %REC	65011 LowLimit	Units: mg/Kg HighLimit	Ne Kange J %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Organ Surr: BFB	56382 Sam Bat Bat 7/2022 Analysis Result Result Inics (GR0) ND 1000	ch ID: 68 Date: 6 PQL 5.0	3382 /28/2022 SPK value 1000	SPK Ref Val	RunNo: 89 SeqNo: 31 %REC 102	65011 LowLimit	Units: mg/Kg HighLimit 212	y %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Orga Surr: BFB	56382 Sam Bat 7/2022 7/2022 Analysis Result Result Inics (GR0) ND 1000 S8382	ch ID: 68 Date: 6 PQL 5.0	3382 /28/2022 SPK value 1000	SPK Ref Val	RunNo: 89 SeqNo: 31 %REC 102 tCode: EF	A Method 2 090 65011 LowLimit 37.7 A Method 2	Units: mg/Kg HighLimit 212 8015D: Gasoli	%RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Orga Surr: BFB Sample ID: Ics-6 Client ID: LCS	56382 Sam Bat Bat 7/2022 Analysis Result Result anics (GRO) ND 1000 368382 Sam Sam	ch ID: 68 Date: 6 PQL 5.0 DType: L(ch ID: 68	3382 /28/2022 SPK value 1000 CS 3382	Fes F SPK Ref Val Tes F	RunNo: 89 SeqNo: 31 %REC 102 tCode: EF RunNo: 89	A Method 2 090 65011 LowLimit 37.7 A Method 2 090	Units: mg/Kg HighLimit 212 8015D: Gasoli	y %RPD ne Range	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Orga Surr: BFB Sample ID: Ics-6 Client ID: LCS3 Prep Date: 6/27	56382 Sam Bat 7/2022 Analysis Result Inics (GRO) ND 1000 38382 S Bat 7/2022 Analysis	ch ID: 68 Date: 6 PQL 5.0 DType: L(ch ID: 68 Date: 6	3382 /28/2022 SPK value 1000 CS 3382 /28/2022	Fes F SPK Ref Val Tes F S	RunNo: 89 SeqNo: 31 %REC 102 tCode: EF RunNo: 89 SeqNo: 31	A Method 2 090 65011 LowLimit 37.7 A Method 2 090 65012	Units: mg/Kg HighLimit 212 8015D: Gasoli Units: mg/Kg	%RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Orga Surr: BFB Sample ID: Ics-6 Client ID: ICS Prep Date: 6/27 Analyte	58382 Sam Bat Bat 7/2022 Analysis Result Result Inics (GRO) ND 1000 1000 58382 Sam 58382 Sam 7/2022 Analysis 7/2022 Analysis	ch ID: 68 Date: 6 PQL 5.0 DType: L(ch ID: 68 Date: 6 PQL	3382 /28/2022 SPK value 1000 CS 3382 /28/2022 SPK value	SPK Ref Val Tes SPK Ref Val	RunNo: 89 SeqNo: 31 %REC 102 tCode: EP RunNo: 89 SeqNo: 31 %REC	A Method 2 090 65011 LowLimit 37.7 A Method 2 090 65012 LowLimit	Units: mg/Kg HighLimit 212 8015D: Gasoli Units: mg/Kg HighLimit	ne Range %RPD ne Range %RPD	RPDLimit	Qual
Client ID: PBS Prep Date: 6/27 Analyte Gasoline Range Orga Surr: BFB Sample ID: Ics-6 Client ID: LCS: Prep Date: 6/27 Analyte Gasoline Range Orga	56382 Sam Bat 7/2022 Analysis Result Inics (GR0) ND 1000 1000 58382 Sam S Bat 7/2022 Analysis Result Result Inics (GR0) 29	ch ID: 68 Date: 6 PQL 5.0 DType: L(ch ID: 68 Date: 6 PQL 5.0	3382 /28/2022 SPK value 1000 CS 3382 /28/2022 SPK value 25.00	SPK Ref Val Tes SPK Ref Val SPK Ref Val 0	RunNo: 89 SeqNo: 31 %REC 102 tCode: EF RunNo: 89 SeqNo: 31 %REC 114	A Method 2 0990 65011 LowLimit 37.7 A Method 2 090 65012 LowLimit 72.3	Units: mg/Kg HighLimit 212 8015D: Gasoli Units: mg/Kg HighLimit 137	ne Range %RPD ne Range %RPD	RPDLimit	Qual

WO#: 2206D53

- в
- Е Estimated value
 - J Analyte detected below quantitation limits

Page 7 of 9

Client:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Project:	Gaucho 6	Battery									
Sample ID:	lcs-68381	Samp	Гуре: LC	S	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID:	LCSS	Batcl	h ID: 68:	381	F	RunNo: 8 9	9080				
Prep Date:	6/27/2022	Analysis [Date: 6/2	28/2022	S	SeqNo: 31	164770	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	0.86		1.000		85.6	70	130			
Sample ID:	mb-68381	SampType: MBLK			Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batcl	h ID: 68	381	F	RunNo: 8 9	9080				
Prep Date:	6/27/2022	Analysis [Date: 6/2	28/2022	S	SeqNo: 31	164771	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	0.85		1.000		85.2	70	130			
Sample ID:	mb-68382	Samp	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID:	PBS	Batch ID: 68382			F	RunNo: 89090					
Prep Date:	6/27/2022	Analysis [Date: 6/3	28/2022	5	SeqNo: 31	165039	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Bron	nofluorobenzene	0.95		1.000		94.7	70	130			
Sample ID:	LCS-68382	Samp	Type: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID:	LCSS	Batcl	h ID: 68:	382	RunNo: 89090						
Prep Date:	6/27/2022	Analysis [Date: 6/2	28/2022	5	SeqNo: 31	165040	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.85	0.025	1.000	0	84.9	80	120			
Toluene		0.90	0.050	1.000	0	89.6	80	120			
Ethylbenzene		0.91	0.050	1.000	0	90.8	80	120			
Xylenes, Total		2.7	0.10	3.000	0	91.1	80	120			
Surr: 4-Bron	nofluorobenzene	0.98		1.000		98.0	70	130			
Sample ID:	2206d53-001ams	Samp	Гуре: МS	6	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID:	WES22-01	Batcl	h ID: 68:	382	F	RunNo: 8 9	9090				
Prep Date:	6/27/2022	Analysis [Date: 6/2	28/2022	S	SeqNo: 31	165043	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.85	0.024	0.9515	0	89.2	68.8	120			
Toluene		0.90	0.048	0.9515	0	94.4	73.6	124			
Ethylbenzene		0.91	0.048	0.9515	0	95.2	72.7	129			
Xylenes. Total		2.8	0.095	2.854	0	96.5	75.7	126			
, ,					-						

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 200 of 290

WO#:	2206D53

07-Jul-22

Gaucho 6 Battery

Client:

Project:

Sample ID: 2206d53-001ams

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

SampType: MS

Client ID: WES22-01	Batch Analysis F	n ID: 683	82	F	RunNo: 89	9090 165043	Linits: ma/K	a		
Analvte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	9 %RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		0.9515		93.4	70	130	,		
Sample ID: 2206d53-001amsd	SampT	SampType: MSD TestCode: EPA Method					8021B: Volati	les		
Client ID: WES22-01	Batch	Batch ID: 68382 RunNo: 89090								
Prep Date: 6/27/2022	Analysis D)ate: 6/2	28/2022	5	SeqNo: 31	65044	Units: mg/K	g		
Prep Date: 6/27/2022 Analyte	Analysis E Result	0ate: 6/2 PQL	2 8/2022 SPK value	SPK Ref Val	SeqNo: 3 1 %REC	1 65044 LowLimit	Units: mg/K HighLimit	g %RPD	RPDLimit	Qual
Prep Date: 6/27/2022 Analyte Benzene	Analysis E Result 0.83	Date: 6/2 PQL 0.024	28/2022 SPK value 0.9434	SPK Ref Val	SeqNo: 3 1 %REC 87.9	LowLimit 68.8	Units: mg/K HighLimit 120	g %RPD 2.31	RPDLimit 20	Qual
Prep Date: 6/27/2022 Analyte Benzene Toluene	Analysis E Result 0.83 0.87	Date: 6/2 PQL 0.024 0.047	28/2022 SPK value 0.9434 0.9434	SPK Ref Val 0 0	SeqNo: 31 %REC 87.9 92.7	LowLimit 68.8 73.6	Units: mg/K HighLimit 120 124	g %RPD 2.31 2.67	RPDLimit 20 20	Qual
Prep Date: 6/27/2022 Analyte Benzene Toluene Ethylbenzene	Analysis D Result 0.83 0.87 0.88	Date: 6/2 PQL 0.024 0.047 0.047	28/2022 SPK value 0.9434 0.9434 0.9434	SPK Ref Val 0 0 0	SeqNo: 31 %REC 87.9 92.7 93.3	LowLimit 68.8 73.6 72.7	Units: mg/K HighLimit 120 124 129	g %RPD 2.31 2.67 2.82	RPDLimit 20 20 20	Qual
Prep Date: 6/27/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Analysis D Result 0.83 0.87 0.88 2.7	PQL 0.024 0.047 0.047 0.094	28/2022 SPK value 0.9434 0.9434 0.9434 2.830	SPK Ref Val 0 0 0 0 0	SeqNo: 31 %REC 87.9 92.7 93.3 95.0	LowLimit 68.8 73.6 72.7 75.7	Units: mg/K <u>HighLimit</u> 120 124 129 126	g %RPD 2.31 2.67 2.82 2.37	RPDLimit 20 20 20 20	Qual

TestCode: EPA Method 8021B: Volatiles

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 9 of 9

WO#: 2206D53 07-Jul-22

ed by OCD: 10/10/2022 8:04:48 AM HALL ENVIRONMENTAL ANALYSIS LABORATORY		Hall TEL W	Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com			Page 20			
Client Name:	Devon En	ergy	Work (Order Num	ber: 2206D5	3		RcptNo: 1	
Received By:	Kasandr	a Payan	6/24/202	2 8:16:00	AM	K	il-		
Completed By	Cheyenn	e Cason	6/24/202	2 9:16:37	AM	()	al		
Reviewed By:	DAD	6/24/22				0,1			
Chain of Cu	istody								
1. Is Chain of	Custody com	plete?			Yes 🗸		No 🗌	Not Present	
2. How was the	ne sample deli	vered?			Courier				
Log In					_		_		
3. Was an att	empt made to	cool the sam	ples?		Yes 🗹	1	No	NA 🛄	
4. Were all sa	mples receive	d at a temper	ature of >0° C to	06.0°C	Yes 🗸	I	No 🗌		
5. Sample(s)	in proper cont	ainer(s)?			Yes 🔽	I	No 🗌		
6. Sufficient sa	ample volume	for indicated	test(s)?		Yes 🗹	١	lo 🗌		
7. Are sample	s (except VOA	and ONG) p	roperly preserved	1?	Yes 🗹	٢	lo 🗌		
8. Was preser	vative added t	o bottles?			Yes 🗌	٢	lo 🔽	NA 🗌	/
9. Received at	least 1 vial w	ith headspace	e <1/4" for AQ VC	DA?	Yes 🗌	٢	lo 🗌	NA 🔽	
10. Were any s	ample contair	ners received	broken?		Yes	I	No 🗸	# of preserved	
11. Does paper (Note discre	work match be pancies on ch	ottle labels? nain of custod	V)		Yes 🗹	١	lo 🗌	bottles checked for pH: (<2 or >1	2 unless noted)
12. Are matrice	s correctly ide	ntified on Cha	in of Custody?		Yes 🗸	Ν	lo 🗌	Adjusted?	
13. Is it clear wi	nat analyses v	vere requeste	d?		Yes 🔽	٢	lo 🗌		,24,
14. Were all ho (If no, notify	lding times ab customer for	le to be met? authorization.)		Yes 🗹	٢	lo 🗌	Checked by:	anu sinta
Special Han	dling (if ap	plicable)							Ū.
15. Was client	notified of all of	discrepancies	with this order?		Yes	I	No 🗌	NA 🗹	
Perso	on Notified:	[enang bi temperang kenang menang bi	Date	[
By W	'hom:	1		Via:	eMail	Phone	🗌 Fax	In Person	
Rega	rding:	1							
Clien	t Instructions:								
16. Additional	remarks:								
17. <u>Cooler Inf</u> Cooler I	ormation No Temp °C	Condition	Seal Intact	Seal No	Seal Date	Sign	ed Bv		
1	2.0	Good	Not Present			Sign			

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Page 1 of 1

Received by: Time: Relinquished by: 1400 Q. If necessary, samples submitted to Hall Environmental may be subco	10/2022 8:04:48 AM Time:	9:45 9:40 4:45 4:45 4:45 4:45 4:45 4:45 4:45 4	email or Fax#: QA/QC Package: QA/QC Package: □ Level 4 (Full Validation) Accreditation: Az Compliance Accreditation: Az Compliance NELAC □ Other EDD (Type) □ EDD (Type) □ Date Time Matrix Sample Name	Phone #:
M Upper Received by: Via: Date Time M COUVILY 6-24-33 8:16 Intracted to other accredited laboratories. This serves as notice of this	Received by: Via: Date Time		Project Manager: MONICA PRADIN Sampler: CD On Ice: RYes INO # of Coolers: RYes INO # of Coolers: RYes INO Cooler Temp(including CF):-RO Cooler Temp(including CF):-RO Container Type and # Type 1.0-0.1-0.8 HEAL No. HEAL No. HEAL No.	Turn-Around Time: 5-D9 y Standard Rush Project Name: GGUCHO & 89222179 Project #: 225-01101-001
Notitiatives. CC: Chance Dixon Direct 8バル Devan Energy ムバク サ: ルバタ s possibility. Any sub-contracted data will be clearly notated on the analytical report.			BTEX MTBE / TMB's (8021) TPH:8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's EDB (Method 504.1) PAHs by 8310 or 8270SIMS RCRA 8 Metals CI, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄ 8260 (VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent)	HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request



July 14, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX:

RE: Gaucho Unit 6 Containment Area

OrderNo.: 2207428

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/9/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Project:

Analytical Report Lab Order 2207428

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Containment Area

Date Reported: 7/14/2022 Client Sample ID: WES22-04 Collection Date: 7/7/2022 12:00:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207428-001	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB		
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 4:14:50 AM		
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/13/2022 4:14:50 AM		
Surr: DNOP	79.1	51.1-141	%Rec	1	7/13/2022 4:14:50 AM		
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB		
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 9:40:18 PM		
Surr: BFB	94.1	37.7-212	%Rec	1	7/12/2022 9:40:18 PM		
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	0.025	mg/Kg	1	7/12/2022 9:40:18 PM		
Toluene	ND	0.050	mg/Kg	1	7/12/2022 9:40:18 PM		
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 9:40:18 PM		
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 9:40:18 PM		
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	7/12/2022 9:40:18 PM		
EPA METHOD 300.0: ANIONS					Analyst: JTT		
Chloride	180	60	mg/Kg	20	7/12/2022 6:03:04 PM		

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 5

Hall Envi	WO#:	2207428 14-Jul-22			
Client: Project:	Devon l Gaucho	Energy Unit 6 Containment Area			
Sample ID: M	B-68734	SampType: mblk	TestCode: EPA Method 300.0: Anions		

1				
Client ID: PBS	Batch ID: 68734	RunNo: 89440		
Prep Date: 7/12/2022	Analysis Date: 7/12/2022	SeqNo: 3181959	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Chloride	ND 1.5			
Sample ID: LCS-68734	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Sample ID: LCS-68734 Client ID: LCSS	SampType: I cs Batch ID: 68734	TestCode: EPA Method RunNo: 89440	300.0: Anions	
Sample ID: LCS-68734 Client ID: LCSS Prep Date: 7/12/2022	SampType: Ics Batch ID: 68734 Analysis Date: 7/12/2022	TestCode: EPA Method RunNo: 89440 SeqNo: 3181960	300.0: Anions Units: mg/Kg	
Sample ID: LCS-68734 Client ID: LCSS Prep Date: 7/12/2022 Analyte	SampType: Ics Batch ID: 68734 Analysis Date: 7/12/2022 Result PQL SPK value	TestCode: EPA Method RunNo: 89440 SeqNo: 3181960 SPK Ref Val %REC LowLimit	300.0: Anions Units: mg/Kg HighLimit %RPD RPDLimit	Qual

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 5

X U U U U							
Hall Env	vironmental Analysis Laboratory, Inc.		14-Jul-22				
Client:	Devon Energy						

Project: Gaucho U	Unit 6 Con	tainmer	nt Area							
Sample ID: MB-68675	MB-68675 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	n ID: 686	675	RunNo: 89401						
Prep Date: 7/11/2022	Analysis D	Date: 7/*	12/2022	Ş	SeqNo: 31	180414	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.2	51.1	141			
Sample ID: LCS-68675	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	n ID: 686	675	F	RunNo: 8 9	9401				
Prep Date: 7/11/2022	Analysis D	Date: 7/	12/2022	Ş	SeqNo: 31	180415	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	96.9	64.4	127			
Surr: DNOP	4.8		5.000		96.3	51.1	141			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 3 of 5

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Client:

	WO#:	2207428
all Environmental Analysis Laboratory, Inc.		14-Jul-22

Client: Project:	Devon E Gaucho	nergy Unit 6 Con	tainmer	nt Area							
Sample ID: mb	-68666	SampT	уре: МЕ	LK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: PB	S	Batch	n ID: 686	66	F	RunNo: 8 9	9410		-		
Prep Date: 7/	/10/2022	Analysis D	Date: 7/*	12/2022	S	SeqNo: 3 [,]	180627	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Org	ganics (GRO)	ND	5.0								
Surr: BFB		960		1000		96.1	37.7	212			
Sample ID: Ics	-68666	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: LC	SS	Batch	n ID: 686	666	F	RunNo: 8 9	9410				
Prep Date: 7/	10/2022	Analysis D	Date: 7/	12/2022	S	SeqNo: 3	180628	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Org	ganics (GRO)	26	5.0	25.00	0	102	72.3	137			
Surr: BFB		2000		1000		196	37.7	212			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 5

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Page	209	of 290	
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Hall Enviro	WO#:	2207428 14-Jul-22	
Client: Project:	Devon Energy Gaucho Unit 6 Containment Area		

Sample ID: mb-68666	SampType: MBLK TestCode: EPA Method 8021B: Volatiles									
Client ID: PBS	Batc	h ID: 686	666	RunNo: 89410						
Prep Date: 7/10/2022	Analysis [Date: 7/	12/2022	S	SeqNo: 31	80658	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			
		SampType: LCS TestCode: EPA Method 8021B: Volatiles								
Sample ID: LCS-68666	Samp	Гуре: LC	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Sample ID: LCS-68666 Client ID: LCSS	Samp ⁻ Batc	Гуре: LC h ID: 686	S 666	Tes F	tCode: EF RunNo: 8	PA Method 9410	8021B: Volati	les		
Sample ID: LCS-68666 Client ID: LCSS Prep Date: 7/10/2022	Samp Batc Analysis [Гуре: LC h ID: 686 Date: 7/ *	S 666 12/2022	Tes F	tCode: EF RunNo: 8 9 SeqNo: 3 1	PA Method 9410 180659	8021B: Volati Units: mg/K	iles g		
Sample ID: LCS-68666 Client ID: LCSS Prep Date: 7/10/2022 Analyte	Samp Batc Analysis I Result	Гуре: LC h ID: 686 Date: 7/ PQL	S 666 12/2022 SPK value	Tes F SPK Ref Val	itCode: EF RunNo: 89 SeqNo: 31 %REC	PA Method 9410 180659 LowLimit	8021B: Volati Units: mg/K HighLimit	iles g %RPD	RPDLimit	Qual
Sample ID: LCS-68666 Client ID: LCSS Prep Date: 7/10/2022 Analyte Benzene	Samp Batc Analysis [Result 0.94	Fype: LC h ID: 686 Date: 7/ PQL 0.025	S 566 12/2022 SPK value 1.000	Tes F S SPK Ref Val 0	tCode: EF RunNo: 89 SeqNo: 31 %REC 93.6	PA Method 9410 180659 LowLimit 80	8021B: Volati Units: mg/K HighLimit 120	iles g %RPD	RPDLimit	Qual
Sample ID: LCS-68666 Client ID: LCSS Prep Date: 7/10/2022 Analyte Benzene Toluene	Samp Batc Analysis I Result 0.94 0.99	Type: LC h ID: 686 Date: 7/ PQL 0.025 0.050	S 566 12/2022 SPK value 1.000 1.000	Tes F SPK Ref Val 0 0	tCode: EF RunNo: 89 SeqNo: 37 %REC 93.6 99.1	PA Method 9410 180659 LowLimit 80 80	8021B: Volati Units: mg/K HighLimit 120 120	iles g %RPD	RPDLimit	Qual
Sample ID: LCS-68666 Client ID: LCSS Prep Date: 7/10/2022 Analyte Benzene Toluene Ethylbenzene	Samp Batc Analysis I Result 0.94 0.99 1.0	Fype: LC h ID: 686 Date: 7/* PQL 0.025 0.050 0.050	S 566 12/2022 SPK value 1.000 1.000 1.000	Tes F SPK Ref Val 0 0 0 0	tCode: EF RunNo: 89 SeqNo: 3 %REC 93.6 99.1 99.8	PA Method 9410 180659 LowLimit 80 80 80	8021B: Volati Units: mg/K HighLimit 120 120 120	iles g %RPD	RPDLimit	Qual
Sample ID: LCS-68666 Client ID: LCSS Prep Date: 7/10/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Samp Batc Analysis [Result 0.94 0.99 1.0 3.0	Fype: LC h ID: 686 Date: 7/ PQL 0.025 0.050 0.050 0.10	S 566 12/2022 SPK value 1.000 1.000 1.000 3.000	Tes F SPK Ref Val 0 0 0 0 0	tCode: EF RunNo: 8 SeqNo: 3 %REC 93.6 99.1 99.8 100	PA Method 9410 180659 LowLimit 80 80 80 80 80	8021B: Volati Units: mg/K HighLimit 120 120 120 120	iles g %RPD	RPDLimit	Qual

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 5 of 5

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eived by OCD: 10/10/2022 8:04:48 AM HALL ENVIRONMENTAL ANALYSIS LABORATORY			Hai TE	ll Environmen 4 L: 505-345-39 Website: www	tal Analysis Labo 4901 Hawk Albuquerque, NM 275 FAX: 505-34 hallenvironment.	oratory kins NE 187109 Sar 5-4107 tal.com	Page 2 Sample Log-In Check List			
Client Name:	Devon En	ergy	Work	Order Numb	er: 2207428		RcptNo: 1			
Received By:	Sean Liv	ingston	7/9/202	2 9:30:00 A	М	S-L	not			
Completed By	Sean Liv	ingston	7/12/20	22 9:36:48 A	M	\leq /	in t			
Reviewed By:	54	7/1/22					, Joi			
<u>Chain of Cu</u>	<u>stody</u>									
1. Is Chain of	Custody com	plete?			Yes 🗹	No 🗌	Not Present			
2. How was th	e sample deli	vered?			<u>Courier</u>					
<u>Log In</u> 3. Was an atte	empt made to	cool the sampl	es?		Yes 🔽	No 🗌				
4. Were all sar	nples receive	d at a temperat	ure of >0° C	to 6.0°C	Yes 🔽	No 🗌				
5. Sample(s) i	n proper cont	ainer(s)?			Yes 🗹	No 🗌				
6. Sufficient sa	mple volume	for indicated te	st(s)?		Yes 🗹	No 🗌				
7. Are samples	(except VOA	and ONG) pro	perly preserve	ed?	Yes 🗹	No 🗌				
8. Was preserv	vative added t	o bottles?			Yes 🗌	No 🔽	NA 🗌			
9. Received at	least 1 vial w	ith headspace ·	<1/4" for AQ V	'OA?	Yes 🗌	No 🗌	NA 🗹			
10. Were any s	ample contair	ers received bi	oken?		Yes	No 🔽	# of preserved			
11. Does papen (Note discre	vork match bo pancies on ch	ottle labels? nain of custody)			Yes 🗹	No 🗌	for pH:			
12. Are matrices	correctly ide	ntified on Chair	of Custody?		Yes 🖌	No 🗌	Adjusted?			
13. Is it clear wh	at analyses w	vere requested	?		Yes 🖌	No 🗌				
14. Were all hol (If no, notify	ding times ab customer for	le to be met? authorization.)			Yes 🔽	No 🗌	Checked by: SUL 71412			
Special Hand	dling (if ap	plicable)								
15. Was client	notified of all o	discrepancies w	vith this order?)	Yes 🗌	No 🗌	NA 🗹			
Perso	n Notified:	J		Date:						
By W	hom:			Via:	eMail	Phone 🗌 Fax	In Person			
Rega	ding:	1			an de contrar e contrar e de					
Client	Instructions:									
16. Additional	emarks:									
17. <u>Cooler Inf</u>	ormation	1	£							
Cooler N	lo Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By				
2	2.1	Good					-			
-	0.0	0000	[

Page 1 of 1

- Received by OCD: 10/10/2022	3:04:48 AM		Page 211 of 290
MENT, DRATO 7109 07			M. Pupp
COM BCOM NM 8			The The
ILA LA LA LA partal. 5-34	Total Coliform (Present/Absent)		otated o
ISI Sonme auero s Re	(AOV) 0628		aarly no
Falbu Faults Faults	CILE' BL' NO3' NO ³ ' EO ⁴ ' 2O ⁴		m S
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IAI <i>NN</i> <i>www</i> <i>www</i> <i>ts</i> -39	2MI20728 or 8270SIMS		O C C
1awk A	(1.40č bodteM) 803		D. D.
	8081 Pesticides/8082 PCB's		Anysu
	TPH:8015D(GRO / DRO / MRO)		
mit An	(°C	- the state of the	Time 100 7:30 s notice of the
18 hr	27.0 + LEAL		18/2 Date This serves a
ITime: I Jrush ollvit#lo Cor	ager: 2 Popin 3 Yes 1 Ves 1 Ves 1 Ves 1 Ves 1 Ves		Via: Via: Count
Turn-Around Standard Project Nam Project #:	Project Mana Project Mana Sampler: On Ice: # of Coolers: Cooler Temp Container Type and #	Ч uz	Received by: Received by: Section other a
ain-of-Custody Record	ax#: kage: d D Level 4 (Full Validation) on: D Az Compliance D Other ype) me Matrix Sample Name	Paliminicha hunding	e: Relinquished by B. Relinquished by: D. M.U.U. essary, samples submitted to Hall Environmental may be subc
Phone #:	Date Tir Date Tir		Date: Time



May 09, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX

RE: Gaucho 6 Heater Treater

OrderNo.: 2204C83

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/29/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Gaucho 6 Heater Treater

Project:

Chloride

Analytical Report Lab Order 2204C83

5/4/2022 9:33:20 PM

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/9/2022 Client Sample ID: BH22-01 2' Collection Date: 4/27/2022 10:00:00 AM

Lab ID: 2204C83-001 Matrix: SOIL Received Date: 4/29/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.2 mg/Kg 1 5/3/2022 5:40:37 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 5/3/2022 5:40:37 PM Surr: DNOP 94.1 51.1-141 %Rec 1 5/3/2022 5:40:37 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 5/3/2022 4:06:00 AM 5.0 mg/Kg 1 Surr: BFB 103 37.7-212 %Rec 1 5/3/2022 4:06:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 5/3/2022 4:06:00 AM 0.025 mg/Kg 1 Toluene 5/3/2022 4:06:00 AM ND 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 5/3/2022 4:06:00 AM Xylenes, Total ND 0.099 mg/Kg 1 5/3/2022 4:06:00 AM 5/3/2022 4:06:00 AM Surr: 4-Bromofluorobenzene 83.2 70-130 %Rec 1 **EPA METHOD 300.0: ANIONS** Analyst: LRN

ND

59

ma/Ka

20

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

Qualifiers:

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

Page 1 of 11

Gaucho 6 Heater Treater

2204C83-002

Project:

Lab ID:

Analytical Report Lab Order 2204C83

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/9/2022 Client Sample ID: BH22-03 0' Collection Date: 4/27/2022 10:15:00 AM

Received Date: 4/29/2022 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: SB
Diesel Range Organics (DRO)	12	9.7	mg/Kg	1	5/3/2022 6:02:23 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/3/2022 6:02:23 PM
Surr: DNOP	121	51.1-141	%Rec	1	5/3/2022 6:02:23 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/3/2022 4:26:00 AM
Surr: BFB	103	37.7-212	%Rec	1	5/3/2022 4:26:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	5/3/2022 4:26:00 AM
Toluene	ND	0.049	mg/Kg	1	5/3/2022 4:26:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/3/2022 4:26:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	5/3/2022 4:26:00 AM
Surr: 4-Bromofluorobenzene	84.6	70-130	%Rec	1	5/3/2022 4:26:00 AM
EPA METHOD 300.0: ANIONS					Analyst: LRN
Chloride	96	60	mg/Kg	20	5/4/2022 10:10:35 PM

Matrix: SOIL

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

Qualifiers:

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

Page 2 of 11

Gaucho 6 Heater Treater

2204C83-003

Project:

Lab ID:

Analytical Report Lab Order 2204C83

Date Reported: 5/9/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-04 2'Collection Date: 4/27/2022 10:30:00 AMMatrix: SOILReceived Date: 4/29/2022 7:10:00 AMResultRL Qual UnitsDFDate Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	5/3/2022 6:13:18 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/3/2022 6:13:18 PM
Surr: DNOP	109	51.1-141	%Rec	1	5/3/2022 6:13:18 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/3/2022 4:46:00 AM
Surr: BFB	102	37.7-212	%Rec	1	5/3/2022 4:46:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	5/3/2022 4:46:00 AM
Toluene	ND	0.049	mg/Kg	1	5/3/2022 4:46:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/3/2022 4:46:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	5/3/2022 4:46:00 AM
Surr: 4-Bromofluorobenzene	83.7	70-130	%Rec	1	5/3/2022 4:46:00 AM
EPA METHOD 300.0: ANIONS					Analyst: LRN
Chloride	ND	60	mg/Kg	20	5/4/2022 10:23:00 PM

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

Qualifiers:

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

Page 3 of 11

Project:

Lab ID:

Analyses

Surr: DNOP

Surr: BFB

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Analytical Report Lab Order 2204C83

5/3/2022 5:06:00 AM

5/4/2022 10:35:24 PM

Analyst: BRM

Analyst: LRN

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/9/2022 **CLIENT:** Devon Energy Client Sample ID: BH22-06 2' Gaucho 6 Heater Treater Collection Date: 4/27/2022 10:50:00 AM 2204C83-004 Matrix: SOIL Received Date: 4/29/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: SB **Diesel Range Organics (DRO)** ND 9.4 mg/Kg 1 5/3/2022 6:24:16 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 5/3/2022 6:24:16 PM 121 51.1-141 %Rec 1 5/3/2022 6:24:16 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM

5.0

37.7-212

0.025

0.050

0.050

0.10

60

70-130

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

1

1

1

1

20

ND

98.8

ND

ND

ND

ND

82.0

ND

Refer to the QC S	ummary report and	sample login checl	klist for flagged QC dat	a and preservation information
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Qualifiers:

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 11
Gaucho 6 Heater Treater

Project:

Analytical Report Lab Order 2204C83

Date Reported: 5/9/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-07 0' Collection Date: 4/27/2022 1:00:00 PM Received Date: 4/29/2022 7:10:00 AM

Lab ID: 2204C83-005	Matrix: SOIL	Received Date: 4/29/2022 7:10:00 AM								
Analyses	Result	RL Qua	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst: SB					
Diesel Range Organics (DRO)	15	9.3	mg/Kg	1	5/3/2022 6:35:14 PM					
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/3/2022 6:35:14 PM					
Surr: DNOP	82.3	51.1-141	%Rec	1	5/3/2022 6:35:14 PM					
EPA METHOD 8015D: GASOLINE RAN	IGE				Analyst: BRM					
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/3/2022 5:25:00 AM					
Surr: BFB	100	37.7-212	%Rec	1	5/3/2022 5:25:00 AM					
EPA METHOD 8021B: VOLATILES					Analyst: BRM					
Benzene	ND	0.024	mg/Kg	1	5/3/2022 5:25:00 AM					
Toluene	ND	0.049	mg/Kg	1	5/3/2022 5:25:00 AM					
Ethylbenzene	ND	0.049	mg/Kg	1	5/3/2022 5:25:00 AM					
Xylenes, Total	ND	0.098	mg/Kg	1	5/3/2022 5:25:00 AM					
Surr: 4-Bromofluorobenzene	80.6	70-130	%Rec	1	5/3/2022 5:25:00 AM					
EPA METHOD 300.0: ANIONS					Analyst: LRN					
Chloride	63	60	mg/Kg	20	5/4/2022 10:47:49 PM					

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

Qualifiers:

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

Page 5 of 11

Gaucho 6 Heater Treater

2204C83-006

Project:

Lab ID:

Analytical Report Lab Order 2204C83

Date Reported: 5/9/2022

Hall Environmental Analysis Laboratory, Inc.

 Client Sample ID: BH22-11 0'

 Collection Date: 4/27/2022 1:20:00 PM

 Matrix: SOIL
 Received Date: 4/29/2022 7:10:00 AM

 Result
 RL Qual Units
 DF
 Date Analyzed

 DRGANICS
 Analyst: SB

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	5/3/2022 6:46:09 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/3/2022 6:46:09 PM
Surr: DNOP	95.2	51.1-141	%Rec	1	5/3/2022 6:46:09 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/2/2022 11:12:02 PM
Surr: BFB	109	37.7-212	%Rec	1	5/2/2022 11:12:02 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	5/2/2022 11:12:02 PM
Toluene	ND	0.049	mg/Kg	1	5/2/2022 11:12:02 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/2/2022 11:12:02 PM
Xylenes, Total	ND	0.098	mg/Kg	1	5/2/2022 11:12:02 PM
Surr: 4-Bromofluorobenzene	107	70-130	%Rec	1	5/2/2022 11:12:02 PM
EPA METHOD 300.0: ANIONS					Analyst: LRN
Chloride	ND	60	mg/Kg	20	5/4/2022 11:25:02 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 11

Client: Project:	Devoi Gauch	n Energy no 6 Heater Tr	reater								
Sample ID:	MB-67267	SampT	ype: mł	olk	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	n ID: 67	267	F	RunNo: 87	7756				
Prep Date:	5/4/2022	Analysis D	Date: 5/	4/2022	S	SeqNo: 31	108183	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-67267	SampT	ype: Ics	5	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	n ID: 67	267	F	RunNo: 87	7756				
Prep Date:	5/4/2022	Analysis D	Date: 5/	4/2022	S	SeqNo: 31	108184	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	92.2	90	110			

Qualifiers:

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

Page 7 of 11

2204C83

09-May-22

1

Client: Devon Project: Gauch	Energy o 6 Heater Ti	reater									
Sample ID: LCS-67196	SampT Batcl	ype: LC	:S 196	Tes	tCode: El	PA Method 7693	8015M/D: Di	esel Range	e Organics		
Prep Date: 5/2/2022	Analysis D	Date: 5/	3/2022	S	SeqNo: 3	105199	Units: mg/k	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	56	10	50.00	0	112	68.9	135				
Surr: DNOP	4.9		5.000		98.1	51.1	141				
Sample ID: MB-67196	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics		
Client ID: PBS	Batcl	n ID: 67	196	F	RunNo: 8	7693					
Prep Date: 5/2/2022	Analysis D	Date: 5/	3/2022	S	SeqNo: 3	105200	Units: mg/k	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	16		10.00		159	51.1	141			S	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 8 of 11

2204C83

09-May-22

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Devon En Gaucho 6	ergy Heater Tr	eater								
Sample ID:	mb-67169	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Range	e	
Client ID:	PBS	Batch	D: 67	169	F	RunNo: 8	7658				
Prep Date:	4/29/2022	Analysis D	ate: 5/	3/2022	S	SeqNo: 3	103540	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 1100	5.0	1000		111	37.7	212			
Sample ID:	lcs-67169	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Range	e	
Client ID:	LCSS	Batch	ID: 67	169	F	RunNo: 8	7658				
Prep Date:	4/29/2022	Analysis D	ate: 5/	2/2022	S	SeqNo: 3	103541	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	26 2100	5.0	25.00 1000	0	103 214	72.3 37.7	137 212			S
Sample ID:	2204c83-006ams	SamoT			Tes	tCode: FI	PA Method	8015D: Gase	line Rang	•	
Client ID:	BH22-11 0'	Batch	D: 67	169	F	RunNo: 8	7658	00100.0030			
Prep Date:	4/29/2022	Analysis D	ate: 5/	2/2022	S	SeqNo: 3	103543	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	28	4.9	24.61	0	114	70	130			
Surr: BFB		2300		984.3		229	37.7	212			S
Sample ID:	2204c83-006amsd	SampT	ype: M \$	SD	Tes	tCode: El	PA Method	8015D: Gaso	oline Range	9	
Client ID:	BH22-11 0'	Batch	ID: 67	169	F	RunNo: 8	7658				
Prep Date:	4/29/2022	Analysis D	ate: 5/	2/2022	5	SeqNo: 3	103544	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	26	5.0	24.88	0	103	70	130	8.50	20	
Surr: BFB		2200		995.0		221	37.7	212	0	0	S
Sample ID:	lcs-67167	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	oline Range	9	
Client ID:	LCSS	Batch	n ID: 67	167	F	RunNo: 8	7661				
Prep Date:	4/29/2022	Analysis D	ate: 5/	2/2022	S	SeqNo: 3	103657	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	28	5.0	25.00	0	111	72.3	137			
Surr: BFB		2300		1000		226	37.7	212			S
Sample ID:	mb-67167	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 67	167	F	RunNo: 8	7661				
Prep Date:	4/29/2022	Analysis D	ate: 5/	2/2022	S	SeqNo: 3	103658	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 9 of 11

2204C83

09-May-22

Client: D Project: C	evon Energy aucho 6 Heater Treate	er							
Sample ID: mb-67167	SampType	MBLK	Tes	Code: EF	PA Method	8015D: Gaso	line Range	9	
Client ID: PBS	Batch ID:	67167	R	unNo: 87	7661				
Prep Date: 4/29/202	2 Analysis Date:	5/2/2022	S	eqNo: 31	03658	Units: mg/K	g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) ND	5.0							
Surr: BFB	1000	1000		104	37.7	212			

Qualifiers:

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

Page 10 of 11

2204C83

09-May-22

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Devon Gauch	Energy o 6 Heater Tr	reater								
Sample ID:	mb-67169	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batcl	h ID: 67	169	F	RunNo: 8	7658				
Prep Date:	4/29/2022	Analysis E	Date: 5/	3/2022	S	SeqNo: 3	103587	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	nofluorobenzene	1.1		1.000		112	70	130			
Sample ID:	LCS-67169	SampT	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 67	169	F	RunNo: 8	7658				
Prep Date:	4/29/2022	Analysis E	Date: 5/	2/2022	S	SeqNo: 3	103588	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000	0	89.6	80	120			
Toluene		0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene		0.95	0.050	1.000	0	95.1	80	120			
Xylenes, Total		2.8	0.10	3.000	0	94.6	80	120			
Surr: 4-Brom	nofluorobenzene	1.0		1.000		101	70	130			
Sample ID:	lcs-67167	SampT	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batc	h ID: 67	167	F	RunNo: 8	7661				
Prep Date:	4/29/2022	Analysis E	Date: 5/	2/2022	S	SeqNo: 3	103705	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.91	0.025	1.000	0	91.3	80	120			
Toluene		0.93	0.050	1.000	0	93.2	80	120			
Ethylbenzene		0.94	0.050	1.000	0	94.2	80	120			
Xylenes, Total		2.8	0.10	3.000	0	94.6	80	120			
Surr: 4-Brom	nofluorobenzene	0.82		1.000		82.4	70	130			
Sample ID:	mb-67167	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batcl	h ID: 67	167	F	RunNo: 8	7661				
Prep Date:	4/29/2022	Analysis E	Date: 5/	2/2022	5	SeqNo: 3	103706	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	nofluorobenzene	0.84		1.000		84.1	70	130			

Qualifiers:

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

2204C83

09-May-22

Page	224	of	290
		~	

ENVIRONMENTAL ANALYSIS LABORATORY				tall Environi TEL: 505-34.	mental Ana 49 Albuquer 5-3975 FAX	ysis La 01 Ha que, N : 505-	aboratory wkins NE IM 87109 345-4107	Page Sample Log-In Check List						
Client Name:	Devon Energ	3y	Wo	Website: w	ww. <i>hallenv</i>	ironme	ental.com		BentNo	1				
									Reptivo.					
Received By:	Juan Rojas	l	4/29/2	2022 7:10:0	0 AM		Gue	may	L					
Completed By:	Sean Living	gston	4/29/2	2022 8:12:4	5 AM		<	5/	not					
Reviewed By:	KPG	4-2	9-22					,						
Chain of Cust	ody													
1. Is Chain of Cu	stody comple	te?			Yes		N	o 🗌	Not Present					
2. How was the s	ample delive	red?			<u>Co</u>	irier								
<u>Log In</u>														
3. Was an attemp	ot made to co	ol the samp	oles?		Yes	\checkmark	N	•	NA 🗌					
4. Were all sampl	es received a	t a tempera	ature of >0° C	C to 6.0°C	Yes	~	N	⊳ 🗆						
5. Sample(s) in p	roper containe	er(s)?			Yes	✓	N	b						
6. Sufficient samp	le volume for	indicated to	est(s)?		Yes	\checkmark	No							
7. Are samples (e:	xcept VOA ar	d ONG) pr	operly preserv	ved?	Yes	\checkmark	No							
8. Was preservativ	ve added to b	ottles?			Yes		No	\checkmark	NA 🗌					
9. Received at lea	st 1 vial with I	neadspace	<1/4" for AQ	VOA?	Yes		No	Π						
10. Were any samp	ole containers	received b	roken?		Yes		No							
11. Does paperwork (Note discrepan	match bottle	e labels? of custody)		Yes		No		# of preserved bottles checked for pH:	12 units and all	_			
12. Are matrices co	rrectly identifi	ed on Chai	, n of Custody?	>	Yes		No	П	Adjusted?	>12 unless noted)				
13. Is it clear what a	analyses were	requested	?		Yes	\checkmark	No							
14. Were all holding (If no, notify cus	times able to	be met?			Yes	\checkmark	No		Checked by:	114/29/	2			
Special Handlin	na (if annli							~~~						
15. Was client notif	ied of all disc	repancies v	vith this order	2	Yes		No							
Person N	otified:													
By Whom	:			Via [.]	≠. □ eM:	il [Bhono [] Eav						
Regarding	j:			via.		an		јгах						
Client Inst	ructions:													
16. Additional rema	arks:								1					
17. <u>Cooler Informa</u>	ation	Condition	Socilistant	Oc al M	0.15	La seconda	11.11.2 <u>1.</u> 11.11.11.1	<u></u>						
1 (0.8 G	ood	Seal Intact	Seal No	Seal Da	ite	Signed	Ву						
2	I.6 G	ood												

Page 1 of 1

Received by OC	D: 10	/10/2	2022	8:0	94:48 Al	M														Pa	ge 22	25 of .	2 <i>90</i>
HALL ENVIRONME	www.hallenvironmental.com 901 Hawkins NF - Alburniaronia, NM 87100	Fear Flag Flag	Analysis Request	(i)	Nypseu SO¢' 20 SIW2	25500 2310 2510 2510 2510 2510 2510 2510 2510 25	s/80 504. 504. 7 7 8 7 8 7 8	ide: bd 5 10 2 10 3 10 10 3	estic lethc y 83 }r, <i>N</i> (OA) emi- emi-	3081 P 20B (N 20P45 b 200 (V 2270 (S 01al Co	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	×								S: CC: CHANCE Dixon	Direct Bill Dale Looder	wher infiltrated a Darson	Any sub-contracted data will $\frac{\log c}{\sqrt{2}}$ and $\sqrt{2}$
	egter Treater) 4			(208) s	am.		BE	MT (°C) MT	HEAL No.	100	1 200	003	700		1 ,100				ate Time Remark	ate Time	>=X 0/12 ZC/61	serves as notice of this possibility.
und Time: <i>S</i> -Day lard Rush ame:	3 UC HO #6 CH		200-10/10-2	anager:	ranica peron	20	D-Yes D N	ers: 2	mp(including CF): 16-0:	# Type 27	TCE	-				-					Via: Da	Hrowipry/	accredited laboratories. This
Turn-Aro	ê,	Project #:	226	Project M	Γ. Γ	Sampler:	On Ice:	# of Coole	Cooler Te	Container Type and	201 *	۰ *	*	*	×	*					Received by:	V	ubcontracted to othe
Custody Record	F7'16				Level 4 (Full Validation	Compliance	her			Sample Name	7 BHEZ-OI 2'	BHZZ-03 0'	BHZZ-OY 2'	BHZZ-06 21	BHZ2-07 0'	BHZ2-11 0'			shad hu:	· co po po	shed by:	Muun	ubmitted to Hall Environmental may be su
Chain-of- ^{Client:}	Mailing Address:		Phone #:	email or Fax#: /	QA/QC Package:	Accreditation:				Date Time Matrix	4127 10:00 501	10:15	10:30	05:01	1:00	1:20			Date: Time. Relincuit		Date: Time: Relinqui	100 and and	If necessary, samples s



May 13, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (575) 748-0176 FAX:

RE: Gaucho 6 Heater Treater

OrderNo.: 2204D50

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 14 sample(s) on 4/30/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Gaucho 6 Heater Treater

Project:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-08 2' Collection Date: 4/28/2022 10:00:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-001	Matrix: SOIL	Received Date: 4/30/2022 8:30:00 AM								
Analyses	Result	RL Qu	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: ED					
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	5/5/2022 5:53:07 PM					
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	5/5/2022 5:53:07 PM					
Surr: DNOP	96.1	51.1-141	%Rec	1	5/5/2022 5:53:07 PM					
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: BRM					
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/5/2022 11:24:00 AM					
Surr: BFB	104	37.7-212	%Rec	1	5/5/2022 11:24:00 AM					
EPA METHOD 8021B: VOLATILES					Analyst: BRM					
Benzene	ND	0.024	mg/Kg	1	5/5/2022 11:24:00 AM					
Toluene	ND	0.048	mg/Kg	1	5/5/2022 11:24:00 AM					
Ethylbenzene	ND	0.048	mg/Kg	1	5/5/2022 11:24:00 AM					
Xylenes, Total	ND	0.097	mg/Kg	1	5/5/2022 11:24:00 AM					
Surr: 4-Bromofluorobenzene	83.8	70-130	%Rec	1	5/5/2022 11:24:00 AM					
EPA METHOD 300.0: ANIONS					Analyst: NAI					
Chloride	ND	60	mg/Kg	20	5/6/2022 3:16:29 PM					

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 21

Project:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

Client Sample ID: BH22-09 2' Collection Date: 4/28/2022 10:05:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-002	Matrix: SOIL	Received Date: 4/30/2022 8:30:00 AM									
Analyses	Result	RL Qu	al Units	DF	Date Analyzed						
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: ED						
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	5/5/2022 6:06:43 PM						
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/5/2022 6:06:43 PM						
Surr: DNOP	104	51.1-141	%Rec	1	5/5/2022 6:06:43 PM						
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: BRM						
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/5/2022 11:44:00 AM						
Surr: BFB	101	37.7-212	%Rec	1	5/5/2022 11:44:00 AM						
EPA METHOD 8021B: VOLATILES					Analyst: BRM						
Benzene	ND	0.024	mg/Kg	1	5/5/2022 11:44:00 AM						
Toluene	ND	0.049	mg/Kg	1	5/5/2022 11:44:00 AM						
Ethylbenzene	ND	0.049	mg/Kg	1	5/5/2022 11:44:00 AM						
Xylenes, Total	ND	0.098	mg/Kg	1	5/5/2022 11:44:00 AM						
Surr: 4-Bromofluorobenzene	83.3	70-130	%Rec	1	5/5/2022 11:44:00 AM						
EPA METHOD 300.0: ANIONS					Analyst: NAI						
Chloride	ND	60	mg/Kg	20	5/6/2022 3:28:50 PM						

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 21

Project:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

Client Sample ID: BH22-10 2' Collection Date: 4/28/2022 10:10:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-003	Matrix: SOIL	Received Date: 4/30/2022 8:30:00 AM				
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: ED	
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	5/5/2022 6:20:20 PM	
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	5/5/2022 6:20:20 PM	
Surr: DNOP	105	51.1-141	%Rec	1	5/5/2022 6:20:20 PM	
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: BRM	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/5/2022 12:03:00 PM	
Surr: BFB	95.4	37.7-212	%Rec	1	5/5/2022 12:03:00 PM	
EPA METHOD 8021B: VOLATILES					Analyst: BRM	
Benzene	ND	0.025	mg/Kg	1	5/5/2022 12:03:00 PM	
Toluene	ND	0.049	mg/Kg	1	5/5/2022 12:03:00 PM	
Ethylbenzene	ND	0.049	mg/Kg	1	5/5/2022 12:03:00 PM	
Xylenes, Total	ND	0.098	mg/Kg	1	5/5/2022 12:03:00 PM	
Surr: 4-Bromofluorobenzene	80.8	70-130	%Rec	1	5/5/2022 12:03:00 PM	
EPA METHOD 300.0: ANIONS					Analyst: NAI	
Chloride	ND	60	mg/Kg	20	5/6/2022 4:05:51 PM	

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 21

Project:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

Client Sample ID: BH22-12 0' Collection Date: 4/28/2022 10:15:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-004	Matrix: SOIL	Received Date: 4/30/2022 8:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: ED		
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	5/5/2022 6:33:58 PM		
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	5/5/2022 6:33:58 PM		
Surr: DNOP	102	51.1-141	%Rec	1	5/5/2022 6:33:58 PM		
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: BRM		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/5/2022 12:23:00 PM		
Surr: BFB	103	37.7-212	%Rec	1	5/5/2022 12:23:00 PM		
EPA METHOD 8021B: VOLATILES					Analyst: BRM		
Benzene	ND	0.024	mg/Kg	1	5/5/2022 12:23:00 PM		
Toluene	ND	0.049	mg/Kg	1	5/5/2022 12:23:00 PM		
Ethylbenzene	ND	0.049	mg/Kg	1	5/5/2022 12:23:00 PM		
Xylenes, Total	ND	0.098	mg/Kg	1	5/5/2022 12:23:00 PM		
Surr: 4-Bromofluorobenzene	82.5	70-130	%Rec	1	5/5/2022 12:23:00 PM		
EPA METHOD 300.0: ANIONS					Analyst: NAI		
Chloride	ND	60	mg/Kg	20	5/6/2022 4:42:54 PM		

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 21

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

2204D50-005

Client Sample ID: BH22-13 0' Collection Date: 4/28/2022 10:20:00 AM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	5/5/2022 6:47:30 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/5/2022 6:47:30 PM
Surr: DNOP	103	51.1-141	%Rec	1	5/5/2022 6:47:30 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/5/2022 12:43:00 PM
Surr: BFB	103	37.7-212	%Rec	1	5/5/2022 12:43:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	5/5/2022 12:43:00 PM
Toluene	ND	0.050	mg/Kg	1	5/5/2022 12:43:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 12:43:00 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/5/2022 12:43:00 PM
Surr: 4-Bromofluorobenzene	84.0	70-130	%Rec	1	5/5/2022 12:43:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/6/2022 4:55:15 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 21

Gaucho 6 Heater Treater

Project:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-14 0' Collection Date: 4/28/2022 10:25:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-006 Matrix: SOIL		Received Date: 4/30/2022 8:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: ED		
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/5/2022 7:01:00 PM		
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/5/2022 7:01:00 PM		
Surr: DNOP	105	51.1-141	%Rec	1	5/5/2022 7:01:00 PM		
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: BRM		
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/5/2022 1:02:00 PM		
Surr: BFB	104	37.7-212	%Rec	1	5/5/2022 1:02:00 PM		
EPA METHOD 8021B: VOLATILES					Analyst: BRM		
Benzene	ND	0.025	mg/Kg	1	5/5/2022 1:02:00 PM		
Toluene	ND	0.050	mg/Kg	1	5/5/2022 1:02:00 PM		
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 1:02:00 PM		
Xylenes, Total	ND	0.10	mg/Kg	1	5/5/2022 1:02:00 PM		
Surr: 4-Bromofluorobenzene	83.7	70-130	%Rec	1	5/5/2022 1:02:00 PM		
EPA METHOD 300.0: ANIONS					Analyst: NAI		
Chloride	ND	60	mg/Kg	20	5/6/2022 5:07:36 PM		

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 21

Gaucho 6 Heater Treater

Project:

Analytical Report Lab Order 2204D50

Date Reported: 5/13/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-15 0' Collection Date: 4/28/2022 10:30:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-007	Matrix: SOIL Received Date: 4/30/2022 8:30:00					022 8:30:00 AM
Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst: ED
Diesel Range Organics (DRO)	1100	44		mg/Kg	5	5/6/2022 4:17:56 PM
Motor Oil Range Organics (MRO)	390	220		mg/Kg	5	5/6/2022 4:17:56 PM
Surr: DNOP	97.3	51.1-141		%Rec	5	5/6/2022 4:17:56 PM
EPA METHOD 8015D: GASOLINE RA	ANGE					Analyst: BRM
Gasoline Range Organics (GRO)	120	25		mg/Kg	5	5/5/2022 1:22:00 PM
Surr: BFB	185	37.7-212		%Rec	5	5/5/2022 1:22:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.12	D	mg/Kg	5	5/5/2022 1:22:00 PM
Toluene	ND	0.25	D	mg/Kg	5	5/5/2022 1:22:00 PM
Ethylbenzene	0.36	0.25	D	mg/Kg	5	5/5/2022 1:22:00 PM
Xylenes, Total	3.0	0.50	D	mg/Kg	5	5/5/2022 1:22:00 PM
Surr: 4-Bromofluorobenzene	111	70-130	D	%Rec	5	5/5/2022 1:22:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	5/6/2022 5:44:38 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 21

Gaucho 6 Heater Treater

2204D50-008

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/13/2022 Client Sample ID: BH22-15 3' Collection Date: 4/28/2022 10:35:00 AM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst: SB
Diesel Range Organics (DRO)	3600	91		mg/Kg	10	5/9/2022 11:44:04 AM
Motor Oil Range Organics (MRO)	950	460		mg/Kg	10	5/9/2022 11:44:04 AM
Surr: DNOP	0	51.1-141	S	%Rec	10	5/9/2022 11:44:04 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	120	60		mg/Kg	20	5/6/2022 5:56:59 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BRM
Benzene	0.16	0.024		mg/Kg	1	5/5/2022 12:54:55 PM
Toluene	3.4	0.048		mg/Kg	1	5/5/2022 12:54:55 PM
Ethylbenzene	1.3	0.048		mg/Kg	1	5/5/2022 12:54:55 PM
Xylenes, Total	12	0.097		mg/Kg	1	5/5/2022 12:54:55 PM
Surr: 1,2-Dichloroethane-d4	92.1	70-130		%Rec	1	5/5/2022 12:54:55 PM
Surr: 4-Bromofluorobenzene	155	70-130	S	%Rec	1	5/5/2022 12:54:55 PM
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	5/5/2022 12:54:55 PM
Surr: Toluene-d8	118	70-130		%Rec	1	5/5/2022 12:54:55 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	980	48		mg/Kg	10	5/6/2022 2:27:34 PM
Surr: BFB	124	70-130		%Rec	10	5/6/2022 2:27:34 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 21

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

2204D50-009

Date Reported: 5/13/2022 Client Sample ID: BH22-15 6' Collection Date: 4/28/2022 10:40:00 AM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: SB
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	5/6/2022 3:41:20 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	5/6/2022 3:41:20 PM
Surr: DNOP	103	51.1-141	%Rec	1	5/6/2022 3:41:20 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/6/2022 6:34:02 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	5/5/2022 2:16:15 PM
Toluene	ND	0.050	mg/Kg	1	5/5/2022 2:16:15 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 2:16:15 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/5/2022 2:16:15 PM
Surr: 1,2-Dichloroethane-d4	111	70-130	%Rec	1	5/5/2022 2:16:15 PM
Surr: 4-Bromofluorobenzene	88.1	70-130	%Rec	1	5/5/2022 2:16:15 PM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	5/5/2022 2:16:15 PM
Surr: Toluene-d8	110	70-130	%Rec	1	5/5/2022 2:16:15 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	9.0	5.0	mg/Kg	1	5/5/2022 2:16:15 PM
Surr: BFB	108	70-130	%Rec	1	5/5/2022 2:16:15 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 21

Gaucho 6 Heater Treater

2204D50-010

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/13/2022 Client Sample ID: BH22-16 0' Collection Date: 4/28/2022 10:45:00 AM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: SB
Diesel Range Organics (DRO)	390	9.2	mg/Kg	1	5/6/2022 4:05:08 PM
Motor Oil Range Organics (MRO)	210	46	mg/Kg	1	5/6/2022 4:05:08 PM
Surr: DNOP	114	51.1-141	%Rec	1	5/6/2022 4:05:08 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	370	60	mg/Kg	20	5/6/2022 6:46:22 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	5/5/2022 3:37:24 PM
Toluene	ND	0.050	mg/Kg	1	5/5/2022 3:37:24 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 3:37:24 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/5/2022 3:37:24 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	5/5/2022 3:37:24 PM
Surr: 4-Bromofluorobenzene	92.0	70-130	%Rec	1	5/5/2022 3:37:24 PM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	5/5/2022 3:37:24 PM
Surr: Toluene-d8	103	70-130	%Rec	1	5/5/2022 3:37:24 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/5/2022 3:37:24 PM
Surr: BFB	98.4	70-130	%Rec	1	5/5/2022 3:37:24 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 21

Gaucho 6 Heater Treater

2204D50-011

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/13/2022 Client Sample ID: BH22-17 0' Collection Date: 4/28/2022 10:55:00 AM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst: SB
Diesel Range Organics (DRO)	5900	97		mg/Kg	10	5/7/2022 2:23:25 AM
Motor Oil Range Organics (MRO)	3400	480		mg/Kg	10	5/7/2022 2:23:25 AM
Surr: DNOP	0	51.1-141	S	%Rec	10	5/7/2022 2:23:25 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	4000	150		mg/Kg	50	5/10/2022 2:22:20 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	5/5/2022 4:04:26 PM
Toluene	0.14	0.050		mg/Kg	1	5/5/2022 4:04:26 PM
Ethylbenzene	0.18	0.050		mg/Kg	1	5/5/2022 4:04:26 PM
Xylenes, Total	1.1	0.099		mg/Kg	1	5/5/2022 4:04:26 PM
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	5/5/2022 4:04:26 PM
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	5/5/2022 4:04:26 PM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	5/5/2022 4:04:26 PM
Surr: Toluene-d8	107	70-130		%Rec	1	5/5/2022 4:04:26 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	24	5.0		mg/Kg	1	5/5/2022 4:04:26 PM
Surr: BFB	107	70-130		%Rec	1	5/5/2022 4:04:26 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 21

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

2204D50-012

Date Reported: 5/13/2022 Client Sample ID: BH22-17 3' Collection Date: 4/28/2022 11:00:00 AM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: SB
Diesel Range Organics (DRO)	380	9.8	mg/Kg	1	5/6/2022 4:28:56 PM
Motor Oil Range Organics (MRO)	210	49	mg/Kg	1	5/6/2022 4:28:56 PM
Surr: DNOP	116	51.1-141	%Rec	1	5/6/2022 4:28:56 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	440	60	mg/Kg	20	5/6/2022 7:11:03 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	5/5/2022 4:31:28 PM
Toluene	ND	0.050	mg/Kg	1	5/5/2022 4:31:28 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/5/2022 4:31:28 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/5/2022 4:31:28 PM
Surr: 1,2-Dichloroethane-d4	117	70-130	%Rec	1	5/5/2022 4:31:28 PM
Surr: 4-Bromofluorobenzene	88.0	70-130	%Rec	1	5/5/2022 4:31:28 PM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	5/5/2022 4:31:28 PM
Surr: Toluene-d8	106	70-130	%Rec	1	5/5/2022 4:31:28 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/5/2022 4:31:28 PM
Surr: BFB	100	70-130	%Rec	1	5/5/2022 4:31:28 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 21

Project:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

Date Reported: 5/13/2022 Client Sample ID: BH22-17 6' Collection Date: 4/28/2022 11:05:00 AM Received Date: 4/30/2022 8:30:00 AM

Lab ID: 2204D50-013	Matrix: SOIL	Received Date: 4/30/2022 8:30:00 AM				
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB	
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/6/2022 4:52:43 PM	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/6/2022 4:52:43 PM	
Surr: DNOP	103	51.1-141	%Rec	1	5/6/2022 4:52:43 PM	
EPA METHOD 300.0: ANIONS					Analyst: NAI	
Chloride	ND	60	mg/Kg	20	5/6/2022 7:23:24 PM	
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst: BRM	
Benzene	ND	0.024	mg/Kg	1	5/5/2022 4:58:31 PM	
Toluene	ND	0.049	mg/Kg	1	5/5/2022 4:58:31 PM	
Ethylbenzene	ND	0.049	mg/Kg	1	5/5/2022 4:58:31 PM	
Xylenes, Total	ND	0.098	mg/Kg	1	5/5/2022 4:58:31 PM	
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	5/5/2022 4:58:31 PM	
Surr: 4-Bromofluorobenzene	92.3	70-130	%Rec	1	5/5/2022 4:58:31 PM	
Surr: Dibromofluoromethane	106	70-130	%Rec	1	5/5/2022 4:58:31 PM	
Surr: Toluene-d8	102	70-130	%Rec	1	5/5/2022 4:58:31 PM	
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst: BRM	
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/5/2022 4:58:31 PM	
Surr: BFB	97.2	70-130	%Rec	1	5/5/2022 4:58:31 PM	

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

Qualifiers:

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

Page 13 of 21

Project:

Lab ID:

Analytical Report Lab Order 2204D50

Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

2204D50-014

Date Reported: 5/13/2022 Client Sample ID: BH22-16 6' Collection Date: 4/28/2022 1:30:00 PM

Received Date: 4/30/2022 8:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/6/2022 5:16:33 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/6/2022 5:16:33 PM
Surr: DNOP	102	51.1-141	%Rec	1	5/6/2022 5:16:33 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	5/6/2022 7:35:44 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	5/5/2022 5:25:30 PM
Toluene	ND	0.049	mg/Kg	1	5/5/2022 5:25:30 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/5/2022 5:25:30 PM
Xylenes, Total	ND	0.097	mg/Kg	1	5/5/2022 5:25:30 PM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	5/5/2022 5:25:30 PM
Surr: 4-Bromofluorobenzene	93.8	70-130	%Rec	1	5/5/2022 5:25:30 PM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	5/5/2022 5:25:30 PM
Surr: Toluene-d8	109	70-130	%Rec	1	5/5/2022 5:25:30 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/5/2022 5:25:30 PM
Surr: BFB	99.3	70-130	%Rec	1	5/5/2022 5:25:30 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 14 of 21

Client: Project:	Devon Gauch	Energy 0 6 Heater T	reater								
Sample ID:	MB-67316	SampT	ype: mb	lk	Tes	tCode: EF	PA Method	300.0: Anions	5		
Client ID:	PBS	Batch	n ID: 673	816	F	RunNo: 87	7798				
Prep Date:	5/6/2022	Analysis D	ate: 5/0	6/2022	S	SeqNo: 31	111668	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-67316	SampT	ype: Ics		Tes	tCode: EF	PA Method	300.0: Anions	6		
Client ID:	LCSS	Batch	n ID: 673	316	F	RunNo: 87	7798				
Prep Date:	5/6/2022	Analysis D	ate: 5/0	6/2022	5	SeqNo: 31	111669	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	92.8	90	110			

Qualifiers:

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

Page 15 of 21

2204D50

13-May-22

Devon Energy

Client:

Project:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

Released to Imaging:	10/26/2022 1:55:11 PM	

Sample ID: LCS-67260	Samp i ype:	LCS	les	Studde: EF	'A Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch ID:	67260	F	RunNo: 87	762				
Prep Date: 5/4/2022	Analysis Date:	5/5/2022	ę	SeqNo: 31	09550	Units: mg/K	g		
Analyte	Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
iesel Range Organics (DRO)	45	10 50.00	0	90.1	68.9	135			
Surr: DNOP	3.7	5.000		73.5	51.1	141			
Sample ID: MB-67260	SampType:	MBLK	Tes	tCode: EP	'A Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch ID:	67260	F	RunNo: 87	762				
Prep Date: 5/4/2022	Analysis Date:	5/5/2022	ę	SeqNo: 31	09554	Units: mg/K	g		
Analyte	Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
iesel Range Organics (DRO)	ND	10							
Iotor Oil Range Organics (MRO)	ND	50							
Surr: DNOP	8.4	10.00		84.4	51.1	141			
Sample ID: MB-67249	SampType:	MBLK	Tes	tCode: EP	A Method	8015M/D: Die	sel Range	Organics	
Sample ID: MB-67249 Client ID: PBS	SampType: Batch ID:	MBLK 67249	Tes F	tCode: EP	'A Method '770	8015M/D: Die	sel Range	Organics	
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022	SampType: Batch ID: Analysis Date:	MBLK 67249 5/5/2022	Tes F د	tCode: EP RunNo: 87 SeqNo: 31	A Method 770 10446	8015M/D: Die Units: mg/K	sel Range	Organics	
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte	SampType: Batch ID: Analysis Date: Result PC	MBLK 67249 5/5/2022 QL SPK value	Tes ۶ ۶ SPK Ref Val	tCode: EP RunNo: 87 SeqNo: 31 %REC	A Method 770 10446 LowLimit	8015M/D: Die Units: mg/K HighLimit	sel Range g %RPD	Organics RPDLimit	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO)	SampType: Batch ID: Analysis Date: Result PC ND	MBLK 67249 5/5/2022 2L SPK value 10	Tes F SPK Ref Val	tCode: EP RunNo: 87 SeqNo: 31 %REC	A Method 770 10446 LowLimit	8015M/D: Die Units: mg/K HighLimit	sel Range g %RPD	Organics RPDLimit	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) lotor Oil Range Organics (MRO)	SampType: Batch ID: Analysis Date: Result PC ND ND	MBLK 67249 5/5/2022 AL SPK value 10 50	Tes F SPK Ref Val	tCode: EP RunNo: 87 SeqNo: 31 %REC	A Method 770 10446 LowLimit	8015M/D: Die Units: mg/K HighLimit	sel Range g %RPD	Organics RPDLimit	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) iotor Oil Range Organics (MRO) Surr: DNOP	SampType: Batch ID: Analysis Date: Result PC ND ND 9.7	MBLK 67249 5/5/2022 2L SPK value 10 50 10.00	Tes F SPK Ref Val	tCode: EP RunNo: 87 SeqNo: 31 %REC 97.1	A Method 770 10446 LowLimit 51.1	8015M/D: Die Units: mg/K HighLimit 141	sel Range g %RPD	Organics RPDLimit	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) lotor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-67249	SampType: Batch ID: Analysis Date: Result PC ND ND 9.7 SampType:	MBLK 67249 5/5/2022 ≥L SPK value 10 50 10.00 LCS	Tes F SPK Ref Val	tCode: EP RunNo: 87 SeqNo: 31 %REC 97.1	A Method 770 10446 LowLimit 51.1 24 Method	8015M/D: Die Units: mg/K HighLimit 141 8015M/D: Die	sel Range g %RPD sel Range	Organics RPDLimit Organics	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) lotor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-67249 Client ID: LCSS	SampType: Batch ID: Analysis Date: Result PC ND ND 9.7 SampType: Batch ID:	MBLK 67249 5/5/2022 2L SPK value 10 50 10.00 LCS 67249	Tes F SPK Ref Val Tes F	tCode: EP RunNo: 87 SeqNo: 31 %REC 97.1 stCode: EF RunNo: 87	A Method 770 10446 LowLimit 51.1 24 Method 7770	8015M/D: Die Units: mg/K HighLimit 141 8015M/D: Die	sel Range g %RPD sel Range	Organics RPDLimit Organics	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) lotor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-67249 Client ID: LCSS Prep Date: 5/4/2022	SampType: Batch ID: Analysis Date: Result PC ND ND 9.7 SampType: Batch ID: Analysis Date:	MBLK 67249 5/5/2022 ≥L SPK value 10 50 10.00 LCS 67249 5/5/2022	Tes F SPK Ref Val Tes F	tCode: EP RunNo: 87 SeqNo: 31 %REC 97.1 stCode: EP RunNo: 87 SeqNo: 31	A Method 770 10446 LowLimit 51.1 24 Method 7770	8015M/D: Die Units: mg/K HighLimit 141 8015M/D: Die Units: mg/K	sel Range 9 %RPD sel Range	Organics RPDLimit Organics	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) lotor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-67249 Client ID: LCSS Prep Date: 5/4/2022 Analyte	SampType: Batch ID: Analysis Date: Result PC ND ND 9.7 SampType: Batch ID: Analysis Date: Result PC	MBLK 67249 5/5/2022 2L SPK value 10 50 10.00 LCS 67249 5/5/2022 QL SPK value	Tes F SPK Ref Val Tes F SPK Ref Val	tCode: EP RunNo: 87 SeqNo: 31 %REC 97.1 stCode: EP RunNo: 87 SeqNo: 31 %REC	A Method 770 10446 LowLimit 51.1 A Method 7770 10447 LowLimit	8015M/D: Die Units: mg/K HighLimit 141 8015M/D: Die Units: mg/K HighLimit	sel Range g %RPD sel Range	Organics RPDLimit Organics RPDLimit	Qual
Sample ID: MB-67249 Client ID: PBS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO) lotor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-67249 Client ID: LCSS Prep Date: 5/4/2022 Analyte iesel Range Organics (DRO)	SampType: Batch ID: Analysis Date: Result PC ND ND 9.7 SampType: Batch ID: Analysis Date: Result PC 46	MBLK 67249 5/5/2022 2L SPK value 10 50 10.00 LCS 67249 5/5/2022 2L SPK value 10 50.00	Tes F SPK Ref Val Tes F SPK Ref Val 0	tCode: EP RunNo: 87 SeqNo: 31 %REC 97.1 tCode: EP RunNo: 87 SeqNo: 31 %REC 92.9	A Method 770 10446 LowLimit 51.1 'A Method '770 10447 LowLimit 68.9	8015M/D: Die Units: mg/K HighLimit 141 8015M/D: Die Units: mg/K HighLimit 135	sel Range %RPD sel Range %RPD	Organics RPDLimit Organics RPDLimit	Qual

Qualifiers:

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

PQL Practical Quanitative Limit

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

Page 16 of 21

WO#: **2204D50**

13-May-22

Project: Devon E	6 Heater T	reater									
Sample ID: Ics-67229	SampT	ype: LC	S	Tes	tCode: EF	A Method	8015D: Gaso	ine Range			
Client ID: LCSS	Batch	ID: 672	229	F	RunNo: 87	721					
Prep Date: 5/3/2022	Analysis D	ate: 5/	5/2022	S	SeqNo: 31	07557	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	72.3	137				
Surr: BFB	2200		1000		224	37.7	212			S	
Sample ID: mb-67229	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	ine Range			
Client ID: PBS	Batch	ID: 672	229	F	RunNo: 87	721					
Prep Date: 5/3/2022	Analysis D	ate: 5/	5/2022	5	SeqNo: 31	07558	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	1000		1000		102	37.7	212				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

2204D50

13-May-22

WO#:

RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	2204D5	0

13-May-22

Client:	Devon En	ergy									
Project:	Gaucho 6	Heater T	reater								
Sample ID: Ics	s-67229	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LC	ss	Batch	n ID: 672	229	F	RunNo: 87	7721				
Prep Date: 5/	/3/2022	Analysis D	ate: 5/	5/2022	S	SeqNo: 31	107604	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000	0	89.7	80	120			
Toluene		0.91	0.050	1.000	0	90.7	80	120			
Ethylbenzene		0.91	0.050	1.000	0	90.8	80	120			
Xylenes, Total		2.7	0.10	3.000	0	90.5	80	120			
Surr: 4-Bromoflu	orobenzene	0.83		1.000		82.8	70	130			
Sample ID: mb	o-67229	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PB	BS	Batch	ID: 672	229	F	RunNo: 87	7721				
Prep Date: 5/	/3/2022	Analysis D	ate: 5/	5/2022	S	SeqNo: 31	107605	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Bromoflu	lorobenzene	0.84		1.000		83.7	70	130			

Qualifiers:

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

Page 18 of 21

Devon Energy

Client:

Project:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Gaucho 6 Heater Treater

Sample ID: 2204d50-009ams	SampType: MS4 TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: BH22-15 6'	Batch	ID: 672	:32	F	RunNo: 87	782				
Prep Date: 5/3/2022	Analysis Da	ate: 5/5	5/2022	5	3eqNo: 31	09237	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9681	0	99.2	63.5	137			
Toluene	0.93	0.048	0.9681	0.01398	95.0	77.6	127			
Ethylbenzene	0.97	0.048	0.9681	0	100	77.9	129			
Xylenes, Total	2.9	0.097	2.904	0.04579	100	76.8	127			
Surr: 1,2-Dichloroethane-d4	0.51		0.4840		105	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4840		94.0	70	130			
Surr: Dibromofluoromethane	0.50		0.4840		104	70	130			
Surr: Toluene-d8	0.51		0.4840	<u> </u>	105	70	130			<u> </u>
Sample ID: 2204d50-009amsd	SampTy	ype: MS	D4	Tes	tCode: EP	A Method	8260B: Volati	les Short L	List	
Client ID: BH22-15 6'	Batch	ID: 672	32	F	RunNo: 87	782				
Prep Date: 5/3/2022	Analysis Da	ate: 5/5	5/2022	٤	3eqNo: 31	09238	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9852	0	95.6	63.5	137	1.97	20	
Toluene	0.97	0.049	0.9852	0.01398	97.4	77.6	127	4.15	20	
Ethylbenzene	0.95	0.049	0.9852	0	96.8	77.9	129	1.66	20	
Xylenes, Total	3.0	0.099	2.956	0.04579	101	76.8	127	2.56	20	
Surr: 1,2-Dichloroethane-d4	0.53		0.4926		107	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.44		0.4926		89.6	70	130	0	0	
Surr: Dibromofluoromethane	0.52		0.4926		105	70	130	0	0	
Surr: Toluene-d8	0.51		0.4926		104	70	130	0	0	
Sample ID: Ics-67232	SampTy	pe: LC	S4	Tes	tCode: EP	A Method	8260B: Volati	les Short L	List	
Client ID: BatchQC	Batch	ID: 672	32	F	RunNo: 87	782				
Prep Date: 5/3/2022	Analysis Da	ate: 5/5	5/2022	٤	SeqNo: 31	09258	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	112	80	120			
Toluene	0.99	0.050	1.000	0	98.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.60		0.5000		120	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.6	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		113	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 19 of 21

WO#: 2204D50

13-May-22

Devon Energy

Client:

2204D5	WO#:
13-May-2	

Project: Gauch	no 6 Heater T	reater								
Sample ID: mb-67232	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8260B: Volati	les Short I	List	
Client ID: PBS	Batcl	h ID: 672	232	F	RunNo: 8 7	7782				
Prep Date: 5/3/2022	Analysis E	Date: 5/	5/2022	S	SeqNo: 3	109259	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.55		0.5000		110	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.3	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Qualifiers:

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

Page 20 of 21

Client: Devon H Project: Gaucho	Energy 6 Heater T	reater									
Sample ID: Ics-67232	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline R	ange		_
Client ID: LCSS	Batch	n ID: 672	232	F	RunNo: 87	7782					
Prep Date: 5/3/2022	Analysis D	Date: 5/	5/2022	S	SeqNo: 31	109233	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	70	130				
Surr: BFB	540		500.0		108	70	130				
Sample ID: mb-67232	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline R	ange		_
Client ID: PBS	Batch	n ID: 672	232	F	RunNo: 87	7782					
Prep Date: 5/3/2022	Analysis D	Date: 5/	5/2022	S	SeqNo: 31	109234	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	510		500.0		102	70	130				

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

Page 21 of 21

WO#: 2204D50 13-May-22

Received	by	OCD :	10/10/2	2022 8	:04:48 AM	ľ
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ANALYSIS LABORATORY	Hall Environmental Albi TEL: 505-345-3975 Website: www.hc	Analysis Lab 4901 Haw uquerque, NN FAX: 505-3- allenvironmen	kins NE 187109 Sarr 15-4107 atal.com	nple Log-In Cl	neck List
Client Name: Devon Energy	Work Order Number	: 2204D50		RcptNo:	1
Received By: Juan Rojas	4/30/2022 8:30:00 AM	C	flow & g		
Completed By: Juan Rojas Reviewed By: WG 5.2.2	4/30/2022 10:04:11 AI Z	М	(panen g		
Chain of Custody				_	
1. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the sample delivered?		<u>Courier</u>			
Log In 3. Was an attempt made to cool the samples?		Yes 🗸	No 🗌		
4. Were all samples received at a temperature of	f >0° C to 6.0°C	Yes 🗹	No 🗌		
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated test(s)?		Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) properly	preserved?	Yes 🗹	No 🗌	_	
8. Was preservative added to bottles?		Yes 🗌	No 🔽	NA 🗌	
9. Received at least 1 vial with headspace <1/4"	for AQ VOA?	Yes	No 🗌	NA 🗹	
 Were any sample containers received broken' 	?	Yes 🗌	No 🗹	# of preserved bottles checked	
 Does paperwork match bottle labels? (Note discrepancies on chain of custody) 		Yes 🗹	No 🗌	for pH: (<2 or >	>12 unless noted)
2. Are matrices correctly identified on Chain of C	ustody?	Yes 🗸	No 🗌	Adjusted?	al mark the
3. Is it clear what analyses were requested?		Yes 🗸	No 🗌		ulada
 Were all holding times able to be met? (If no, notify customer for authorization.) 		Yes 🗹	No 🗌	Checked by: Jv	1930122
Special Handling (if applicable)			2 I		
15. Was client notified of all discrepancies with th	is order?	Yes	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via: [eMail	Phone Fax	In Person	
Regarding:					
Client Instructions:			4		
16. Additional remarks: Sample 009	Hos clearly	water	in the so	i). KPG 4-	5·J·22
Cooler Information Cooler No Temp °C Condition Sea 1 0.1 Good Good<	al Intact Seal No	Seal Date	Signed By		

Page 1 of 1

The Mathematical Standard Time: The Mathematical Standard Time:	Receive	ed by	<u>0C</u> 1	D: 10	/10/.	2022	? <u>8:0</u>	4:48		1																	_ ′	Page	<u>249 o</u>		
Chain-of-Custody Record Turn-Around Time: $S - 0.9 y$ in: \land (1/07) \square (1/07) \square (1/07) \square (1/07) In: \land (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07) In: \square (1/07) \square (1/07) \square (1/07) \square (1/07)		ANAL ENVIKONMENTAL ANALYSTS LABODATODY		www.rialienvironmental.com Hawkins NE - Albuquergue, NM 87109	505-345-3075 Eav 505-345 4107	Analysis Request	()1 ()1	pseu SW	Dq Dq Ayr	۹۵۵۶۱ ۱۹۵۶ ۱۹۵۶ (۲۰	8/8 001 3 3, 10 3, 10 4, 10 5, 10 4, 10 5, 10 4, 10 5, 10 4, 10 5, 10 4, 10 5, 10 7, 10 1,) bc (10 (10 (10 (10 (10 (10)) (10)) (10) (10	etho y 83 hr, 1 emi emi emi	6081 P6 EDB (M PAHs b RCRA E 8260 (V 8270 (S Total Co Total Co)]												CC: Chance Dixon	102 BIN Dale 1-000/01/	1000 CC-		
Chain-of-Custody Record Turn-Around Time: $5-0.4y$ Ift $5 \neq V0D$ Project Name: $5 - 0.4y$ Ing Address: $9 \neq 10^{-1}$ Information $10^{-1} = 0^{-1}$ Information				490	Tol		(c	NR(/ 01	אם /	02	 19)	190	08:H9T	7	-			_								narks:	2.2			
Chain-of-Custody Record Tum- Int. Int. $\mathcal{E} V \partial \mathcal{D}$ Int. $\mathcal{E} V \partial D$	Around Time: 5-094	andard the Rush	t Name:	aucho # & (Hegter) Treater]	t#:	52 E-01101	t Manager:	100,29 Deppin)) s <u>,</u>	er: C.D.	s:	oolers: 1 B	- Temp(including CF): 0.7-6・1 こ 0.7 5	iner Preservative HEAL No.	22 ZZe -001	1 -002 1	-003	1 -00%	-005	-006	-003	-005	-009	-0 10	110-	210-	d by: Via: Date Time Ren	WWWWWWWW # 2012 900	d by: Via: Date Time		
Chain-of-Custody Record Int De VOD Ing Address: De VOD Ine #: Ine #: Ine #: Ine #: Ine #: De VOD Ing Address: De VOD Standard De Level 4 (Full Validation) reditation: DA Compliance Standard Develope	Turn-/	Ja st	Projec	V	Projec	رب 	Projec	4		Sampl	On Ice	# of Co	Cooler	Contai Type a	40											-	Receive	M	Receive		
Chain Int:	-of-Custody Record	U.0,				s: On Fild					Level 4 (Full Validation)	□ Aź Compliance	Other			Matrix Sample Name	5011 BHZZ-08 2'	1 8HZZ-09 2'	BH22-10 2'	BHZZ-12 0'	BH22-13 0'	BH22-14 0'	BHZZ-IS O	BHZZ-15 3	8HZZ-15 6	BH22-160'	BH22-17 0	8422-17 3'	Relinquished by:		Relinquished by:
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HALL ENVIRONMER ANALYSIS LABORA	www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Tel. 505-345-3975 Fax 505-345-4107 Analysis Request		PCB's PO4, Sr PO4, Sr PO4, Sr	es/8082 Pd (Present/ 0 or 82705 115 0 or 82705 115 0 or 82705 115 0 or 82705 115 0 or 82705 115 0 or 92 0 or 9		PD/06106.046 8081 Pesticide: PPHs by 8310 RCRA 8 Metals 8260 (VOA) 8260 (VOA) 2201 (Semi-VC 70tal Coliform (7							Irks: CC; CHAPCE DIZON	Direct Bill Deran	
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ustody Record	Ei'ld				Level 4 (Full Validation)	Compliance			Sample Name	1 3422-17 6'	8HZZ-16 6'							hed by:	hed bv:	TANA AD
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July 11, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX:

RE: Gaucho 6 Heater Treater

OrderNo.: 2206D57

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 12 sample(s) on 6/24/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: WES22-01 Collection Date: 6/21/2022 8:55:00 AM

Project:	Gaucho 6 Heater Treater	Collection Date: 6/21/2022 8:55:00 AM											
Lab ID:	2206D57-001	Matrix: SOIL	Rece	Received Date: 6/24/2022 8:16:00 AM									
Analyses		Result	RL Qua	al Units	DF	Date Analyzed							
EPA ME	THOD 8015M/D: DIESEL RANG	SE ORGANICS				Analyst: ED							
Diesel R	ange Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 6:18:48 AM							
Motor O	il Range Organics (MRO)	ND	46	mg/Kg	1	6/30/2022 6:18:48 AM							
Surr:	DNOP	93.1	51.1-141	%Rec	1	6/30/2022 6:18:48 AM							
EPA ME	THOD 8015D: GASOLINE RAN	GE				Analyst: NSB							
Gasoline	e Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2022 1:21:47 AM							
Surr:	BFB	97.0	37.7-212	%Rec	1	6/29/2022 1:21:47 AM							
EPA ME	THOD 8021B: VOLATILES					Analyst: NSB							
Benzene	9	ND	0.025	mg/Kg	1	6/29/2022 1:21:47 AM							
Toluene		ND	0.049	mg/Kg	1	6/29/2022 1:21:47 AM							
Ethylber	zene	ND	0.049	mg/Kg	1	6/29/2022 1:21:47 AM							
Xylenes.	, Total	ND	0.099	mg/Kg	1	6/29/2022 1:21:47 AM							
Surr:	4-Bromofluorobenzene	91.9	70-130	%Rec	1	6/29/2022 1:21:47 AM							
EPA ME	THOD 300.0: ANIONS					Analyst: NAI							
Chloride		ND	60	mg/Kg	20	6/29/2022 9:47:31 PM							

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

Qualifiers:

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

Page 1 of 16
Project: Gaucho 6 Heater Treater

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: WES22-02 Collection Date: 6/21/2022 9:00:00 AM

Lab ID: 2206D57-002	Matrix: SOIL	Rece	eived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	SE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 6:42:41 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/30/2022 6:42:41 AM
Surr: DNOP	102	51.1-141	%Rec	1	6/30/2022 6:42:41 AM
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/29/2022 1:45:14 AM
Surr: BFB	93.3	37.7-212	%Rec	1	6/29/2022 1:45:14 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2022 1:45:14 AM
Toluene	ND	0.048	mg/Kg	1	6/29/2022 1:45:14 AM
Ethylbenzene	ND	0.048	mg/Kg	1	6/29/2022 1:45:14 AM
Xylenes, Total	ND	0.096	mg/Kg	1	6/29/2022 1:45:14 AM
Surr: 4-Bromofluorobenzene	89.7	70-130	%Rec	1	6/29/2022 1:45:14 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/29/2022 9:59:55 PM

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

Qualifiers:

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

Page 2 of 16

Analytical Report
Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022
Client Sample ID: WES22-03

Project:	Gaucho 6 Heater Treater		Collec	tion Date:	6/21/2	022 9:05:00 AM
Lab ID:	2206D57-003	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses		Result	RL Qua	al Units	DF	Date Analyzed
EPA ME	THOD 8015M/D: DIESEL RANG	BE ORGANICS				Analyst: ED
Diesel R	ange Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 7:06:31 AM
Motor O	il Range Organics (MRO)	ND	48	mg/Kg	1	6/30/2022 7:06:31 AM
Surr:	DNOP	96.6	51.1-141	%Rec	1	6/30/2022 7:06:31 AM
EPA ME	THOD 8015D: GASOLINE RAN	GE				Analyst: NSB
Gasoline	e Range Organics (GRO)	ND	4.7	mg/Kg	1	6/29/2022 2:08:36 AM
Surr:	BFB	99.1	37.7-212	%Rec	1	6/29/2022 2:08:36 AM
EPA ME	THOD 8021B: VOLATILES					Analyst: NSB
Benzene	e	ND	0.023	mg/Kg	1	6/29/2022 2:08:36 AM
Toluene		ND	0.047	mg/Kg	1	6/29/2022 2:08:36 AM
Ethylber	nzene	ND	0.047	mg/Kg	1	6/29/2022 2:08:36 AM
Xylenes	, Total	ND	0.093	mg/Kg	1	6/29/2022 2:08:36 AM
Surr:	4-Bromofluorobenzene	93.5	70-130	%Rec	1	6/29/2022 2:08:36 AM
EPA ME	THOD 300.0: ANIONS					Analyst: NAI
Chloride		75	59	mg/Kg	20	6/29/2022 10:12:20 PM

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

Qualifiers:

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

Page 3 of 16

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022
Client Sample ID: WES22-04

Project: Gaucho 6 Heater Treater		Collec	ction Date:	6/21/2	022 9:10:00 AM
Lab ID: 2206D57-004	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	24	15	mg/Kg	1	6/30/2022 7:30:23 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/30/2022 7:30:23 AM
Surr: DNOP	111	51.1-141	%Rec	1	6/30/2022 7:30:23 AM
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2022 2:31:57 AM
Surr: BFB	97.6	37.7-212	%Rec	1	6/29/2022 2:31:57 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2022 2:31:57 AM
Toluene	ND	0.049	mg/Kg	1	6/29/2022 2:31:57 AM
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2022 2:31:57 AM
Xylenes, Total	ND	0.097	mg/Kg	1	6/29/2022 2:31:57 AM
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	1	6/29/2022 2:31:57 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/29/2022 10:24:45 PM

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

Qualifiers:

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

Page 4 of 16

Project: Gaucho 6 Heater Treater

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: BES22-01 Collection Date: 6/21/2022 9:15:00 AM

Lab ID: 2206D57-005	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 7:54:22 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/30/2022 7:54:22 AM
Surr: DNOP	93.2	51.1-141	%Rec	1	6/30/2022 7:54:22 AM
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/29/2022 2:55:21 AM
Surr: BFB	97.9	37.7-212	%Rec	1	6/29/2022 2:55:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	6/29/2022 2:55:21 AM
Toluene	ND	0.050	mg/Kg	1	6/29/2022 2:55:21 AM
Ethylbenzene	ND	0.050	mg/Kg	1	6/29/2022 2:55:21 AM
Xylenes, Total	ND	0.099	mg/Kg	1	6/29/2022 2:55:21 AM
Surr: 4-Bromofluorobenzene	94.8	70-130	%Rec	1	6/29/2022 2:55:21 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	170	60	mg/Kg	20	6/29/2022 10:37:10 PM

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

Qualifiers:

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

Page 5 of 16

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022
Client Sample ID: BES22-02

Project: Gaucho 6 Heater Treater		Collec	ction Date:	6/21/2	022 9:20:00 AM
Lab ID: 2206D57-006	Matrix: SOIL	Rece	eived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL R	ANGE ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 8:18:17 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/30/2022 8:18:17 AM
Surr: DNOP	94.6	51.1-141	%Rec	1	6/30/2022 8:18:17 AM
EPA METHOD 8015D: GASOLINE F	RANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2022 3:18:46 AM
Surr: BFB	95.4	37.7-212	%Rec	1	6/29/2022 3:18:46 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2022 3:18:46 AM
Toluene	ND	0.049	mg/Kg	1	6/29/2022 3:18:46 AM
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2022 3:18:46 AM
Xylenes, Total	ND	0.098	mg/Kg	1	6/29/2022 3:18:46 AM
Surr: 4-Bromofluorobenzene	90.5	70-130	%Rec	1	6/29/2022 3:18:46 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	220	60	mg/Kg	20	6/29/2022 10:49:34 PM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 16

Analytical Report
Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: WES22-05

Project:	Gaucho 6 Heater Treater		Collec	tion Date:	6/21/2	022 9:30:00 AM
Lab ID:	2206D57-007	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses		Result	RL Qua	al Units	DF	Date Analyzed
EPA ME	THOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst: ED
Diesel R	ange Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 8:42:14 AM
Motor O	il Range Organics (MRO)	ND	46	mg/Kg	1	6/30/2022 8:42:14 AM
Surr:	DNOP	91.8	51.1-141	%Rec	1	6/30/2022 8:42:14 AM
EPA ME	THOD 8015D: GASOLINE RAN	GE				Analyst: NSB
Gasoline	e Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2022 3:42:13 AM
Surr:	BFB	97.8	37.7-212	%Rec	1	6/29/2022 3:42:13 AM
EPA ME	THOD 8021B: VOLATILES					Analyst: NSB
Benzene	e	ND	0.024	mg/Kg	1	6/29/2022 3:42:13 AM
Toluene		ND	0.049	mg/Kg	1	6/29/2022 3:42:13 AM
Ethylber	nzene	ND	0.049	mg/Kg	1	6/29/2022 3:42:13 AM
Xylenes,	, Total	ND	0.098	mg/Kg	1	6/29/2022 3:42:13 AM
Surr:	4-Bromofluorobenzene	92.7	70-130	%Rec	1	6/29/2022 3:42:13 AM
EPA ME	THOD 300.0: ANIONS					Analyst: JMT
Chloride		330	61	mg/Kg	20	6/30/2022 9:27:08 AM

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

Qualifiers:

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

Page 7 of 16

Gaucho 6 Heater Treater

2206D57-008

Project:

Lab ID:

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: BES22-03 Collection Date: 6/21/2022 9:35:00 AM

Received Date: 6/24/2022 8:16:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 9:06:08 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/30/2022 9:06:08 AM
Surr: DNOP	96.3	51.1-141	%Rec	1	6/30/2022 9:06:08 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/29/2022 4:29:03 AM
Surr: BFB	100	37.7-212	%Rec	1	6/29/2022 4:29:03 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	6/29/2022 4:29:03 AM
Toluene	ND	0.049	mg/Kg	1	6/29/2022 4:29:03 AM
Ethylbenzene	ND	0.049	mg/Kg	1	6/29/2022 4:29:03 AM
Xylenes, Total	ND	0.098	mg/Kg	1	6/29/2022 4:29:03 AM
Surr: 4-Bromofluorobenzene	94.5	70-130	%Rec	1	6/29/2022 4:29:03 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	230	60	mg/Kg	20	6/30/2022 9:39:33 AM

Matrix: SOIL

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

Qualifiers:

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

Page 8 of 16

Project:

Lab ID:

Gaucho 6 Heater Treater

2206D57-009

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: WES22-06 Collection Date: 6/21/2022 9:40:00 AM

Received Date: 6/24/2022 8:16:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 9:30:03 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	6/30/2022 9:30:03 AM
Surr: DNOP	91.1	51.1-141	%Rec	1	6/30/2022 9:30:03 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	6/29/2022 4:52:32 AM
Surr: BFB	96.8	37.7-212	%Rec	1	6/29/2022 4:52:32 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	6/29/2022 4:52:32 AM
Toluene	ND	0.046	mg/Kg	1	6/29/2022 4:52:32 AM
Ethylbenzene	ND	0.046	mg/Kg	1	6/29/2022 4:52:32 AM
Xylenes, Total	ND	0.093	mg/Kg	1	6/29/2022 4:52:32 AM
Surr: 4-Bromofluorobenzene	91.1	70-130	%Rec	1	6/29/2022 4:52:32 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	220	60	mg/Kg	20	6/30/2022 10:16:48 AM

Matrix: SOIL

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

Qualifiers:

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

Page 9 of 16

Project:

Lab ID:

Gaucho 6 Heater Treater

2206D57-010

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: WES22-07 Collection Date: 6/21/2022 9:45:00 AM

Received Date: 6/24/2022 8:16:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 9:53:57 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/30/2022 9:53:57 AM
Surr: DNOP	97.0	51.1-141	%Rec	1	6/30/2022 9:53:57 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/29/2022 4:41:00 AM
Surr: BFB	89.7	37.7-212	%Rec	1	6/29/2022 4:41:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	6/29/2022 4:41:00 AM
Toluene	ND	0.047	mg/Kg	1	6/29/2022 4:41:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	6/29/2022 4:41:00 AM
Xylenes, Total	ND	0.094	mg/Kg	1	6/29/2022 4:41:00 AM
Surr: 4-Bromofluorobenzene	85.7	70-130	%Rec	1	6/29/2022 4:41:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	100	60	mg/Kg	20	6/30/2022 10:29:12 AM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 16

Project: Gaucho 6 Heater Treater

Analytical Report Lab Order 2206D57

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/11/2022 Client Sample ID: BES22-04 Collection Date: 6/22/2022 11:00:00 AM

Lab ID: 2206D57-011	Matrix: SOIL	Rece	ived Date:	6/24/2	022 8:16:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	6/30/2022 10:17:50 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/30/2022 10:17:50 AM
Surr: DNOP	97.9	51.1-141	%Rec	1	6/30/2022 10:17:50 AM
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	6/29/2022 5:00:00 AM
Surr: BFB	87.4	37.7-212	%Rec	1	6/29/2022 5:00:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.023	mg/Kg	1	6/29/2022 5:00:00 AM
Toluene	ND	0.046	mg/Kg	1	6/29/2022 5:00:00 AM
Ethylbenzene	ND	0.046	mg/Kg	1	6/29/2022 5:00:00 AM
Xylenes, Total	ND	0.092	mg/Kg	1	6/29/2022 5:00:00 AM
Surr: 4-Bromofluorobenzene	82.6	70-130	%Rec	1	6/29/2022 5:00:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	6/30/2022 11:06:27 AM

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

Qualifiers:

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

Page 11 of 16

Gaucho 6 Heater Treater

2206D57-012

Project:

Lab ID:

Analytical Report Lab Order 2206D57

Date Reported: 7/11/2022

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-08 Collection Date: 6/22/2022 11:05:00 AM

Received Date: 6/24/2022 8:16:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	6/30/2022 11:29:33 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/30/2022 11:29:33 AM
Surr: DNOP	105	51.1-141	%Rec	1	6/30/2022 11:29:33 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	6/29/2022 5:20:00 AM
Surr: BFB	87.0	37.7-212	%Rec	1	6/29/2022 5:20:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	6/29/2022 5:20:00 AM
Toluene	ND	0.050	mg/Kg	1	6/29/2022 5:20:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	6/29/2022 5:20:00 AM
Xylenes, Total	ND	0.10	mg/Kg	1	6/29/2022 5:20:00 AM
Surr: 4-Bromofluorobenzene	83.1	70-130	%Rec	1	6/29/2022 5:20:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	6/30/2022 11:18:51 AM

Matrix: SOIL

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

Qualifiers:

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

Page 12 of 16

QC SUMMARY REPORT

Result

14

PQL

1.5

SPK value SPK Ref Val

0

15.00

Page 264	of 290

Uell Environmor	ntal Analysis I aborat	owy Inc	WO#:	2206D57
	Ital Allalysis Laborau	ory, mc.		11-Jul-22
Client: Devor	n Energy			
Project: Gauch	10 6 Heater Treater			
Sample ID: MB-68444	SampType: mblk	TestCode: EPA Method	l 300.0: Anions	
Client ID: PBS	Batch ID: 68444	RunNo: 89143		
Prep Date: 6/29/2022	Analysis Date: 6/29/2022	SeqNo: 3167724	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Chloride	ND 1.5			
Sample ID: LCS-68444	SampType: Ics	TestCode: EPA Method	l 300.0: Anions	
Client ID: LCSS	Batch ID: 68444	RunNo: 89143		
Prep Date: 6/29/2022	Analysis Date: 6/29/2022	SeqNo: 3167725	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Chloride	14 1.5 15.00	0 92.6 90	110	
Sample ID: MB-68460	SampType: mblk	TestCode: EPA Method	l 300.0: Anions	
Client ID: PBS	Batch ID: 68460	RunNo: 89182		
Prep Date: 6/29/2022	Analysis Date: 6/30/2022	SeqNo: 3170091	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Chloride	ND 1.5			
Sample ID: LCS-68460	SampType: Ics	TestCode: EPA Method	l 300.0: Anions	
Client ID: LCSS	Batch ID: 68460	RunNo: 89182		
Prep Date: 6/29/2022	Analysis Date: 6/30/2022	SeqNo: 3170092	Units: mg/Kg	

Qualifiers:

Analyte

Chloride

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В

%REC

91.8

LowLimit

90

HighLimit

110

%RPD

RPDLimit

Qual

- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 13 of 16

1

Surr: DNOP

5.1

5.000

Client: Devon Devon Devon Devon Devon Devon Devon Devon Devon	Energy 6 Heater Ti	reater								
Sample ID: MB-68415	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batcl	h ID: 68	415	F	RunNo: 8 9	9 114				
Prep Date: 6/28/2022	Analysis D	Date: 6/	30/2022	S	SeqNo: 3	170264	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Notor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.5	51.1	141			
Sample ID: LCS-68415	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batcl	h ID: 68	415	F	RunNo: 8 9	9114				
Prep Date: 6/28/2022	Analysis D	Date: 6/	30/2022	S	SeqNo: 3	170265	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	15	50.00	0	98.8	64.4	127			

103

51.1

141

Qualifiers:

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

Page 14 of 16

2206D57

11-Jul-22

WO#:

Client: Devon Project: Gauch	Energy o 6 Heater Tr	reater									
Sample ID: mb-68382	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D: Gasc	line Range	9		
Client ID: PBS	Batc	h ID: 68	382	R	unNo: 8 9	9090					
Prep Date: 6/27/2022	Analysis E	Date: 6/	28/2022	S	eqNo: 31	165011	Units: mg/k	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO) Surr: BFB	ND 1000	5.0	1000		102	37.7	212				
Sample ID: Ics-68382	SampT	Гуре: LC	S	Tes	tCode: EF	PA Method	8015D: Gasc	line Range	e		
Client ID: LCSS	Batc	h ID: 68	382	R	unNo: 8 9	9090					
Prep Date: 6/27/2022	Analysis E	Date: 6/	28/2022	S	eqNo: 31	165012	Units: mg/k	ζg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	29	5.0	25.00	0	114	72.3	137				
Surr: BFB	2200		1000		218	37.7	212			S	

Qualifiers:

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

Page 15 of 16

2206D57

11-Jul-22

WO#:

Client: Project:	Devon Energy Gaucho 6 Heater	r Treater								
Sample ID: mb-68	382 Sai	npType: M I	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	В	atch ID: 68	382	F	RunNo: 89090					
Prep Date: 6/27/2	2022 Analys	is Date: 6	28/2022	S	SeqNo: 3	165039	Units: mg/K	g		
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	N	D 0.025								
Toluene	N	D 0.050								
Ethylbenzene	N	D 0.050								
Xylenes, Total	N	D 0.10								
Surr: 4-Bromofluorobe	enzene 0.9	5	1.000		94.7	70	130			
Sample ID: LCS-6	8382 Sai	mpType: LC	s	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	В	atch ID: 68	382	F	RunNo: 8 9	9090				
Prep Date: 6/27/2	2022 Analys	is Date: 6	/28/2022	S	SeqNo: 3	165040	Units: mg/K	g		
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.8	5 0.025	1.000	0	84.9	80	120			
Toluene	0.9	0 0.050	1.000	0	89.6	80	120			
Ethylbenzene	0.9	1 0.050	1.000	0	90.8	80	120			
Xylenes, Total	2.	7 0.10	3.000	0	91.1	80	120			
Surr: 4-Bromofluorobe	enzene 0.9	8	1.000		98.0	70	130			

Qualifiers:

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

Page 16 of 16

WO#: 2206D57 11-Jul-22

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmen TEL: 505-345-39 Website: www	ntal Analysis Labor 4901 Hawkis Albuquerque, NM 8 975 FAX: 505-345 v.hallenvironmenta	ratory ns NE 87109 Sar -4107 1.com	Sample Log-In Check Lis				
Client Name: Devon Energy	Work Order Numb	per: 2206D57		RcptNo: 1				
Received By: Kasandra Pay Completed By: Sean Livingst Reviewed By: DAD (720	an 6/24/2022 8:16:00 A on 6/24/2022 9:24:03 A	AM AM	44 5L					
0	122							
Chain of Custody								
1. Is Chain of Custody complete?		Yes 🗹	No 🗀	Not Present				
2. How was the sample delivered	?	Courier						
Loa In								
3. Was an attempt made to cool t	he samples?	Yes 🗸	No 🗌					
 D Doc 1002 (2004) 4929-4029 	anne de cane e este de							
4. Were all samples received at a	temperature of >0° C to 6.0°C	Yes 🗸	No 🗌					
	nen mener i pere esta nueva procedura i sur a nen su concer sona de la concerna esta esta 10							
5. Sample(s) in proper container(s	3)?	Yes 🗹	No 🗌					
0.0								
6. Sufficient sample volume for inc	dicated test(s)?	Yes 🗹	No 🗌					
7. Are samples (except VOA and	ONG) properly preserved?	Yes 🗹	No 🗌	_				
8. Was preservative added to bott	les?	Yes 🛄	No 🗹	NA 🛄				
9 Received at least 1 vial with her	denote < 1/4" for AO VOA2	Vac 🗆						
10 More any comple containers re	acitized broken?				/			
IO, were any sample containers re	ceived broken?	Yes 🗀	No 💌	# of preserved				
11 Does nanenwork match bottle is	hels?	Voc.	No 🗍	bottles checked				
(Note discrepancies on chain of	custody)	Tes 💌		(\$2 or >12	unless noted			
12. Are matrices correctly identified	on Chain of Custody?	Yes 🔽	No 🗌	Adjusted?				
13. Is it clear what analyses were re	equested?	Yes 🔽	No 🗌		2.4			
14. Were all holding times able to b	e met?	Yes 🖌	No 🗌	Checked by	- Geel			
(If no, notify customer for autho	rization.)			<u> </u>	cre			
Special Handling (if applica	hle)				GIONI			
15 Was client notified of all discuss	ponoioo with this code-0	Vec 🗆						
TO, Was client notified of all uiscre				NA 🗹				
Person Notified:	Date:	6/24/20						
By Whom:	eyern Cerson Via:	🗌 eMail 🛛 🕅 F	Phone 🗌 Fax	In Person				
Regarding:	Sumple norme incorr	rect						
Client Instructions:	with coc.							
16. Additional remarks:								
17 Cooler Information								
Cooler No Temp °C C	ondition Seal Intact Seal No	Seal Date	Signed By					
1 2.0 God	od	Sour Date	Signed by					
2 0.8 Goo	od l			-				

Page 1 of 1

Reccoll necessary, samples submitted to Hall Environmental may be sut	1213/22 1900 ac	Pate: Time: Relinquished by:	(CD)	Date: Time: Relinquished by:	\$12211:US 1 4 ES22-08	5/2211:00 Soi'l & ESZZ-04	10-22232 A:42 24:42	9:40 NES22-06	9:35	9:30 45522-05	9:20 B E522-02	9:15 8:522-01	9:10 WESZZ-04	9:05 WESTER 30:03	9:00 LES22-02	6/218:55 SOIT WESZZOI	Date Time Matrix Sample Name	EDD (Type)	NELAC Other	Accreditation: Az Compliance	QA/QC Package: //	email or Fax#:	Phone #:	Mailing Address:	Pag	269 Gilent: 021000	of 290 Chain-of-Custody Record
contrated to other accredited laboratories. This serves as notice of this	1/ awrier 6:24:22 8:16	Received by: Via: Date Time	an tracker track	Received by: Via: Date Time	012	sii		0.0%	100	too	004	\$ CO	hor	Eac	1 007.	402 ICE 201	Cooler Temp(including CF):IC IQ 0.1- (°C)ContainerPreservativeI 0-0.2 ÷ 0.8Type and #Type72.0005.7	# of Coolers: 2 2.2.0.2=2.00cH.8	On Ice: Yes 🗆 No Suc clay	Sampler: C ひ	MON OG PEPIN	Project Manager:	200-1011-222	GAUCHO 6 HEAter Treater	Project Name:	Z Standard K Rush	Turn-Around Time: $5 - \partial a y$
s possibility. Any sub-contracted data will be clearly notated on the analytical report.	5/0 #: N/A	Direct Sill Devon Energy	CC. Change Dixon	Remarks:	:: 10	/26//	20222	1:53	5:11								BTEX / MT TPH:8015D 8081 Pestic EDB (Metho PAHs by 83 RCRA 8 Me Cl, F, Br, N 8260 (VOA) 8270 (Semi Total Colifor	GF ide ide ide ide ide ide ide ide ide ide	/ T RO / s/80 504. or 8 3 , N DA) (Pre		's (8021 O / MRC PCB's DSIMS PO4, SC) D) D₄	Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	4901 Hawkins NE - Albuquerque, NM 87109	www.hallenvironmental.com	ANALYSIS LABORATORY	

Released to Imaging: 10/26/2022 1:55:11 PM



July 14, 2022

Monica Peppin Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (575) 748-0176 FAX:

RE: Gaucho Unit 6 Heater Treater

OrderNo.: 2207345

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 12 sample(s) on 7/9/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Project:

Analytical Report Lab Order 2207345

Date Reported: 7/14/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Client Sample ID: BES22-05 5' Collection Date: 7/7/2022 12:05:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-001	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/12/2022 11:21:23 PM			
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	7/12/2022 11:21:23 PM			
Surr: DNOP	102	51.1-141	%Rec	1	7/12/2022 11:21:23 PM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2022 11:45:28 AM			
Surr: BFB	98.5	37.7-212	%Rec	1	7/12/2022 11:45:28 AM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.025	mg/Kg	1	7/12/2022 11:45:28 AM			
Toluene	ND	0.049	mg/Kg	1	7/12/2022 11:45:28 AM			
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2022 11:45:28 AM			
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 11:45:28 AM			
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/12/2022 11:45:28 AM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	ND	60	mg/Kg	20	7/12/2022 4:23:12 PM			

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 16

Project:

Chloride

Analytical Report Lab Order 2207345

7/12/2022 4:35:37 PM

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Date Reported: 7/14/2022 Client Sample ID: BES22-06 5' Collection Date: 7/7/2022 12:05:00 PM

Lab ID: 2207345-002 Matrix: SOIL Received Date: 7/9/2022 9:30:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: SB EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 14 mg/Kg 1 7/12/2022 11:45:51 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 7/12/2022 11:45:51 PM Surr: DNOP 102 51.1-141 %Rec 1 7/12/2022 11:45:51 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 7/12/2022 12:56:33 PM 4.9 mg/Kg 1 Surr: BFB 98.1 37.7-212 %Rec 1 7/12/2022 12:56:33 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 7/12/2022 12:56:33 PM mg/Kg 1 Toluene ND 0.049 mg/Kg 1 7/12/2022 12:56:33 PM Ethylbenzene ND 0.049 mg/Kg 1 7/12/2022 12:56:33 PM Xylenes, Total ND 0.098 mg/Kg 7/12/2022 12:56:33 PM 1 Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 7/12/2022 12:56:33 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI

ND

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

mg/Kg

20

60

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 16

Project:

Analytical Report Lab Order 2207345

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Date Reported: 7/14/2022 Client Sample ID: BES22-07 6' Collection Date: 7/7/2022 12:10:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-003	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM						
Analyses	Result	RL Qua	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 12:10:19 AM			
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/13/2022 12:10:19 AM			
Surr: DNOP	108	51.1-141	%Rec	1	7/13/2022 12:10:19 AM			
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 2:07:57 PM			
Surr: BFB	101	37.7-212	%Rec	1	7/12/2022 2:07:57 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.025	mg/Kg	1	7/12/2022 2:07:57 PM			
Toluene	ND	0.050	mg/Kg	1	7/12/2022 2:07:57 PM			
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 2:07:57 PM			
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 2:07:57 PM			
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	7/12/2022 2:07:57 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	64	60	mg/Kg	20	7/12/2022 5:12:50 PM			

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 16

Project:

Analytical Report Lab Order 2207345

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Date Reported: 7/14/2022 Client Sample ID: BES22-08 0.5' Collection Date: 7/7/2022 12:20:00 PM Baseived Date: 7/0/2022 0:20:00 AM

Lab ID: 2207345-004	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM						
Analyses	Result	RL Qua	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	13	mg/Kg	1	7/13/2022 12:34:48 AM			
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	7/13/2022 12:34:48 AM			
Surr: DNOP	76.3	51.1-141	%Rec	1	7/13/2022 12:34:48 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 2:31:48 PM			
Surr: BFB	102	37.7-212	%Rec	1	7/12/2022 2:31:48 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.025	mg/Kg	1	7/12/2022 2:31:48 PM			
Toluene	ND	0.050	mg/Kg	1	7/12/2022 2:31:48 PM			
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 2:31:48 PM			
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 2:31:48 PM			
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	7/12/2022 2:31:48 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	230	59	mg/Kg	20	7/12/2022 5:25:14 PM			

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 16

Project:

Analytical Report Lab Order 2207345

Date Reported: 7/14/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Client Sample ID: BES22-09 0.5' Collection Date: 7/7/2022 12:20:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-005	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	7/13/2022 12:59:11 AM			
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/13/2022 12:59:11 AM			
Surr: DNOP	73.8	51.1-141	%Rec	1	7/13/2022 12:59:11 AM			
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 2:55:39 PM			
Surr: BFB	104	37.7-212	%Rec	1	7/12/2022 2:55:39 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.025	mg/Kg	1	7/12/2022 2:55:39 PM			
Toluene	ND	0.050	mg/Kg	1	7/12/2022 2:55:39 PM			
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 2:55:39 PM			
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 2:55:39 PM			
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	7/12/2022 2:55:39 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	190	60	mg/Kg	20	7/12/2022 5:37:38 PM			

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 16

2207345-006

Project:

Lab ID:

Analytical Report Lab Order 2207345

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Date Reported: 7/14/2022 Client Sample ID: BES22-10 4' Collection Date: 7/7/2022 12:35:00 PM

Received Date: 7/9/2022 9:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 1:23:39 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/13/2022 1:23:39 AM
Surr: DNOP	76.3	51.1-141	%Rec	1	7/13/2022 1:23:39 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 3:19:30 PM
Surr: BFB	101	37.7-212	%Rec	1	7/12/2022 3:19:30 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	7/12/2022 3:19:30 PM
Toluene	ND	0.050	mg/Kg	1	7/12/2022 3:19:30 PM
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 3:19:30 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 3:19:30 PM
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	7/12/2022 3:19:30 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	7/12/2022 5:50:03 PM

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 16

Project:

Analytical Report Lab Order 2207345

Date Reported: 7/14/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Client Sample ID: WES22-09 0.5-4' Collection Date: 7/7/2022 12:30:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-007	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 1:48:10 AM			
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/13/2022 1:48:10 AM			
Surr: DNOP	77.3	51.1-141	%Rec	1	7/13/2022 1:48:10 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 3:43:28 PM			
Surr: BFB	101	37.7-212	%Rec	1	7/12/2022 3:43:28 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.025	mg/Kg	1	7/12/2022 3:43:28 PM			
Toluene	ND	0.050	mg/Kg	1	7/12/2022 3:43:28 PM			
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 3:43:28 PM			
Xylenes, Total	ND	0.099	mg/Kg	1	7/12/2022 3:43:28 PM			
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	7/12/2022 3:43:28 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	200	60	mg/Kg	20	7/12/2022 6:02:27 PM			

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 16

Project:

Analytical Report Lab Order 2207345

Date Reported: 7/14/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Client Sample ID: WES22-10 0.5-6' Collection Date: 7/7/2022 12:10:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-008	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analyst: SB		
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 2:12:43 AM		
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/13/2022 2:12:43 AM		
Surr: DNOP	78.9	51.1-141	%Rec	1	7/13/2022 2:12:43 AM		
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: NSB		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2022 4:07:26 PM		
Surr: BFB	102	37.7-212	%Rec	1	7/12/2022 4:07:26 PM		
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	0.025	mg/Kg	1	7/12/2022 4:07:26 PM		
Toluene	ND	0.049	mg/Kg	1	7/12/2022 4:07:26 PM		
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2022 4:07:26 PM		
Xylenes, Total	ND	0.098	mg/Kg	1	7/12/2022 4:07:26 PM		
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	7/12/2022 4:07:26 PM		
EPA METHOD 300.0: ANIONS					Analyst: NAI		
Chloride	190	60	mg/Kg	20	7/12/2022 6:14:52 PM		

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 16

Project:

Analytical Report Lab Order 2207345

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Date Reported: 7/14/2022 Client Sample ID: WES22-11 5-6' Collection Date: 7/7/2022 12:10:00 PM Baseived Date: 7/0/2022 0:20:00 AM

Lab ID: 2207345-009	Matrix: SOIL	Rece	Received Date: 7/9/2022 9:30:00 AM					
Analyses	Result	RL Qua	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	12	mg/Kg	1	7/13/2022 2:37:18 AM			
Motor Oil Range Organics (MRO)	ND	39	mg/Kg	1	7/13/2022 2:37:18 AM			
Surr: DNOP	75.9	51.1-141	%Rec	1	7/13/2022 2:37:18 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/12/2022 4:31:22 PM			
Surr: BFB	100	37.7-212	%Rec	1	7/12/2022 4:31:22 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.024	mg/Kg	1	7/12/2022 4:31:22 PM			
Toluene	ND	0.049	mg/Kg	1	7/12/2022 4:31:22 PM			
Ethylbenzene	ND	0.049	mg/Kg	1	7/12/2022 4:31:22 PM			
Xylenes, Total	ND	0.098	mg/Kg	1	7/12/2022 4:31:22 PM			
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	7/12/2022 4:31:22 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	190	60	mg/Kg	20	7/12/2022 6:52:06 PM			

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 9 of 16

Project: Gaucho Unit 6 Heater Treater

Analytical Report Lab Order 2207345

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/14/2022 Client Sample ID: WES22-12 0-4' Collection Date: 7/7/2022 12:30:00 PM Baseived Date: 7/0/2022 0:20:00 AM

Lab ID: 2207345-010	Matrix: SOIL	Rece	Received Date: 7/9/2022 9:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 3:01:45 AM			
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	7/13/2022 3:01:45 AM			
Surr: DNOP	76.5	51.1-141	%Rec	1	7/13/2022 3:01:45 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/12/2022 4:55:13 PM			
Surr: BFB	100	37.7-212	%Rec	1	7/12/2022 4:55:13 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.024	mg/Kg	1	7/12/2022 4:55:13 PM			
Toluene	ND	0.048	mg/Kg	1	7/12/2022 4:55:13 PM			
Ethylbenzene	ND	0.048	mg/Kg	1	7/12/2022 4:55:13 PM			
Xylenes, Total	ND	0.097	mg/Kg	1	7/12/2022 4:55:13 PM			
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	7/12/2022 4:55:13 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	67	60	mg/Kg	20	7/12/2022 7:04:31 PM			

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

Page 10 of 16

Project: Gaucho Unit 6 Heater Treater

Analytical Report Lab Order 2207345

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/14/2022 Client Sample ID: WES22-13 0-0.5' Collection Date: 7/7/2022 12:25:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-011	Matrix: SOIL	Rece	Received Date: 7/9/2022 9:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: SB			
Diesel Range Organics (DRO)	ND	11	mg/Kg	1	7/13/2022 3:26:13 AM			
Motor Oil Range Organics (MRO)	ND	35	mg/Kg	1	7/13/2022 3:26:13 AM			
Surr: DNOP	73.1	51.1-141	%Rec	1	7/13/2022 3:26:13 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 8:52:57 PM			
Surr: BFB	95.5	37.7-212	%Rec	1	7/12/2022 8:52:57 PM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.025	mg/Kg	1	7/12/2022 8:52:57 PM			
Toluene	ND	0.050	mg/Kg	1	7/12/2022 8:52:57 PM			
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 8:52:57 PM			
Xylenes, Total	ND	0.10	mg/Kg	1	7/12/2022 8:52:57 PM			
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	7/12/2022 8:52:57 PM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	230	60	mg/Kg	20	7/12/2022 8:06:33 PM			

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 16

Project:

Analytical Report Lab Order 2207345

Date Reported: 7/14/2022

Hall Environmental Analysis Laboratory, Inc.

Gaucho Unit 6 Heater Treater

Client Sample ID: WES22-14 0-0.5' Collection Date: 7/7/2022 12:25:00 PM Received Date: 7/9/2022 9:30:00 AM

Lab ID: 2207345-012	Matrix: SOIL	Received Date: 7/9/2022 9:30:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB		
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	7/13/2022 3:50:38 AM		
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/13/2022 3:50:38 AM		
Surr: DNOP	70.4	51.1-141	%Rec	1	7/13/2022 3:50:38 AM		
EPA METHOD 8015D: GASOLINE RA	ANGE				Analyst: NSB		
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/12/2022 9:16:36 PM		
Surr: BFB	95.8	37.7-212	%Rec	1	7/12/2022 9:16:36 PM		
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	0.025	mg/Kg	1	7/12/2022 9:16:36 PM		
Toluene	ND	0.050	mg/Kg	1	7/12/2022 9:16:36 PM		
Ethylbenzene	ND	0.050	mg/Kg	1	7/12/2022 9:16:36 PM		
Xylenes, Total	ND	0.10	mg/Kg	1	7/12/2022 9:16:36 PM		
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	7/12/2022 9:16:36 PM		
EPA METHOD 300.0: ANIONS					Analyst: NAI		
Chloride	210	60	mg/Kg	20	7/12/2022 8:18:58 PM		

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 16

OC CUMMA DV DEDODT

Result

14

PQL

1.5

SPK value SPK Ref Val

0

15.00

Page	283	of 290

QC St Hall Ei	JIVIIVIA ivironm	ental Analysis	. I Laborato	ory, Inc.					WO#:	2207345 14-Jul-22
Client: Project:	Dev Ga	von Energy ucho Unit 6 Heater T	`reater							
Sample ID:	MB-68714	SampType:	mblk	Tes	stCode: EF	PA Method	300.0: Anion:	5		
Client ID:	PBS	Batch ID:	68714	F	RunNo: 8 9	9439				
Prep Date:	7/12/2022	Analysis Date:	7/12/2022	5	SeqNo: 31	181846	Units: mg/K	g		
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5							
Sample ID:	LCS-68714	SampType:	lcs	Tes	stCode: EF	PA Method	300.0: Anions	5		
Client ID:	LCSS	Batch ID:	68714	F	RunNo: 8 9	9439				
Prep Date:	7/12/2022	Analysis Date:	7/12/2022	S	SeqNo: 31	181847	Units: mg/K	g		
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5 15.00	0	92.5	90	110			
Sample ID:	MB-68724	SampType:	mblk	Tes	stCode: EF	PA Method	300.0: Anion:	5		
Client ID:	PBS	Batch ID:	68724	F	RunNo: 8 9	9439				
Prep Date:	7/12/2022	Analysis Date:	7/12/2022	S	SeqNo: 31	181876	Units: mg/K	g		
Analyte		Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5							
Sample ID:	LCS-68724	SampType:	lcs	Tes	stCode: EF	PA Method	300.0: Anion:	5		
Client ID:	LCSS	Batch ID:	68724	F	RunNo: 8 9	9439				
Prep Date:	7/12/2022	Analysis Date:	7/12/2022	Ş	SeqNo: 31	181877	Units: mg/K	g		

Qualifiers:

Analyte

Chloride

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank

%REC

94.8

LowLimit

90

HighLimit

110

%RPD

RPDLimit

Qual

- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 13 of 16

	WO#:	2207345
all Environmental Analysis Laboratory, Inc.		14-Jul-22

Client:	Devon Energy										
Project:	Gaucho Unit 6 He	eater Trea	iter								
Sample ID: MB-686	Sample ID: MB-68675 SampType: MBLK					TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Ba	Batch ID: 68675			RunNo: 89401						
Prep Date: 7/11/2	022 Analysis	s Date: 7/	12/2022	Ş	SeqNo: 31	180414	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (I	DRO) ND	15									
Motor Oil Range Organic	s (MRO) ND	50									
Surr: DNOP	9.6		10.00		96.2	51.1	141				
Sample ID: LCS-68	675 Sam	pType: LC	S	Tes	stCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID: LCSS	Ba	tch ID: 68	675	F	RunNo: 8 9	9401					
Prep Date: 7/11/2	022 Analysis	s Date: 7/	12/2022	\$	SeqNo: 31	180415	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (I	DRO) 48	15	50.00	0	96.9	64.4	127				
Surr: DNOP	4.8		5.000		96.3	51.1	141				

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 14 of 16

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

	Page 285 of 290	
WO#.	2207345	
WO#.	2207343 14-Jul-22	

Client: Project:	Devon En Gaucho U	ergy nit 6 Hea	ter Tre	eater							
Sample ID:	mb	Samp	Гуре: 🛛	IBLK	Tes	stCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	PBS	Batc	h ID: G	89410	F	RunNo: 8 9	9410				
Prep Date:		Analysis [Date: 7	7/12/2022	:	SeqNo: 31	180613	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000		1000		101	37.7	212			
Sample ID:	2.5ug gro lcs	Samp	Гуре: L	cs	Tes	stCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	LCSS	Batc	h ID: G	89410	F	RunNo: 8 9	9410				
Prep Date:		Analysis [Date: 7	7/12/2022	\$	SeqNo: 31	180614	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1900		1000		194	37.7	212			
Sample ID:	mb-68666	Samp	Гуре: 🛛	IBLK	Tes	stCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	PBS	Batc	h ID: 6	8666	F	RunNo: 8 9	9410				
Prep Date:	7/10/2022	Analysis [Date: 7	7/12/2022	:	SeqNo: 31	180627	Units: mg/K	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	5.0)		06.4	27.7	010			
		900		1000		90.1	57.7	212			
Sample ID:	Ics-68666	Samp	Гуре: L	CS	Tes	stCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	LCSS	Batc	h ID: 6	8666	F	RunNo: 8 9	9410				
Prep Date:	7/10/2022	Analysis [Date: 7	7/12/2022		SeqNo: 31	80628	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	26 2000	5.0	25.00	0	102	72.3	137			
		2000		1000		190	57.7	212			
Sample ID:	2207345-001ams	Samp	Гуре: 🛛	IS	Tes	stCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	BES22-05 5'	Batc	h ID: 6	8666	F	RunNo: 8 9	9410				
Prep Date:	7/10/2022	Analysis [Date: 7	7/12/2022		SeqNo: 31	180631	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	24	4 9	2461	0	96.0	70	130			
	ge e gemee (er e)	1900		984.3		101	37.7	212			
		1900		984.3		191	37.7	212			
Sample ID:	2207345-001amsd	1900 Samp ⁻	Гуре: М	984.3	Tes	191 stCode: EF	37.7 PA Method	212 8015D: Gasol	ine Range		
Sample ID: Client ID:	2207345-001amsd BES22-05 5'	1900 Samp ⁻¹ Batc	Гуре: № h ID: 6	984.3 1SD 8666	Tes	191 stCode: EF	37.7 PA Method 9410	212 8015D: Gasol	ine Range		
Sample ID: Client ID: Prep Date:	2207345-001amsd BES22-05 5' 7/10/2022	1900 Samp Batc Analysis I	Гуре: М h ID: 6 Date: 7	984.3 984.3 ISD 8666 7/12/2022	Tes F	191 stCode: EF RunNo: 89 SeqNo: 31	37.7 PA Method 9410 180632	212 8015D: Gasoli Units: mg/K	ine Range g		
Sample ID: Client ID: Prep Date: Analyte	2207345-001amsd BES22-05 5' 7/10/2022	1900 Samp Batc Analysis I Result	Fype: N h ID: 6 Date: 7 PQL	984.3 984.3 1SD 8666 7/12/2022 SPK value	Tes F SPK Ref Val	191 stCode: EF RunNo: 89 SeqNo: 31 %REC	37.7 PA Method 9410 180632 LowLimit	212 8015D: Gasol Units: mg/K HighLimit	ine Range g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Gasoline Rang	2207345-001amsd BES22-05 5' 7/10/2022 ge Organics (GRO)	1900 Samp ⁻ Batc Analysis I Result 25	Fype: N h ID: 6 Date: 7 PQL 5.0	984.3 984.3 1SD 8666 7/12/2022 SPK value 0 24.98 000.0	Tes F SPK Ref Val 0	191 stCode: EF RunNo: 89 SeqNo: 31 %REC 102	37.7 PA Method 9410 180632 LowLimit 70 37.7	212 8015D: Gasol Units: mg/Kg HighLimit 130 212	ine Range g %RPD 7.20	RPDLimit 20	Qual

Qualifiers:

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

RL Reporting Limit

Page 15 of 16

	WO#:	2207345
all Environmental Analysis Laboratory, Inc.		14-Jul-22

Client:	Devon En	ergy														
Project:	Gaucho U	nit 6 Hea	ter Trea	ter												
Sample ID:	mb-686666 SampType: MBLK				TestCode: EPA Method 8021B: Volatiles											
Client ID:	PBS	Batch ID: 68666			F	RunNo: 8 9										
Prep Date:	7/10/2022	Analysis Date: 7/12/2022			Ş	SeqNo: 31	180658	Units: mg/Kg								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene		ND	0.025													
Toluene		ND	0.050													
Ethylbenzene		ND	0.050													
Xylenes, Total		ND	0.10													
Surr: 4-Brom	ofluorobenzene	1.0		1.000		102	70	130								
Sample ID:	LCS-68666	Samp	Type: LC	S	TestCode: EPA Method 8021B: Volatiles											
Client ID:	LCSS	Batch ID: 68666			F	RunNo: 8 9	9410									
Prep Date:	7/10/2022	Analysis Date: 7/12/2022			:	SeqNo: 31	180659	Units: mg/k	٢g							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene		0.94	0.025	1.000	0	93.6	80	120								
Toluene		0.99	0.050	1.000	0	99.1	80	120								
Ethylbenzene		1.0	0.050	1.000	0	99.8	80	120								
Xylenes, Total		3.0	0.10	3.000	0	100	80	120								
Surr: 4-Brom	ofluorobenzene	1.0		1.000		105	70	130								
Sample ID:	2207345-002ams	Samp	Type: MS	;	Tes	stCode: EF										
Client ID:	BES22-06 5'	Batc	h ID: 686	66	F	RunNo: 8 9										
Prep Date:	7/10/2022	Analysis Date: 7/12/202		12/2022	SeqNo: 3180662			Units: mg/k	٢g							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene		0.96	0.025	1.000	0	96.3	68.8	120								
Toluene		1.0	0.050	1.000	0	101	73.6	124								
Ethylbenzene		1.0	0.050	1.000	0	103	72.7	129								
Xylenes, Total		3.1	0.10	3.000	0	103	75.7	126								
Surr: 4-Brom	ofluorobenzene	1.0		1.000		103	70	130								
Sample ID:	TestCode: EPA Method 8021B: Volatiles															
Client ID:	BES22-06 5'	Batc	h ID: 686	666	F	RunNo: 8 9										
Prep Date:	7/10/2022	Analysis I	Date: 7/	12/2022	\$	SeqNo: 31	180663	Units: mg/k	٢g							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene		0.97	0.025	0.9970	0	96.8	68.8	120	0.270	20						
Toluene		1.0	0.050	0.9970	0	102	73.6	124	1.31	20						
Ethylbenzene		1.0	0.050	0.9970	0	104	72.7	129	0.398	20						
Xylenes, Total		3.1	0.10	2.991	0	104	75.7	126	1.08	20						
Surr: 4-Brom	ofluorobenzene	1.1		0.9970		106	70	130	0	0						

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р
- Sample pH Not In Range
- RL Reporting Limit

Page 287 of 290	9
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Ceived by OCD: 10/10/2022 8:04:48 AM HALL ENVIRONMENTAL ANALYSIS LABORATORY				ll Environm L: 505-345- Website: ww	ental Analy 490 Albuquerg 3975 FAX: ww.hallenvi	sis Labo I Hawk ue, NM 505-34 conment	oratory tins NE 87109 5-4107 tal.com	Page 28 Sample Log-In Check List						
Client Name:	Devon En	ergy	Work	Order Nun	nber: 220	7345			RcptNo:	1				
Received By: Completed By:	Sean Liv Sean Liv	ingston ingston	7/9/202 7/9/202	2 9:30:00 / 2 9:45:27 /	AM AM		S		not					
Reviewed By:	SUL	7/9/22							r Jo)					
Chain of Cus 1. Is Chain of C 2. How was the	<u>tody</u> ustody comp sample deli	plete? vered?			Yes <u>Cou</u>	∠ ier	N	•	Not Present					
Log In 3. Was an atterr	pt made to	cool the samp	les?		Yes	✓	No	•						
4. Were all samp	oles receive	d at a tempera	ture of >0° C	to 6.0°C	Yes	✓	No							
5. Sample(s) in p	oroper conta	ainer(s)?			Yes	✓	No	• 🗆						
6. Sufficient sam	ple volume	for indicated te	st(s)?		Yes	~	No							
7. Are samples (except VOA	and ONG) pro	perly preserve	ed?	Yes	\checkmark	No							
8. Was preservat	tive added to	o bottles?			Yes		No	\checkmark	NA 🗌					
9 Received at le	ast 1 vial wi	th headsnace	<1/4" for AO \	012	Vaa		No							
				UK!	Tes		NO							
	10. Were any sample containers received broken?						No		# of preserved bottles checked					
(Note discrepa	11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)						No		for pH: (<2.of	>12 unless noted)				
12. Are matrices of	orrectly ider	ntified on Chair	f of Custody?		Yes		No		Adjusted !					
14 Ware all holds	analyses w	ere requested	?		Yes		No			-196-				
(If no, notify cu	istomer for a	e to be met? authorization.)			Yes		No			3 778 TT				
Special Handli	ing (if ap	plicable)												
15. Was client no	tified of all d	liscrepancies v	vith this order?	>	Yes		No		NA 🔽					
Person	Notified:			Date	.]			and services.						
By Who	m:			Via:	eMa	il 🗍	Phone [Fax	In Person					
Regardi	ng:				Received and an									
Client In	structions:	[(C. 4.199.000 / 100						
16. Additional rer	narks:													
17. <u>Cooler Inform</u>	nation	Occativ	0		_	9 a			4					
	remp ℃ 2.1	Good	Seal Intact	Seal No	Seal Da	te	Signed	Ву						
2	3.6	Good												
3	3.9	Good							_					

Page 1 of 1

Received py OCD: 10/10/20 LABORATORY OCD: 10/10/20 Ital.com ue, NM 87109 5-345-4107 guest	(jnəsdA\tnəsər9) m (finəsdA\tnəsər9) m	Total Colifor											Pa	e 28 Luddy W. 7 J	sof 2 when you't a	ated on the analytical report.
HALL ENVI ANALYSIS www.hallenvironme 001 Hawkins NE - Albuquerq el. 505-345-3975 Fax 500 Analysis Re	8081 Pesticides/8082 PCB's EDB (Method 504.1) PPHs by 8310 or 8270SIMS RCRA 8 Metals 8270 (Semi-VOA) 8270 (Semi-VOA)												s:	+ · a017771	d bill Dwon	Any sub-contracted data will be clearly not
	(GRO / DRO / MRO)		S >	-									Remarks	03	Dire	his possibility. A
48hr 6 Heater 6 Treater	e 8	- (-o.1) (°C -2.1, 3.4, 3.9" HEAL No. 220 7345	100	200	hoo	305	000	400	000	010	011	210	1/Blace Time	Date Time	7 9 122 9.30	is. This serves as notice of t
Time: I Must e: DUN 1#	Appir Appir	(including CF): CF Preservative Type	ارد									-	Via:	Via:	Muno	ccredited laboratorie
Turn-Around Project Nam Project Ham Project #:	Project Mana Monic of Sampler: On Ice: # of Coolers:	Cooler Temp Container Type and #	705				x					~	Received by:	Received by:	205	ontracted to other a
Cord	Validation)	Φ	5,	5	0 0	9 0:51	2 L'	0.5-6	5-6-	10-4	3 0-0.5'	4 0-0.5'				ental may be subco
ustody Re Energy	□ Level 4 (Full ompliance	Sample Nam	BES22-05	BES22-04	<u>BESDA-08</u>	BES 22-0°	RESDA-10	WES 23 - 10	WESJO-11	WES22-10	WES22-1	WES02-1		ied by:	(<u>م</u>	bmitted to Hall Environme
in-of-C Wan ess:	#: age: 1:	e Matrix	5 501		0.0	0	80		0				Kelinquist	Relinquish	0 all	sary, samples su
Client: O Mailing Addr	email or Fax QA/QC Packa Candard Accreditatior C NELAC	Date Time	7-7-200 20	0:0 00-1	7-7-22 12:2	ab	3Cl	12:11	Dill	1230	Del	C.C.		Date: Time:	18/22 190	If neces:
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

COMMENTS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	149731
	Action Type:
	[C-141] Release Corrective Action (C-141)
COMMENTS	

Created By Comment Comment Date 10/12/2022 jharimon Missing Initial c-141

Action 149731

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:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	149731
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created	Condition	Condition Date
By		
jnobui	Closure Report Approved.	10/26/2022

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