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	NRM2030932103
District RP	
Facility ID	
Application ID	

# **Release Notification**

# **Responsible Party**

Responsible Party	EOG Resources, Inc. Contact Name Robert Asher Contact email bob asher@eogresource Contact mailing address 104 S. 4 <sup>th</sup> Street, Artesia,  Latitude 33.54260  Site Name: Abby BLF Sta  Date Release: Discovered  Unit Letter Section N 10  Surface Owner: State  Material  Crude Oil Produced Water  Condensate Natural Gas Other (describe)	ate #1 1 10/20/2020  Township 9S	(NAD 83 in Range 33E	decimal deg	Contact 7 575-748- Incident NRM20309  elease S  Longitude grees to 5 dec  Site Type  API# 30-0	# (assigned by OCD) 932103  Source -103.55593 cimal places) 9: Battery 025-38951	
Contact Telephone S75-748-4217 Contact email Brickent Kassigned by OCD) NRM2030932103  Contact mailing address 104 S. 4th Street, Artesia, New Mexico  Location of Release Source Location of Release Source Longitude 103.55593 (NAD 83 in decimal degrees to 5 decimal places)  Site Name: Abby BLF State #1 Site Type: Battery  Date Release: Discovered 10/20/2020 API# 30-025-38951  Unit Letter Section Township Range County N 10 9S 33E Lea  Surface Owner: State Federal Tribal Private (Name:  Nature and Volume of Release  Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)  Crude Oil Volume Released (bbls) 172.42 Volume Recovered (bbls) 0  Produced Water Volume Released (bbls) Volume Recovered (bbls) Is the concentration of dissolved chloride in the produced water >10,000 mg/1? Condensate Volume Released (Mcf) Volume Recovered (Mcf) Other (describe) Volume/Weight Released (provide units)  Cause of Release; Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10' Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10'	Robert Asher Contact email bob_asher@eogresource Contact mailing address 104 S. 4th Street, Artesia,  Latitude 33.54260  Site Name: Abby BLF Sta Date Release: Discovered  Unit Letter Section N 10  Surface Owner: State  Material Crude Oil Produced Water  Condensate Natural Gas Other (describe)	ate #1 1 10/20/2020  Township 9S	(NAD 83 in Range 33E	decimal deg	Contact 575-748- Incident NRM20309  elease S  Longitude grees to 5 dec  Site Type  API# 30-0	# (assigned by OCD) 932103  Source -103.55593 cimal places) 9: Battery 025-38951	
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Dots   Sher@eogresources.com   NRM2030932103	Contact mailing address 104 S. 4th Street, Artesia,  Latitude 33.54260  Site Name: Abby BLF Sta  Date Release: Discovered  Unit Letter Section N 10  Surface Owner: State  Material  Crude Oil Produced Water  Condensate Natural Gas Other (describe)	ate #1 1 10/20/2020  Township 9S	(NAD 83 in Range 33E	decimal deg	elease S Longitude grees to 5 dec Site Type API# 30-0	Source -103.55593 -imal places) -: Battery 025-38951	
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Unit Letter   Section   Township   Range   County     N   10   9S   33E   Lea  Surface Owner:   State   Federal   Tribal   Private (Name:	Unit Letter Section N 10  Surface Owner: State  Material Crude Oil Produced Water  Condensate Natural Gas Other (describe)	Township 9S	33E	Lea			
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Surface Owner: State Federal Tribal Private (Name:    Nature and Volume of Release	Surface Owner: State  Material Crude Oil Produced Water  Condensate Natural Gas Other (describe)			Lea			
Nature and Volume of Release  Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)  Crude Oil Volume Released (bbls) 172.42 Volume Recovered (bbls) 0  Produced Water Volume Released (bbls)  Is the concentration of dissolved chloride in the produced water >10,000 mg/l?  Condensate Volume Released (bbls) Volume Recovered (bbls)  Natural Gas Volume Released (Mcf) Volume Recovered (Mcf)  Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)  Cause of Release;  Pinhole developed in the bottom of a 500 BBL crude oil tank, Volume released was calculated using previous gauge reading of 6' 10"	Material  ☐ Crude Oil ☐ Produced Water ☐ Condensate ☐ Natural Gas ☐ Other (describe)	Federal T	ribal 🔲 Private				
☑ Crude Oil       Volume Released (bbls)       Volume Recovered (bbls)         ☐ Produced Water       Volume Released (bbls)       Volume Recovered (bbls)         ☐ Is the concentration of dissolved chloride in the produced water >10,000 mg/l?       ☐ Yes ☐ No         ☐ Condensate       Volume Released (bbls)       Volume Recovered (bbls)         ☐ Natural Gas       Volume Released (Mcf)       Volume Recovered (Mcf)         ☐ Other (describe)       Volume/Weight Released (provide units)       Volume/Weight Recovered (provide units)         Cause of Release;       Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	☐ Crude Oil ☐ Produced Water ☐ Condensate ☐ Natural Gas ☐ Other (describe)	l(s) Released (Select a					provided below)
Is the concentration of dissolved chloride in the produced water >10,000 mg/l?  Condensate Volume Released (bbls) Volume Recovered (bbls)  Natural Gas Volume Released (Mcf) Volume Recovered (Mcf)  Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)  Cause of Release; Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	☐ Condensate ☐ Natural Gas ☐ Other (describe)	Volume Release	ed (bbls) 172.42		ons or specifi		
produced water >10,000 mg/l?  Condensate Volume Released (bbls) Volume Recovered (bbls)  Natural Gas Volume Released (Mcf) Volume Recovered (Mcf)  Other (describe) Volume/Weight Released (provide units) Volume/Weight Recovered (provide units)  Cause of Release; Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	☐ Natural Gas ☐ Other (describe)	Volume Release	ed (bbls)			Volume Recovered (	bbls)
☐ Condensate       Volume Released (bbls)       Volume Recovered (bbls)         ☐ Natural Gas       Volume Released (Mcf)       Volume Recovered (Mcf)         ☐ Other (describe)       Volume/Weight Released (provide units)       Volume/Weight Recovered (provide units)         Cause of Release;       Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	☐ Natural Gas ☐ Other (describe)			chloride	in the	☐ Yes ☐ No	
Other (describe)  Volume/Weight Released (provide units)  Volume/Weight Recovered (provide units)  Cause of Release;  Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	Other (describe)					Volume Recovered (	obls)
Cause of Release; Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	,	Volume Release	ed (Mcf)			Volume Recovered (	Mcf)
Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	Cause of Release:	Volume/Weight	Released (provi	de units)		Volume/Weight Reco	overed (provide units)
Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10"	Cause of Release:						
Pinhole developed in the bottom of a 500 BBL crude oil tank. Volume released was calculated using previous gauge reading of 6' 10" and the current reading of 1' 8 3/4".	Did i i i i i i i						
and the current reading of 1' 8 3/4".	Pinhole developed in the t	0 500 5	BBL crude oil tan	ık. Volum	ne released	was calculated using pr	evious gauge reading of 6' 10"
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		bottom of a 500 E		100000000000000000000000000000000000000			



# State of New Mexico Oil Conservation Division

Incident ID	NRM2030932103
District RP	
Facility ID	
Application ID	

Released to Imaging: 7/5/2022 4:20:32 PM

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responding Volume released was greater than 25 bbls		
Yes □ No			
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, an email notification was sent from Robert Asher to Brad Billings, Jim Griswold, Mark Naranjo, Ryan Mann, and enmrd-ocd-district1spills@state.nm.us on 10/20/2020 at 6:13 p.m.			
	Initial R	esponse	
The responsible	party must undertake the following actions immediated	y unless they could create a safety hazard that would result in injury	
The source of the rele	ease has been stopped.		
☐ The impacted area ha	s been secured to protect human health and	the environment.	
Released materials ha	we been contained via the use of berms or c	ikes, absorbent pads, or other containment devices.	
All free liquids and re	ecoverable materials have been removed an	l managed appropriately.	
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.	
regulations all operators are public health or the environment failed to adequately investigations.	required to report and/or file certain release notinent. The acceptance of a C-141 report by the Cate and remediate contamination that pose a thre	pest of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws	
Printed Name: Robert Ash		Title: Environmental Supervisor	
Signature:	JACU.	Date: <u>12/16/2020</u>	
email: bob_asher@eogres	ources.com	Telephone: <u>575-748-4217</u>	
OCD Only			
Received by: Cristina F	ads	Date: 12/16/2020	

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### **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?	54.81 (ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ☑ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No	
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No	
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No	
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	☐ Yes ☑ No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
<ul> <li>✓ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.</li> <li>✓ Field data</li> <li>✓ Data table of soil contaminant concentration data</li> <li>✓ Depth to water determination</li> <li>✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release</li> <li>✓ Boring or excavation logs</li> <li>✓ Photographs including date and GIS information</li> <li>✓ Topographic/Aerial maps</li> <li>✓ Laboratory data including chain of custody</li> </ul>		

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

Received by OCD: 6/22/2022 1:37:57 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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0400					

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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: <u>06/22/2022</u>	
email: Chase_Settle@eogresources.com	Telephone: <u>575-748-1471</u>	
OCD Only		
Received by:	Date:	

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# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be inc	cluded in the plan.	
<ul> <li>✓ Detailed description of proposed remediation technique</li> <li>✓ Scaled sitemap with GPS coordinates showing delineation points</li> <li>✓ Estimated volume of material to be remediated</li> <li>✓ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>✓ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>		
<u>Deferral Requests Only</u> : Each of the following items must be confirm	ned as part of any request for deferral of remediation.	
Contamination must be in areas immediately under or around produdeconstruction.	ction equipment where remediation could cause a major facility	
☐ Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health, th	e environment, or groundwater.	
I hereby certify that the information given above is true and complete to rules and regulations all operators are required to report and/or file certa which may endanger public health or the environment. The acceptance liability should their operations have failed to adequately investigate and surface water, human health or the environment. In addition, OCD acceresponsibility for compliance with any other federal, state, or local laws	in release notifications and perform corrective actions for releases of a C-141 report by the OCD does not relieve the operator of d remediate contamination that pose a threat to groundwater, eptance of a C-141 report does not relieve the operator of	
Printed Name: Chase Settle	Title: Rep Safety & Environmental Sr	
$\alpha$ , $\alpha$	Date: 06/22/2022	
email: Chase_Settle@eogresources.com	Геlephone: <u>575-748-1471</u>	
OCD Only		
Received by: D	ate:	
Approved	proval Denied Deferral Approved	
Signature: Jennifer Nobui Dat	e: 07/05/2022	

2135 S. Loop 250 W, Midland, Texas 79703 United States www.ghd.com



GHD Reference #: 11220612

June 21, 2022

New Mexico Oil Conservation Division District 1 1625 N. French Drive Hobbs, New Mexico 88240

Re: Amended Site Characterization and Remediation Plan

Abby BLF State #1 Release Site

EOG Resources, Inc.

Incident ID: nRM2030932103

Unit O-Sec 10-T9S-R33E, Lea County, New Mexico

### 1. Introduction

GHD Services Inc. (GHD), on behalf of EOG Resources (EOG), submits this Amended Site Characterization Report and Remediation Plan (Plan) to the New Mexico Oil Conservation Division (NMOCD) District 1 Office. This Plan provides documentation of delineation, sampling, and analysis to date in the affected area at the EOG Abby BLF State #1 Release Site (Site). The Site is located in Unit Letter O, Section 10, Township 9 South, and Range 33 East in Lea County, New Mexico (Figure 1). The GPS coordinates for the tank battery where the release occurred are 33.54260 N latitude and 103.55593 W longitude. The surface owner of the land where the release occurred is the New Mexico State Land Office (NMSLO). The EOG production facility and other Site details are depicted on Figure 2, Site Assessment: Soil Analytical Results Map.

# 2. Background Information

A Form C-141, Release Notification, was submitted to the NMOCD on October 28, 2020, then again on December 16, 2020. The C-141 stated that the release was discovered on October 20, 2020 and was due to a pinhole in the bottom of a five hundred (500) barrel crude oil tank. Approximately one hundred-seventy-two (172) barrels of crude oil was calculated to have been released, with zero (0) barrels being recovered. The crude oil was released within a tank battery surrounded by an unlined berm.

The release falls under the jurisdiction of the NMOCD District 1 Office in Hobbs, New Mexico. The NMOCD assigned the release with Incident Number nRM2030932103. A previous Site Characterization and Remediation Work Plan dated February 4, 2021 was submitted to the NMOCD for approval. The work plan was denied on June 17, 2021, due to not having the site delineated and due to lack of depth to groundwater information within a half mile of the site. The original Plan stated the nearest groundwater well was located approximately 1.7 miles west of the Site. The Release Notification, Site Assessment/Characterization, and Remediation Plan sections of Form C-141 are attached to the front of this report.



### 3. Groundwater and Site Characterization

On July 20, 2021, Talon LPE (Talon) installed a temporary well, Abby Temp Well, at the following GPS coordinates, 33.542237 N latitude and 103.555846 W longitude, which is located on the well pad and within a half mile from the Site. The temporary well was installed to a total depth of 57.40 feet below ground surface and was dry when drilled. The Abby BLF State #1 Temp Well was left open for seventy-two (72) hours and a water level meter was utilized to determine the presence or absence of groundwater. The depth to groundwater was measured at 54.81 feet below ground surface. Abby BLF State #1 Temp well plugged and abandoned.

According to the Site characterization evaluation and 19.15.29.12.C(4)(a) the Site is located within an area of low karst potential with depth to groundwater fifty-one (51) to one hundred (100) feet below ground surface and meets the closure criteria for depth to groundwater fifty-one (51) to one hundred (100) feet in Table I in NMAC 19.15.29.12. The Site characterization documentation (Karst Potential, Talon and GHD Soil Boring Log, FEMA, Points of Diversion and Wetlands maps) are provided in Attachment A. The soil closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft)
No Receptors Found	51 to 100

Table 3.1 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12)

Regulatory Standard	Chloride	TPH (GRO+DRO+MRO)	TPH (GRO+MRO)	втех	Benzene
19.15.29.13 Restoration, Reclamation and Re- Vegetation (Impacted Area 0-4 Feet)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
19.15.29.12 NMAC Table I Closure Criteria for Soils Impacted by a Release	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
Notes:					
= not defined					

# 4. Initial Response Summary

EOG conducted an Initial Response action in early November 2020 by removing all equipment from the tank battery, then excavating soils within the berm area to a depth of four (4) feet below ground surface. GHD conducted confirmation sampling of the initial excavation on November 11, 2020. Composite confirmation samples were collected from the bottom and side walls of the excavation from areas representing an area no larger than two hundred (200) square feet. Twenty confirmation samples were collected from the bottom of the excavation (BH -1 through BH-20) and six sidewall confirmation samples (SW-1 through SW-6) were collected from the excavation sidewalls. All soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method 300 by Hall Envirotech Laboratory in Farmington, New Mexico.

Analytical results indicated twelve (12) of the bottom hole confirmation samples and one (1) sidewall confirmation sample exhibited TPH concentrations above Table I Closure Criteria: B-1 through B-6, B-8 through B-10, and B-12 through B-14.

None of the confirmation samples exhibited chloride concentrations above closure criteria of 10,000 mg/kg. Details of initial activities were documented in a Site Characterization and Remediation Plan dated February 3, 2021.

# 5. Soil Delineation Assessment Summary and Findings

On June 22, 2021, GHD and EOG's contractor, Culberson Construction Energy Services (CCI) installed 7 test pits, TP1 through TP7, within and around the suspected impacted area. The test pit locations were excavated to depths ranging from the surface to eighteen (18) feet below grade. Soil samples were collected from varying depths of the test pits and field screened for chloride and hydrocarbons. Select soil samples were analyzed for BTEX (EPA Method 8021B), TPH (Method 8015B Modified), and chloride (EPA Method 300) by Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico.

Analytical results indicated TPH and/or BTEX concentrations above Table I closure criteria for TP1, TP2, TP3, and TP5. All chloride concentrations were below Table I closure criteria. Analytical results and sample locations are provided on Figure 2, Table 1, and Laboratory Analytical Reports and Chain-of-Custody Documentation provided as Attachment B.

# 6. Waste Management

Waste Management activities were performed in coordination with EOG directives. EOG obtained regulatory approval via the successful processing of Form C-138 Request for Approval to Accept Solid Waste. The waste was approved for acceptance at the OCD-permitted (NM-01-0019), Gandy Marley, Inc facility. Approximately 740 cubic yards of impacted soil were disposed at Gandy Marley, Inc, the waste manifests from June 22 through July 19, 2021, are available upon request and aren't included in this report due to size of the file. A Daily Disposal Summary is provided as Table 2.

# 7. nRM2030932103 Proposed Work Plan

Analytical results indicated TPH and/or BTEX concentrations above Table I closure criteria for TP1, TP2, TP3, and TP5. GHD, on behalf of EOG, proposes to excavate the areas to the following depths:

- TP5 will be excavated from surface to two (2) feet below grade or until concentrations are below limits for NMAC 19.15.29.13 (restoration).
- TP1 to will be excavated four (4) to eight (8) below grade or until concentrations are below Table I closure criteria.
- TP2 will be excavated ten (10) to fifteen (15) feet below grade or until concentrations are below Table I closure criteria.
- TP3 will be excavated eight (8) to twelve (12) feet below grade or until concentrations are below Table I closure criteria.

→ The Power of Commitment

Composite confirmation samples will be collected from the bottom and side walls of the excavation from areas representing an area no larger than two hundred (200) square feet. Discrete soil samples will be collected from the side walls if any staining is observed. All confirmation samples will be taken to a certified laboratory and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300.

Excavated soils will be transported to a NMOCD-approved disposal facility for disposal. The anticipated volume of soil to be disposed of is approximately 2,900 cubic yards. The excavation will be backfilled with non-impacted soil transported to the Site. The remediation will be performed within 90 days after the work plan has been approved. A closure report documenting remediation activities will be prepared and submitted to the NMOCD when remediation activities have been completed.

If you have any questions or comments concerning this Amended Site Characterization and Remediation Work Plan, please do not hesitate to contact our Midland office at (432) 686-0086.

Sincerely,

**GHD** 

Becky Haskell

Senior Project Manager

Thomas C. Larson, M.S. Midland Operation Manager

Thomas Clayon

BH/tl/1

Encl. Figure 1 – Site Location Map

Rebecca Haskell

Figure 2 – Site Assessment: Soil Analytical Results Map

Table 1 - Summary of Soil Analytical Data

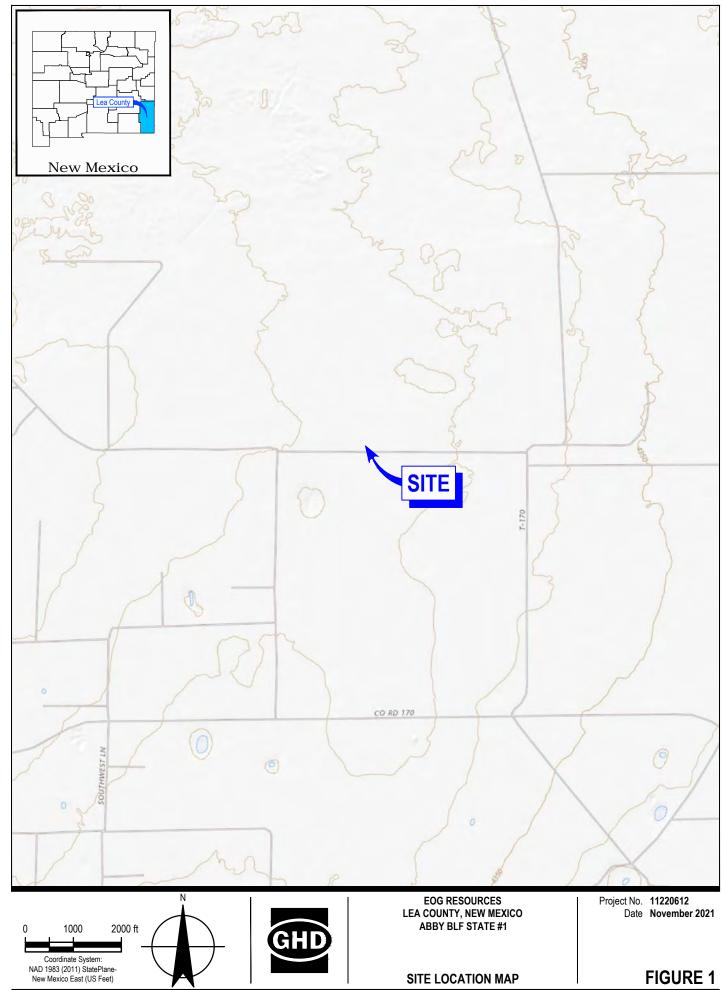
Table 2 - Daily Disposal Summary

Attachment A – Site Characterization Documentation

Attachment B - Laboratory Analytical Reports and Chain-of-Custody Documentation

cc: Chase Settle

Figures



					TPH	
			Benzene	BTEX	Total	Chloride
	Sample	Depth			GRO/DRO/MRO	
Sample ID	Date	(feet	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
		bgs)	Table I C	osure Criteria	for Soils <50 feet	
			10 mg/Kg	50 mg/Kg	2,500 mg/Kg	10,000 mg/Kg
		2021	1 Assessment	Samples		
TP1-4	6/22/21	4	<0.096	36.4	5,610	86
TP1-8	6/22/21	8	<0.019	<0.077	<49	<60
TP1-12	6/22/21	12	<0.018	<0.072	<48	<60
TP1-13	6/22/21	13	<0.091	<0.36	<50	<60
TP2-4	6/22/21	4	15	344	33,700	470
					<i>'</i>	
TP2-10	6/22/21	10	7.4	218.4	13,500	150
TP2-15	6/22/21	15	0.046	1.002	422	240
TP2-18	6/22/21	18	<0.022	<0.088	263	260
TP3-4	6/22/21	4	4.6	275.6	18,600	<60
TP3-8	6/22/21	8	0.41	35.91	4,560	140
TP3-12	6/22/21	12	<0.093	2.72	810	68
TP4-S	6/22/21	Surface	<0.017	<0.069	12	<59
TP4-2	6/22/21	2	<0.019	<0.074	<46	<60
TP5-S	6/22/21	Surface	<0.020	<0.080	670	<60
TP5-2	6/22/21	2	<0.018	<0.072	<50	<60
TP6-S	6/22/21	Surface	<0.020	<0.080	<48	<60
TP6-2	6/22/21	2	<0.018	<0.071	<48	<59
TP7-S	6/22/21	Surface	<0.017	<0.067	94	<60
TP7-2	6/22/21	2	<0.019	<0.076	<45	88

**LEGEND** 

PROPOSED EXCAVATION AREA w/ DEPTH

TEST PIT LOCATION DEPTH DEPTH OF SAMPLE (FT)

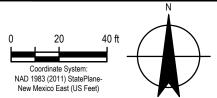
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BENZENE, TOLUENE, ETHYLBENZENE & BTEX

XYLENES CONCENTRATION (MG/KG)

TOTAL PETROLEUM HYDROCARBONS TPH

CONCENTRATION (MG/KG)



### NOTES:

- 1. RESULTS IN MILLIGRAMS PER KILOGRAM (MG/KG).
- 2. SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.

ACCESS ROAD

3. YELLOW SHADED CELLS INDICATE EXCEEDANCE.



LEA COUNTY, NEW MEXICO ABBY BLF STATE #1

SITE ASSESSMENT: **SOIL ANALYTICAL RESULTS MAP**  Date June 2022

FIGURE 2

Tables

Page 1 of 2

### Table 1 Summary of Soil Analytical Data Abby BLF State #1 EOG Resources Lea County, New Mexico

								TPH					
	Commis	Depth	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO(C6-C10)	DRO(C10- C28)	MRO (C28- C35)	Total GRO/DRO/MRO	Chloride	
Sample ID	Sample Date	(feet	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	
	2000	bgs)			Table I C	losure Criteria	for Soils <50 fe	eet Depth to Gro	undwater 19.15	5.29 NMAC			
			10 mg/Kg				50 mg/Kg	1,000 ו	ng/Kg		2,500 mg/Kg	10,000 mg/Kg	
					Initia	l Assessment	Samples						
SW-1	11/11/2020	0-3"	< 0.0250	<.0250	<.0250	0.0655	0.1	<200	61	<50.0	61	1,360	
SW-2	11/11/2020	0-3"	< 0.0250	<.0250	<.0250	<.0250	<0.0250	<200	<25.0	<50.0	0	277	
SW-3	11/11/2020	0-3"	<0.0250	1.06	1.17	9.13	11.4	<200	13,700	4,290	17,990	4,700	
SW-4	11/11/2020	0-3"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	40	<50.0	40	1,340	
SW-5	11/11/2020	0-3"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	25	<50.0	25	194	
SW-6	11/11/2020	0-3"	<0.0250	<.0250	<.0250	<.0250	< 0.0250	<200	<25.0	<50.0	<275	114	
B-1	11/11/2020	0-6"	1.47	18.8	11	74.5	105.8	564	14,300	3,220	18,084	1,470	
B-2	11/11/2020	0-6"	1.88	23.6	14.7	101	141.2	859	19,600	3,120	23,579	467	
B-3	11/11/2020	0-6"	0.926	7.51	6.21	47.6	62.2	532	19,900	4,720	25,152	403	
B-4	11/11/2020	0-6"	<0.0250	0.0388	0.0313	0.405	0.5	<200	1,840	490	2,330	1,370	
B-5	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	1,050	294	1,344	723	
B-6	11/11/2020	0-6"	<0.0250	<.0250	<.0250	1.41	1.41	<200	4,350	881	5,231	333	
B-7	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<.0251	<200	714	254	968	190	
B-8	11/11/2020	0-6"	0.788	6.44	4.64	34.6	46.5	347	14,500	2,550	17,397	3,770	
B-9	11/11/2020	0-6"	2.5	16	11.2	82.4	112.1	686	28,400	6,270	35,356	1,990	
B-10	11/11/2020	0-6"	<0.0250	0.667	2.44	22.7	25.8	241	10,100	2,310	12,651	1,130	
B-11	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	49	<50.0	49	362	
B-12	11/11/2020	0-6"	<0.0250	0.311	0.893	8.84	10.0	<200	4,390	773	5,163	1,250	
B-13	11/11/2020	0-6"	<0.0250	0.323	0.944	7.2	8.5	<200	8,570	2,330	10,900	921	
B-14	11/11/2020	0-6"	<0.0250	3.91	4.34	33.1	41.4	376	10,100	1,670	12,146	225	
B-15	11/11/2020	0-6"	<0.0250	<.0250	<.0250	0.113	0.1	<200	484	174	658	891	
B-16	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	203	80	283	94	
B-17	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	<25.0	<50.0	<275	67	
B-18	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	<25.0	<50.0	<275	60	
B-19	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	32	<50.0	32	31	
B-20	11/11/2020	0-6"	<0.0250	<.0250	<.0250	<.0250	<0.0250	<200	193	84	277	272	
	1		.5.3200	1		Assessment S				, , , , , , , , , , , , , , , , , , ,			
TP1-4	6/22/21	4	<0.096	3.4	4.0	29	36.4	910	3,700	1,000	5,610	86	
TP1-8	6/22/21	8	<0.019	<0.038	<0.038	<0.077	< 0.077	<3.8	<9.9	<49	<49	<60	
TP1-12	6/22/21	12	<0.018	< 0.036	<0.036	<0.072	<0.072	<3.6	<9.6	<48	<48	<60	
TP1-13	6/22/21	13	<0.091	<0.18	<0.18	<0.36	<0.36	<18	<10	<50	<50	<60	

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### Table 1 **Summary of Soil Analytical Data** Abby BLF State #1 **EOG Resources** Lea County, New Mexico

	Commite	Depth	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO(C6-C10)	DRO(C10- C28)	MRO (C28- C35)	Total GRO/DRO/MRO		
Sample ID	Sample Date	(feet	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	
	Duto	bgs)			Table I C	losure Criteria	for Soils <50 f	eet Depth to Gro	et Depth to Groundwater 19.15.2				
			10 mg/Kg				50 mg/Kg	1,000 ו	ng/Kg		2,500 mg/Kg	10,000 mg/Kg	
TP2-4	6/22/21	4	15	68	31	230	344	4,100	23,000	6,600	33,700	470	
TP2-10	6/22/21	10	7.4	51	20	140	218.4	3,800	7,900	1,800	13,500	150	
TP2-15	6/22/21	15	0.046	0.20	0.086	0.67	1.002	23	310	89	422	240	
TP2-18	6/22/21	18	<0.022	<0.044	<0.044	<0.088	<0.088	<4.4	190	73	263	260	
TP3-4	6/22/21	4	4.6	63	28	180	275.6	3,700	12.000	2.900	18.600	<60	
TP3-4	6/22/21	8	0.41	6.3	3.2	26	35.91	760	3,000	800	4,560	140	
TP3-12	6/22/21	12	<0.093	0.33	0.29	2.1	2.72	100	540	170	810	68	
11 0 12	3/22/2 T	12	10.000	0.00	0.23	2.1	2.72	100	040	170	0.0	00	
TP4-S	6/22/21	Surface	<0.017	<0.034	<0.034	<0.069	<0.069	<3.4	12	<49	12	<59	
TP4-2	6/22/21	2	<0.019	<0.037	<0.037	<0.074	<0.074	<3.7	<9.3	<46	<46	<60	
TP5-S	6/22/21	Surface	<0.020	<0.040	<0.040	<0.080	<0.080	<4.0	290	380	670	<60	
TP5-2	6/22/21	2	<0.018	<0.036	<0.036	<0.072	<0.072	<3.6	<10	<50	<50	<60	
TP6-S	6/22/21	Surface	<0.020	<0.040	<0.040	<0.080	<0.080	<4.0	<9.5	<48	<48	<60	
TP6-2	6/22/21	2	<0.018	<0.036	<0.036	<0.071	<0.071	<3.6	<9.7	<48	<48	<59	
TP7-S	6/22/21	Surface	<0.017	<0.033	<0.033	<0.067	<0.067	<3.3	36	58	94	<60	
TP7-2	6/22/21	2	<0.019	<0.038	<0.038	<0.076	<0.076	<3.8	<9.1	<45	<45	88	

- 1. Values reported in mg/kg
- 2. <= Value Less than Reporting Limit (RL)
- 3. Bold Indicates Analyte Detected
- 4 BTEX analyses by EPA Method SW 8021B.
- 5. TPH analyses by EPA Method SW 8015 Mod.
- 6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil
- Yellow shaded cells indicate analytical samples that exceed the NMAC 19.15.29.12 Table 1 Closure Criteria for the site.
   Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table 1 Closure Criteria for the site (Surface to 4 Feet Below Grade).

B-BH 2 Sample Point Excavated

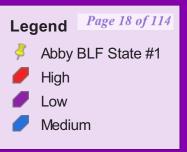
Table 2
Daily Disposal Summary
Abby BLF State #1
EOG Resources
Lea County, New Mexico

Date of Disposal	Cubic Yards Disposed
6/22/2021	120
7/16/2021	480
7/19/2021	140
Project Total	740

# Attachment A Site Characterization Documentation

Received by OCD: 6/22/2022 1:37:57 PM ADDY ALF State #1

Karst Potiential Map



Abby BLF State #1



300 ft

# OSE POD Locations Map - Abby BLF State #1



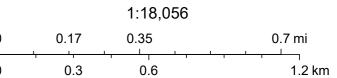
6/21/2022, 9:23:54 AM GIS WATERS PODs

Pending

Pending

OSE District Boundary

SiteBoundaries



Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, U.S. Department of Energy Office of Legacy Management



# Amarillo, TX - Artesia, NM Midland, TX - Oklahoma City, OK San Antonio, TX - Fort Collins, CO

# **BORING LOG**

Job Number: 700438.265.01

Driller/Co.: Talon/LPE

Boring Number: ATW # ( Job Number: Site Name: FUG Alby BLF SALTLPST # MA

Bit Size: . 5 7/8 "

Rig Type: Reichlos W

Location: 33.5422 37,

Weather: Sumy Sample Retrieval Method: Grab

Drilling Method: Air Ratery

Time	Sample Number	Sample Interval (ft)	Sample Recovery (ft)	nscs	Sample Material/Comments (include composition, moisture, hardness, grain size, color)	ODOR	(mdd) Old
		THE PARTY OF	NA	NA	Sand W/ Gravel, brain	N	VA T
		5-10'			SAA	4	+
		10-15			SAA	1	+
	4	15-20			SAA		+
	5	20-25'			Sandstone W/ Sand brown		+
	6	25-30	-		SAA		
	7	30-75			SAA		+
	8	35-40	-		Sand out bravel, brown		
	9	40-45	-		SAA		H
	10	45-50	-		SAA.	_	-
	11	505	_		SAA.		1/

Water Mensured @ 54.81 de bys

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Page 1 of 1

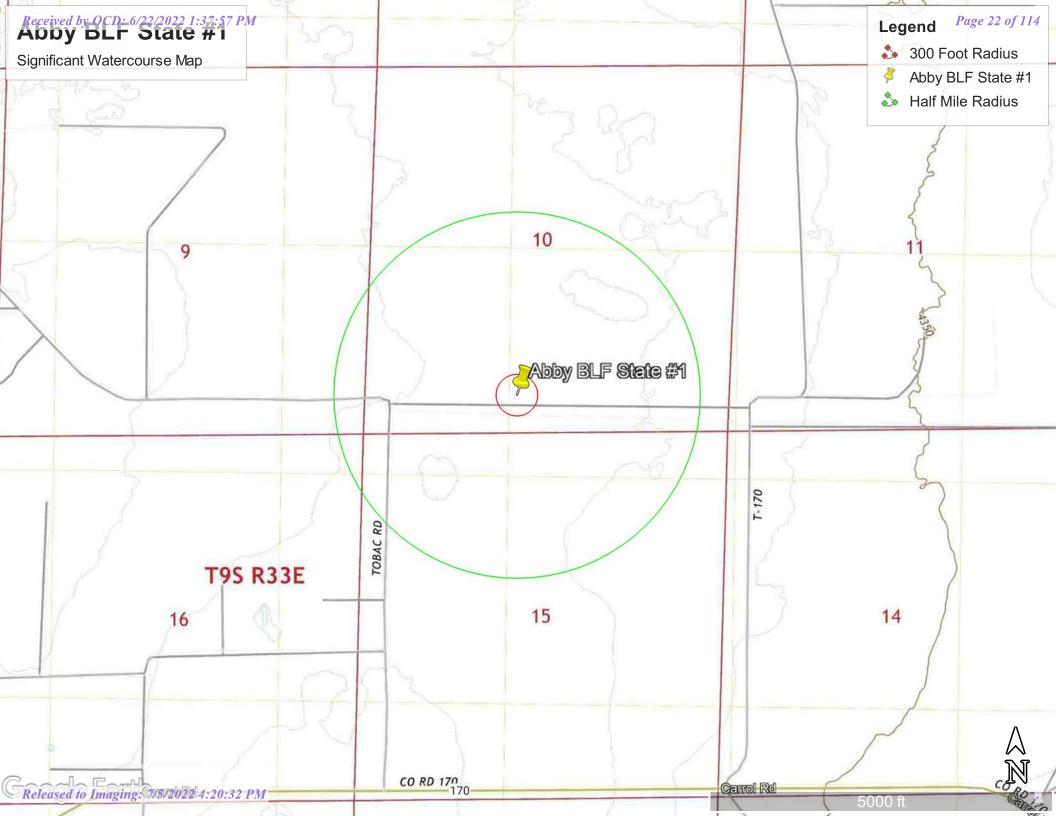
## STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Abby Temp Well #1 HOLE DESIGNATION:

PROJECT NAME: EOG Abby BLF State #1 Release Site

NUMBER: 11220612 DATE COMPLETED: 20 July 2021 CLIENT: EOG Resources. INC. DRILLING METHOD: Air Rotary LOCATION: N-10-09S-33E, Lea County, NM 33.542237, -103.555846 FIELD PERSONNEL: Lee M./Zach C.

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS		DEPTH m BGS	МО	NITO	R INSTALLATION	<u>~</u>	1	SAMF		
							NUMBER	INTERVAL	REC (%)	mS/cm	
- 5 —	SAND, fine/medium, with sandstone, brown, dry  SAND, with caliche, dry		5.00								
10											
15											
20			00.00								
25	SAND, fine/medium, with consolidated sandstone throughout, dry		23.00								
30 –	SAND, with partialy consolidated sandstone and caliche		30.00								
35											
40											
45	CLAYEY SAND, with caliche stone interbedded, brown, dry		45.00		=						
50											
55	END OF BOREHOLE @ 57.40ft BGS		57.40								
60	END OF BOXENOLE (@ 07.10x 550			WELL Screen 47.4 Length:	ed inte 10 to 5	erval: 57.40ft BGS					
65											
70											
75											
NO	OTES: MEASURING POINT ELEVATIONS MAY CHAN	GE; REFE	R TO CUF	RRENT	ELE\	VATION TABLE					





# Abby BLF State #1



July 2, 2021

#### Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine



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

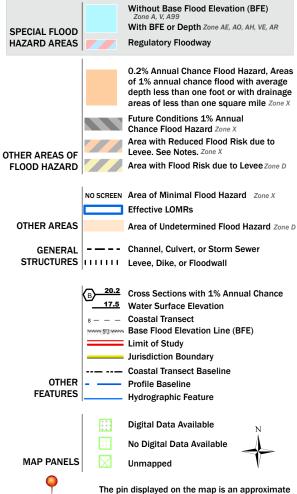
# Received by OCD: 6/22/2022 1:37:57,PM National Flood Hazard Layer FIRMette





# Legend

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



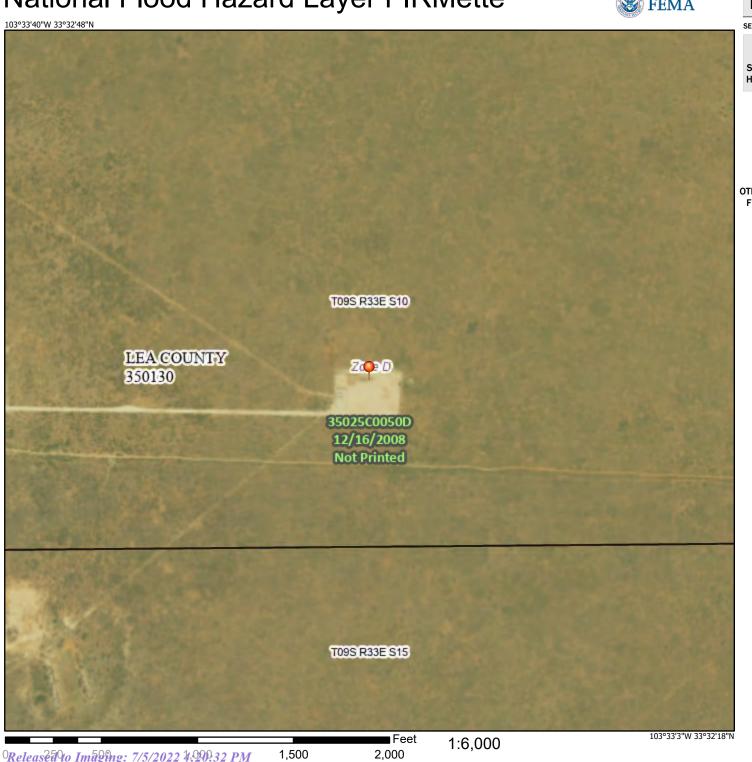
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

point selected by the user and does not represent

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/21/2022 at 10:19 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



# Attachment B Laboratory Analytical Reports and Chain-of-Custody Documentation

Report to:
Jeff Walker

104 South 4th Street
Artesia, NM 88210







5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

Practical Solutions for a Better Tomorrow

# **Analytical Report**

EOG Resources Inc. - Carlsbad

Project Name: Abb-1 BLF State #1

Work Order: E011038

Job Number: 19034-0001

Received: 11/12/2020

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 11/18/20

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM009792018-1 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 11/18/20

Jeff Walker 104 South 4th Street Artesia, NM 88210



Project Name: Abb-1 BLF State #1

Workorder: E011038

Date Received: 11/12/2020 9:35:00AM

Jeff Walker.

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/12/2020 9:35:00AM, under the Project Name: Abb-1 BLF State #1.

The analytical test results summarized in this report with the Project Name: Abb-1 BLF State #1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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# Sample Summary

EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	Donoutod
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/20 08:11

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP-1	E011038-01A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-2	E011038-02A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-3	E011038-03A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-4	E011038-04A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-5	E011038-05A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-6	E011038-06A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-7	E011038-07A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SP-8	E011038-08A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SW-1	E011038-09A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SW-2	E011038-10A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SW-3	E011038-11A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SW-4	E011038-12A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SW-5	E011038-13A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
SW-6	E011038-14A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-1	E011038-15A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-2	E011038-16A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-3	E011038-17A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-4	E011038-18A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-5	E011038-19A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-6	E011038-20A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-7	E011038-21A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-8	E011038-22A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-9	E011038-23A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-10	E011038-24A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-11	E011038-25A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-12	E011038-26A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-13	E011038-27A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-14	E011038-28A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-15	E011038-29A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-16	E011038-30A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-17	E011038-31A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-18	E011038-32A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-19	E011038-33A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.
B-20	E011038-34A	Soil	11/11/20	11/12/20	Glass Jar, 4 oz.



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104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### SP-1 E011038-01

	E011050-01				
	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
0.685	0.250	10	11/12/20	11/12/20	
15.9	0.250	10	11/12/20	11/12/20	
9.80	0.250	10	11/12/20	11/12/20	
45.6	0.500	10	11/12/20	11/12/20	
21.9	0.250	10	11/12/20	11/12/20	
67.5	0.250	10	11/12/20	11/12/20	
	104 %	70-130	11/12/20	11/12/20	
mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
588	200	10	11/12/20	11/12/20	
	94.8 %	70-130	11/12/20	11/12/20	
mg/kg	mg/kg	Analys	t: JL		Batch: 2046037
8300	250	10	11/13/20	11/16/20	
1240	500	10	11/13/20	11/16/20	
	446 %	50-200	11/13/20	11/16/20	S5
mg/kg	mg/kg	Analys	t: NE		Batch: 2046041
- 0 0	0 0				
	mg/kg 0.685 15.9 9.80 45.6 21.9 67.5  mg/kg 588  mg/kg 8300 1240	Result         Limit           mg/kg         mg/kg           0.685         0.250           15.9         0.250           9.80         0.250           45.6         0.500           21.9         0.250           67.5         0.250           104 %         mg/kg           mg/kg         mg/kg           588         200           94.8 %         mg/kg           mg/kg         mg/kg           8300         250           1240         500	Reporting           Result         Limit         Dilution           mg/kg         mg/kg         Analys           0.685         0.250         10           15.9         0.250         10           9.80         0.250         10           45.6         0.500         10           21.9         0.250         10           67.5         0.250         10           mg/kg         mg/kg         Analys           588         200         10           94.8 %         70-130           mg/kg         mg/kg         Analys           8300         250         10           1240         500         10	Reporting         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           0.685         0.250         10         11/12/20           15.9         0.250         10         11/12/20           9.80         0.250         10         11/12/20           45.6         0.500         10         11/12/20           21.9         0.250         10         11/12/20           67.5         0.250         10         11/12/20           mg/kg         mg/kg         Analyst: IY           588         200         10         11/12/20           mg/kg         mg/kg         Analyst: JL           8300         250         10         11/13/20           1240         500         10         11/13/20	Reporting           Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           0.685         0.250         10         11/12/20         11/12/20           15.9         0.250         10         11/12/20         11/12/20           9.80         0.250         10         11/12/20         11/12/20           45.6         0.500         10         11/12/20         11/12/20           21.9         0.250         10         11/12/20         11/12/20           67.5         0.250         10         11/12/20         11/12/20           104 %         70-130         11/12/20         11/12/20           mg/kg         mg/kg         Analyst: IY           588         200         10         11/12/20         11/12/20           mg/kg         mg/kg         Analyst: JL           8300         250         10         11/13/20         11/16/20           1240         500         10         11/13/20         11/16/20



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### SP-2

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2046030
Benzene	1.43	0.250	10	11/12/20	11/12/20	
Toluene	17.4	0.250	10	11/12/20	11/12/20	
Ethylbenzene	7.50	0.250	10	11/12/20	11/12/20	
p,m-Xylene	42.4	0.500	10	11/12/20	11/12/20	
o-Xylene	21.6	0.250	10	11/12/20	11/12/20	
Total Xylenes	64.0	0.250	10	11/12/20	11/12/20	
Surrogate: 4-Bromochlorobenzene-PID		108 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	540	200	10	11/12/20	11/12/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.1 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	13300	500	20	11/13/20	11/17/20	
Oil Range Organics (C28-C35)	2080	1000	20	11/13/20	11/17/20	
Surrogate: n-Nonane		470 %	50-200	11/13/20	11/17/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: NE		Batch: 2046041
Chloride	440	20.0	1	11/13/20	11/13/20	
*			1		11/13/20	Datem 20



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### SP-3

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Benzene	ND	0.250	10	11/12/20	11/12/20	
Toluene	3.11	0.250	10	11/12/20	11/12/20	
Ethylbenzene	2.67	0.250	10	11/12/20	11/12/20	
p,m-Xylene	14.9	0.500	10	11/12/20	11/12/20	
o-Xylene	7.49	0.250	10	11/12/20	11/12/20	
Total Xylenes	22.4	0.250	10	11/12/20	11/12/20	
Surrogate: 4-Bromochlorobenzene-PID		106 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	251	200	10	11/12/20	11/12/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.6 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	3280	125	5	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	558	250	5	11/13/20	11/16/20	
Surrogate: n-Nonane		207 %	50-200	11/13/20	11/16/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046041
·	•	20.0		11/13/20	11/13/20	.,,



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Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### SP-4

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Benzene	ND	0.250	10	11/12/20	11/12/20	
Toluene	1.48	0.250	10	11/12/20	11/12/20	
Ethylbenzene	1.74	0.250	10	11/12/20	11/12/20	
p,m-Xylene	8.73	0.500	10	11/12/20	11/12/20	
o-Xylene	4.81	0.250	10	11/12/20	11/12/20	
Total Xylenes	13.5	0.250	10	11/12/20	11/12/20	
Surrogate: 4-Bromochlorobenzene-PID		105 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	200	10	11/12/20	11/12/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.9 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	2820	125	5	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	492	250	5	11/13/20	11/16/20	
Surrogate: n-Nonane		183 %	50-200	11/13/20	11/16/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046041
Chloride	292	20.0	-	11/13/20	11/13/20	



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### **SP-5**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2046030
Benzene	0.999	0.250	10	11/12/20	11/12/20	
Toluene	20.8	0.250	10	11/12/20	11/12/20	
Ethylbenzene	9.49	0.250	10	11/12/20	11/12/20	
p,m-Xylene	55.2	0.500	10	11/12/20	11/12/20	
o-Xylene	27.6	0.250	10	11/12/20	11/12/20	
Total Xylenes	82.8	0.250	10	11/12/20	11/12/20	
Surrogate: 4-Bromochlorobenzene-PID		106 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2046030
Gasoline Range Organics (C6-C10)	713	200	10	11/12/20	11/12/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		96.1 %	70-130	11/12/20	11/12/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	12400	250	10	11/13/20	11/17/20	
Oil Range Organics (C28-C35)	1870	500	10	11/13/20	11/17/20	
Surrogate: n-Nonane		552 %	50-200	11/13/20	11/17/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: NE		Batch: 2046041
Chloride	387	20.0	1	11/13/20	11/13/20	



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### **SP-6**

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analyst	IY		Batch: 2046030
0.757	0.250	10	11/12/20	11/12/20	
13.4	0.250	10	11/12/20	11/12/20	
9.22	0.250	10	11/12/20	11/12/20	
51.1	0.500	10	11/12/20	11/12/20	
25.8	0.250	10	11/12/20	11/12/20	
77.0	0.250	10	11/12/20	11/12/20	
	110 %	70-130	11/12/20	11/12/20	
mg/kg	mg/kg	Analyst: IY			Batch: 2046030
758	200	10	11/12/20	11/12/20	
	94.8 %	70-130	11/12/20	11/12/20	
mg/kg	mg/kg	Analyst	JL		Batch: 2046037
mg/kg 15400	mg/kg 250	Analyst:	JL 11/13/20	11/14/20	Batch: 2046037
		-		11/14/20 11/14/20	Batch: 2046037
15400	250	10	11/13/20		Batch: 2046037
15400	250 500	10 10	11/13/20 11/13/20 11/13/20	11/14/20	
	mg/kg 0.757 13.4 9.22 51.1 25.8 77.0	Result         Limit           mg/kg         mg/kg           0.757         0.250           13.4         0.250           9.22         0.250           51.1         0.500           25.8         0.250           77.0         0.250           110 %         mg/kg           758         200	Result         Limit         Dilution           mg/kg         mg/kg         Analyst:           0.757         0.250         10           13.4         0.250         10           9.22         0.250         10           51.1         0.500         10           25.8         0.250         10           77.0         0.250         10           110 %         70-130           mg/kg         mg/kg         Analyst:           758         200         10	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           0.757         0.250         10         11/12/20           13.4         0.250         10         11/12/20           9.22         0.250         10         11/12/20           51.1         0.500         10         11/12/20           25.8         0.250         10         11/12/20           77.0         0.250         10         11/12/20           mg/kg         mg/kg         Analyst: IY           758         200         10         11/12/20	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY <ul> <li>0.757</li> <li>0.250</li> <li>10                 <li>11/12/20</li> <li< td=""></li<></li></ul>



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104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### **SP-7**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Benzene	ND	0.250	10	11/12/20	11/13/20	
Toluene	ND	0.250	10	11/12/20	11/13/20	
Ethylbenzene	ND	0.250	10	11/12/20	11/13/20	
p,m-Xylene	1.19	0.500	10	11/12/20	11/13/20	
o-Xylene	0.566	0.250	10	11/12/20	11/13/20	
Total Xylenes	1.75	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		105 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.0 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	4840	125	5	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	900	250	5	11/13/20	11/16/20	
Surrogate: n-Nonane		133 %	50-200	11/13/20	11/16/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046041
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104 South 4th Street	Project Number:	19034-0001	Reported:
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### SP-8

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2046030
Benzene	0.0398	0.0250	1	11/12/20	11/13/20	
Toluene	1.10	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	1.44	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	7.34	0.0500	1	11/12/20	11/13/20	
o-Xylene	3.40	0.0250	1	11/12/20	11/13/20	
Total Xylenes	10.7	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		122 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	119	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	rst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	2900	125	5	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	477	250	5	11/13/20	11/16/20	
Surrogate: n-Nonane		178 %	50-200	11/13/20	11/16/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: NE		Batch: 2046041
Allions by EPA 500.0/9050A						



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104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### **SW-1**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	0.0655	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	0.0655	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		102 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.0 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	61.3	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		98.1 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: NE		Batch: 2046041
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EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
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Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

## SW-2

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	lyst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		103 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	lyst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	lyst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	ND	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		106 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	lyst: NE		Batch: 2046041
Chloride	277	20.0	1	11/13/20	11/13/20	•



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

## SW-3

Analyzed  11/13/20 11/13/20 11/13/20 11/13/20 11/13/20	Notes  Batch: 2046030
11/13/20 11/13/20 11/13/20 11/13/20	
11/13/20 11/13/20 11/13/20	Batch: 2046030
11/13/20 11/13/20 11/13/20	
11/13/20 11/13/20	
11/13/20	
11/13/20	
11/13/20	
11/13/20	
	Batch: 2046030
11/13/20	
11/13/20	
	Batch: 2046037
11/14/20	
11/14/20	
11/14/20	
	Batch: 2046041
	11/13/20 11/13/20 11/14/20 11/14/20



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
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Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### **SW-4**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		102 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.1 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	39.8	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		114 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: NE		Batch: 2046041
			<u> </u>	11/13/20	11/13/20	



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Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

## SW-5

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		100 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.7 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	25.4	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		113 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: NE		Batch: 2046041
Chloride	194	20.0	1	11/13/20	11/13/20	



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### **SW-6**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		100 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	ND	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		109 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: NE		Batch: 2046041
Chloride	114	20.0	1	11/13/20	11/13/20	



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### B-1

Dilution  Analyst	Prepared	Analyzed	Notes
	•	Analyzed	Notes
Analyst			
	: IY		Batch: 2046030
10	11/12/20	11/13/20	
10	11/12/20	11/13/20	
10	11/12/20	11/13/20	
10	11/12/20	11/13/20	
10	11/12/20	11/13/20	
10	11/12/20	11/13/20	
30	11/12/20	11/13/20	
Analyst: IY			Batch: 2046030
10	11/12/20	11/13/20	
30	11/12/20	11/13/20	
Analyst: JL			Batch: 2046037
10	11/13/20	11/14/20	
1.0	11/13/20	11/14/20	
10	11/13/20		
00	11/13/20	11/14/20	S5
	11/13/20	11/14/20	S5 Batch: 2046041
	10 10 10 10 10 30 Analyst 10	10 11/12/20 10 11/12/20 10 11/12/20 10 11/12/20 10 11/12/20 30 11/12/20 Analyst: IY 10 11/12/20 Analyst: JL	10 11/12/20 11/13/20 10 11/12/20 11/13/20 10 11/12/20 11/13/20 10 11/12/20 11/13/20 10 11/12/20 11/13/20 10 11/12/20 11/13/20 30 11/12/20 11/13/20 Analyst: IY 10 11/12/20 11/13/20 Analyst: JL



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### B-2 E011038-16

		E011038-16				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Benzene	1.88	0.250	10	11/12/20	11/13/20	
Toluene	23.6	0.250	10	11/12/20	11/13/20	
Ethylbenzene	14.7	0.250	10	11/12/20	11/13/20	
p,m-Xylene	67.3	0.500	10	11/12/20	11/13/20	
o-Xylene	33.6	0.250	10	11/12/20	11/13/20	
Total Xylenes	101	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		110 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	859	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.9 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	19600	1250	50	11/13/20	11/17/20	
Oil Range Organics (C28-C35)	3120	2500	50	11/13/20	11/17/20	
Surrogate: n-Nonane		757 %	50-200	11/13/20	11/17/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046041
Chloride	467	20.0	1	11/13/20	11/14/20	



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### **B-3**

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analyst	:: IY		Batch: 2046030
0.926	0.250	10	11/12/20	11/13/20	
7.51	0.250	10	11/12/20	11/13/20	
6.21	0.250	10	11/12/20	11/13/20	
31.3	0.500	10	11/12/20	11/13/20	
16.3	0.250	10	11/12/20	11/13/20	
47.6	0.250	10	11/12/20	11/13/20	
	109 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Analyst: IY			Batch: 2046030
532	200	10	11/12/20	11/13/20	
	94.2 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Analyst	Analyst: JL		Batch: 2046037
19900	500	20	11/13/20	11/14/20	
4720	1000	20	11/13/20	11/14/20	
4720	1000 570 %	50-200	11/13/20	11/14/20	S5
4720 mg/kg			11/13/20		S5 Batch: 2046041
	mg/kg 0.926 7.51 6.21 31.3 16.3 47.6  mg/kg 532	Result         Limit           mg/kg         mg/kg           0.926         0.250           7.51         0.250           6.21         0.250           31.3         0.500           16.3         0.250           47.6         0.250           I09 %           mg/kg         mg/kg           532         200           94.2 %         mg/kg	Result         Limit         Dilution           mg/kg         mg/kg         Analyst           0.926         0.250         10           7.51         0.250         10           6.21         0.250         10           31.3         0.500         10           16.3         0.250         10           47.6         0.250         10           mg/kg         Mg/kg         Analyst           532         200         10           94.2 %         70-130           mg/kg         mg/kg         Analyst	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           0.926         0.250         10         11/12/20           7.51         0.250         10         11/12/20           6.21         0.250         10         11/12/20           31.3         0.500         10         11/12/20           16.3         0.250         10         11/12/20           47.6         0.250         10         11/12/20           mg/kg         mg/kg         Analyst: IY           532         200         10         11/12/20           mg/kg         mg/kg         Analyst: IY           mg/kg         Mg/kg         Analyst: IY	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           0.926         0.250         10         11/12/20         11/13/20           7.51         0.250         10         11/12/20         11/13/20           6.21         0.250         10         11/12/20         11/13/20           31.3         0.500         10         11/12/20         11/13/20           16.3         0.250         10         11/12/20         11/13/20           47.6         0.250         10         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20         11/13/20           532         200         10         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20



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### **B-4**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	llyst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	0.0388	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	0.0313	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	0.277	0.0500	1	11/12/20	11/13/20	
o-Xylene	0.128	0.0250	1	11/12/20	11/13/20	
Total Xylenes	0.405	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		108 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	1840	25.0	1	11/13/20	11/14/20	
Oil Range Organics (C28-C35)	490	50.0	1	11/13/20	11/14/20	
Surrogate: n-Nonane		160 %	50-200	11/13/20	11/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: NE		Batch: 2046041



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### B-5

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	yst: IY		Batch: 2046030
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	yst: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.1 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	yst: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	1050	50.0	2	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	294	100	2	11/13/20	11/16/20	
Surrogate: n-Nonane		109 %	50-200	11/13/20	11/16/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	yst: NE		Batch: 2046041
Chloride	723	20.0	1	11/13/20	11/14/20	

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### B-6 E011038-20

		E011038-20				
		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2046030
Benzene	ND	0.250	10	11/12/20	11/13/20	
Toluene	ND	0.250	10	11/12/20	11/13/20	
Ethylbenzene	ND	0.250	10	11/12/20	11/13/20	
p,m-Xylene	0.824	0.500	10	11/12/20	11/13/20	
o-Xylene	0.587	0.250	10	11/12/20	11/13/20	
Total Xylenes	1.41	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		105 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: IY		Batch: 2046030
Gasoline Range Organics (C6-C10)	ND	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.4 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2046037
Diesel Range Organics (C10-C28)	4350	250	10	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	881	500	10	11/13/20	11/16/20	
Surrogate: n-Nonane		131 %	50-200	11/13/20	11/16/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: NE		Batch: 2046041
Chloride	333	20.0	1	11/13/20	11/14/20	



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### **B-7**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046032
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		99.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.7 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	714	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	254	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		94.3 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: NE		Batch: 2046042
	•	·		<u> </u>	11/16/20	



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### **B-8**

	E011050 22				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analys	st: IY		Batch: 2046032
0.788	0.250	10	11/12/20	11/13/20	
6.44	0.250	10	11/12/20	11/13/20	
4.64	0.250	10	11/12/20	11/13/20	
22.9	0.500	10	11/12/20	11/13/20	
11.7	0.250	10	11/12/20	11/13/20	
34.6	0.250	10	11/12/20	11/13/20	
	106 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Analys	st: IY		Batch: 2046032
347	200	10	11/12/20	11/13/20	
	90.9 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Analys	st: JL		Batch: 2046038
14500	500	20	11/13/20	11/17/20	
2550	1000	20	11/13/20	11/17/20	
	355 %	50-200	11/13/20	11/17/20	S5
mg/kg	mg/kg	Analys	st: NE		Batch: 2046042
3770	40.0		11/13/20	11/16/20	
	mg/kg 0.788 6.44 4.64 22.9 11.7 34.6  mg/kg 347  mg/kg 14500 2550	Result         Reporting Limit           mg/kg         mg/kg           0.788         0.250           6.44         0.250           4.64         0.250           22.9         0.500           11.7         0.250           34.6         0.250           106 %         mg/kg           mg/kg         mg/kg           347         200           90.9 %         mg/kg           14500         500           2550         1000           355 %         mg/kg           mg/kg         mg/kg	mg/kg         mg/kg         Analys           0.788         0.250         10           6.44         0.250         10           4.64         0.250         10           22.9         0.500         10           11.7         0.250         10           34.6         0.250         10           mg/kg         mg/kg         Analys           347         200         10           90.9 %         70-130         mg/kg           mg/kg         mg/kg         Analys           14500         500         20           2550         1000         20           355 %         50-200           mg/kg         Mg/kg         Analys	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           0.788         0.250         10         11/12/20           6.44         0.250         10         11/12/20           4.64         0.250         10         11/12/20           22.9         0.500         10         11/12/20           34.6         0.250         10         11/12/20           34.6         0.250         10         11/12/20           mg/kg         mg/kg         Analyst: IY           347         200         10         11/12/20           mg/kg         mg/kg         Analyst: IL           14500         500         20         11/13/20           2550         1000         20         11/13/20           355 %         50-200         11/13/20           mg/kg         mg/kg         Analyst: NE	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY         Analyst: IY           0.788         0.250         10         11/12/20         11/13/20           6.44         0.250         10         11/12/20         11/13/20           4.64         0.250         10         11/12/20         11/13/20           22.9         0.500         10         11/12/20         11/13/20           11.7         0.250         10         11/12/20         11/13/20           34.6         0.250         10         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20         11/13/20           14500         500         20         11/13/20         11/17/20           2550         1000         20         11/13/20         11/17/20           355 %         50-200         11/13/20         11/17/20           mg/kg         mg/kg         Analyst: NE



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104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### B-9

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: IY		Batch: 2046032
Benzene	2.50	0.250	10	11/12/20	11/13/20	
Toluene	16.0	0.250	10	11/12/20	11/13/20	
Ethylbenzene	11.2	0.250	10	11/12/20	11/13/20	
p,m-Xylene	54.1	0.500	10	11/12/20	11/13/20	
o-Xylene	28.2	0.250	10	11/12/20	11/13/20	
Total Xylenes	82.4	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		109 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	st: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	686	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.2 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	28400	1250	50	11/13/20	11/14/20	
Oil Range Organics (C28-C35)	6270	2500	50	11/13/20	11/14/20	
Surrogate: n-Nonane		934 %	50-200	11/13/20	11/14/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: NE		Batch: 2046042
Chloride	1990	20.0	1	11/13/20	11/16/20	



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### B-10 E011038-24

		E011036-24				
Analyte	Result	Reporting Limit	Dilution	Duomonod	Analyzed	Notes
Analyte	Result	Limit	Dilution	Prepared	Anaiyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046032
Benzene	ND	0.250	10	11/12/20	11/13/20	
Toluene	0.667	0.250	10	11/12/20	11/13/20	
Ethylbenzene	2.44	0.250	10	11/12/20	11/13/20	
p,m-Xylene	14.6	0.500	10	11/12/20	11/13/20	
o-Xylene	8.09	0.250	10	11/12/20	11/13/20	
Total Xylenes	22.7	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		104 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	241	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.3 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	10100	250	10	11/13/20	11/14/20	
Oil Range Organics (C28-C35)	2310	500	10	11/13/20	11/14/20	
Surrogate: n-Nonane		305 %	50-200	11/13/20	11/14/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046042
Chloride	1130	20.0	1	11/13/20	11/16/20	



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## B-11 E011038-25

	E011050 25				
Result	Reporting Limit		Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	lyst: IY		Batch: 2046032
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0500	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
	98.9 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046032
ND	20.0	1	11/12/20	11/13/20	
	89.0 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Ana	lyst: JL		Batch: 2046038
49.4	25.0	1	11/13/20	11/13/20	
ND	50.0	1	11/13/20	11/13/20	
	91.0 %	50-200	11/13/20	11/13/20	
mg/kg	mg/kg	Ana	lyst: NE		Batch: 2046042
362	20.0	1	11/13/20	11/16/20	
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND mg/kg 49.4 ND	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           ND         0.0250           ND         0.0250           mg/kg         mg/kg           MB/kg         mg/kg           MB/kg         mg/kg           MB/kg         mg/kg           MB/kg         mg/kg           MB/kg         mg/kg	mg/kg         mg/kg         Ana           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           98.9 %         70-130           mg/kg         mg/kg         Ana           ND         20.0         1           89.0 %         70-130         1           mg/kg         mg/kg         Ana           49.4         25.0         1           ND         50.0         1           91.0 %         50-200           mg/kg         mg/kg         Ana	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         11/12/20           ND         0.0250         1         11/12/20           ND         0.0250         1         11/12/20           ND         0.0500         1         11/12/20           ND         0.0250         1         11/12/20           ND         0.0250         1         11/12/20           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         11/12/20           mg/kg         mg/kg         Analyst: JL           49.4         25.0         1         11/13/20           ND         50.0         1         11/13/20           ND         50.0         1         11/13/20           Mg/kg         mg/kg         Analyst: JL         11/13/20	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         ND         20.0         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         ND         20.0         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: JL         11/13/20         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: JL         11/13/20         11/13/20         11/13/20           mg/kg         mg/kg         Analy



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## B-12 E011038-26

		E011050-20				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046032
Benzene	ND	0.250	10	11/12/20	11/13/20	
Toluene	0.311	0.250	10	11/12/20	11/13/20	
Ethylbenzene	0.893	0.250	10	11/12/20	11/13/20	
p,m-Xylene	5.56	0.500	10	11/12/20	11/13/20	
o-Xylene	3.27	0.250	10	11/12/20	11/13/20	
Total Xylenes	8.84	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2046032
Gasoline Range Organics (C6-C10)	ND	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: Л		Batch: 2046038
Diesel Range Organics (C10-C28)	4390	250	10	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	773	500	10	11/13/20	11/16/20	
Surrogate: n-Nonane		166 %	50-200	11/13/20	11/16/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046042
Chloride	1250	20.0	1	11/13/20	11/16/20	
Chloride	1250	20.0	1	11/13/20	11/10/20	



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## B-13 E011038-27

	E011050 27				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: IY		Batch: 2046032
ND	0.250	10	11/12/20	11/13/20	
0.323	0.250	10	11/12/20	11/13/20	
0.944	0.250	10	11/12/20	11/13/20	
4.76	0.500	10	11/12/20	11/13/20	
2.44	0.250	10	11/12/20	11/13/20	
7.20	0.250	10	11/12/20	11/13/20	
	103 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Anal	yst: IY		Batch: 2046032
ND	200	10	11/12/20	11/13/20	
	91.5 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Anal	yst: JL		Batch: 2046038
8570	125	5	11/13/20	11/14/20	
2330	250	5	11/13/20	11/14/20	
	176 %	50-200	11/13/20	11/14/20	
mg/kg	mg/kg	Anal	yst: NE		Batch: 2046042
921	20.0	1	11/13/20	11/16/20	
	mg/kg ND 0.323 0.944 4.76 2.44 7.20  mg/kg ND  mg/kg 2330	Result         Limit           mg/kg         mg/kg           ND         0.250           0.323         0.250           0.944         0.250           4.76         0.500           2.44         0.250           7.20         0.250           103 %         mg/kg           ND         200           91.5 %         mg/kg           mg/kg         mg/kg           8570         125           2330         250           176 %         mg/kg           mg/kg         mg/kg	mg/kg         mg/kg         Anal           ND         0.250         10           0.323         0.250         10           0.944         0.250         10           4.76         0.500         10           2.44         0.250         10           7.20         0.250         10           mg/kg         mg/kg         Anal           ND         200         10           91.5 %         70-130           mg/kg         mg/kg         Anal           8570         125         5           2330         250         5           176 %         50-200           mg/kg         mg/kg         Anal	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.250         10         11/12/20           0.323         0.250         10         11/12/20           0.944         0.250         10         11/12/20           4.76         0.500         10         11/12/20           2.44         0.250         10         11/12/20           7.20         0.250         10         11/12/20           mg/kg         mg/kg         Analyst: IY           ND         200         10         11/12/20           mg/kg         mg/kg         Analyst: JL           8570         125         5         11/13/20           2330         250         5         11/13/20           mg/kg         mg/kg         Analyst: JL         11/13/20	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.250         10         11/12/20         11/13/20           0.323         0.250         10         11/12/20         11/13/20           0.944         0.250         10         11/12/20         11/13/20           4.76         0.500         10         11/12/20         11/13/20           2.44         0.250         10         11/12/20         11/13/20           7.20         0.250         10         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY           ND         200         10         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: JL         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: JL         11/14/20           8570         125         5         11/13/20         11/14/20           2330         250         5         11/13/20         11/14/20           mg/kg         mg/kg         Analyst: NE         11/14/20



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		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	t: IY		Batch: 2046032
Benzene	ND	0.250	10	11/12/20	11/13/20	
Toluene	3.91	0.250	10	11/12/20	11/13/20	
Ethylbenzene	4.34	0.250	10	11/12/20	11/13/20	
p,m-Xylene	22.1	0.500	10	11/12/20	11/13/20	
o-Xylene	11.0	0.250	10	11/12/20	11/13/20	
Total Xylenes	33.1	0.250	10	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		104 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analys	t: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	376	200	10	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.4 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	t: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	10100	250	10	11/13/20	11/16/20	
Oil Range Organics (C28-C35)	1670	500	10	11/13/20	11/16/20	
Surrogate: n-Nonane		319 %	50-200	11/13/20	11/16/20	S5
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	t: NE		Batch: 2046042
Chloride	225	20.0	1	11/13/20	11/16/20	



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## B-15 E011038-29

		E011050 27				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046032
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	0.0743	0.0500	1	11/12/20	11/13/20	
o-Xylene	0.0390	0.0250	1	11/12/20	11/13/20	
Total Xylenes	0.113	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		102 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	lyst: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.8 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	lyst: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	484	25.0	1	11/13/20	11/13/20	
Oil Range Organics (C28-C35)	174	50.0	1	11/13/20	11/13/20	
Surrogate: n-Nonane		112 %	50-200	11/13/20	11/13/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: NE		Batch: 2046042
Chloride	891	20.0	1	11/13/20	11/16/20	



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## B-16 E011038-30

	E011036-30				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: IY		Batch: 2046032
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0500	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
	103 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Analyst: IY			Batch: 2046032
ND	20.0	1	11/12/20	11/13/20	
	90.8 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Anal	yst: JL		Batch: 2046038
203	25.0	1	11/13/20	11/13/20	
80.4	50.0	1	11/13/20	11/13/20	
	112 %	50-200	11/13/20	11/13/20	
mg/kg	mg/kg	Anal	yst: NE		Batch: 2046042
	mg/kg ND ND ND ND ND ND ND ND ND Mg/kg ND  mg/kg 203 80.4	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         20.0250           MB/kg         mg/kg           ND         20.0           90.8 %         mg/kg           mg/kg         mg/kg           203         25.0           80.4         50.0           112 %	Reporting           Result         Limit         Dilution           mg/kg         mg/kg         Analy           ND         0.0250         1           Mg/kg         mg/kg         Analy           ND         20.0         1           90.8 %         70-130           mg/kg         mg/kg         Analy           203         25.0         1           80.4         50.0         1           112 %         50-200	Reporting           Result         Limit         Dilution         Prepared           mg/kg         Analyst: IY           ND         0.0250         1         11/12/20           ND         0.0250         1         11/12/20           ND         0.0250         1         11/12/20           ND         0.0500         1         11/12/20           ND         0.0250         1         11/12/20           ND         0.0250         1         11/12/20           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         11/12/20           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         11/12/20           mg/kg         mg/kg         Analyst: JL           203         25.0         1         11/13/20           80.4         50.0         1         11/13/20	Reporting           Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: JL         11/13/20         11/13/20           203         25.0         1         11/13/20         11/13/20           80.4         50.0         1         11/13/20         11/13/20



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

## B-17 E011038-31

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	yst: IY		Batch: 2046032
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	yst: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.5 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	yst: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	ND	25.0	1	11/13/20	11/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/14/20	
Surrogate: n-Nonane		134 %	50-200	11/13/20	11/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	yst: NE		Batch: 2046042
Chloride	66.8	20.0	1	11/13/20	11/16/20	



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

## B-18 E011038-32

	E011050 52				
Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Anal	yst: IY		Batch: 2046032
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0500	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
ND	0.0250	1	11/12/20	11/13/20	
	102 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Anal	yst: IY		Batch: 2046032
ND	20.0	1	11/12/20	11/13/20	
	90.3 %	70-130	11/12/20	11/13/20	
mg/kg	mg/kg	Anal	yst: JL		Batch: 2046038
ND	25.0	1	11/13/20	11/14/20	
ND	50.0	1	11/13/20	11/14/20	
	93.2 %	50-200	11/13/20	11/14/20	
mg/kg	mg/kg	Anal	yst: NE		Batch: 2046042
59.6	20.0	1	11/13/20	11/16/20	
	mg/kg ND Mg/kg ND mg/kg	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           MD         20.0250           MD         20.0           90.3 %         mg/kg           MB/kg         mg/kg           ND         25.0           ND         50.0           93.2 %         mg/kg           mg/kg         mg/kg	mg/kg         mg/kg         Anal           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           MD         0.0250         1           MD         20.0         1           90.3 %         70-130           mg/kg         mg/kg         Anal           ND         25.0         1           ND         50.0         1           93.2 %         50-200           mg/kg         mg/kg         Anal	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         11/12/20           mg/kg         mg/kg         Analyst: IY           ND         20.0         1         11/12/20           mg/kg         mg/kg         Analyst: JL           ND         25.0         1         11/13/20           ND         50.0         1         11/13/20           ND         50.0         1         11/13/20           Mg/kg         mg/kg         Analyst: JL         11/13/20	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: IY           ND         0.0250         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         ND         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: IY         ND         20.0         1         11/12/20         11/13/20           mg/kg         mg/kg         Analyst: IY         ND         11/13/20         11/13/20           mg/kg         mg/kg         Analyst: JL         ND         25.0         1         11/13/20         11/14/20           ND         50.0         1         11/13/20         11/14/20         11/14/20           mg/kg         mg/kg         Analyst: NE         11



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

## B-19

		E011038-33				
		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ar	nalyst: IY		Batch: 2046032
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ar	nalyst: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.2 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ar	nalyst: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	32.1	25.0	1	11/13/20	11/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/13/20	11/14/20	
Surrogate: n-Nonane		147 %	50-200	11/13/20	11/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ar	nalyst: NE		Batch: 2046042
Chloride	30.5	20.0	1	11/13/20	11/16/20	



EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

### B-20

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: IY		Batch: 2046032
Benzene	ND	0.0250	1	11/12/20	11/13/20	
Toluene	ND	0.0250	1	11/12/20	11/13/20	
Ethylbenzene	ND	0.0250	1	11/12/20	11/13/20	
p,m-Xylene	ND	0.0500	1	11/12/20	11/13/20	
o-Xylene	ND	0.0250	1	11/12/20	11/13/20	
Total Xylenes	ND	0.0250	1	11/12/20	11/13/20	
Surrogate: 4-Bromochlorobenzene-PID		101 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	rst: IY		Batch: 2046032
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/12/20	11/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.4 %	70-130	11/12/20	11/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	rst: JL		Batch: 2046038
Diesel Range Organics (C10-C28)	193	25.0	1	11/13/20	11/14/20	
Oil Range Organics (C28-C35)	84.1	50.0	1	11/13/20	11/14/20	
Surrogate: n-Nonane		128 %	50-200	11/13/20	11/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	rst: NE		Batch: 2046042
-			·	11/13/20	11/17/20	·



Total Xylenes

Toluene

Ethylbenzene

Total Xylenes

p,m-Xylene

o-Xylene

Surrogate: 4-Bromochlorobenzene-PID

Surrogate: 4-Bromochlorobenzene-PID

Matrix Spike Dup (2046030-MSD1)

## **QC Summary Data**

Abb-1 BLF State #1 EOG Resources Inc. - Carlsbad Project Name: Reported: 104 South 4th Street Project Number: 19034-0001 Artesia NM, 88210 Project Manager: Jeff Walker 11/18/2020 8:11:18AM **Volatile Organics by EPA 8021B** Analyst: IY Reporting Spike Source Rec RPD Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % % % Notes Prepared: 11/12/20 Analyzed: 11/12/20 Blank (2046030-BLK1) ND 0.0250 ND 0.0250 Toluene Ethylbenzene ND 0.0250 ND p,m-Xylene 0.0500 ND o-Xylene 0.0250 Total Xylenes ND 0.0250 Surrogate: 4-Bromochlorobenzene-PID 7.87 8.00 98.3 70-130 Prepared: 11/12/20 Analyzed: 11/12/20 LCS (2046030-BS1) 4.88 97.6 70-130 5.00 Benzene 0.0250 4.99 0.0250 5.00 99.9 70-130 Toluene Ethylbenzene 4.94 0.0250 5.00 98.8 70-130 p,m-Xylene 9.83 0.0500 10.0 98.3 70-130 4.89 5.00 97.9 70-130 0.0250 o-Xvlene 98.1 70-130 14.7 15.0 Total Xylenes 0.0250 100 8.00 70-130 Surrogate: 4-Bromochlorobenzene-PID 8.01 Prepared: 11/12/20 Analyzed: 11/12/20 Matrix Spike (2046030-MS1) Source: E011038-01 Benzene 51.1 0.250 50.0 0.685 101 54-133 101 61-130 Toluene 66.3 0.250 50.0 15.9 Ethylbenzene 61.2 0.250 50.0 9.80 103 61-133 148 100 45.6 103 63-131 0.500 p,m-Xylene o-Xylene 73.5 0.250 50.0 21.9 103 63-131

63-131

70-130

54-133

61-130

61-133

63-131

63-131

63-131

70-130

**Source: E011038-01** Prepared: 11/12/20 Analyzed: 11/12/20

5.97

3.21

4 47

3.28

3.12

3.22

20

20

20

20

20

20

222

84.5

48.1

64.2

58.5

143

71.2

215

85.5

0.250

0.250

0.250

0.250

0.500

0.250

0.250

80.0

50.0

50.0

50.0

100

50.0

150

80.0

0.685

15.9

9.80

45.6

21.9

67.5

94.9

96.5

974

97.8

98.7

98.1

107

Surrogate: 4-Bromochlorobenzene-PID

## **QC Summary Data**

Abb-1 BLF State #1 EOG Resources Inc. - Carlsbad Project Name: Reported: Project Number: 19034-0001 104 South 4th Street Artesia NM, 88210 Project Manager: Jeff Walker 11/18/2020 8:11:18AM **Volatile Organics by EPA 8021B** Analyst: IY Spike Source RPD Reporting Rec Analyte Result Limit Level Result Rec Limits RPD Limit mg/kg mg/kg mg/kg mg/kg % % Notes Prepared: 11/12/20 Analyzed: 11/13/20 Blank (2046032-BLK1) ND 0.0250 ND 0.0250 Toluene ND Ethylbenzene 0.0250 p,m-Xylene ND 0.0500 ND o-Xylene 0.0250 Total Xylenes ND 0.0250

LCS (2046032-BS1)		Prepared: 11/12/20 Analyzed: 11/13/20				
Benzene	4.91	0.0250	5.00	98.1	70-130	
Toluene	5.01	0.0250	5.00	100	70-130	
Ethylbenzene	4.96	0.0250	5.00	99.2	70-130	
p,m-Xylene	9.84	0.0500	10.0	98.4	70-130	
o-Xylene	4.89	0.0250	5.00	97.7	70-130	
Total Xylenes	14.7	0.0250	15.0	98.2	70-130	
Surrogate: 4-Bromochlorobenzene-PID	8.08		8.00	101	70-130	

8.00

98.8

70-130

7.91

Matrix Spike (2046032-MS1)				Sou	rce: E0110	<b>038-21</b> Prepared: 11/12/20 Analyzed: 11/13/20	
Benzene	5.19	0.0250	5.00	ND	104	54-133	
Toluene	5.26	0.0250	5.00	ND	105	61-130	
Ethylbenzene	5.24	0.0250	5.00	ND	105	61-133	
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131	
o-Xylene	5.20	0.0250	5.00	ND	104	63-131	
Total Xylenes	15.6	0.0250	15.0	ND	104	63-131	
Surrogate: 4-Bromochlorobenzene-PID	8.12		8.00		102	70-130	

Matrix Spike Dup (2046032-MSD1)	Source: E011038-21 Prepared: 11/12/20 Analyzed: 11/13/20							
Benzene	5.04	0.0250	5.00	ND	101	54-133	2.92	20
Toluene	5.17	0.0250	5.00	ND	103	61-130	1.67	20
Ethylbenzene	5.12	0.0250	5.00	ND	102	61-133	2.31	20
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	1.77	20
o-Xylene	5.05	0.0250	5.00	ND	101	63-131	2.83	20
Total Xylenes	15.2	0.0250	15.0	ND	102	63-131	2.13	20
Surrogate: 4-Bromochlorobenzene-PID	8.09		8.00		101	70-130		

EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	Reported:
104 South 4th Street	Project Number:	19034-0001	·
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

Artesia NM, 88210		Project Number Project Manager		ff Walker				11/	18/2020 8:11:18AM
	Non	halogenated	Organics l	by EPA 80	15D - G	RO			Analyst: IY
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2046030-BLK1)						Pre	pared: 11/1	2/20 Analyz	ed: 11/12/20
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			
LCS (2046030-BS2)						Pre	pared: 11/1	2/20 Analyz	ed: 11/12/20
Gasoline Range Organics (C6-C10)	46.8	20.0	50.0		93.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.36		8.00		91.9	70-130			
Matrix Spike (2046030-MS2)				Sou	rce: E0110	038-01 Pre	pared: 11/1	2/20 Analyz	ed: 11/12/20
Gasoline Range Organics (C6-C10)	1020	200	500	588	86.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	74.4		80.0		93.0	70-130			
Matrix Spike Dup (2046030-MSD2)				Sou	rce: E0110	)38-01 Pre	pared: 11/1	2/20 Analyz	ed: 11/12/20
Gasoline Range Organics (C6-C10)	1020	200	500	588	86.6	70-130	0.144	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	75.7		80.0		94.6	70-130			

EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

Artesia NM, 88210		Project Manage	r: Jei	ff Walker				11/1	8/2020 8:11:18AM		
	Nonhalogenated Organics by EPA 8015D - GRO								Analyst: IY		
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes		
Blank (2046032-BLK1)						Pre	pared: 11/1	2/20 Analyze	ed: 11/13/20		
Gasoline Range Organics (C6-C10)	ND	20.0									
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130					
LCS (2046032-BS2)						Pre	pared: 11/1	2/20 Analyze	ed: 11/13/20		
Gasoline Range Organics (C6-C10)	50.5	20.0	50.0		101	70-130					
Gurrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.8	70-130					
Matrix Spike (2046032-MS2)				Sou	rce: E0110	038-21 Pre	pared: 11/1	2/20 Analyza	ed: 11/13/20		
Gasoline Range Organics (C6-C10)	53.9	20.0	50.0	ND	108	70-130					
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.31		8.00		91.4	70-130					
Matrix Spike Dup (2046032-MSD2)				Sou	rce: E0110	038-21 Pre	pared: 11/1	2/20 Analyze	ed: 11/13/20		
Gasoline Range Organics (C6-C10)	51.5	20.0	50.0	ND	103	70-130	4.55	20			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.32		8.00		91.5	70-130					

EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	Reported:
104 South 4th Street	Project Number:	19034-0001	•
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

Artesia NM, 88210		Project Manager	r: Jei	ft Walker				11	/18/2020 8:11:18	AM	
	Nonhalogenated Organics by EPA 8015D - DRO/ORO								Analyst: JL		
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit			
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes		
Blank (2046037-BLK1)						Pre	pared: 11/	13/20 Analy	zed: 11/13/20		
Diesel Range Organics (C10-C28)	ND	25.0									
Dil Range Organics (C28-C35)	ND	50.0									
urrogate: n-Nonane	58.7		50.0		117	50-200					
LCS (2046037-BS1)						Pre	pared: 11/	13/20 Analy	zed: 11/13/20		
Diesel Range Organics (C10-C28)	436	25.0	500		87.1	38-132					
urrogate: n-Nonane	51.3		50.0		103	50-200					
Matrix Spike (2046037-MS1)				Sou	rce: E011	038-01 Pre	pared: 11/	13/20 Analy	zed: 11/16/20		
Diesel Range Organics (C10-C28)	11500	250	500	8300	642	38-132			M4		
urrogate: n-Nonane	287		50.0		573	50-200				S5	
Matrix Spike Dup (2046037-MSD1)				Sou	rce: E011	038-01 Pre	pared: 11/	13/20 Analy	zed: 11/16/20		
Diesel Range Organics (C10-C28)	9480	250	500	8300	238	38-132	19.3	20	M4		
'urrogate: n-Nonane	238		50.0		475	50-200				S5	

EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	Reported:
104 South 4th Street	Project Number:	19034-0001	·
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

Artesia NM, 88210		Project Manage	r: Je	ff Walker				11/	18/2020 8:11:18AM
	Nonha	logenated Or	ganics by	EPA 8015I	Analyst: JL				
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2046038-BLK1)						Pre	pared: 11/1	3/20 Analyz	zed: 11/13/20
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	50.2		50.0		100	50-200			
LCS (2046038-BS1)						Pre	pared: 11/1	3/20 Analyz	zed: 11/13/20
Diesel Range Organics (C10-C28)	425	25.0	500		85.1	38-132			
Surrogate: n-Nonane	50.2		50.0		100	50-200			
Matrix Spike (2046038-MS1)				Sou	rce: E011	038-21 Pre	pared: 11/1	3/20 Analyz	zed: 11/13/20
Diesel Range Organics (C10-C28)	1410	25.0	500	714	139	38-132			M2
Surrogate: n-Nonane	44.9		50.0		89.8	50-200			
Matrix Spike Dup (2046038-MSD1)				Sou	rce: E011	038-21 Pre	pared: 11/1	3/20 Analyz	zed: 11/13/20
Diesel Range Organics (C10-C28)	1390	25.0	500	714	134	38-132	1.69	20	M2
Surrogate: n-Nonane	51.4		50.0		103	50-200			



Chloride

# **QC Summary Data**

EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	Reported:
104 South 4th Street	Project Number:	19034-0001	•
Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/2020 8:11:18AM

Artesia ivivi, 60210		1 Toject Wanage	1. 50	ii waikei				117	10/2020 0.11.10/11/1		
Anions by EPA 300.0/9056A Analyst: NE											
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes		
Blank (2046041-BLK1)						Pre	pared: 11/	13/20 Analyz	ed: 11/13/20		
Chloride	ND	20.0									
LCS (2046041-BS1)						Pre	pared: 11/1	13/20 Analyz	ed: 11/13/20		
Chloride	483	20.0	500		96.7	90-110					
Matrix Spike (2046041-MS1)				Sou	rce: E0110	038-01 Pre	pared: 11/1	13/20 Analyz	ed: 11/13/20		
Chloride	1430	20.0	250	1210	87.9	80-120					
Matrix Spike Dup (2046041-MSD1)				Sour	rce: E0110	038-01 Pre	pared: 11/1	13/20 Analyz	ed: 11/13/20		

250

1210

113

80-120

4.36

20.0



EOG Resources Inc Carlsbad 104 South 4th Street Artesia NM, 88210		Project Name: Project Number: Project Manager:	19	Abb-1 BLF State #1 19034-0001 Jeff Walker					Reported: 11/18/2020 8:11:18AM
		Anions	by EPA 3	300.0/9056 <i>E</i>	4				Analyst: NE
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2046042-BLK1)						Pre	pared: 11/	13/20 An	alyzed: 11/16/20
Chloride	ND	20.0							

#### QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



### **Definitions and Notes**

ſ	EOG Resources Inc Carlsbad	Project Name:	Abb-1 BLF State #1	
l	104 South 4th Street	Project Number:	19034-0001	Reported:
1	Artesia NM, 88210	Project Manager:	Jeff Walker	11/18/20 08:11

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The

associated LCS spike recovery was acceptable.

S5 Surrogate spike recovery exceeded acceptance limits due to interfering target and/or non-target analytes.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client:	EC	06				Bill To				La	ab Us	e On	ly		į.		TA	T		EPA Pr	ogram
Project:	Ab	9-1 13	LFS	tote #1	Attention	: Bob Ash	er ECG	Lab	WO#			Job I	Numb	er .	1D	2D	3D	Standa	ard	CWA	SDWA
Project N	lanager:	Jet	fival	lan	Address:			EC	SUC	33	8	190	340	DOOL	3			X			
Address:					City, State	e, Zip						Analy	sis an	d Metho	d						RCRA
City, Stat	e, Zip				Phone:																
Phone:	- //	- 11-	120	/ l	Email:			015	8015											State	
Email:		inall	ercey	hd-con				by 8	by 8	8021	09	0	0.00		Σ			NM	CO	UT AZ	TX
Report d	ue by:						1/2007	NO NO	ORO	38 %	y 82	601	Je 3(		Z	¥					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID			Lab Number	DRO/ORO by 8015	GRO/DRO by	BTEX by 8	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC - NM	ВСБОС				Remarks	
1130	11/11/20	5	1	SP-	1		1	X	X				V								
1140				SP.			a	X	X				1								
1145			1	5P.			3	X	X				V								
1150			1	SP.	4		4	X	X				V								
1210			1	5P.	5		5	X	X				1								
1205			-	5P.	6		6	X	X				1								1
1200			1	SP -	7			X	X				V								
1215				SP-	8		8	X	X				1								ď
1348			1	SW-	1		9	X	X				1								
1351	$\bigvee$	V	1	5W-	-2		10	Y	X												
Addition	al Instruc	tions:																			
	CONTRACTOR CONTRACTOR			city of this sample. I	The second secon	ering with or intentionally m Sampled by:	nislabelling the sample lo	cation,			= 1			ing thermal t an avg tem						ey are sample s.	d or received
Relinquish	ed by: (Signa	ature)	Date	/ / Time		ved by: (Signature)	Date 11.11.2	2074	Time	55	55	Rece	eived	on ice:		ab U	se Onl	У			1
Relinquish	ed by? (Signa	ature)	_ / Date	Time	700 Recei	ved by: (Signature)	Date 11/12	20	Time	:3	5	T1			T2			<u></u>			
Relinquish	ed by: (Signa	ature)	Date			ved by: (Signature)	Date		Time			AVG	Tem	p°c 4							
Sample Mati	ix: S - Soil. So	- Solid, Sg -	Sludge, A - A	queous, O - Other_			Containe	r Type	: g - g	glass,		_					- VOA				
					d unless other arrai	ngements are made. Ha												port for t	he anal	ysis of the	above
The second second second second						COC. The liability of the l															



Client:	EC	26			Bill To ,	-			L	ab Us	se Onl	V					TAT		EPA P	rogram
Project:	A A B Contained	IBLE	Staj	te#/	Attention: EOG BOG AS	her	Lab	WO#			Job N	lum		1	D 2	2D	3D	Standard	CWA	SDWA
Project N	lanager: '	Jet	twa	11ac	Address:		EC	SIIC	33				000					X	222.11	
Address:					City, State, Zip						Analy:	sis an	d Met	od						RCRA
City, Stat	e, Zip				Phone:											- 1				
Phone:	2/	¥ 1.1.	the	eghd.com	Email:		8015	015					- 1					NA 4 60	State	1 77/ 1
Email:	Jer	l = coo	AIRCO	= guaran			þ	by 8	021	99	10	0.00		1	Σ			NM CO	UT AZ	IX
Report d						Lak	ORO ORO	DRO	by 8(	y 82	s 60.	de 3			5	¥				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Lab Number	DRO/ORO	GRO/DRO	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC - NM	верос			Remarks	
1354	11/11/20	S	1	5W-3		11	X	X				X								
1356	1		1	5W-4		12	X	X				X								
1359			1	5W-5		13	X	X				X								
1401			(	5W-6		14	X	X				X								
1305			1	13-1		15	X	X				X	-							
1304			ſ	B-2		160	X	X				X								
1308			1	13-3		FI	X	X				$X_{\mu}$						U		
1310			1	B-4		18	X	X				X								
13/1			1	13-5		19	X	X				X								
13/3	V	V	1	8-6		20	Y	X			1	X								
Addition	al Instruc	tions:																		
1				ity of this sample. I am a	ware that tampering with or intentionally mislabellington.  Sampled by:	g the sample lo	cation,						-					ed on ice the day on subsequent da	the second second	ed or received
Relinquish	-	iture)	Date	/11/20 Time 150	Received by (Signature)	Date 11-11-2	1070	Time	55	55	Rece	ived	on ice		Lab	Us N	e Only	Y		7
	d by: (Signa			11.2020 Time	Received by: (Signature)	Date 11/12					T1							T3		
Relinquish	ed by: (Signa	iture)	Date	Time	Received by: (Signature)	Date		Time					p°C_(							
Sample Mat	ix: S - Soil, So	- Solid, Sg -	Sludge, A - A	queous, O - Other		Containe	r Type	: g - g	lass,					_		, v -	VOA			1
					ess other arrangements are made. Hazardou													ort for the ana	alysis of the	above

samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

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lient: Ean	Bill To				La	b Use	e Onl	lv			TA	\T	EPA Pr	ogram
roject: Abb V BLF State	Bill To Attention: EOG BOY	Stehen	Lab	WO#			Job N	Number	1D	2D	3D	Standard	CWA	SDWA
oject Manager: Je H.Wa	Address:		EC	NIC	235	3	pc	34000				X		
ldress:	City, State, Zip					1	Analy	sis and Meth	od					RCRA
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ione:	and could Email:		015	015							1 1	hund col	State	TV
nail: Jeff. Walkerco	714-1011		by 8	by 8	8021	8260	10	300.0	Σ	1	1 1	NM CO	UT AZ	IX
eport due by: Time Date No. of		Lab	DRO/ORO by 8015	GRO/DRO by 8015	( by 8	by 82	Metals 6010	Chloride 3	BGDOC - NM	XT - 20				
mpled Sampled Matrix Containers	Sample ID	Number	DRO	GRO	втех бу	VOC by 8	Met	Chlo	860	верос			Remarks	
3/5 11/11/20 5 1	8-7	21	V	V				V						
3/7 1 1	B-8 :	22	V	V	,			1						
3/9	B9 :	23	V	V				1						
32/	B-10.	24	V	V										
123	B-11	25	1	V										
327	8-12	26	1	V				V						
329	B-B	27	1	1				1						
33/	B-14	28	1	V				1						
333	B-15	29	V	V			N	1						
335	B-16	30	V	V										
Iditional Instructions:														
eld sampler), attest to the validity and authen	icity of this sample. I am aware that tampering with or intentionally r may be grounds for legal action. Sampled by:	mislabelling the sample lo	cation,				1000					eived on ice the day to		ed or receiv
	e Received by: (Signature)	Date		Time						ab U	se Onl	ly		-
	1/11/20 1555 /	50 11.11.21	020	15	55	>	Rece	eived on ice:		1 YY				
inquished by: (Signature) Date		A Date		Time	:3=	5	T1		T2			T3		
inquished by: (Signature)	e Time Received by: (Signature)	Date		Time			۸۷۷۵	Temp °C	1 (	3				
3								astic, ag - am						

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Client: 150G	Bill To				Lal	b Us	e Only	У				TAT		EPA P	ogram
Project: 166, BLF	Attention: EOG Bob As	he	Lab \	NO#				umber	10.00	LD 2	2D	3D	Standard	CWA	SDWA
	Address:		EO	110	3	_		34000					X		
Address:	City, State, Zip					- /	Analys	is and Met	hod	-				1	RCRA
City, State, Zip	Phone:												1	Ct-t-	
Phone: Email: 1eff-walkneghd.co	Email:		8015	8015									NINAL CO.	State	TVI
			by		021	760	10	000		Σ	~		NIVI CO	UT AZ	TX
Report due by:		Lab	ORC	DRC	by 8	by 8.	ls 60	ide		-5	C-TX				
Time Date Matrix No. of Containers Sample ID		Number	DRO/ORO by	GRO/DRO by	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC - NM	BGDOC			Remarks	
136 11/11/20 S   B-1:	2	3	V	V											
1338 1 1 1 8-1	3	32	U	1											
1340 1 13-19		33	V	V				0							
1342 V 1 1 B-2		24	V	1				~							
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					-									-	
	/			-	-				-	-					
									4						
Additional Instructions:															
I, (field sampler), attest to the validity and authenticity of this sample date or time of collection is considered fraud and may be grounds for		sample loca	ation,						,				ived on ice the day C on subsequent da		ed or received
	ne Received by: (Signature) D	ate   •     • 20.		Time	55	5	Recei	ved on ice	e:	Lal		e Only			
	ne Received by: (Signature)	1/12/6		Time	35	3	T1			Г2			<u></u>		
		ate		Time			AVG	Temp °C_	4	0					
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other	r	ontainer	Type	: g - gl	ass, p			stic, ag - ar				VOA			
Note: Samples are discarded 30 days after results are repor	ed unless other arrangements are made. Hazardous san	nples will b	oe retu	urned t	to clie	ent or	dispos	ed of at the					port for the ana	alysis of the	above
samples is applicable only to those samples received by the															

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roject Information							Chain o	f Custody												F	age	of_	Recei
Client: EO	1/2			186.6	20	Bi	III To		Dist	No. of Lot	La	b Use	Onl	V	No.		-	TA	\T		EPA Pr	ogram	¬ ed
Project: Aby	2-1 B	LFS	kte#1		Atter	ntion: 3 of Bi	Asher Ec	291	Lah	WO#	ALC: A STATE OF THE PARTY OF TH	THE RESERVE OF THE PARTY OF THE		lumbe	r	1D	2D	3D		ndard	CWA	SDWA	, 5°
Project Manager:		FWall	an		Addr		ESSE TO SE		FC	3110	<b>\2</b> C	2 1	90	340	108					X			
Address:	-				00.	State, Zip				,,,,,,					Metho	d		-				RCRA	18
City, State, Zip					Phon		L. CHECK																1 3
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Report due by:		0		The same					(O p	(O b)	8021	VOC by 8260	Metals 6010	Chloride 300.		BGDOC - NM	¥						2022
Time Date		No. of	Cample ID					Lab	DRO/ORO	GRO/DRO	X by	by	tals	oride		200	BGDOC-				Damasla		1
Sampled Sampled	Matrix	Containers	Sample ID					Number	DRC	GRC	втех	VOC	Met	GF		BGE	BGD				Remarks		37:
1130 11/1/20 S 1 SP-1								1000	V		V			V									57
1130 1111120		1	51						$\wedge$		^			V									PN
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1140					-			O.	/	/	^		-										
1145		1	SP	- 3				3	X		X			1									
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110			4		_																_	_	
1210		1	SP	5				5	IX	X	X			1									
10.70			10	1				Control of	1		17												-22
1205			SP	- 6				6	X	A	X			V									ō
		1	10	7		7.0		-	1/	1/	V		1	/									53
1200		1	SP	- (				Trick of the second	X	X.	X			4									Page
10.45		-	SP	-8				8	X	X	V			1									Ъа
1215			21	O				0			٨												
12/10		i	SW	-1				9	X	X	X			1									
1348	1								1	/ /	1.			/									
1271	V	1	SW	1	2			10	Y	X	XI												
1351 V		1	- 10	-				10	-	r \	1		-		4							-	
Additional Instruct	tions:										•	w	VIZ										
I, (field sampler), attest to	the validity a	and authentic	ity of this samn	le Lama	ware that	tampering with or inten	ntionally mislabelling t	he sample loc	ation		-	S	amples	requiring	thermal p	reservati	ion mu:	st be rec	eived on	ice the day t	ney are sample	d or received	d
date or time of collection						Sampled b		ine sumple to e	u,											bsequent day	And the second second second second		
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~/1/4/6/	in		11/20	155		1	59	11.11.2	2024	1	55	5 1	Recei	ved o	n ice:	Q	VN						
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		-53	- > 1		- 1							1	NG T	Гетр	°c U	.0	)						
Sample Matrix: S - Soil, So	d - Solid, Sg -	Sludge, A - A	Aqueous, O - Oti	her				Container	Туре	: g - g	lass,			T-000-01-01-010		er glas	s, v -	VOA	NAME OF THE OWNER, OWNE			recommendation (	
Note: Samples are disc	arded 30 d	ays after re	sults are repo	orted unle	ess other	arrangements are m	nade. Hazardous s	amples will	be ret	urned	to clie	nt or c	lispos	ed of at					eport fo	or the ana	ysis of the a	bove	
samples is applicable of	only to thos	e samples i	received by th	e laborat	tory with	this COC. The liabilit	ty of the laboratory	is limited to	the a	mount	t paid	for on	the re	port.					- 1				Pa



roject Information	Chain of Custody								P	age <u>2</u> of	Recei
Client: EOG1 Project: A b B B F S fate # Attention: Address: Address: City, State, 2		ab WO#		190	ly Number 03-1000 rsis and Meth		2D	TAT 3D St	tandard		am DWA CRA
City, State, Zip Phone: Phone: Email: Report due by: Phone: Email: Email:		DRO/ORO by 8015 GRO/DRO by 8015	ny 8021	0109	de 300.0	BGDOC - NM	ХГ-		NM CO	State UT AZ TX	6/22/2022
Time Date Sampled Matrix No. of Containers Sample ID	Lab S Number	DRO/ORO GRO/DRO	BTEX by	Metals 6010	Chloride	BGDO	верос			Remarks	1:37:5
1354 11/11/20 \$ 1 5W-3	11	XX	X		X						7 PM
	12	XX	X		X						
1359   5W-5	13	XX	X		X						
1401 1 5W-6	14 >	XX	X		X						
1305 1 1 13-1	15	XX	X		X						
1304   1 13-2	10	XX	X		X						1 of 57
1308 1 13-3	(FI	XX	X		X						Page 54
1310 1 1 13-4	18 >	X	X		X						Pa
1311 1 13-5	19	XXX	X		X)						
1313 V V 1 B-6	20	XX	X		X						
Additional Instructions:			AN	11/12							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering date or time of collection is considered fraud and may be grounds for legal action.	g with or intentionally mislabelling the sample location Sampled by:	on,	7	and the second	s requiring therma in ice at an avg te					ey are sampled or re s.	eceived
	by (Signature) Date 11-11-202	Time	555	Rece	eived on ice:		b Use	Only			
Relinquished by: (Signature)  Date  Time  Received  1700  Received	By: (Signature)  Date   11/12/2	Time	-	T1		<u>T2</u>	, ··		<u>T3</u>		
Relinquished by: (Signature)  Date  Time  Received	by: (Signature) Date	Time		AVG	Temp °C	0.4					
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other	Container Ty			poly/pl	astic, ag - am	ber glas	ss, v - V		and the second s		
Note: Samples are discarded 30 days after results are reported unless other arrange samples is applicable only to those samples received by the laboratory with this COC						ient exp	ense.	The repor	t for the analy	sis of the above	P

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oject Information	Chain of Custody											Page	3	of 4	Receiv
Project: Abby BLF State#1  Project Manager: Jeff. Walke Address:	206 Asher	Lab	wo#		Jse O	Numb	er Voco	1D	2D	TA 3D	Standa		EPA Pro	gram SDWA	ed by O
ddress: City, State, Zip Phone:							nd Meth							RCRA	OCD: 6/2
Phone:  Smail: Jeff-walkoveghd-cow  Beport due by:		O by 8015	O by 8015	y 8021	010	300.0		NM	X		NM		tate AZ	TX	2/2022
Time Date Sampled Sampled Matrix No. of Containers Sample ID	Lab Number	DRO/OR	GRO/DRO	BTEX by	Metals 6010	Chloride		BGDOC - NM	BGDOC-			Re	marks		1:37:57
315 11/11/20 5 1 8-7	21	V	1	X	No.	V									57 PM
1317   1 18-8	22	V	V	X		V									
1319 1 8-9	33	V	V	X		1	/								
1321 1 8-10:	24	V	V	X		V		-					-		
1323 13-11 ::.	25	1		X		V									f 57
1327   B-B	26	V	1	X V											55 of
7 2 41	<b>是</b>	/	1	<u> </u>		1									Page
1331   B-19 1333   B-15	29	V	V	ζ.		V									
1335 V 1 13-16	30	V	V	X		V						W.			
Additional Instructions:				AN	(11)	12									
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentional date or time of collection is considered fraud and may be grounds for legal action.  Sampled by:								np above	0 but les	ss than 6	eived on ice to °C on subseq	The second second second	re sampled o	or received	
Relinquished by: (Signature)  Date    Time   Received by: (Signature)   1555   Received by: (Signature)   15	Date 11-11-21		Time 15	55	Rec	eived	on ice:		y N	se Onl	У				
Refinquished by: (Signature)  Refinquished by: (Signature)  Date  Time  Received by: (Signature)  Received by: (Signature)	Date Date	30	Time	35	T1			<u>T2</u>	77		<u>T3</u> _				
					1900000	Tem		1.0	۷ _				a de la la		
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other Note: Samples are discarded 30 days after results are reported unless other arrangements are made.	Containe Hazardous samples will										anort for H	o analysis	of the ab	anno.	
samples is applicable only to those samples received by the laboratory with this COC. The liability of the								CIT EXP	crise.	THE TE	.port for tr	ic analysis	or the ab	ove	Pa

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Project Information	Chain of Custody	/										P	age <u>4</u> of <u>4</u>	Receiv
Client: FOGA Project: A66' RLF Project Manager: SEA Wallow Address:	Attention: Eoc. Bob Ashu Address: City, State, Zip	Lab 'EC	NO#	110 000 000	3	190	umber 34000 is and Me	10	1D 2	2D	TAT 3D	Standard	EPA Program CWA SDWA RCRA	ed by OCD
City, State, Zip Phone: mail: jeff-walkneghd.com Report due by:	Phone: Email:	0RO by 8015	3RO by 8015	y 8021	voc by 8260		300.0	triod	C-NM	-TX		NM CO	State UT AZ TX	0: 6/22/2022
Time Date Sampled Matrix No. of Containers Sample ID	Lab Number	DRO/ORO	GRO/DRO	втех by	vocb	Metals 6010	Chloride		BGDOC-	ВСВОС			Remarks	1:37:57
13 6 11/11/20 S   B-17	31	V	V	X										7 PM
1338   1 8-18	32	0	-	X										
1340 18-19	33	V	V	X			0							
1342 V V 1 B-20	34	V		X	DA A								- 41 - 1	
					740	ıy	2							22
	2000													56 of
														Page (
														i.
Additional Instructions:  I, (field sampler), attest to the validity and authenticity of this sample. I am	ware that tampering with or intentionally miclabelling the sample le	ocation			I	Samples	requiring the	rmal pre	servatio	on must	be recei	ved on ice the day t	hey are sampled or received	
date or time of collection is considered fraud and may be grounds for legal a  Relinquished by: (Senature)  Date  Time	ction. Sampled by:		Time						bove 0 b	but less		C on subsequent day		
Jalle 11/11/20 15	Received by: (Signature)  Reserved by: (Signature)  Reserved by: (Signature)  Date		Time	355	5	Recei	ved on i	ce:	(v)		City			
2 2 11-11-2020 17	Received by: (Signature)	20	Time	:35	5	T1		_	T2			<u>T3</u>		
Rélinfy/ished by: (Signature) Date Time							Γemp °C							
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other  Note: Samples are discarded 30 days after results are reported un							stic, ag - a					port for the ana	lysis of the above	

@ envirotech

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Printed: 11/12/2020 10:27:02AM

### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

	•				<u> </u>	
Client:	EOG Resources Inc Carlsbad	Date Received:	11/12/20 0	9:35	Work Order ID:	E011038
Phone:	(575) 748-4217	Date Logged In:	11/12/20 1	0:09	Logged In By:	Alexa Michaels
Email:	jeff.walker@ghd.com	Due Date:	11/18/20 1	17:00 (4 day TAT)		
	Custody (COC)					
	te sample ID match the COC?	tab the COC	Yes			
	te number of samples per sampling site location ma	ten the COC	Yes			
	amples dropped off by client or carrier? c COC complete, i.e., signatures, dates/times, reque	stad analyseas?	Yes Yes	Carrier: <u>F</u>	<u>edex</u>	
	Il samples received within holding time?	sted allaryses:	Yes			
	Note: Analysis, such as pH which should be conducted i i.e, 15 minute hold time, are not included in this disucssi		103	г	Comme	nts/Resolution
	urn Around Time (TAT)		37		Btex analysis was adde	ed to the COC per
	COC indicate standard TAT, or Expedited TAT?		Yes		Jeff via Lynn	ou to the coc per
Sample C	ample cooler received?		Yes		Jen via Lynn	
	was cooler received in good condition?		Yes			
	e sample(s) received intact, i.e., not broken?					
			Yes			
	custody/security seals present? were custody/security seals intact?		No			
•	• •		NA			
	e sample received on ice? If yes, the recorded temp is 4°C Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	re received w/i 15	Yes			
Sample C			_			
	queous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
17. Was a	trip blank (TB) included for VOC analyses?		NA			
18. Are no	on-VOC samples collected in the correct containers	?	Yes			
19. Is the a	appropriate volume/weight or number of sample contai	ners collected?	Yes			
Field Lab	<u>el</u>					
	field sample labels filled out with the minimum info	ormation:				
	ample ID?		Yes			
	ate/Time Collected? ollectors name?		Yes	-		
	reservation		No			
	the COC or field labels indicate the samples were p	reserved?	No			
	ample(s) correctly preserved?		NA			
	filteration required and/or requested for dissolved r	netals?	No			
	se Sample Matrix					
	the sample have more than one phase, i.e., multipha	ise?	No			
	does the COC specify which phase(s) is to be analy		NA			
		,	1421			
	act Laboratory  Imples required to get sent to a subcontract laborate	arra 9	No			
	subcontract laboratory specified by the client and i	•	NA	Subcontract Lab	. NA	
	• • •	i so wiio.	1111	Subcontract Lab	, NA	
Chent in	struction					
						0

Date

Signature of client authorizing changes to the COC or sample disposition.



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

June 30, 2021

Becky Haskell
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672

FAX

RE: Abby BLF Sate 1 OrderNo.: 2106B84

### Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 19 sample(s) on 6/23/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-001 **Collection Date:** 6/22/2021 10:20:00 AM

Client Sample ID: TP4-S Matrix: MEOH (SOIL)

		Matrix	: IVI	EOH (SOIL)		
Result	RL Qu	al Units	DF	Date Analyzed	Batch	ID
				An	alyst: <b>VP</b>	
ND	59	mg/Kg	20	6/23/2021 10:10:0	6 AM 608	848
Ē				An	alyst: <b>JM</b> I	R
ND	3.4	mg/Kg	1	6/23/2021 3:22:24	PM B79	9322
95.4	70-130	%Rec	1	6/23/2021 3:22:24	PM B79	9322
ANICS				An	alyst: <b>JM</b> I	E
12	9.8	mg/Kg	1	6/23/2021 2:38:23	PM 608	345
ND	49	mg/Kg	1	6/23/2021 2:38:23	PM 608	345
82.3	70-130	%Rec	1	6/23/2021 2:38:23	PM 608	845
Т				An	alyst: <b>JM</b> I	R
ND	0.017	mg/Kg	1	6/23/2021 3:22:24	PM A79	322
ND	0.034	mg/Kg	1	6/23/2021 3:22:24	PM A79	322
ND	0.034	mg/Kg	1	6/23/2021 3:22:24	PM A79	9322
ND	0.069	mg/Kg	1	6/23/2021 3:22:24	PM A79	9322
87.6	70-130	%Rec	1	6/23/2021 3:22:24	PM A79	322
104	70-130	%Rec	1	6/23/2021 3:22:24	PM A79	9322
85.5	70-130	%Rec	1	6/23/2021 3:22:24	PM A79	322
114	70-130	%Rec	1	6/23/2021 3:22:24	PM A79	9322
,	ND 95.4 ANICS 12 ND 82.3 T ND ND ND ND ND ND ND 87.6 104 85.5	ND 59  E  ND 3.4 95.4 70-130  ANICS  12 9.8 ND 49 82.3 70-130  T  ND 0.017 ND 0.034 ND 0.034 ND 0.069 87.6 70-130 104 70-130 85.5 70-130	Result         RL         Qual         Units           ND         59         mg/Kg           E         ND         3.4         mg/Kg           95.4         70-130         %Rec           ANICS         12         9.8         mg/Kg           ND         49         mg/Kg           82.3         70-130         %Rec           T         ND         0.017         mg/Kg           ND         0.034         mg/Kg           ND         0.034         mg/Kg           ND         0.069         mg/Kg           ND         0.069         mg/Kg           ND         0.069         mg/Kg           ND         0.069         mg/Kg           ND         0.70-130         %Rec           104         70-130         %Rec           85.5         70-130         %Rec	Result         RL         Qual         Units         DF           ND         59         mg/Kg         20           E         ND         3.4         mg/Kg         1           95.4         70-130         %Rec         1           ANICS         12         9.8         mg/Kg         1           ND         49         mg/Kg         1           ND         49         mg/Kg         1           ND         0.017         mg/Kg         1           ND         0.034         mg/Kg         1           ND         0.034         mg/Kg         1           ND         0.069         mg/Kg         1           ND         0.069         mg/Kg         1           87.6         70-130         %Rec         1           104         70-130         %Rec         1           85.5         70-130         %Rec         1	Ani ND 59 mg/Kg 20 6/23/2021 10:10:0  E	Result         RL         Qual         Units         DF         Date Analyzed         Batch           ND         59         mg/Kg         20         6/23/2021 10:10:06 AM         608           ND         3.4         mg/Kg         1         6/23/2021 3:22:24 PM         B78           95.4         70-130         %Rec         1         6/23/2021 3:22:24 PM         B78           ANICS         Analyst: JM           12         9.8         mg/Kg         1         6/23/2021 2:38:23 PM         608           ND         49         mg/Kg         1         6/23/2021 2:38:23 PM         608           82.3         70-130         %Rec         1         6/23/2021 2:38:23 PM         608           82.3         70-130         %Rec         1         6/23/2021 2:38:23 PM         608           82.3         70-130         %Rec         1         6/23/2021 3:22:24 PM         A78           ND         0.017         mg/Kg         1         6/23/2021 3:22:24 PM         A78           ND         0.034         mg/Kg         1         6/23/2021 3:22:24 PM         A78           ND         0.069         mg/Kg         1         6/23/2021 3:22:24 PM         A78

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

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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**CLIENT:** 

**Analytical Report** 

Lab Order: **2106B84**Date Reported: **6/30/2021** 

### Hall Environmental Analysis Laboratory, Inc.

**Lab Order:** 2106B84

**Project:** Abby BLF Sate 1

**GHD** 

**Lab ID:** 2106B84-002 **Collection Date:** 6/22/2021 10:25:00 AM

Client Sample ID: TP5-S Matrix: MEOH (SOIL)

**Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: VP Chloride ND 60 6/23/2021 10:22:30 AM 60848 mg/Kg 20 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 6/23/2021 4:48:53 PM B79322 4.0 mg/Kg 1 Surr: BFB 90.6 70-130 %Rec 1 6/23/2021 4:48:53 PM B79322 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) 290 9.5 mg/Kg 6/23/2021 3:27:03 PM 60845 1 Motor Oil Range Organics (MRO) 380 47 mg/Kg 1 6/23/2021 3:27:03 PM 60845 Surr: DNOP 102 70-130 %Rec 6/23/2021 3:27:03 PM 60845 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 0.020 6/23/2021 4:48:53 PM A79322 mg/Kg 1 Toluene ND A79322 0.040 mg/Kg 1 6/23/2021 4:48:53 PM Ethylbenzene ND 0.040 mg/Kg 1 6/23/2021 4:48:53 PM A79322 Xylenes, Total ND 0.080 mg/Kg 1 6/23/2021 4:48:53 PM A79322 Surr: 1,2-Dichloroethane-d4 98.2 70-130 %Rec 1 6/23/2021 4:48:53 PM A79322 Surr: 4-Bromofluorobenzene 97.2 70-130 %Rec 6/23/2021 4:48:53 PM A79322 Surr: Dibromofluoromethane 84.5 70-130 %Rec 6/23/2021 4:48:53 PM A79322 1 Surr: Toluene-d8 114 70-130 %Rec 6/23/2021 4:48:53 PM A79322

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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**CLIENT:** 

**Analytical Report** 

Lab Order: **2106B84**Date Reported: **6/30/2021** 

### Hall Environmental Analysis Laboratory, Inc.

GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-003 **Collection Date:** 6/22/2021 10:30:00 AM

Client Sample ID: TP6-S Matrix: MEOH (SOIL)

**Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: VP Chloride ND 60 6/23/2021 10:34:55 AM 60848 mg/Kg 20 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 6/23/2021 6:15:14 PM B79322 4.0 mg/Kg 1 Surr: BFB 96.8 70-130 %Rec 1 6/23/2021 6:15:14 PM B79322 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.5 mg/Kg 6/23/2021 2:13:58 PM 60845 1 Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 6/23/2021 2:13:58 PM 60845 Surr: DNOP 75.5 70-130 %Rec 1 6/23/2021 2:13:58 PM 60845 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 0.020 6/23/2021 6:15:14 PM A79322 mg/Kg 1 Toluene ND A79322 0.040 mg/Kg 1 6/23/2021 6:15:14 PM Ethylbenzene ND 0.040 mg/Kg 1 6/23/2021 6:15:14 PM A79322 Xylenes, Total ND 0.080 mg/Kg 1 6/23/2021 6:15:14 PM A79322 Surr: 1,2-Dichloroethane-d4 96 1 70-130 %Rec 1 6/23/2021 6:15:14 PM A79322 Surr: 4-Bromofluorobenzene 99.0 70-130 %Rec 6/23/2021 6:15:14 PM A79322 Surr: Dibromofluoromethane 88.7 70-130 %Rec 6/23/2021 6:15:14 PM A79322 1 Surr: Toluene-d8 118 70-130 %Rec 6/23/2021 6:15:14 PM A79322

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-004 **Collection Date:** 6/22/2021 10:35:00 AM

Client Sample ID: TP7-S Matrix: MEOH (SOIL)

Chefit Sample 1D. 11 / 5			Matila	. 1711	LOII (BOIL)		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Ba	tch ID
EPA METHOD 300.0: ANIONS					Ana	lyst:	VP
Chloride	ND	60	mg/Kg	20	6/23/2021 10:47:19	AM	60848
EPA METHOD 8015D MOD: GASOLINE RANGI	E				Ana	lyst:	JMR
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	6/23/2021 6:44:00 F	PM	B79322
Surr: BFB	94.4	70-130	%Rec	1	6/23/2021 6:44:00 F	PM	B79322
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Ana	lyst:	TOM
Diesel Range Organics (DRO)	36	9.2	mg/Kg	1	6/23/2021 3:03:01 F	PM	60845
Motor Oil Range Organics (MRO)	58	46	mg/Kg	1	6/23/2021 3:03:01 F	PM	60845
Surr: DNOP	82.6	70-130	%Rec	1	6/23/2021 3:03:01 F	PM	60845
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	Т				Ana	lyst:	JMR
Benzene	ND	0.017	mg/Kg	1	6/23/2021 6:44:00 F	PM	A79322
Toluene	ND	0.033	mg/Kg	1	6/23/2021 6:44:00 F	PM	A79322
Ethylbenzene	ND	0.033	mg/Kg	1	6/23/2021 6:44:00 F	PM	A79322
Xylenes, Total	ND	0.067	mg/Kg	1	6/23/2021 6:44:00 F	PM	A79322
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	6/23/2021 6:44:00 F	PM	A79322
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	6/23/2021 6:44:00 F	PM	A79322
Surr: Dibromofluoromethane	89.9	70-130	%Rec	1	6/23/2021 6:44:00 F	PM	A79322
Surr: Toluene-d8	113	70-130	%Rec	1	6/23/2021 6:44:00 F	PM	A79322

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-005 **Collection Date:** 6/22/2021 11:30:00 AM

Client Sample ID: TP1-4 Matrix: MEOH (SOIL)

Chefit Sample ID. 1114		Watrix, WEOR (BOIL)								
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Ba	tch ID		
EPA METHOD 300.0: ANIONS						Ana	ılyst:	VP		
Chloride	86	60		mg/Kg	20	6/23/2021 11:24:32	2 AM	60848		
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>	<u> </u>					Ana	ılyst:	JMR		
Gasoline Range Organics (GRO)	910	19		mg/Kg	5	6/23/2021 7:12:41	PM	B79322		
Surr: BFB	102	70-130		%Rec	5	6/23/2021 7:12:41	PM	B79322		
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS					Ana	ılyst:	SB		
Diesel Range Organics (DRO)	3700	45		mg/Kg	5	6/23/2021 1:05:09 I	PM	60845		
Motor Oil Range Organics (MRO)	1000	230		mg/Kg	5	6/23/2021 1:05:09 I	PM	60845		
Surr: DNOP	0	70-130	S	%Rec	5	6/23/2021 1:05:09 I	PM	60845		
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>	Г					Ana	ılyst:	JMR		
Benzene	ND	0.096		mg/Kg	5	6/23/2021 7:12:41	PM	A79322		
Toluene	3.4	0.19		mg/Kg	5	6/23/2021 7:12:41	PM	A79322		
Ethylbenzene	4.0	0.19		mg/Kg	5	6/23/2021 7:12:41	PM	A79322		
Xylenes, Total	29	0.38		mg/Kg	5	6/23/2021 7:12:41	PM	A79322		
Surr: 1,2-Dichloroethane-d4	126	70-130		%Rec	5	6/23/2021 7:12:41	PM	A79322		
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	5	6/23/2021 7:12:41	PM	A79322		
Surr: Dibromofluoromethane	90.8	70-130		%Rec	5	6/23/2021 7:12:41 I	PM	A79322		
Surr: Toluene-d8	110	70-130		%Rec	5	6/23/2021 7:12:41	PM	A79322		

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

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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**CLIENT:** 

**Analytical Report** 

Lab Order: **2106B84**Date Reported: **6/30/2021** 

### Hall Environmental Analysis Laboratory, Inc.

**Lab Order:** 2106B84

**Project:** Abby BLF Sate 1

**GHD** 

**Lab ID:** 2106B84-006 **Collection Date:** 6/22/2021 11:40:00 AM

Client Sample ID: TP1-8 Matrix: MEOH (SOIL)

**Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: VP Chloride ND 60 6/23/2021 11:36:56 AM 60848 mg/Kg 20 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 3.8 6/24/2021 1:45:09 PM S79337 mg/Kg 1 Surr: BFB 94.1 70-130 %Rec 1 6/24/2021 1:45:09 PM S79337 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.9 mg/Kg 6/23/2021 9:39:45 AM 60845 1 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 6/23/2021 9:39:45 AM 60845 Surr: DNOP 106 70-130 %Rec 6/23/2021 9:39:45 AM 60845 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 0.019 6/23/2021 7:41:21 PM A79322 mg/Kg 1 Toluene ND A79322 0.038 mg/Kg 1 6/23/2021 7:41:21 PM Ethylbenzene ND 0.038 mg/Kg 1 6/23/2021 7:41:21 PM A79322 Xylenes, Total ND 0.077 mg/Kg 1 6/23/2021 7:41:21 PM A79322 Surr: 1,2-Dichloroethane-d4 97.3 70-130 %Rec 1 6/23/2021 7:41:21 PM A79322 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 6/23/2021 7:41:21 PM A79322 Surr: Dibromofluoromethane 84.1 70-130 %Rec 6/23/2021 7:41:21 PM A79322 1 Surr: Toluene-d8 109 70-130 %Rec 6/23/2021 7:41:21 PM A79322

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-007 **Collection Date:** 6/22/2021 12:00:00 PM

Client Sample ID: TP1-12 Matrix: MEOH (SOIL)

**Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: VP Chloride ND 60 6/23/2021 11:49:21 AM 60848 mg/Kg 20 **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 3.6 6/23/2021 8:10:00 PM B79322 mg/Kg 1 Surr: BFB 92.1 70-130 %Rec 1 6/23/2021 8:10:00 PM B79322 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) ND 9.6 mg/Kg 6/23/2021 9:52:13 AM 60845 1 Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 6/23/2021 9:52:13 AM 60845 Surr: DNOP 108 70-130 %Rec 1 6/23/2021 9:52:13 AM 60845 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR Benzene ND 0.018 6/23/2021 8:10:00 PM A79322 mg/Kg 1 Toluene ND A79322 0.036 mg/Kg 1 6/23/2021 8:10:00 PM Ethylbenzene ND 0.036 mg/Kg 1 6/23/2021 8:10:00 PM A79322 Xylenes, Total ND 0.072 mg/Kg 1 6/23/2021 8:10:00 PM A79322 Surr: 1,2-Dichloroethane-d4 105 70-130 %Rec 1 6/23/2021 8:10:00 PM A79322 Surr: 4-Bromofluorobenzene 97.1 70-130 %Rec 6/23/2021 8:10:00 PM A79322 Surr: Dibromofluoromethane 82.9 70-130 %Rec A79322 1 6/23/2021 8:10:00 PM Surr: Toluene-d8 110 70-130 %Rec 6/23/2021 8:10:00 PM A79322

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-008 **Collection Date:** 6/22/2021 12:05:00 PM

Client Sample ID: TP1-13 Matrix: MEOH (SOIL)

Chefit Bampie ID. 11 1 13			Matila	. 1411	LOII (BOIL)		
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Ba	tch ID
EPA METHOD 300.0: ANIONS					Ana	lyst:	VP
Chloride	ND	60	mg/Kg	20	6/23/2021 12:01:45	PM	60848
EPA METHOD 8015D MOD: GASOLINE RANGE					Ana	lyst:	JMR
Gasoline Range Organics (GRO)	ND	18	mg/Kg	5	6/23/2021 8:38:39 F	PM	B79322
Surr: BFB	90.6	70-130	%Rec	5	6/23/2021 8:38:39 F	PM	B79322
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Ana	lyst:	SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/23/2021 10:04:53	AM	60845
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/23/2021 10:04:53	AM	60845
Surr: DNOP	109	70-130	%Rec	1	6/23/2021 10:04:53	AM	60845
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Ana	lyst:	JMR
Benzene	ND	0.091	mg/Kg	5	6/23/2021 8:38:39 F	PM	A79322
Toluene	ND	0.18	mg/Kg	5	6/23/2021 8:38:39 F	PM	A79322
Ethylbenzene	ND	0.18	mg/Kg	5	6/23/2021 8:38:39 F	PM	A79322
Xylenes, Total	ND	0.36	mg/Kg	5	6/23/2021 8:38:39 F	PM	A79322
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	5	6/23/2021 8:38:39 F	PM	A79322
Surr: 4-Bromofluorobenzene	94.9	70-130	%Rec	5	6/23/2021 8:38:39 F	PM	A79322
Surr: Dibromofluoromethane	88.7	70-130	%Rec	5	6/23/2021 8:38:39 F	PM	A79322
Surr: Toluene-d8	108	70-130	%Rec	5	6/23/2021 8:38:39 F	PM	A79322

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-009 **Collection Date:** 6/22/2021 1:30:00 PM

Client Sample ID: TP2-4 Matrix: MEOH (SOIL)

Cheff Bample 1D. 112 4	Matrix. MEOII (BOIL)								
Analyses	Result	RL	Qual	Units	DF	Date Ana	lyzed B	atch ID	
EPA METHOD 300.0: ANIONS							Analys	t: <b>VP</b>	
Chloride	470	60		mg/Kg	20	6/23/2021	12:14:09 PM	1 60848	
EPA METHOD 8015D MOD: GASOLINE RAN	GE						Analys	t: <b>JMR</b>	
Gasoline Range Organics (GRO)	4100	200		mg/Kg	50	6/24/2021	2:42:35 PM	S79337	
Surr: BFB	99.7	70-130		%Rec	50	6/24/2021	2:42:35 PM	S79337	
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS						Analys	t: SB	
Diesel Range Organics (DRO)	23000	970		mg/Kg	100	6/23/2021	12:00:03 PM	1 60845	
Motor Oil Range Organics (MRO)	6600	4900		mg/Kg	100	6/23/2021	12:00:03 PM	1 60845	
Surr: DNOP	0	70-130	S	%Rec	100	6/23/2021	12:00:03 PM	1 60845	
EPA METHOD 8260B: VOLATILES SHORT L	IST						Analys	t: <b>JMR</b>	
Benzene	15	0.10		mg/Kg	5	6/23/2021	9:07:16 PM	A79322	
Toluene	68	2.0		mg/Kg	50	6/24/2021	2:42:35 PM	R79337	
Ethylbenzene	31	2.0		mg/Kg	50	6/24/2021	2:42:35 PM	R79337	
Xylenes, Total	230	4.1		mg/Kg	50	6/24/2021	2:42:35 PM	R79337	
Surr: 1,2-Dichloroethane-d4	133	70-130	S	%Rec	5	6/23/2021	9:07:16 PM	A79322	
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	5	6/23/2021	9:07:16 PM	A79322	
Surr: Dibromofluoromethane	89.1	70-130		%Rec	5	6/23/2021	9:07:16 PM	A79322	
Surr: Toluene-d8	108	70-130		%Rec	5	6/23/2021	9:07:16 PM	A79322	

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-010 **Collection Date:** 6/22/2021 1:50:00 PM

Client Sample ID: TP2-10 Matrix: MEOH (SOIL)

						(		
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Ba	tch ID
EPA METHOD 300.0: ANIONS						An	alyst:	VP
Chloride	150	61		mg/Kg	20	6/23/2021 12:26:3	34 PM	60848
EPA METHOD 8015D MOD: GASOLINE RANGE						An	alyst:	JMR
Gasoline Range Organics (GRO)	3800	210		mg/Kg	50	6/24/2021 3:11:15	5 PM	S79337
Surr: BFB	93.9	70-130		%Rec	50	6/24/2021 3:11:15	5 PM	S79337
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					An	alyst:	SB
Diesel Range Organics (DRO)	7900	200		mg/Kg	20	6/23/2021 12:13:0	)1 PM	60845
Motor Oil Range Organics (MRO)	1800	1000		mg/Kg	20	6/23/2021 12:13:0	)1 PM	60845
Surr: DNOP	0	70-130	S	%Rec	20	6/23/2021 12:13:0	)1 PM	60845
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Ar	alyst:	JMR
Benzene	7.4	0.10		mg/Kg	5	6/23/2021 9:35:53	3 PM	A79322
Toluene	51	2.1		mg/Kg	50	6/24/2021 3:11:15	5 PM	R79337
Ethylbenzene	20	0.21		mg/Kg	5	6/23/2021 9:35:53	B PM	A79322
Xylenes, Total	140	4.1		mg/Kg	50	6/24/2021 3:11:15	5 PM	R79337
Surr: 1,2-Dichloroethane-d4	128	70-130		%Rec	5	6/23/2021 9:35:53	3 PM	A79322
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	5	6/23/2021 9:35:53	3 PM	A79322
Surr: Dibromofluoromethane	82.7	70-130		%Rec	5	6/23/2021 9:35:53	3 PM	A79322
Surr: Toluene-d8	110	70-130		%Rec	5	6/23/2021 9:35:53	3 PM	A79322

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

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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**CLIENT:** 

**Analytical Report** 

Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

2106B84

Lab Order:

**Project:** Abby BLF Sate 1

**GHD** 

**Lab ID:** 2106B84-011 **Collection Date:** 6/22/2021 2:15:00 PM

Client Sample ID: TP2-15 Matrix: MEOH (SOIL)

Client Sample ID: 1P2-15		Matrix: MEOH (SOIL)								
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch ID				
EPA METHOD 300.0: ANIONS					Ana	alyst: <b>VP</b>				
Chloride	240	60	mg/Kg	20	6/23/2021 12:38:59	9 PM 60848				
EPA METHOD 8015D MOD: GASOLINE RANGE					Ana	alyst: <b>JMR</b>				
Gasoline Range Organics (GRO)	23	4.9	mg/Kg	1	6/24/2021 2:13:53	PM S79337				
Surr: BFB	90.5	70-130	%Rec	1	6/24/2021 2:13:53	PM S79337				
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Ana	alyst: <b>SB</b>				
Diesel Range Organics (DRO)	310	9.5	mg/Kg	1	6/23/2021 10:17:33	3 AM 60845				
Motor Oil Range Organics (MRO)	89	47	mg/Kg	1	6/23/2021 10:17:33	3 AM 60845				
Surr: DNOP	97.5	70-130	%Rec	1	6/23/2021 10:17:33	3 AM 60845				
EPA METHOD 8260B: VOLATILES SHORT LIST	-				Ana	alyst: <b>JMR</b>				
Benzene	0.046	0.024	mg/Kg	1	6/24/2021 2:13:53	PM R79337				
Toluene	0.20	0.049	mg/Kg	1	6/24/2021 2:13:53	PM R79337				
Ethylbenzene	0.086	0.049	mg/Kg	1	6/24/2021 2:13:53	PM R79337				
Xylenes, Total	0.67	0.097	mg/Kg	1	6/24/2021 2:13:53	PM R79337				
Surr: 1,2-Dichloroethane-d4	99.0	70-130	%Rec	1	6/24/2021 2:13:53	PM R79337				
Surr: 4-Bromofluorobenzene	95.9	70-130	%Rec	1	6/24/2021 2:13:53	PM R79337				
Surr: Dibromofluoromethane	85.3	70-130	%Rec	1	6/24/2021 2:13:53	PM R79337				
Surr: Toluene-d8	110	70-130	%Rec	1	6/24/2021 2:13:53	PM R79337				

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-012 **Collection Date:** 6/22/2021 2:45:00 PM

Client Sample ID: TP2-18 Matrix: MEOH (SOIL)

Client Sample ID: 1P2-18			Matrix	: IVI	EOH (SOIL)		
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Ba	tch ID
EPA METHOD 300.0: ANIONS					An	alyst:	VP
Chloride	260	60	mg/Kg	20	6/23/2021 12:51:2	24 PM	60848
EPA METHOD 8015D MOD: GASOLINE RANGE	Ē				An	alyst:	JMR
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	6/24/2021 1:24:19	AM (	B79322
Surr: BFB	94.8	70-130	%Rec	1	6/24/2021 1:24:19	AM (	B79322
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				An	alyst:	SB
Diesel Range Organics (DRO)	190	9.0	mg/Kg	1	6/23/2021 10:30:1	5 AM	60845
Motor Oil Range Organics (MRO)	73	45	mg/Kg	1	6/23/2021 10:30:1	5 AM	60845
Surr: DNOP	102	70-130	%Rec	1	6/23/2021 10:30:1	5 AM	60845
EPA METHOD 8260B: VOLATILES SHORT LIS	Т				An	alyst:	JMR
Benzene	ND	0.022	mg/Kg	1	6/24/2021 1:24:19	) AM	A79322
Toluene	ND	0.044	mg/Kg	1	6/24/2021 1:24:19	) AM	A79322
Ethylbenzene	ND	0.044	mg/Kg	1	6/24/2021 1:24:19	AM (	A79322
Xylenes, Total	ND	0.088	mg/Kg	1	6/24/2021 1:24:19	AM (	A79322
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	6/24/2021 1:24:19	AM (	A79322
Surr: 4-Bromofluorobenzene	98.2	70-130	%Rec	1	6/24/2021 1:24:19	AM (	A79322
Surr: Dibromofluoromethane	78.8	70-130	%Rec	1	6/24/2021 1:24:19	AM (	A79322
Surr: Toluene-d8	105	70-130	%Rec	1	6/24/2021 1:24:19	AM (	A79322

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: 2106B84

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/30/2021

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-013 **Collection Date:** 6/22/2021 3:00:00 PM

Client Sample ID: TP3-4 Matrix: MEOH (SOIL)

Chefit bumple 1D: 113				111441171		BOII (BOIL)		
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Ba	tch ID
EPA METHOD 300.0: ANIONS						Ana	alyst:	VP
Chloride	ND	60		mg/Kg	20	6/23/2021 1:03:48	PM	60848
EPA METHOD 8015D MOD: GASOLINE RAN	GE					Ana	alyst:	JMR
Gasoline Range Organics (GRO)	3700	200		mg/Kg	50	6/24/2021 3:39:55	PM	S79337
Surr: BFB	91.8	70-130		%Rec	50	6/24/2021 3:39:55	PM	S79337
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Ana	alyst:	SB
Diesel Range Organics (DRO)	12000	490		mg/Kg	50	6/23/2021 12:26:0	4 PM	60845
Motor Oil Range Organics (MRO)	2900	2400		mg/Kg	50	6/23/2021 12:26:0	4 PM	60845
Surr: DNOP	0	70-130	S	%Rec	50	6/23/2021 12:26:0	4 PM	60845
EPA METHOD 8260B: VOLATILES SHORT L	IST					Ana	alyst:	JMR
Benzene	4.6	0.099		mg/Kg	5	6/24/2021 1:52:56	AM	A79322
Toluene	63	2.0		mg/Kg	50	6/24/2021 3:39:55	PM	R79337
Ethylbenzene	28	2.0		mg/Kg	50	6/24/2021 3:39:55	PM	R79337
Xylenes, Total	180	3.9		mg/Kg	50	6/24/2021 3:39:55	PM	R79337
Surr: 1,2-Dichloroethane-d4	129	70-130		%Rec	5	6/24/2021 1:52:56	AM	A79322
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	5	6/24/2021 1:52:56	AM	A79322
Surr: Dibromofluoromethane	85.1	70-130		%Rec	5	6/24/2021 1:52:56	AM	A79322
Surr: Toluene-d8	110	70-130		%Rec	5	6/24/2021 1:52:56	AM	A79322

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

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-014 **Collection Date:** 6/22/2021 3:10:00 PM

Client Sample ID: TP3-8 Matrix: MEOH (SOIL)

Client Sample ID: 1P3-8		Matrix: MEOH (SOIL)								
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Ba	tch ID			
EPA METHOD 300.0: ANIONS					An	alyst:	VP			
Chloride	140	61	mg/Kg	20	6/23/2021 1:16:12	PM	60848			
EPA METHOD 8015D MOD: GASOLINE RANGI	E				An	alyst:	JMR			
Gasoline Range Organics (GRO)	760	20	mg/Kg	5	6/24/2021 2:21:30	) AM	B79322			
Surr: BFB	91.3	70-130	%Rec	5	6/24/2021 2:21:30	) AM	B79322			
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				An	alyst:	SB			
Diesel Range Organics (DRO)	3000	49	mg/Kg	5	6/23/2021 12:39:1	0 PM	60845			
Motor Oil Range Organics (MRO)	800	250	mg/Kg	5	6/23/2021 12:39:1	0 PM	60845			
Surr: DNOP	110	70-130	%Rec	5	6/23/2021 12:39:1	0 PM	60845			
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	Т				Ar	alyst:	JMR			
Benzene	0.41	0.10	mg/Kg	5	6/24/2021 2:21:30	) AM	A79322			
Toluene	6.3	0.20	mg/Kg	5	6/24/2021 2:21:30	) AM	A79322			
Ethylbenzene	3.2	0.20	mg/Kg	5	6/24/2021 2:21:30	) AM	A79322			
Xylenes, Total	26	0.41	mg/Kg	5	6/24/2021 2:21:30	) AM	A79322			
Surr: 1,2-Dichloroethane-d4	129	70-130	%Rec	5	6/24/2021 2:21:30	) AM	A79322			
Surr: 4-Bromofluorobenzene	98.9	70-130	%Rec	5	6/24/2021 2:21:30	) AM	A79322			
Surr: Dibromofluoromethane	89.0	70-130	%Rec	5	6/24/2021 2:21:30	) AM	A79322			
Surr: Toluene-d8	107	70-130	%Rec	5	6/24/2021 2:21:30	) AM	A79322			

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-015 **Collection Date:** 6/22/2021 3:30:00 PM

Client Sample ID: TP3-12 Matrix: MEOH (SOIL)

Cheme Sumple 12.		Mutik, Mizon (Soiz)								
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Ba	tch ID			
EPA METHOD 300.0: ANIONS					An	alyst:	VP			
Chloride	68	60	mg/Kg	20	6/23/2021 1:53:24	PM	60848			
EPA METHOD 8015D MOD: GASOLINE RANGE					An	alyst:	JMR			
Gasoline Range Organics (GRO)	100	19	mg/Kg	5	6/24/2021 2:50:00	AM	B79322			
Surr: BFB	92.4	70-130	%Rec	5	6/24/2021 2:50:00	AM	B79322			
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				An	alyst:	SB			
Diesel Range Organics (DRO)	540	8.6	mg/Kg	1	6/23/2021 10:42:5	5 AM	60845			
Motor Oil Range Organics (MRO)	170	43	mg/Kg	1	6/23/2021 10:42:5	5 AM	60845			
Surr: DNOP	102	70-130	%Rec	1	6/23/2021 10:42:5	5 AM	60845			
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					An	alyst:	JMR			
Benzene	ND	0.093	mg/Kg	5	6/24/2021 2:50:00	AM	A79322			
Toluene	0.33	0.19	mg/Kg	5	6/24/2021 2:50:00	AM	A79322			
Ethylbenzene	0.29	0.19	mg/Kg	5	6/24/2021 2:50:00	AM	A79322			
Xylenes, Total	2.1	0.37	mg/Kg	5	6/24/2021 2:50:00	AM	A79322			
Surr: 1,2-Dichloroethane-d4	111	70-130	%Rec	5	6/24/2021 2:50:00	AM	A79322			
Surr: 4-Bromofluorobenzene	95.3	70-130	%Rec	5	6/24/2021 2:50:00	AM	A79322			
Surr: Dibromofluoromethane	90.6	70-130	%Rec	5	6/24/2021 2:50:00	AM	A79322			
Surr: Toluene-d8	106	70-130	%Rec	5	6/24/2021 2:50:00	AM	A79322			

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-016 **Collection Date:** 6/22/2021 3:45:00 PM

Client Sample ID: TP5-2 Matrix: MEOH (SOIL)

Chefit Sumple 12.	Witting Willow (SOIL)								
Analyses	Result	RL	Qual Units	DF	Date Analyzed I	Batch ID			
EPA METHOD 300.0: ANIONS					Analys	st: <b>VP</b>			
Chloride	ND	60	mg/Kg	20	6/23/2021 2:05:49 PM	60848			
EPA METHOD 8015D MOD: GASOLINE RANGE					Analys	st: <b>JMR</b>			
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	6/24/2021 3:18:30 AM	B79322			
Surr: BFB	92.3	70-130	%Rec	1	6/24/2021 3:18:30 AM	B79322			
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analys	st: SB			
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	6/23/2021 11:08:38 Al	M 60845			
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	6/23/2021 11:08:38 Al	M 60845			
Surr: DNOP	104	70-130	%Rec	1	6/23/2021 11:08:38 Al	M 60845			
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analys	st: <b>JMR</b>			
Benzene	ND	0.018	mg/Kg	1	6/24/2021 3:18:30 AM	A79322			
Toluene	ND	0.036	mg/Kg	1	6/24/2021 3:18:30 AM	A79322			
Ethylbenzene	ND	0.036	mg/Kg	1	6/24/2021 3:18:30 AM	A79322			
Xylenes, Total	ND	0.072	mg/Kg	1	6/24/2021 3:18:30 AM	A79322			
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	6/24/2021 3:18:30 AM	A79322			
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	6/24/2021 3:18:30 AM	A79322			
Surr: Dibromofluoromethane	86.9	70-130	%Rec	1	6/24/2021 3:18:30 AM	A79322			
Surr: Toluene-d8	109	70-130	%Rec	1	6/24/2021 3:18:30 AM	A79322			

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-017 **Collection Date:** 6/22/2021 3:50:00 PM

Client Sample ID: TP4-2 Matrix: MEOH (SOIL)

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS					Analy	st: <b>VP</b>
Chloride	ND	60	mg/Kg	20	6/23/2021 2:18:13 PM	1 60848
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analy	st: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	6/23/2021 11:21:25 A	M 60845
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	6/23/2021 11:21:25 A	M 60845
Surr: DNOP	103	70-130	%Rec	1	6/23/2021 11:21:25 A	M 60845
EPA METHOD 8015D: GASOLINE RANGE					Analy	st: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	6/23/2021 4:20:31 PM	M G79302
Surr: BFB	104	70-130	%Rec	1	6/23/2021 4:20:31 PM	M G79302
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.019	mg/Kg	1	6/23/2021 4:20:31 PM	M B79302
Toluene	ND	0.037	mg/Kg	1	6/23/2021 4:20:31 PM	M B79302
Ethylbenzene	ND	0.037	mg/Kg	1	6/23/2021 4:20:31 PM	M B79302
Xylenes, Total	ND	0.074	mg/Kg	1	6/23/2021 4:20:31 PM	M B79302
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	6/23/2021 4:20:31 PM	M B79302

**Lab ID:** 2106B84-018 **Collection Date:** 6/22/2021 4:00:00 PM

Client Sample ID: TP7-2 Matrix: MEOH (SOIL)

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Bat	tch ID
EPA METHOD 300.0: ANIONS					Ana	lyst:	VP
Chloride	88	60	mg/Kg	20	6/23/2021 2:30:38 F	PM	60848
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Ana	lyst:	SB
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	6/23/2021 11:34:19	AM	60845
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	6/23/2021 11:34:19	AM	60845
Surr: DNOP	109	70-130	%Rec	1	6/23/2021 11:34:19	AM	60845
EPA METHOD 8015D: GASOLINE RANGE					Ana	lyst:	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	6/23/2021 4:44:19 F	PM	G79302
Surr: BFB	104	70-130	%Rec	1	6/23/2021 4:44:19 F	PM	G79302
<b>EPA METHOD 8021B: VOLATILES</b>					Ana	lyst:	NSB
Benzene	ND	0.019	mg/Kg	1	6/23/2021 4:44:19 F	PM	B79302
Toluene	ND	0.038	mg/Kg	1	6/23/2021 4:44:19 F	PM	B79302
Ethylbenzene	ND	0.038	mg/Kg	1	6/23/2021 4:44:19 F	PM	B79302
Xylenes, Total	ND	0.076	mg/Kg	1	6/23/2021 4:44:19 F	PM	B79302
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	6/23/2021 4:44:19 F	PM	B79302

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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Lab Order: **2106B84**Date Reported: **6/30/2021** 

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Lab Order: 2106B84

**Project:** Abby BLF Sate 1

**Lab ID:** 2106B84-019 **Collection Date:** 6/22/2021 4:05:00 PM

Client Sample ID: TP6-2 Matrix: MEOH (SOIL)

Client Sample ID: 170-2	Matrix: MEOH (SOIL)								
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch ID			
EPA METHOD 300.0: ANIONS					Ana	lyst: <b>VP</b>			
Chloride	ND	59	mg/Kg	20	6/23/2021 2:43:02 F	PM 60848			
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Ana	lyst: SB			
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/23/2021 11:47:09	AM 60845			
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/23/2021 11:47:09	AM 60845			
Surr: DNOP	116	70-130	%Rec	1	6/23/2021 11:47:09	AM 60845			
EPA METHOD 8015D: GASOLINE RANGE					Ana	lyst: <b>NSB</b>			
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	6/23/2021 5:08:02 F	PM G79302			
Surr: BFB	104	70-130	%Rec	1	6/23/2021 5:08:02 F	PM G79302			
<b>EPA METHOD 8021B: VOLATILES</b>					Ana	lyst: <b>NSB</b>			
Benzene	ND	0.018	mg/Kg	1	6/23/2021 5:08:02 F	PM B79302			
Toluene	ND	0.036	mg/Kg	1	6/23/2021 5:08:02 F	PM B79302			
Ethylbenzene	ND	0.036	mg/Kg	1	6/23/2021 5:08:02 F	PM B79302			
Xylenes, Total	ND	0.071	mg/Kg	1	6/23/2021 5:08:02 F	PM B79302			
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	6/23/2021 5:08:02 F	PM B79302			

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** *30-Jun-21* 

Client: GHD

**Project:** Abby BLF Sate 1

Sample ID: MB-60848 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 60848 RunNo: 79312

Prep Date: 6/23/2021 Analysis Date: 6/23/2021 SeqNo: 2785749 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-60848 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 60848 RunNo: 79312

Prep Date: 6/23/2021 Analysis Date: 6/23/2021 SeqNo: 2785750 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 92.5 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 2106B84 30-Jun-21

**Client:** 

**Project:** Abby BLF Sate 1

Sample ID: MB-60845 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 60845 RunNo: 79260

Prep Date: 6/23/2021 Analysis Date: 6/23/2021 SeqNo: 2784853 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit **RPDLimit** Analyte Result PQL HighLimit %RPD Qual 10

Diesel Range Organics (DRO) ND Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 70 8.5 10.00 85.4 130

Sample ID: LCS-60845 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS

Client ID: LCSS Batch ID: 60845 RunNo: 79260

Prep Date: Analysis Date: 6/23/2021 SeqNo: 2784855 6/23/2021 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 48 50.00 95.2 68.9 141 Surr: DNOP 3.9 5.000 78.1 70 130

Sample ID: 2106B84-001AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: TP4-S Batch ID: 60845 RunNo: 79260

Prep Date: 6/23/2021 Analysis Date: 6/23/2021 SeqNo: 2785740 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 57 10 50.20 11.92 15 88.9 184

Surr: DNOP 4.0 5.020 79.9 70 130

Sample ID: 2106B84-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: TP4-S Batch ID: 60845 RunNo: 79260

Prep Date: 6/23/2021 Analysis Date: 6/23/2021 SeqNo: 2785742 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Diesel Range Organics (DRO) 56 9.4 46.82 11.92 93.8 15 184 1.25 23.9 Surr: DNOP 3.7 4.682 78.6 70 130 0 0

Sample ID: MB-60870 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Batch ID: 60870 Client ID: PBS RunNo: 79239

Prep Date: 6/23/2021 Analysis Date: 6/24/2021 SeqNo: 2789223 Units: %Rec

Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte LowLimit Qual

Surr: DNOP 10 10.00 102 70 130

Sample ID: LCS-60870 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS

Client ID: LCSS Batch ID: 60870 RunNo: 79239

Prep Date: 6/23/2021 Analysis Date: 6/24/2021 SeqNo: 2789224 Units: %Rec

PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual

#### Qualifiers:

Value exceeds Maximum Contaminant Level

Sample Diluted Due to Matrix D

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 20 of 27

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** *30-Jun-21* 

Client: GHD

**Project:** Abby BLF Sate 1

Sample ID: LCS-60870 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 60870 RunNo: 79239

Prep Date: 6/23/2021 Analysis Date: 6/24/2021 SegNo: 2789224 Units: %Rec

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

Surr: DNOP 5.3 5.000 106 70 130

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** *30-Jun-21* 

Client: GHD

Surr: BFB

**Project:** Abby BLF Sate 1

Sample ID: mb SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: G79302 RunNo: 79302

Prep Date: Analysis Date: 6/23/2021 SeqNo: 2785365 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 1000 1000 103 70 130

Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G79302 RunNo: 79302

1100

Prep Date: Analysis Date: 6/23/2021 SeqNo: 2785366 Units: mg/Kg

1000

Qual Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Gasoline Range Organics (GRO) 28 5.0 25.00 0 110 78.6 131

70

130

114

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** 

30-Jun-21

Client: GHD

**Project:** Abby BLF Sate 1

Sample ID: mb SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: B79302 RunNo: 79302

Prep Date: Analysis Date: 6/23/2021 SeqNo: 2785398 Units: mg/Kg

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

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 100 70 130

Sample ID: 100ng btex Ics SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: B79302 RunNo: 79302

Prep Date: Analysis Date: 6/23/2021 SeqNo: 2785399 Units: mg/Kg

Prep Date:	Analysis L	)ate: <b>6/</b>	23/2021	3	seqino: 2	785399	Units: mg/K	.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130			

#### Qualifiers:

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

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** *30-Jun-21* 

Client: GHD

**Project:** Abby BLF Sate 1

Sample ID: 100ng Ics	SampT	SampType: <b>LCS</b>			TestCode: EPA Method 8260B: Volatiles Short List					
Client ID: LCSS	Batcl	Batch ID: A79322			RunNo: <b>79322</b>					
Prep Date:	Analysis D	Date: <b>6/</b> 2	23/2021	8	SeqNo: 2	786194	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	70	130			
Toluene	1.1	0.050	1.000	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.52		0.5000		105	70	130			

Sample ID: mb	Samp	Гуре: МЕ	BLK	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batc	Batch ID: A79322			RunNo: <b>79322</b>					
Prep Date:	Analysis [	Date: <b>6/</b>	23/2021	5	SeqNo: 2	786196	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.9	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: <b>2106b84-002ams</b>	Samp1	SampType: <b>MS</b>			tCode: El	List				
Client ID: TP5-S	Batcl	Batch ID: A79322			RunNo: 7					
Prep Date:	Analysis D	Date: <b>6/</b>	23/2021	8	SeqNo: 2	786456	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.020	0.8019	0	87.8	70	130			
Toluene	0.90	0.040	0.8019	0	112	70	130			
Surr: 1,2-Dichloroethane-d4	0.41		0.4010		103	70	130			
Surr: 4-Bromofluorobenzene	0.38		0.4010		95.0	70	130			
Surr: Dibromofluoromethane	0.34		0.4010		84.8	70	130			
Surr: Toluene-d8	0.44		0.4010		110	70	130			

Sample ID: 2106b84-002amsd	SampT	ype: <b>MS</b>	SD	Test	tCode: <b>EF</b>	PA Method	8260B: Volat	iles Short	List	
Client ID: TP5-S	Batch	1D: <b>A7</b>	9322	R	tunNo: <b>7</b> 9	9322				
Prep Date:	Analysis D	ate: 6/	23/2021	S	SeqNo: 27	786457	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.020	0.8019	0	81.3	70	130	7.76	20	
Toluene	0.82	0.040	0.8019	0	102	70	130	10.0	20	

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** 

30-Jun-21

Client: GHD

**Project:** Abby BLF Sate 1

Sample ID: 2106b84-002amsc	<b>d</b> SampT	SampType: MSD			TestCode: EPA Method 8260B: Volatiles Short List					
Client ID: TP5-S	Batch	Batch ID: <b>A79322</b>			RunNo: 79	9322				
Prep Date:	Analysis D	ate: 6/	23/2021	S	SeqNo: 2	786457	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.41		0.4010		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.40		0.4010		101	70	130	0	0	
Surr: Dibromofluoromethane	0.34		0.4010		85.4	70	130	0	0	
Surr: Toluene-d8	0.43		0.4010		107	70	130	0	0	

Sample ID: 100ng lcs	SampT	SampType: LCS			tCode: El	List				
Client ID: LCSS	Batcl	Batch ID: <b>R79337</b>			RunNo: <b>7</b>					
Prep Date:	Analysis D	ate: <b>6/</b> 2	24/2021	\$	SeqNo: 2	786980	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	108	70	130			
Toluene	1.1	0.050	1.000	0	113	70	130			
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		107	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.6	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: mb	Samp <sup>-</sup>	SampType: MBLK			TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batc	Batch ID: <b>R79337</b>			RunNo: <b>7</b>						
Prep Date:	Analysis [	Date: <b>6/</b>	24/2021	5	SeqNo: 2	786981	Units: mg/k	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130				
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.5	70	130				
Surr: Dibromofluoromethane	0.48		0.5000		96.2	70	130				
Surr: Toluene-d8	0.52		0.5000		105	70	130				

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 25 of 27

### Hall Environmental Analysis Laboratory, Inc.

SampType: LCS

WO#: **2106B84** 

30-Jun-21

Client: GHD

Sample ID: 2.5ug gro Ics

**Project:** Abby BLF Sate 1

	1	71							Ū	
Client ID: LCSS	Batch	n ID: <b>B7</b>	9322	F	tunNo: <b>7</b> 9	9322				
Prep Date:	Analysis D	ate: 6/	23/2021	S	SeqNo: 27	786226	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.2	70	130			
Surr: BFB	480		500.0		95.3	70	130			
Sample ID: mb	SampT	ype: ME	BLK	Tes	tCode: <b>EF</b>	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch	n ID: <b>B7</b>	9322	F	tunNo: <b>7</b> 9	9322				
Prep Date:	Analysis D	ate: 6/	23/2021	8	SeqNo: 27	786228	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	450		500.0		89.8	70	130			
Sample ID: 2106b84-001ams	SampT	ype: <b>M</b> \$	3	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline	Range	
Client ID: TP4-S	Batch	n ID: <b>B7</b>	9322	F	tunNo: <b>7</b> 9	9322				
Prep Date:	Analysis D	ate: 6/	23/2021	S	SeqNo: 27	786486	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.4	17.18	1.622	103	64.4	124			
Surr: BFB	330		343.7		96.0	70	130			
		SampType: <b>MSD</b>			TestCode: EPA Method 8015D Mod: Gasolin					
Sample ID: <b>2106b84-001ams</b>	<b>d</b> SampT	ype: <b>M</b> \$	SD	Tes	tCode: <b>EF</b>	PA Method	8015D Mod:	Gasoline	Range	

TestCode: EPA Method 8015D Mod: Gasoline Range

Prep Date:	Analysis [	)ate: <b>6/</b>	/23/2021	5	SeqNo: 2	786487	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.4	17.18	1.622	94.3	64.4	124	7.64	20	
Surr: BFB	310		343.7		91.2	70	130	0	0	
Sample ID: 2.5ug gro Ics	Samp1	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline					·
Client ID: LCCC	Poto	Potob ID: \$70227			PunNo: 70227					

Client ID: LCSS Batch ID: **\$79337** RunNo: 79337 Prep Date: Analysis Date: 6/24/2021 SeqNo: 2786989 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 95.8 70 130 Surr: BFB 470 500.0 93.6 70 130

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range
Client ID: PBS	Batch ID: \$79337	RunNo: <b>79337</b>
Prep Date:	Analysis Date: 6/24/2021	SeqNo: <b>2786990</b> Units: <b>mg/Kg</b>
Analyte	Result PQL SPK value SP	K Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 26 of 27

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2106B84** 

30-Jun-21

Client: GHD

**Project:** Abby BLF Sate 1

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

Client ID: PBS Batch ID: \$79337 RunNo: 79337

Prep Date: Analysis Date: 6/24/2021 SeqNo: 2786990 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

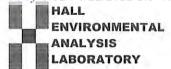
Surr: BFB 460 500.0 92.2 70 130

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 27 of 27



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

# Sample Log-In Check List

Client Name:	GHD	Work Order Number	: 210	6B84		RcptNo: 1
Received By:	Juan Rojas	6/23/2021 7:30:00 AM	į		Huaning	
Completed By:	Cheyenne Cason	6/23/2021 7:55:11 AM	ı		(lead	
Reviewed By:	IU	6.23.21				
Chain of Cus	stody					
1. Is Chain of C	custody complete?		Yes	V	No 🗌	Not Present
2. How was the	sample delivered?		Cou	rier		
Log In						4520
3. Was an atter	npt made to cool the sar	mples?	Yes	V	No 🗀	NA 🗌
4. Were all sam	ples received at a tempe	erature of >0° C to 6.0°C	Yes	<b>V</b>	No 🗌	NA 🗆
5. Sample(s) in	proper container(s)?		Yes	V	No 🗌	
6. Sufficient san	nple volume for indicated	d test(s)?	Yes	V	No 🗌	
7. Are samples	(except VOA and ONG)	properly preserved?	Yes	<b>V</b>	No 🗌	
8. Was preserva	ative added to bottles?		Yes		No 🗸	NA 🗆
9. Received at le	east 1 vial with headspace	ce <1/4" for AQ VOA?	Yes		No 🗌	NA 🗹
10. Were any sa	mple containers received	d broken?	Yes		No 🗸	# of preserved bottles checked
	ork match bottle labels? pancies on chain of custo	ody)	Yes	V	No 🗌	for pH: (<2 or >12 unless noted)
12. Are matrices	correctly identified on Ch	nain of Custody?	Yes	<b>V</b>	No 🗆	Adjusted?
13. Is it clear wha	at analyses were request	ed?	Yes	<b>V</b>	No 🗌	101 /010
	ing times able to be met customer for authorizatio		Yes	<b>V</b>	No 🗌	Checked by: KPG/RLC
Special Hand	ling (if applicable)					6/23/2
15. Was client n	otified of all discrepancie	es with this order?	Yes		No 🗌	NA 🗹
Persor	Notified:	Date:				
By Wh	iom:	Via:	_ eN	lail 🗌	Phone  Fax	☐ In Person
Regard	ding:					
Client	Instructions:					
16. Additional re	emarks:					
17. <u>Cooler Info</u> Cooler N		on Seal Intact Seal No	Seal [	Date	Signed By	
1	1.7 Good	and the state of t			The Control of Control	
2	3.9 Good					

Rece	ived	by O	CD	<b>)</b> : 6/2	2/20	22 1	:37:	57 PM											1					T		Pag	ze 11	2 of 1	114
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Released to Imaging: 7/5/2022 4:20:32 PM

TORY TO Seceived by OCD: 6/22/202	37:57 PM		Page 113 of 1
HALL ENVIRONMENTAI ANALYSIS LABORATOR www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	EDB (Method 504.1)  EDB (Method 504.1)  PAHs by 8310 or 8270SIMS  SCRA 8 Metals  CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> S20 (VOA)  S270 (Semi-VOA)  Total Coliform (Present/Absent)	9 - 7	Place and Each composed
4900 Tel.	STEX / MTBE / TMB's (8021) PPRO15D(GRO / DRO / MRO)	2	Remarks:
d Time:  d Arush Event Desperation  of Blf Stell #1	Lessen  Lessen  Lessen  I S-0 1= 1 7 (°C)  I S-0 1= 1 7 (°C)  HEAL NO.  HEAL NO.	013 014 016 016 018 018	1) Date Time F 1) 1745 Via: 8 Date Time  1 (2) 128/21 7:30
Turn-Around T  Standard Project Name:  Albe Project #5	Project Manager: (S. Zampler: Z.	13	Received by: Received by:
Client: Chain-of-Custody Record Client: Chain-of-Custody Record Client: Chain-of-Custody Record Mailing Address:  2440 Male #: (SCSS) 377-4218 Phone #: (SCSS) 377-4218	email or Fax#: 18_L, Hk.   C. (1) C	1510   TP3-4 1510   TP3-8 1530   TP3-12 1550   TP3-2 1605   TP3-2	Time: Relinquished by:    Time: Relinquished by:   Received by: Via:   Date Time   Remarks: Please characteristics   Color   Date Time   Color   Date Time   Color   Date Time   Date Date Time   Date Time   Date Date Date Date Date Date Date Date

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

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 119613

### **CONDITIONS**

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	119613
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved.	7/5/2022