



SITE REMEDIATION AND CLOSURE REPORT

**STATE CO SWD SYSTEM (CATCLAW/HUISACHE BATTERY)
UNIT H, SECTION 2, TOWNSHIP 20S, RANGE 24E
EDDY COUNTY, NEW MEXICO
32.60527, -104.55187
RANGER REFERENCE NO. 5375**

PREPARED FOR:

**EOG RESOURCES, INC.
ARTESIA DIVISION
105 S 4TH STREET
ARTESIA, NEW MEXICO 88210**

PREPARED BY:

**RANGER ENVIRONMENTAL SERVICES, LLC.
P.O. BOX 201179
AUSTIN, TEXAS 78720**

SEPTEMBER 19, 2022

A blue ink signature of Patrick K. Finn, consisting of a stylized 'P' followed by a horizontal line.

**Patrick K. Finn, P.G. (TX)
Project Geologist**

A blue ink signature of William Kierdorf, consisting of a stylized 'W' followed by a horizontal line.

**William Kierdorf, REM
Project Manager**

TABLE OF CONTENTS

1.0	SITE LOCATION AND BACKGROUND	1
2.0	SITE REMEDIATION	2
2.1	Impacted Soil Removal and Confirmation Soil Sampling	2
2.2	Protective Excavation and Liner Installation	2
2.4	Waste Disposal.....	3
3.0	SITE CLOSURE.....	3
3.1	Site Backfill and Re-Vegetation	3
3.2	Closure Request.....	3

FORM C-141**FIGURES**

- Topographic Map
- Area Map
- Final Confirmation Soil Sample Location and Excavation Area Map

TABLES

- Confirmation Soil Sample BTEX (EPA 8260), TPH (EPA 8015) & Chloride (EPA 300) Analytical Data

ATTACHMENTS

- Attachment 1 – Photographic Documentation
- Attachment 2 – Laboratory Analytical Report
- Attachment 3 – NMOCD Correspondence



**SITE REMEDIATION AND CLOSURE REPORT
STATE CO SWD SYSTEM (CATCLAW/HUISACHE BATTERY)
UNIT H, SECTION 2, TOWNSHIP 20S, RANGE 24E
EDDY COUNTY, NEW MEXICO
32.60527, -104.55187
RANGER REFERENCE NO. 5375**

1.0 SITE LOCATION AND BACKGROUND

The State CO SWD System (Catclaw/Huisache Battery – “Site”) is located on state land, approximately 18.6 miles southwest of Artesia, within Eddy County, New Mexico. The Site is situated in Unit H, Section 2, T20S-R24E at GPS coordinates 32.60527, -104.55187. On July 26, 2021, a release was discovered along a produced water transfer line near a valve box immediately north of the Catclaw/Huisache tank battery.

Upon discovery, EOG Resources, Inc. (EOG) took immediate action to stop the release and initiate fluid recovery efforts. Earthen berms were constructed to contain the released fluids, and approximately 120 barrels (bbls) of released produced water were recovered. Upon recovery of all available fluids, soil removal operations were initiated.

Based on the nature of the line, the release was limited to produced water; however, the total release volume is currently unknown. Based on the recovered volume (greater than 25 bbls), the incident was reported to the New Mexico Oil Conservation Division (NMOCD) within the required timeframe (NMOCD Incident # nAPP2120958120).

EOG subsequently engaged Ranger Environmental Services, Inc. (Ranger) to assist in the assessment and remediation of the release. In August 2021, Ranger completed site assessment activities to determine the extent of the site impacts. Based on the completed assessment activities Ranger prepared a *Site Assessment/Characterization and Proposed Remediation Plan*, dated January 19, 2022. The plan included details of the completed site assessment activities, provided the available site characterization information, proposed additional site assessment/site characterization confirmation activities, and proposed a remediation strategy to address the impacts at the Site.

Upon completion of the additional assessment/site characterization confirmation activities, a *Site Assessment/Characterization Update and Proposed Remediation Plan* was prepared by Ranger and submitted to the NMOCD in July 2022. The updated plan included details of the completed assessment/site characterization confirmation activities, and proposed an alternative remediation plan which requested a variance request to allow for limited soil removal operations and the utilization of a 20-ml synthetic liner. The proposed plan was approved by the NMOCD on July 19, 2022.

The following *Site Remediation and Closure Report* has been prepared to document the completed remediation and cleanup confirmation soil sampling activities.

A copy of the previously submitted Form C-141 Release Notification, Assessment/Characterization and Remediation Plan sections of Form C-141, are attached. A recent Form C-141 Closure section is also attached. A Topographic Map and Area Map noting the location of the subject Site and surrounding areas, and a Site Map illustrating the Site features and sampling locations, are provided in the Figures section.

2.0 SITE REMEDIATION

Upon NMOCD approval of the proposed remediation plan and variance request for the Site, remedial activities were initiated on July 25, 2022.

2.1 Impacted Soil Removal and Confirmation Soil Sampling

Remedial soil removal operations were conducted in the impacted area at the Site from July 25, 2022 to August 4, 2022. Upon completing the excavation to the proposed boundaries as detailed in the approved remediation plan, Ranger personnel collected field readings utilizing an organic vapor monitor (OVM) and field chloride titration kit to assess the boundaries of the excavated area. To confirm that the excavated areas had been completed to appropriate boundaries, cleanup confirmation soil samples were subsequently collected in accordance with the NMOCD approved sampling plan detailed in the July 5, 2022 *Site Assessment/Characterization Update and Proposed Remediation Plan*.

The cleanup confirmation soil sampling activities were completed on August 4, 2022. A total of 13 five-part composite wall samples and 18 excavation base grab samples were collected during the August 4, 2022 sampling event. Prior to the cleanup confirmation sampling event, notice was provided to the NMOCD in accordance with NMAC 19.15.29.12(D). A copy of the notification is attached.

Upon collection, all cleanup confirmation soil samples were submitted to Hall Environmental in Albuquerque, New Mexico for analysis of total petroleum hydrocarbons (TPH) using EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021; and total chloride using EPA Method 300. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

Upon review of the laboratory analytical report for the samples collected on August 4, 2022, all 13 excavation wall samples were noted to be in attainment of the approved Restoration, Reclamation and Re-Vegetation criteria detailed in 19.15.29.13 NMAC.

2.2 Protective Excavation and Liner Installation

Upon confirmation that the horizontal extent of the excavation had achieved cleanup to concentrations below the Restoration, Reclamation and Re-Vegetation criteria, the additional protective horizontal soil removal operations were completed. The excavation walls were extended an additional approximate 10 feet outward from the boundaries where the Restoration, Reclamation and Re-Vegetation criteria had been attained. Upon completion, a 20-ml synthetic liner was installed in the excavation base, including the additional 10 foot protective overexcavation area.



Upon completion, the final extent of the excavation had maximum dimensions of approximately 169 feet by 125 feet. A *Site Map* depicting the final excavation boundaries and the extent of the installed liner is attached.

2.4 Waste Disposal

All soils generated during the excavation activities were disposed of at Lea Land disposal facility in Lea County, New Mexico.

3.0 SITE CLOSURE

3.1 Site Backfill and Re-Vegetation

Upon completion of the excavation activities and liner installation, the excavated area was backfilled with clean fill material.

Re-vegetation efforts at the Site will be completed in conjunction with the remaining decommissioning and reclamation efforts at the Catclaw/Huisache Facility located immediately south of subject remediation area.

3.2 Closure Request

Based on the results of the cleanup confirmation soil sampling activities and the excavation base liner installation, the site has been properly addressed pursuant to the NMOCD approved *Site Assessment/Characterization Update and Proposed Remediation Plan* and as such EOG respectfully requests closure of the incident. A final C-141 form is attached.

FORM C-141

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2120958120
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # (assigned by OCD)
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.60527 Longitude -104.55187
(NAD 83 in decimal degrees to 5 decimal places)

Site Name State CO SWD System (Catclaw/Huisache Battery)	Site Type Pipeline
Date Release Discovered 7/26/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
H	2	20	24	Eddy

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Unknown	Volume Recovered (bbls) 120
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)


Cause of Release There was a failure of a produced water transfer line that caused a release of an unknown amount of produced water near a valve box.

Incident ID	NAPP2120958120
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Greater than 25 barrels of fluid was released.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Andrea Felix, to: Bradford Billings, Jim Griswold, Mark Naranjo, and Ryan Mann, at 9:35 p.m. by way of email.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Chase Settle</u>	Title: <u>Rep Safety & Environmental Sr</u>
Signature: <u></u>	Date: <u>07/28/2021</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>8/1/2021</u>

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

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
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 38844

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 38844
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
marcus	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	8/1/2021

Incident ID	nAPP2120958120
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>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2120958120
District RP	
Facility ID	
Application ID	

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr
Signature: Chase Settle Date: 07/13/2022
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2120958120
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC*
**EOG Resources, Inc. respectfully requests a variance to 19.15.29.12(C)(4)(G) NMAC. A variance request in accordance with 19.15.29.14 NMAC is included in the attached proposal.*
- ☒ 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: Chase Settle Title: Rep Safety & Environmental Sr
Signature: Chase Settle Date: 07/13/2022
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

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

Signature: Jennifer Nobui Date: 07/19/2022

Incident ID	nAPP2120958120
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr
Signature: Chase Settle Date: 09/26/2022
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

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.

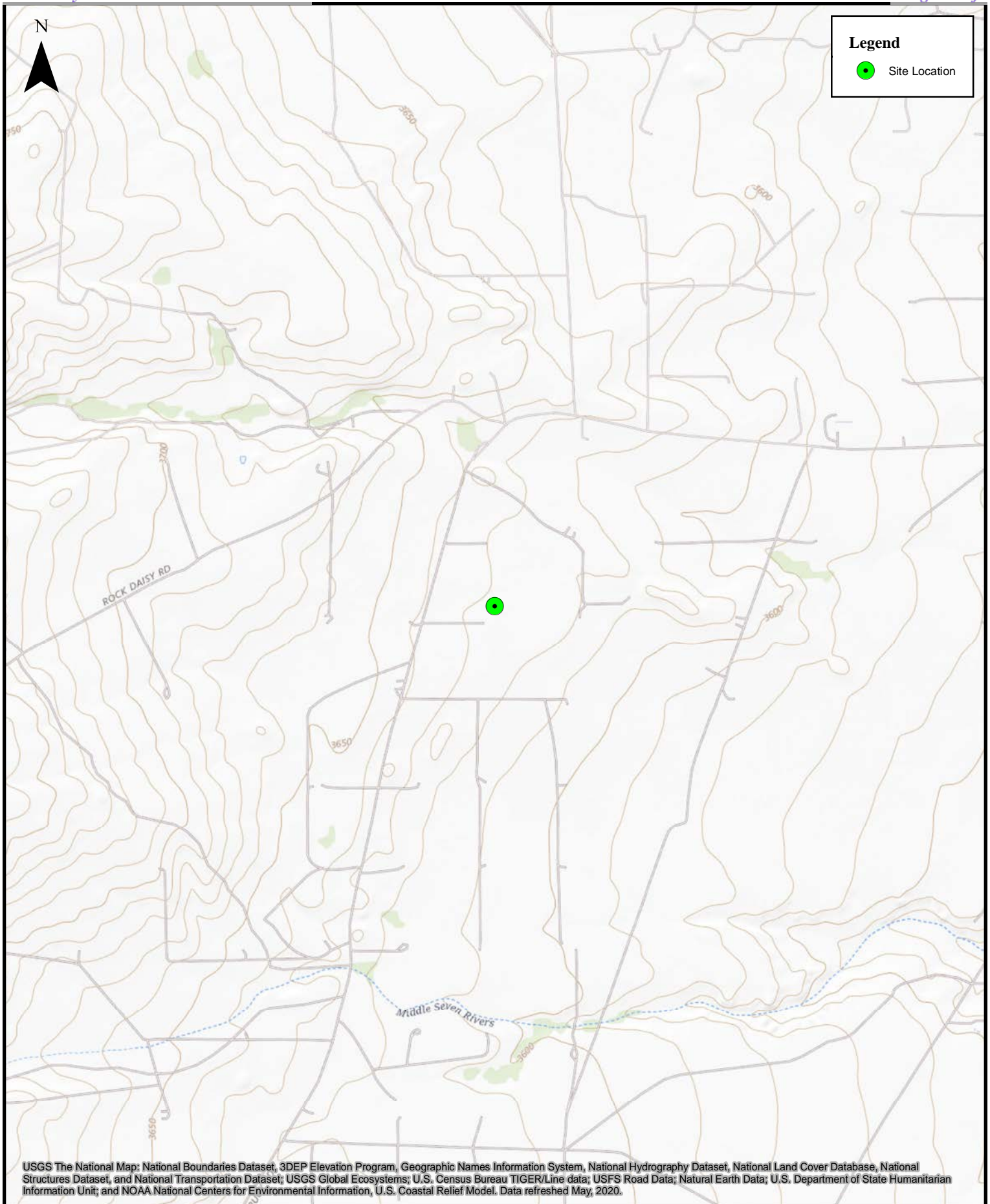
Closure Approved by: Jennifer Nobui Date: 09/27/2022
Printed Name: Jennifer Nobui Title: Environmental Specialist A

FIGURES

Topographic Map

Area Map

Final Confirmation Sample Location and Excavation Area Map

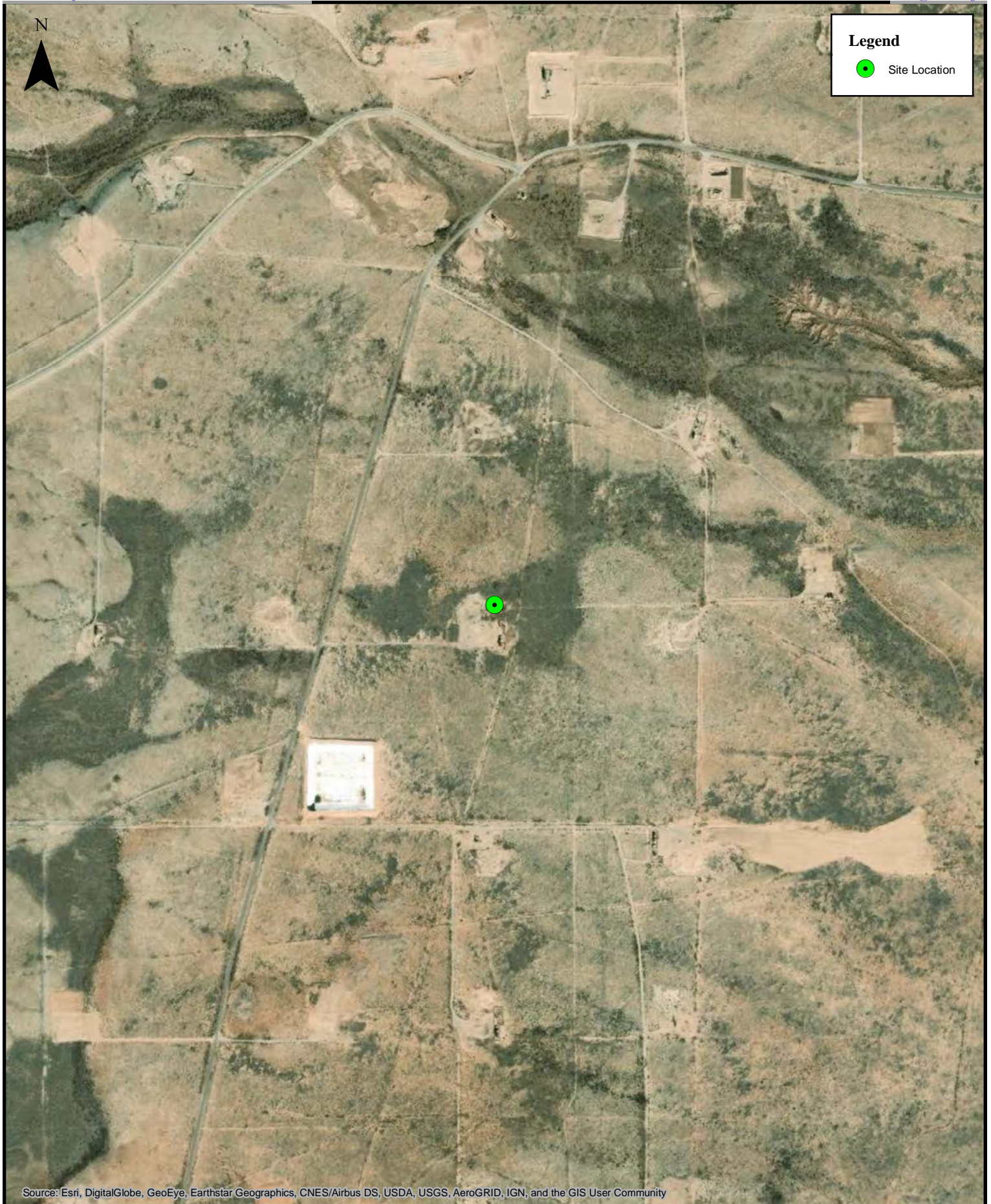


0 600 1,200 2,400 3,600 4,800 Feet

1:24,000

Topographic Map

State CO SWD System (Catclaw/Huisache Battery)
EOG Resources, Inc.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

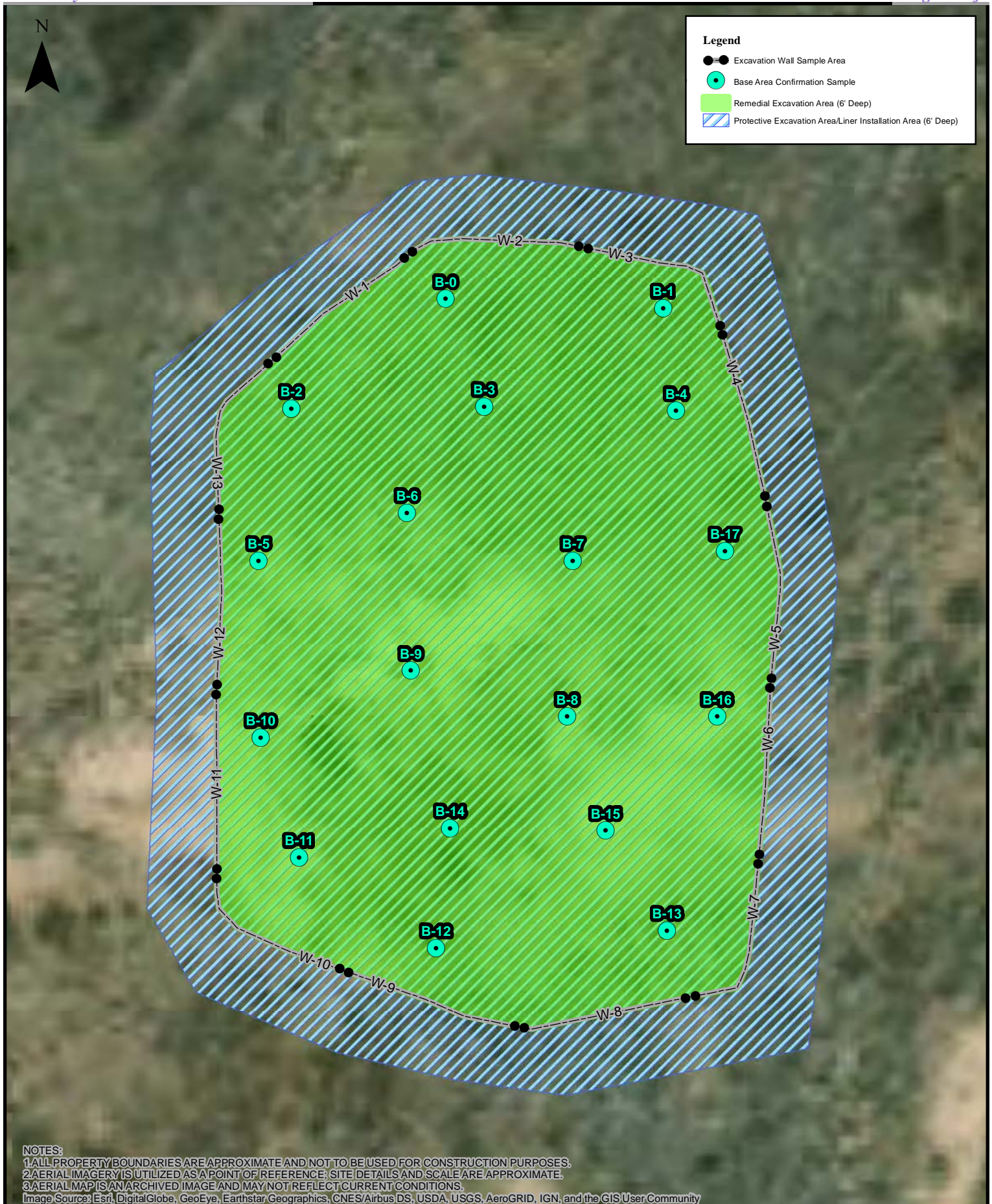


0 250 500 1,000 1,500 2,000 Feet

1:10,000

Area Map

State CO SWD System (Catclaw/Huisache Battery)
EOG Resources, Inc.



0 5 10 20 30 40
Feet

1:275

**Final Confirmation Sample Location
and Excavation Area Map**
State CO SWD System (Catchlaw/Huisache Battery)
EOG Resources, Inc.

TABLES

Confirmation Soil Sample BTEX (EPA 8260), TPH (EPA 8015) &
Chloride (EPA 300) Analytical Data

CONFIRMATION SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA EOG RESOURCES, INC. CATCLAW-HUISATCHE LINE RELEASE All values presented in parts per million (mg/Kg)													
SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	CHLORIDE
Excavation Wall Composite Soil Samples													
W-1	8/4/2022	0-6'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<15	<48	<15	<48	<60
W-2	8/4/2022	0-6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<14	<46	<14	<46	<60
W-3	8/4/2022	0-6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<14	<48	<14	<48	<60
W-4	8/4/2022	0-6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<13	<45	<13	<45	<60
W-5	8/4/2022	0-6'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<15	<49	<15	<49	<60
W-6	8/4/2022	0-6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<14	<48	<14	<48	<60
W-7	8/4/2022	0-6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<15	<49	<15	<49	170
W-8	8/4/2022	0-6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<13	<42	<13	<42	66
W-9	8/4/2022	0-6'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<14	<47	<14	<47	<60
W-10	8/4/2022	0-6'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<15	<49	<15	<49	<60
W-11	8/4/2022	0-6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<14	<47	<14	<47	<60
W-12	8/4/2022	0-6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<15	<49	<15	<49	71
W-13	8/4/2022	0-6'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<14	<47	<14	<47	88
Excavation Base Grab Soil Samples (All Sample Areas Covered by 20-Mil Synthetic Liner)													
B-0	8/4/2022	6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<14	<47	<14	<47	<60
B-1	8/4/2022	6'	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<14	<46	<14	<46	<60
B-2	8/4/2022	6'	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<15	<49	<15	<49	320
B-3	8/4/2022	6'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<14	<47	<14	<47	5,600
B-4	8/4/2022	6'	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<14	<48	<14	<48	<60
B-5	8/4/2022	6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<14	<46	<14	<46	6,000
B-6	8/4/2022	6'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<15	<49	<15	<49	7,400
B-7	8/4/2022	6'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<14	<47	<14	<47	5,600
B-8	8/4/2022	6'	<0.024	<0.048	<0.048	<0.095	<0.10	<4.8	<15	<49	<15	<49	2,500
B-9	8/4/2022	6'	<0.023	<0.046	<0.046	<0.093	<0.09	<4.6	<15	<49	<15	<49	6,200
B-10	8/4/2022	6'	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<15	<50	<15	<50	5,500
B-11	8/4/2022	6'	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<15	<50	<15	<50	8,200
B-12	8/4/2022	6'	<0.023	<0.046	<0.046	<0.091	<0.09	<4.6	<15	<51	<15	<51	5,600
B-13	8/4/2022	6'	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<15	<50	<15	<50	3,500
B-14	8/4/2022	6'	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	21	<50	21	21	7,200
B-15	8/4/2022	6'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<15	<50	<15	<50	8,800
B-16	8/4/2022	6'	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<15	<49	<15	<49	<60
B-17	8/4/2022	6'	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<15	<50	<15	<50	<60
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW <50')			10	---	---	---	50	---	---	---	---	100	600
19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)			10 ³	---	---	---	50 ³	---	---	---	---	100 ³	600
Notes: 1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow. (All Documented Areas Are Included in the Synthetic Liner Installation Area) 2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type. 3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.													

ATTACHMENT 1 – PHOTOGRAPHIC DOCUMENTATION



PHOTOGRAPH NO. 1 – A view of the Site during the remedial excavation activities in July 2022. The view is towards the southeast.

(Approximate GPS: 32.605493, -104.551899)



PHOTOGRAPH NO. 2 – A general view of the excavated area at the site. The view is towards the east.

(Approximate GPS: 32.605260, -104.552037)



PHOTOGRAPH NO. 3 – A view of the excavated area during the August 4, 2022 confirmation sampling activities. The view is towards the northeast.
(Approximate GPS: 32.605207, -104.551979)



PHOTOGRAPH NO. 4 – A view of the protective over-excavation and liner installation activities. The view is towards the northeast. (Approximate GPS: 32.605240, -104.552039)



PHOTOGRAPH NO. 5 – An additional view of the protective excavation and liner installation activities. The view is to the west. (Approximate GPS: 32.605304, -104.551519)



PHOTOGRAPH NO. 6 – A view of the site upon completion of the liner installation and subsequent backfill activities. The view is towards the north. (Approximate GPS: 32.605024, -104.551799)

ATTACHMENT 2 – LABORATORY ANALYTICAL REPORT



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

August 18, 2022

Will Kierdorf

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Catclaw Huisache

OrderNo.: 2208485

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 31 sample(s) on 8/9/2022 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-1

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:30:00 AM

Lab ID: 2208485-001

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/13/2022 10:08:25 PM	69482
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/11/2022 11:35:55 PM	69403
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/11/2022 11:35:55 PM	69403
Surr: DNOP	65.7	21-129		%Rec	1	8/11/2022 11:35:55 PM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/11/2022 2:09:00 PM	69366
Surr: BFB	89.3	37.7-212		%Rec	1	8/11/2022 2:09:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 2:09:00 PM	69366
Toluene	ND	0.048		mg/Kg	1	8/11/2022 2:09:00 PM	69366
Ethylbenzene	ND	0.048		mg/Kg	1	8/11/2022 2:09:00 PM	69366
Xylenes, Total	ND	0.095		mg/Kg	1	8/11/2022 2:09:00 PM	69366
Surr: 4-Bromofluorobenzene	81.1	70-130		%Rec	1	8/11/2022 2:09:00 PM	69366

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

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

Page 1 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-2

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:33:00 AM

Lab ID: 2208485-002

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/13/2022 10:45:37 PM	69482
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 12:21:15 AM	69403
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/12/2022 12:21:15 AM	69403
Surr: DNOP	46.9	21-129		%Rec	1	8/12/2022 12:21:15 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 3:08:00 PM	69366
Surr: BFB	87.6	37.7-212		%Rec	1	8/11/2022 3:08:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 3:08:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 3:08:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 3:08:00 PM	69366
Xylenes, Total	ND	0.098		mg/Kg	1	8/11/2022 3:08:00 PM	69366
Surr: 4-Bromofluorobenzene	79.3	70-130		%Rec	1	8/11/2022 3:08:00 PM	69366

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

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

Page 2 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-3

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:36:00 AM

Lab ID: 2208485-003

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/13/2022 10:58:02 PM	69482
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 12:36:16 AM	69403
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/12/2022 12:36:16 AM	69403
Surr: DNOP	55.4	21-129		%Rec	1	8/12/2022 12:36:16 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 4:07:00 PM	69366
Surr: BFB	86.9	37.7-212		%Rec	1	8/11/2022 4:07:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 4:07:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 4:07:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 4:07:00 PM	69366
Xylenes, Total	ND	0.098		mg/Kg	1	8/11/2022 4:07:00 PM	69366
Surr: 4-Bromofluorobenzene	77.8	70-130		%Rec	1	8/11/2022 4:07:00 PM	69366

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

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

Page 3 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-4

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:37:00 AM

Lab ID: 2208485-004

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/13/2022 11:10:27 PM	69482
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/12/2022 12:51:28 AM	69403
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/12/2022 12:51:28 AM	69403
Surr: DNOP	56.1	21-129		%Rec	1	8/12/2022 12:51:28 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2022 4:27:00 PM	69366
Surr: BFB	90.0	37.7-212		%Rec	1	8/11/2022 4:27:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 4:27:00 PM	69366
Toluene	ND	0.050		mg/Kg	1	8/11/2022 4:27:00 PM	69366
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2022 4:27:00 PM	69366
Xylenes, Total	ND	0.099		mg/Kg	1	8/11/2022 4:27:00 PM	69366
Surr: 4-Bromofluorobenzene	81.2	70-130		%Rec	1	8/11/2022 4:27:00 PM	69366

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

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

Page 4 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-5

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:39:00 AM

Lab ID: 2208485-005

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/13/2022 11:47:40 PM	69482
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 1:06:43 AM	69403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 1:06:43 AM	69403
Surr: DNOP	53.6	21-129		%Rec	1	8/12/2022 1:06:43 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 4:47:00 PM	69366
Surr: BFB	88.3	37.7-212		%Rec	1	8/11/2022 4:47:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 4:47:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 4:47:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 4:47:00 PM	69366
Xylenes, Total	ND	0.097		mg/Kg	1	8/11/2022 4:47:00 PM	69366
Surr: 4-Bromofluorobenzene	82.4	70-130		%Rec	1	8/11/2022 4:47:00 PM	69366

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

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

Page 5 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-6

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:40:00 AM

Lab ID: 2208485-006

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	8/14/2022 12:00:04 AM	69482
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 1:21:53 AM	69403
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/12/2022 1:21:53 AM	69403
Surr: DNOP	46.3	21-129		%Rec	1	8/12/2022 1:21:53 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 5:06:00 PM	69366
Surr: BFB	95.4	37.7-212		%Rec	1	8/11/2022 5:06:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 5:06:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 5:06:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 5:06:00 PM	69366
Xylenes, Total	ND	0.098		mg/Kg	1	8/11/2022 5:06:00 PM	69366
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	8/11/2022 5:06:00 PM	69366

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

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

Page 6 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-7

Project: Catclaw Huisache

Collection Date: 8/4/2022 9:50:00 AM

Lab ID: 2208485-007

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	170	60		mg/Kg	20	8/13/2022 6:04:40 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 1:37:03 AM	69403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 1:37:03 AM	69403
Surr: DNOP	55.9	21-129		%Rec	1	8/12/2022 1:37:03 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 5:26:00 PM	69366
Surr: BFB	92.4	37.7-212		%Rec	1	8/11/2022 5:26:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 5:26:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 5:26:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 5:26:00 PM	69366
Xylenes, Total	ND	0.098		mg/Kg	1	8/11/2022 5:26:00 PM	69366
Surr: 4-Bromofluorobenzene	83.1	70-130		%Rec	1	8/11/2022 5:26:00 PM	69366

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

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

Page 7 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-8

Project: Catclaw Huisache

Collection Date: 8/4/2022 10:15:00 AM

Lab ID: 2208485-008

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	66	59		mg/Kg	20	8/13/2022 6:17:01 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/12/2022 1:52:13 AM	69403
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	8/12/2022 1:52:13 AM	69403
Surr: DNOP	38.5	21-129		%Rec	1	8/12/2022 1:52:13 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2022 5:46:00 PM	69366
Surr: BFB	87.5	37.7-212		%Rec	1	8/11/2022 5:46:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 5:46:00 PM	69366
Toluene	ND	0.050		mg/Kg	1	8/11/2022 5:46:00 PM	69366
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2022 5:46:00 PM	69366
Xylenes, Total	ND	0.099		mg/Kg	1	8/11/2022 5:46:00 PM	69366
Surr: 4-Bromofluorobenzene	78.8	70-130		%Rec	1	8/11/2022 5:46:00 PM	69366

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

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

Page 8 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-9

Project: Catclaw Huisache

Collection Date: 8/4/2022 10:17:00 AM

Lab ID: 2208485-009

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 7:18:45 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 2:07:30 AM	69403
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 2:07:30 AM	69403
Surr: DNOP	36.2	21-129		%Rec	1	8/12/2022 2:07:30 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 6:06:00 PM	69366
Surr: BFB	91.8	37.7-212		%Rec	1	8/11/2022 6:06:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 6:06:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 6:06:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 6:06:00 PM	69366
Xylenes, Total	ND	0.098		mg/Kg	1	8/11/2022 6:06:00 PM	69366
Surr: 4-Bromofluorobenzene	79.6	70-130		%Rec	1	8/11/2022 6:06:00 PM	69366

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

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

Page 9 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-10

Project: Catclaw Huisache

Collection Date: 8/4/2022 10:20:00 AM

Lab ID: 2208485-010

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 7:55:46 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 2:22:47 AM	69403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 2:22:47 AM	69403
Surr: DNOP	39.5	21-129		%Rec	1	8/12/2022 2:22:47 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2022 6:25:00 PM	69366
Surr: BFB	91.6	37.7-212		%Rec	1	8/11/2022 6:25:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 6:25:00 PM	69366
Toluene	ND	0.050		mg/Kg	1	8/11/2022 6:25:00 PM	69366
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2022 6:25:00 PM	69366
Xylenes, Total	ND	0.10		mg/Kg	1	8/11/2022 6:25:00 PM	69366
Surr: 4-Bromofluorobenzene	80.3	70-130		%Rec	1	8/11/2022 6:25:00 PM	69366

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

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

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-11

Project: Catclaw Huisache

Collection Date: 8/4/2022 10:22:00 AM

Lab ID: 2208485-011

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 8:08:06 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 2:37:35 AM	69403
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 2:37:35 AM	69403
Surr: DNOP	33.1	21-129		%Rec	1	8/12/2022 2:37:35 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2022 7:05:00 PM	69366
Surr: BFB	89.7	37.7-212		%Rec	1	8/11/2022 7:05:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 7:05:00 PM	69366
Toluene	ND	0.050		mg/Kg	1	8/11/2022 7:05:00 PM	69366
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2022 7:05:00 PM	69366
Xylenes, Total	ND	0.099		mg/Kg	1	8/11/2022 7:05:00 PM	69366
Surr: 4-Bromofluorobenzene	80.6	70-130		%Rec	1	8/11/2022 7:05:00 PM	69366

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

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

Page 11 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-12

Project: Catclaw Huisache

Collection Date: 8/4/2022 10:26:00 AM

Lab ID: 2208485-012

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	71	60		mg/Kg	20	8/13/2022 8:20:27 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 2:52:08 AM	69403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 2:52:08 AM	69403
Surr: DNOP	51.2	21-129		%Rec	1	8/12/2022 2:52:08 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2022 7:24:00 PM	69366
Surr: BFB	93.8	37.7-212		%Rec	1	8/11/2022 7:24:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 7:24:00 PM	69366
Toluene	ND	0.050		mg/Kg	1	8/11/2022 7:24:00 PM	69366
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2022 7:24:00 PM	69366
Xylenes, Total	ND	0.099		mg/Kg	1	8/11/2022 7:24:00 PM	69366
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	8/11/2022 7:24:00 PM	69366

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

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

Page 12 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: W-13

Project: Catclaw Huisache

Collection Date: 8/4/2022 10:30:00 AM

Lab ID: 2208485-013

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	88	60		mg/Kg	20	8/13/2022 8:32:48 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 3:06:30 AM	69403
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 3:06:30 AM	69403
Surr: DNOP	49.9	21-129		%Rec	1	8/12/2022 3:06:30 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 7:44:00 PM	69366
Surr: BFB	92.3	37.7-212		%Rec	1	8/11/2022 7:44:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 7:44:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 7:44:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 7:44:00 PM	69366
Xylenes, Total	ND	0.097		mg/Kg	1	8/11/2022 7:44:00 PM	69366
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	8/11/2022 7:44:00 PM	69366

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

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

Page 13 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-0

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:30:00 PM

Lab ID: 2208485-014

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 8:45:08 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 3:20:51 AM	69403
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 3:20:51 AM	69403
Surr: DNOP	50.7	21-129		%Rec	1	8/12/2022 3:20:51 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 8:04:00 PM	69366
Surr: BFB	93.7	37.7-212		%Rec	1	8/11/2022 8:04:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 8:04:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 8:04:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 8:04:00 PM	69366
Xylenes, Total	ND	0.098		mg/Kg	1	8/11/2022 8:04:00 PM	69366
Surr: 4-Bromofluorobenzene	86.5	70-130		%Rec	1	8/11/2022 8:04:00 PM	69366

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

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

Page 14 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-1

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:34:00 PM

Lab ID: 2208485-015

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 9:22:12 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 3:35:02 AM	69403
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/12/2022 3:35:02 AM	69403
Surr: DNOP	58.9	21-129		%Rec	1	8/12/2022 3:35:02 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/11/2022 8:24:00 PM	69366
Surr: BFB	97.8	37.7-212		%Rec	1	8/11/2022 8:24:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 8:24:00 PM	69366
Toluene	ND	0.047		mg/Kg	1	8/11/2022 8:24:00 PM	69366
Ethylbenzene	ND	0.047		mg/Kg	1	8/11/2022 8:24:00 PM	69366
Xylenes, Total	ND	0.095		mg/Kg	1	8/11/2022 8:24:00 PM	69366
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	8/11/2022 8:24:00 PM	69366

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

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

Page 15 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-2

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:36:00 PM

Lab ID: 2208485-016

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	320	60		mg/Kg	20	8/13/2022 9:34:33 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 3:49:08 AM	69403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 3:49:08 AM	69403
Surr: DNOP	55.0	21-129		%Rec	1	8/12/2022 3:49:08 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/11/2022 8:43:00 PM	69366
Surr: BFB	94.4	37.7-212		%Rec	1	8/11/2022 8:43:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 8:43:00 PM	69366
Toluene	ND	0.048		mg/Kg	1	8/11/2022 8:43:00 PM	69366
Ethylbenzene	ND	0.048		mg/Kg	1	8/11/2022 8:43:00 PM	69366
Xylenes, Total	ND	0.097		mg/Kg	1	8/11/2022 8:43:00 PM	69366
Surr: 4-Bromofluorobenzene	85.6	70-130		%Rec	1	8/11/2022 8:43:00 PM	69366

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

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

Page 16 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-3

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:38:00 PM

Lab ID: 2208485-017

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	5600	300		mg/Kg	100	8/15/2022 9:27:12 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 4:03:16 AM	69403
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/12/2022 4:03:16 AM	69403
Surr: DNOP	56.6	21-129		%Rec	1	8/12/2022 4:03:16 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 9:03:00 PM	69366
Surr: BFB	91.7	37.7-212		%Rec	1	8/11/2022 9:03:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 9:03:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 9:03:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 9:03:00 PM	69366
Xylenes, Total	ND	0.097		mg/Kg	1	8/11/2022 9:03:00 PM	69366
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	8/11/2022 9:03:00 PM	69366

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

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

Page 17 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-4

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:40:00 PM

Lab ID: 2208485-018

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 9:59:15 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 4:17:25 AM	69403
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/12/2022 4:17:25 AM	69403
Surr: DNOP	57.7	21-129		%Rec	1	8/12/2022 4:17:25 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 9:23:00 PM	69366
Surr: BFB	93.7	37.7-212		%Rec	1	8/11/2022 9:23:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 9:23:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 9:23:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 9:23:00 PM	69366
Xylenes, Total	ND	0.099		mg/Kg	1	8/11/2022 9:23:00 PM	69366
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	8/11/2022 9:23:00 PM	69366

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

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

Page 18 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-5

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:42:00 PM

Lab ID: 2208485-019

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	6000	300		mg/Kg	100	8/15/2022 9:39:32 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/12/2022 4:31:24 AM	69403
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/12/2022 4:31:24 AM	69403
Surr: DNOP	58.9	21-129		%Rec	1	8/12/2022 4:31:24 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/11/2022 9:42:00 PM	69366
Surr: BFB	91.2	37.7-212		%Rec	1	8/11/2022 9:42:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/11/2022 9:42:00 PM	69366
Toluene	ND	0.050		mg/Kg	1	8/11/2022 9:42:00 PM	69366
Ethylbenzene	ND	0.050		mg/Kg	1	8/11/2022 9:42:00 PM	69366
Xylenes, Total	ND	0.099		mg/Kg	1	8/11/2022 9:42:00 PM	69366
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	8/11/2022 9:42:00 PM	69366

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

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

Page 19 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-6

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:46:00 PM

Lab ID: 2208485-020

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	7400	300		mg/Kg	100	8/15/2022 9:51:52 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/12/2022 4:45:17 AM	69403
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/12/2022 4:45:17 AM	69403
Surr: DNOP	55.6	21-129		%Rec	1	8/12/2022 4:45:17 AM	69403
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/11/2022 10:02:00 PM	69366
Surr: BFB	92.5	37.7-212		%Rec	1	8/11/2022 10:02:00 PM	69366
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/11/2022 10:02:00 PM	69366
Toluene	ND	0.049		mg/Kg	1	8/11/2022 10:02:00 PM	69366
Ethylbenzene	ND	0.049		mg/Kg	1	8/11/2022 10:02:00 PM	69366
Xylenes, Total	ND	0.097		mg/Kg	1	8/11/2022 10:02:00 PM	69366
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	1	8/11/2022 10:02:00 PM	69366

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

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

Page 20 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-7

Project: Catclaw Huisache

Collection Date: 8/4/2022 12:50:00 PM

Lab ID: 2208485-021

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	5600	300		mg/Kg	100	8/15/2022 10:04:13 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/13/2022 7:06:41 AM	69434
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/13/2022 7:06:41 AM	69434
Surr: DNOP	27.2	21-129		%Rec	1	8/13/2022 7:06:41 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/12/2022	69372
Surr: BFB	97.7	37.7-212		%Rec	1	8/12/2022	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/12/2022	69372
Toluene	ND	0.048		mg/Kg	1	8/12/2022	69372
Ethylbenzene	ND	0.048		mg/Kg	1	8/12/2022	69372
Xylenes, Total	ND	0.096		mg/Kg	1	8/12/2022	69372
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	8/12/2022	69372

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

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

Page 21 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-17

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:15:00 PM

Lab ID: 2208485-022

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/13/2022 10:48:37 PM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 7:48:59 AM	69434
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/13/2022 7:48:59 AM	69434
Surr: DNOP	32.8	21-129		%Rec	1	8/13/2022 7:48:59 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/12/2022 12:59:00 AM	69372
Surr: BFB	92.9	37.7-212		%Rec	1	8/12/2022 12:59:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/12/2022 12:59:00 AM	69372
Toluene	ND	0.050		mg/Kg	1	8/12/2022 12:59:00 AM	69372
Ethylbenzene	ND	0.050		mg/Kg	1	8/12/2022 12:59:00 AM	69372
Xylenes, Total	ND	0.099		mg/Kg	1	8/12/2022 12:59:00 AM	69372
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	8/12/2022 12:59:00 AM	69372

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

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

Page 22 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-10

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:20:00 PM

Lab ID: 2208485-023

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	5500	300		mg/Kg	100	8/15/2022 10:16:34 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 8:03:04 AM	69434
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/13/2022 8:03:04 AM	69434
Surr: DNOP	33.1	21-129		%Rec	1	8/13/2022 8:03:04 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/12/2022 1:59:00 AM	69372
Surr: BFB	94.3	37.7-212		%Rec	1	8/12/2022 1:59:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/12/2022 1:59:00 AM	69372
Toluene	ND	0.049		mg/Kg	1	8/12/2022 1:59:00 AM	69372
Ethylbenzene	ND	0.049		mg/Kg	1	8/12/2022 1:59:00 AM	69372
Xylenes, Total	ND	0.098		mg/Kg	1	8/12/2022 1:59:00 AM	69372
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	8/12/2022 1:59:00 AM	69372

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

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

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-9

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:24:00 PM

Lab ID: 2208485-024

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	6200	300		mg/Kg	100	8/15/2022 10:28:55 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 8:17:05 AM	69434
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/13/2022 8:17:05 AM	69434
Surr: DNOP	35.7	21-129		%Rec	1	8/13/2022 8:17:05 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/12/2022 2:18:00 AM	69372
Surr: BFB	93.1	37.7-212		%Rec	1	8/12/2022 2:18:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	8/12/2022 2:18:00 AM	69372
Toluene	ND	0.046		mg/Kg	1	8/12/2022 2:18:00 AM	69372
Ethylbenzene	ND	0.046		mg/Kg	1	8/12/2022 2:18:00 AM	69372
Xylenes, Total	ND	0.093		mg/Kg	1	8/12/2022 2:18:00 AM	69372
Surr: 4-Bromofluorobenzene	84.5	70-130		%Rec	1	8/12/2022 2:18:00 AM	69372

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

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

Page 24 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-8

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:26:00 PM

Lab ID: 2208485-025

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2500	150		mg/Kg	50	8/15/2022 10:41:16 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 8:31:15 AM	69434
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/13/2022 8:31:15 AM	69434
Surr: DNOP	41.9	21-129		%Rec	1	8/13/2022 8:31:15 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/12/2022 2:38:00 AM	69372
Surr: BFB	95.5	37.7-212		%Rec	1	8/12/2022 2:38:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/12/2022 2:38:00 AM	69372
Toluene	ND	0.048		mg/Kg	1	8/12/2022 2:38:00 AM	69372
Ethylbenzene	ND	0.048		mg/Kg	1	8/12/2022 2:38:00 AM	69372
Xylenes, Total	ND	0.095		mg/Kg	1	8/12/2022 2:38:00 AM	69372
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	8/12/2022 2:38:00 AM	69372

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

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

Page 25 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-16

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:27:00 PM

Lab ID: 2208485-026

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/14/2022 12:02:42 AM	69483
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 8:45:18 AM	69434
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/13/2022 8:45:18 AM	69434
Surr: DNOP	37.0	21-129		%Rec	1	8/13/2022 8:45:18 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/12/2022 2:58:00 AM	69372
Surr: BFB	97.5	37.7-212		%Rec	1	8/12/2022 2:58:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	8/12/2022 2:58:00 AM	69372
Toluene	ND	0.047		mg/Kg	1	8/12/2022 2:58:00 AM	69372
Ethylbenzene	ND	0.047		mg/Kg	1	8/12/2022 2:58:00 AM	69372
Xylenes, Total	ND	0.094		mg/Kg	1	8/12/2022 2:58:00 AM	69372
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	8/12/2022 2:58:00 AM	69372

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

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

Page 26 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-11

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:30:00 PM

Lab ID: 2208485-027

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	8200	300		mg/Kg	100	8/16/2022 8:09:48 AM	69494
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 8:59:33 AM	69434
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/13/2022 8:59:33 AM	69434
Surr: DNOP	41.5	21-129		%Rec	1	8/13/2022 8:59:33 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/12/2022 3:17:00 AM	69372
Surr: BFB	94.3	37.7-212		%Rec	1	8/12/2022 3:17:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/12/2022 3:17:00 AM	69372
Toluene	ND	0.048		mg/Kg	1	8/12/2022 3:17:00 AM	69372
Ethylbenzene	ND	0.048		mg/Kg	1	8/12/2022 3:17:00 AM	69372
Xylenes, Total	ND	0.096		mg/Kg	1	8/12/2022 3:17:00 AM	69372
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	8/12/2022 3:17:00 AM	69372

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

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

Page 27 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-14

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:34:00 PM

Lab ID: 2208485-028

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	7200	300		mg/Kg	100	8/16/2022 8:22:12 AM	69494
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	21	15		mg/Kg	1	8/13/2022 9:13:45 AM	69434
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/13/2022 9:13:45 AM	69434
Surr: DNOP	47.2	21-129		%Rec	1	8/13/2022 9:13:45 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/12/2022 3:37:00 AM	69372
Surr: BFB	94.3	37.7-212		%Rec	1	8/12/2022 3:37:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/12/2022 3:37:00 AM	69372
Toluene	ND	0.049		mg/Kg	1	8/12/2022 3:37:00 AM	69372
Ethylbenzene	ND	0.049		mg/Kg	1	8/12/2022 3:37:00 AM	69372
Xylenes, Total	ND	0.098		mg/Kg	1	8/12/2022 3:37:00 AM	69372
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	1	8/12/2022 3:37:00 AM	69372

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

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

Page 28 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-15

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:36:00 PM

Lab ID: 2208485-029

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	8800	300		mg/Kg	100	8/16/2022 8:34:36 AM	69494
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 9:27:53 AM	69434
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/13/2022 9:27:53 AM	69434
Surr: DNOP	46.3	21-129		%Rec	1	8/13/2022 9:27:53 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/12/2022 3:57:00 AM	69372
Surr: BFB	94.9	37.7-212		%Rec	1	8/12/2022 3:57:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	8/12/2022 3:57:00 AM	69372
Toluene	ND	0.050		mg/Kg	1	8/12/2022 3:57:00 AM	69372
Ethylbenzene	ND	0.050		mg/Kg	1	8/12/2022 3:57:00 AM	69372
Xylenes, Total	ND	0.10		mg/Kg	1	8/12/2022 3:57:00 AM	69372
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	8/12/2022 3:57:00 AM	69372

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

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

Page 29 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-12

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:40:00 PM

Lab ID: 2208485-030

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	5600	300		mg/Kg	100	8/16/2022 8:47:01 AM	69494
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 9:42:10 AM	69434
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	8/13/2022 9:42:10 AM	69434
Surr: DNOP	48.6	21-129		%Rec	1	8/13/2022 9:42:10 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/12/2022 4:17:00 AM	69372
Surr: BFB	95.0	37.7-212		%Rec	1	8/12/2022 4:17:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	8/12/2022 4:17:00 AM	69372
Toluene	ND	0.046		mg/Kg	1	8/12/2022 4:17:00 AM	69372
Ethylbenzene	ND	0.046		mg/Kg	1	8/12/2022 4:17:00 AM	69372
Xylenes, Total	ND	0.091		mg/Kg	1	8/12/2022 4:17:00 AM	69372
Surr: 4-Bromofluorobenzene	84.8	70-130		%Rec	1	8/12/2022 4:17:00 AM	69372

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

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

Page 30 of 38

Analytical Report

Lab Order 2208485

Date Reported: 8/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: B-13

Project: Catclaw Huisache

Collection Date: 8/4/2022 1:42:00 PM

Lab ID: 2208485-031

Matrix: SOIL

Received Date: 8/9/2022 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	3500	150		mg/Kg	50	8/16/2022 8:59:25 AM	69494
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/13/2022 9:56:30 AM	69434
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/13/2022 9:56:30 AM	69434
Surr: DNOP	48.3	21-129		%Rec	1	8/13/2022 9:56:30 AM	69434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/12/2022 4:56:00 AM	69372
Surr: BFB	97.9	37.7-212		%Rec	1	8/12/2022 4:56:00 AM	69372
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	8/12/2022 4:56:00 AM	69372
Toluene	ND	0.049		mg/Kg	1	8/12/2022 4:56:00 AM	69372
Ethylbenzene	ND	0.049		mg/Kg	1	8/12/2022 4:56:00 AM	69372
Xylenes, Total	ND	0.097		mg/Kg	1	8/12/2022 4:56:00 AM	69372
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	8/12/2022 4:56:00 AM	69372

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

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

Page 31 of 38

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

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: MB-69482	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 69482	RunNo: 90266								
Prep Date: 8/13/2022	Analysis Date: 8/13/2022	SeqNo: 3219654 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-69482	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 69482	RunNo: 90266								
Prep Date: 8/13/2022	Analysis Date: 8/13/2022	SeqNo: 3219655 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Sample ID: MB-69483	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 69483	RunNo: 90271								
Prep Date: 8/13/2022	Analysis Date: 8/13/2022	SeqNo: 3219770 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-69483	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 69483	RunNo: 90271								
Prep Date: 8/13/2022	Analysis Date: 8/13/2022	SeqNo: 3219771 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.1	90	110			

Sample ID: MB-69494	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 69494	RunNo: 90295								
Prep Date: 8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220734 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-69494	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 69494	RunNo: 90295								
Prep Date: 8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220735 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Qualifiers:

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

Page 32 of 38

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

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: MB-69403	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69403	RunNo: 90193								
Prep Date: 8/10/2022	Analysis Date: 8/11/2022	SeqNo: 3218194 Units: mg/Kg								
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	7.0		10.00		70.0	21	129			

Sample ID: LCS-69403	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69403	RunNo: 90193								
Prep Date: 8/10/2022	Analysis Date: 8/11/2022	SeqNo: 3218195 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	50.00	0	99.7	64.4	127			
Surr: DNOP	3.3		5.000		65.9	21	129			

Sample ID: MB-69436	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69436	RunNo: 90272								
Prep Date: 8/11/2022	Analysis Date: 8/12/2022	SeqNo: 3219906 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.8		10.00		88.2	21	129			

Sample ID: LCS-69436	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69436	RunNo: 90272								
Prep Date: 8/11/2022	Analysis Date: 8/12/2022	SeqNo: 3219907 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.8	21	129			

Sample ID: MB-69420	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69420	RunNo: 90272								
Prep Date: 8/11/2022	Analysis Date: 8/12/2022	SeqNo: 3219908 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.0	21	129			

Sample ID: LCS-69420	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69420	RunNo: 90272								
Prep Date: 8/11/2022	Analysis Date: 8/12/2022	SeqNo: 3219909 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.0	21	129			

Qualifiers:

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

Page 33 of 38

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

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: MB-69434	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 69434	RunNo: 90272								
Prep Date: 8/11/2022	Analysis Date: 8/12/2022	SeqNo: 3219910 Units: mg/Kg								
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	8.7		10.00		86.6	21	129			

Sample ID: LCS-69434	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 69434	RunNo: 90272								
Prep Date: 8/11/2022	Analysis Date: 8/12/2022	SeqNo: 3219911 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	15	50.00	0	83.1	64.4	127			
Surr: DNOP	4.2		5.000		84.3	21	129			

Qualifiers:

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

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

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: ics-69366	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 69366				RunNo: 90181					
Prep Date: 8/9/2022	Analysis Date: 8/11/2022				SeqNo: 3216893	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.8	72.3	137			
Surr: BFB	1900		1000		186	37.7	212			

Sample ID: mb-69366	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 69366				RunNo: 90181					
Prep Date: 8/9/2022	Analysis Date: 8/11/2022				SeqNo: 3216894	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.6	37.7	212			

Sample ID: ics-69372	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 69372				RunNo: 90181					
Prep Date: 8/9/2022	Analysis Date: 8/11/2022				SeqNo: 3216917	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	72.3	137			
Surr: BFB	2100		1000		212	37.7	212			

Sample ID: mb-69372	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 69372				RunNo: 90181					
Prep Date: 8/9/2022	Analysis Date: 8/11/2022				SeqNo: 3216918	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.2	37.7	212			

Sample ID: mb	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: G90220				RunNo: 90220					
Prep Date:	Analysis Date: 8/12/2022				SeqNo: 3218937	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		112	37.7	212			

Sample ID: 2.5ug gro ics	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: G90220				RunNo: 90220					
Prep Date:	Analysis Date: 8/12/2022				SeqNo: 3218938	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2200		1000		224	37.7	212			S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: mb-69407	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 69407			RunNo: 90220						
Prep Date: 8/10/2022	Analysis Date: 8/13/2022			SeqNo: 3218968		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	37.7	212			

Sample ID: LCS-69407	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 69407			RunNo: 90220						
Prep Date: 8/10/2022	Analysis Date: 8/13/2022			SeqNo: 3218969		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		191	37.7	212			

Qualifiers:

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

Page 36 of 38

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

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: mb-69366	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 69366	RunNo: 90181								
Prep Date: 8/9/2022	Analysis Date: 8/11/2022	SeqNo: 3216942 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.82		1.000		81.9	70	130			

Sample ID: lcs-69372	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 69372	RunNo: 90181								
Prep Date: 8/9/2022	Analysis Date: 8/11/2022	SeqNo: 3216965 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.1	80	120			
Toluene	0.89	0.050	1.000	0	89.4	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.6	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		87.8	70	130			

Sample ID: mb-69372	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 69372	RunNo: 90181								
Prep Date: 8/9/2022	Analysis Date: 8/11/2022	SeqNo: 3216966 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.85		1.000		85.1	70	130			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B90220	RunNo: 90220								
Prep Date:	Analysis Date: 8/12/2022	SeqNo: 3218998 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B90220	RunNo: 90220								
Prep Date:	Analysis Date: 8/12/2022	SeqNo: 3218999 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

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

WO#: 2208485

18-Aug-22

Client: EOG
Project: Catclaw Huisache

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: B90220		RunNo: 90220							
Prep Date:	Analysis Date: 8/12/2022		SeqNo: 3218999		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: mb-69407	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 69407		RunNo: 90220							
Prep Date: 8/10/2022	Analysis Date: 8/13/2022		SeqNo: 3219026		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

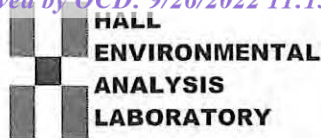
Sample ID: lcs-69407	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 69407		RunNo: 90220							
Prep Date: 8/10/2022	Analysis Date: 8/13/2022		SeqNo: 3219027		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	70	130			

Sample ID: lcs-69366	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 69366		RunNo: 90220							
Prep Date: 8/9/2022	Analysis Date: 8/12/2022		SeqNo: 3219128		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.0	80	120			
Toluene	0.94	0.050	1.000	0	93.8	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	70	130			

Qualifiers:

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

Page 38 of 38



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2208485

RcptNo: 1

Received By: Juan Rojas 8/9/2022 7:15:00 AM

Completed By: Sean Livingston 8/9/2022 8:16:30 AM

Reviewed By: *KRM 8.09.22**Glenn B. G.**S. Livingston*Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *jn8/9/22*Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

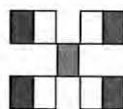
Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good				



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record				Turn-Around Time: <u>EOG 5 Day TAT</u>		
Client: EOG-Artesia / Ranger Env.				<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush		
Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210				Project Name: <u>Catclaw - Huisache</u>		
Ranger: PO Box 201179, Austin TX 78720				Project #: <u>5375</u>		
Phone #: 521-335-1785				Project Manager: <u>W. Kierdorf</u>		
email or Fax#: <u>Will@RangerEnv.com</u>						
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)						
Accreditation: <input type="checkbox"/> Az Compliance						
<input checked="" type="checkbox"/> NELAC <input type="checkbox"/> Other _____						
<input checked="" type="checkbox"/> EDD (Type) _____ Excel _____						
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
8-4-22	1030	Soil	W-13	1 x 4oz Jar	ICE	013
	1230		B-0			014
	1234		B-1			015
	1236		B-2			016
	1238		B-3			017
	1240		B-4			018
	1242		B-5			019
	1246		B-6			020
	1250		B-7			021
	1315		B-17			022
	1320		B-10			023
	1324		B-9			024
Relinquished by: <u>J. Martinez</u>				Received by: <u>Cover</u>		
Date: <u>8-8-22</u>	Time: <u>1009</u>			Via: <u>Edgar</u>		Date: <u>8/8/22</u> Time: <u>1009</u>
Date: <u>8/8/22</u>	Time: <u>1900</u>			Via: <u>Edgar</u>		Date: <u>8/8/22</u> Time: <u>1900</u>

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

ATTACHMENT 3 – NMOCD CORRESPONDENCE

Released to Imaging: 9/27/2022 1:28:52 PM

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, July 19, 2022 1:37 PM
To: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: State CO SWD System (Catclaw-Huisache Battery) Remediation Plan approved

Attached is the approved Remediation plan with conditions as noted below.

Thank you.

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, July 19, 2022 1:33 PM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 125194

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2120958120, with the following conditions:

- Remediation Plan Approved. Variance to install a liner at 6' approved.

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any question regarding this application, please contact me.

Thank you,
Jennifer Nobui
Environmental Specialist-Advanced
505-470-3407
Jennifer.Nobui@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505



From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, July 27, 2022 3:29 PM
To: Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: State CO SWD System (Catolaw-Huisache Battery) (nAPP2120858120) Sampling Notification

Good Afternoon,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

State CO SWD System (Catolaw-Huisache Battery)
H-2-20S-24E
Eddy County, NM
nAPP2120858120

Sampling will begin at 7:00 a.m. on Thursday, August 4, 2022.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 146157

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 146157
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	9/27/2022