

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2112055203
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # (assigned by OCD) nAPP2112055203
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.42609 Longitude -104.54400
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Brannigan ANF Federal Battery	Site Type Battery
Date Release Discovered 04/13/2021	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	06	22S	24E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) Unknown	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/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 Unknown historical release, no known volume or date. Release area is within the battery berm where oil tanks were. Area discovered 4/13/21, but could not access for investigation due to P&A activities until 4/27/21.

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State of New Mexico
Oil Conservation Division

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

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Chase Settle</u>	Title: <u>Rep Safety & Environmental Sr</u>
Signature: <u></u>	Date: <u>04/30/2021</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	nAPP2112055203
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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?	<u>Unknown</u> (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

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Oil Conservation Division

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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:  Date: 09/30/2021
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2112055203
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Remediation Plan

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

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

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

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

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr
Signature:  Date: 09/30/2021
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: Chad Hensley Date: 10/15/2021

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

Signature:  Date: 10/15/2021

Incident ID	nAPP2112055203
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Closure

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

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

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

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

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr
Signature: Chase Settle Date: 01/12/2022
email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: Chad Hensley Date: 02/03/2022

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Chad Hensley Date: 02/03/2022
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

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

Our ref: 11228319

January 11, 2022

New Mexico Oil Conservation Division
District 2
811 South First Street
Artesia, New Mexico 88210

Re: **Site Characterization and Closure Report
Brannigan ANF Federal Battery Release Site
EOG Resources Inc.
Incident ID: nAPP2112055203
D-06-22S-24E, Eddy County, New Mexico**

To Whom It May Concern:

1. Introduction

GHD Services, Inc. (GHD), on behalf of EOG Resources (EOG), submits this Site Characterization and Closure Report to the New Mexico Oil Conservation Division (NMOCD) District 2 Office. This Report provides documentation of delineation, sampling, analyses, and remedial activities in the affected areas at the EOG Brannigan ANF Federal Battery Release Site (Site). The Site is located in Unit Letter D Section 06 of Township 22 South and Range 24 East in Eddy County, New Mexico. The GPS coordinates for the release site are 32.42609 N latitude and 104.54400 W longitude. The release occurred on land managed by the Bureau of Land Management (BLM). Figure 1 depicts the Site location. The EOG production facility and other site details are depicted on Figures 2 and 3, respectively.

2. Background Information

A C-141 initial report for this release was submitted to the NMOCD on April 30, 2021. The C-141 stated that no known volume or date could be assigned to this historical release. The potential release area was discovered during EOG well plugging and site abandonment activities associated with this location. Soils within the former tank battery containment appeared to be discolored and after discussions between field personnel and environmental staff – EOG made the decision to go ahead and file a C-141 for this suspect release location.

A Site Characterization and Remediation Work Plan dated September 24, 2021 was submitted to the NMOCD for approval. The report documented delineation and remediation activities at the site and requested approval to backfill the excavation. The work plan was approved by the NMOCD on October 15, 2021. The Initial Form C-141, Site Assessment/Characterization, Remediation Plan and Closure portions of Form C-141 for Incident Number nAPP2112055203 are attached to the front of this report.

3. Groundwater and Site Characterization

GHD characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12). The release falls under the jurisdiction of the NMOCD District 2 in Artesia, New Mexico.

According to the Site characterization evaluation and 19.15.29.12.C(4)(a)(i) the Site is located within an area of high karst potential so the release must be treated as if it occurred less than 50 feet from groundwater. No other receptors (water wells, playas, wetlands, waterways, lakebeds or ordinance boundaries) were located within each specific boundaries or distance from the Site. No groundwater data could be located within one-half mile of the Site. The Site characterization documentation (Karst Potential, FEMA, Points of Diversion and Wetlands maps) are provided in Attachment A. The soil and closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft.)
High Karst Potential Area	Unknown, Treated as <50 ft.

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

Constituent	Limits
Chloride	600 mg/kg
TPH (GRO+DRO+MRO)	100 mg/kg
TPH (GRO+DRO)	N/A
Benzene	10mg/kg
BTEX	50 mg/kg

4. Initial Soil Delineation Assessment Summary and Findings

On May 18, 2021, GHD Services Inc. (GHD) and EOG's contractor BDS Enterprise, LLC (BDS), on behalf of EOG, installed eight (8) test pits and one (1) hand boring within the former tank battery containment at the site. The test pit and hand boring locations were excavated to approximately three (3) feet below ground surface (bgs) with samples collected from the bottom of the test pits and hand boring.

All soil samples were analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300 by Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico. Seven (7) of nine (9) soil samples exceeded applicable NMAC Table 3.1 Closure Criteria: TP-1, TP-2, TP-3, TP-5, TP-6, TP-7 and HA-1. Figure 2, Initial Site Assessment: Analytical Results Map, depicts the locations of the initial delineation samples and analytical concentrations. Analytical results are provided in Table 1, on Figure 2, and in the Laboratory Analytical Reports provided in Attachment C.

5. Excavation, Waste Management and Confirmation Sampling

Due to the preliminary soil sampling activities exhibiting TPH and Chloride exceedance above the closure criteria in the above Table 3.1 values, GHD and BDS returned to the site on June 7, 2021, to excavate the affected soils. Confirmation soil samples (SW-1, SW-2, SW-3, BH-1, BH-2, BH-3, BH-4, BH-5 and BH-6) were

collected on June 9, 2021, after a confirmation sampling notification was submitted to the NMOCD two business days prior. All confirmation samples were taken to HEAL in Albuquerque, New Mexico and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300. Analytical results indicated that confirmation soil sample BH-2 through BH-4, BH-6 and SW-1 exhibited TPH concentration above Table 1 closure criteria. Confirmation samples collected represented areas no greater than two hundred (200) square feet. Laboratory Analytical Reports and Chain-of-Custody Documentation are provided in Attachment C. Analytical results are summarized in Attached Table 1.

On June 15, 2021 through June 24, 2021, GHD and Culberson Construction Energy Services (CCI) returned to the site, to conduct further remediation activities. Composite confirmation samples were collected by use of a trackhoe which assisted in scrapping collectable samples off bedrock encountered past three (3) feet bgs. Thirty-four (34) bottom hole (BH-7 through BH-40) and twenty-two (22) sidewall (SW-3 through SW-25) samples were collected from areas representing no more than 200 square feet. Samples were then taken to HEAL in Albuquerque, New Mexico. Analytical results for all samples collected indicated twelve (12) bottom hole (BH-2, BH-3 BH-4, BH-6, BH-7, BH-9 through BH-13, BH-15 and BH-29) and five (5) sidewall (SW-1, SW-5, SW-11, SW-17 and SW-18) samples had Total TPH or chloride concentrations exceeding Table 1 closure criteria. No samples exhibited benzene or BTEX concentrations above Table 1 closure criteria.

On July 8, 2021, GHD and CCI returned to the site after further remediation activities to re-sample the eastern portion of the excavation. Two (2) bottom hole (BH-3A and BH-4A) and three (3) sidewall (SW-1A, SW-5A and SW-11A) samples were collected from areas no greater than 200 square feet and were submitted to HEAL in Albuquerque, New Mexico. Analytical results indicated four (4) samples (BH-4A, SW-1A, SW-5A and SW-11A) still had Total TPH concentrations exceeding Table 1 closure criteria.

GHD and CCI returned to the site on July 16, 2021, to conduct further remediation activities and to re-sample areas that had previously exceeded Table 1 closure criteria. Composite confirmation samples were collected by use of a trackhoe to gather collectable samples from bedrock. The bedrock was swept free of debris before any samples were collected. Twelve (12) bottom hole (BH-2A, BH-4B, BH-6A, BH-7A, BH-9A through BH-13A, BH-15A, BH-29A and BH-41) and six (6) sidewall (SW-1B, SW-5B, SW-11B, SW-17A, SW-18A and SW-26) samples were collected from areas representing no more than 200 square feet. Samples were then taken to HEAL in Albuquerque, New Mexico. Analytical results indicated chloride, TPH, Benzene and BTEX concentrations were below Table 1 closure criteria. All final soil confirmation soil samples collected from the excavation were below Table 1 closure criteria.

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 (WM-1-035), Lea Land, LLC facility located at MM64, Highway 62/180 East, Carlsbad, NM, 88220. Approximately 4,741 tons of impacted soil and rock were disposed at Lea Land, LLC, the waste manifest from June 8 through July 26, 2021. Shipping manifests 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. The Approved C-138 is provided in Attachment D.

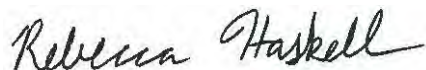
6. nAPP2112055203 Closure Request

On October 15, 2021, the NMOCD approved the Site Characterization and Remediation Work Plan (Backfill Request). The excavation was backfilled with non-impacted material on October 18 through 22, 2021. Site Characterization, soil delineation, and remediation activities for this incident number have been performed in accordance with applicable NMOCD guidance and regulations. Based upon supporting documentation provided in this report, GHD, on behalf of EOG, respectfully requests closure and no further regulatory actions for nAPP2112055203

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

Sincerely,

GHD



Becky Haskell
Senior Project Manager



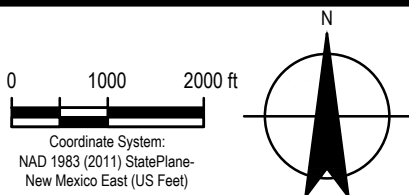
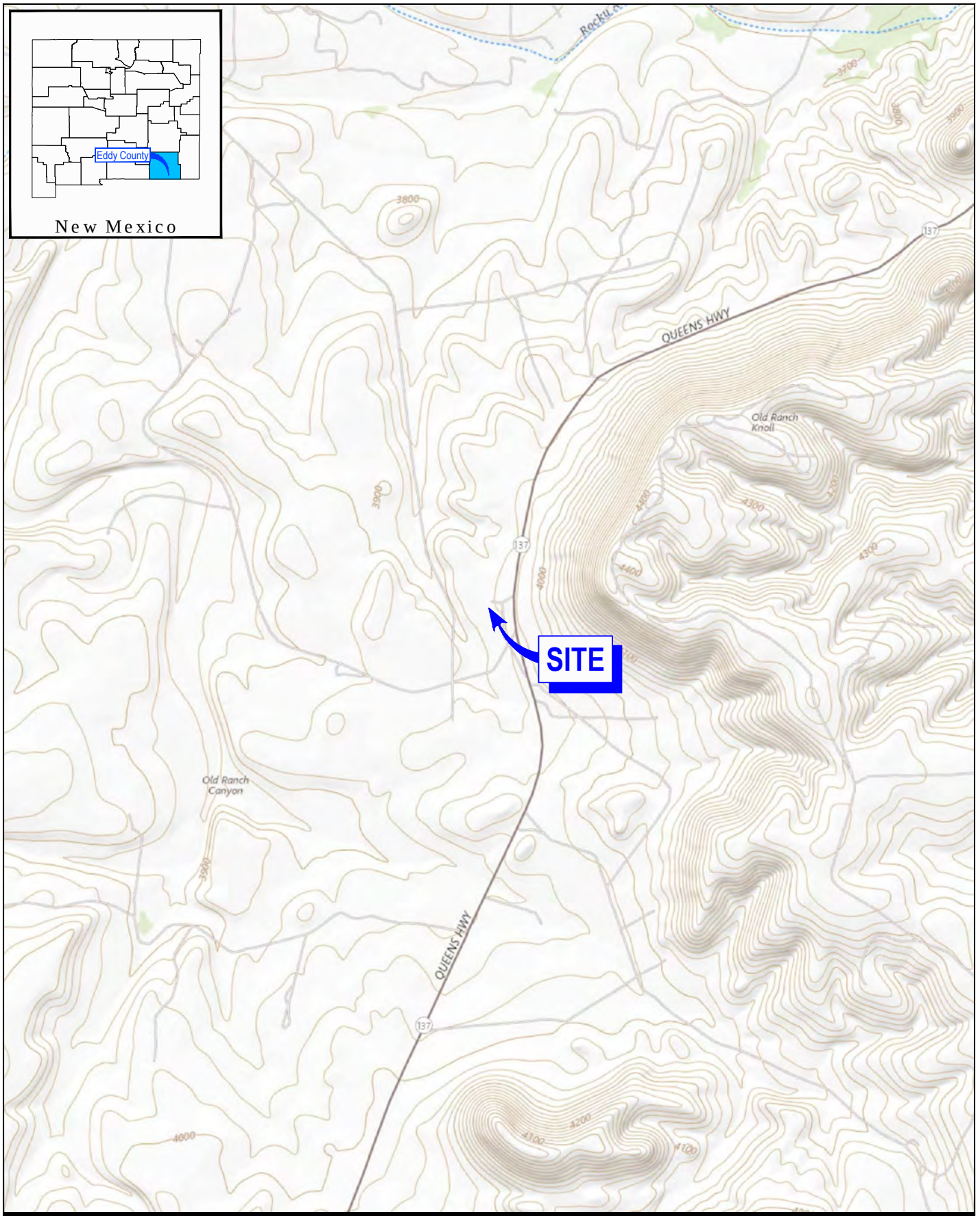
Zach H. Comino
Field Geologist

BH/tl/1

Encl. Figure 1 – Site Location Map
 Figure 2 – Initial Site Assessment: Analytical Results Map
 Figure 3 – Confirmation Sampling: Soil Analytical Results Map
 Table 1 – Summary of Soil Analytical Data
 Table 2 – Daily Disposal Summary
 Attachment A – Site Characterization Documentation
 Attachment B – Photographic Log
 Attachment C – Laboratory Analytical Reports and Chain-of-Custody Documentation
 Attachment D – Approved C-138

cc: Chase Settle

Figures

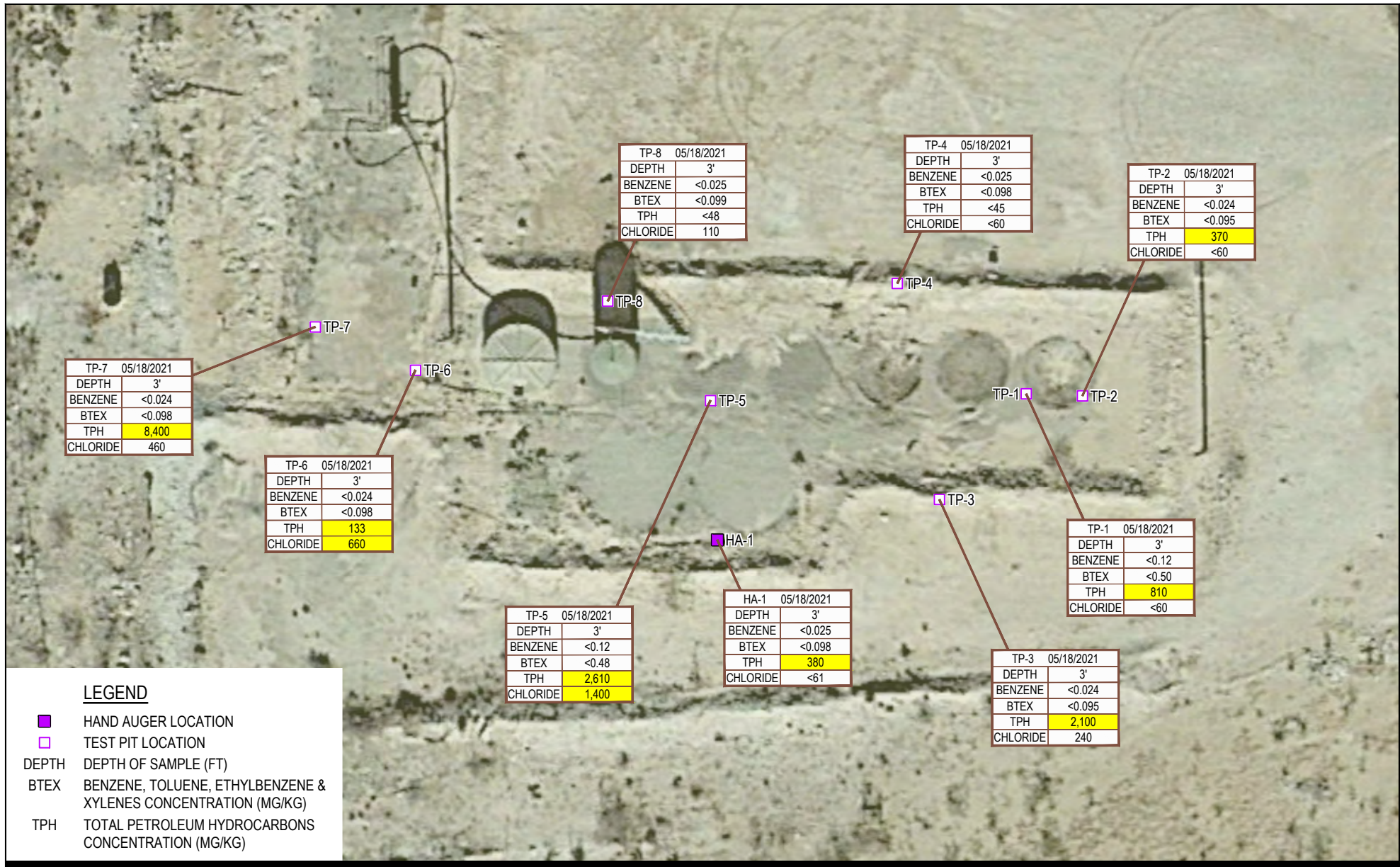


EOG RESOURCES
EDDY COUNTY, NEW MEXICO
BRANNIGAN ANF FEDERAL #5 BATTERY

Project No. 11228319
Date August 2021

SITE LOCATION MAP

FIGURE 1



NOTES:

1. RESULTS IN MILLIGRAMS PER KILOGRAM (MG/KG).
2. SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.
3. YELLOW SHADED CELLS INDICATE EXCEEDANCE.



EOG RESOURCES
EDDY COUNTY, NEW MEXICO
BRANNIGAN ANF FEDERAL #5 TANK BATTERY

INITIAL SITE ASSESSMENT:
ANALYTICAL RESULTS MAP

Project No. 11228319
Date September 2021

FIGURE 2

Sample ID	Sample Date	Depth (feet bgs)	Benzene	BTEX	TPH Total GRO/DROMRO	Chloride
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
			Table 1 Closure Criteria for Soils <50 feet Depth to			
			10 mg/Kg	50 mg/Kg	100 mg/Kg	600 mg/Kg
Sidewall Samples						
SW-1	6/9/2021	-	<0.025	<0.099	340	130
SW-1A	7/8/2021	-	<0.025	<0.099	390	61
SW-1B	7/16/2021	-	<0.023	<0.091	<49	<59
SW-2	6/9/2021	-	<0.025	<0.098	24	<60
SW-3	6/9/2021	-	<0.024	<0.097	12	<60
SW-4	6/15/21	-	<0.025	<0.099	<46	89
SW-5	6/15/21	-	<0.024	<0.098	300	220
SW-5A	7/8/21	-	<0.025	<0.098	310	170
SW-5B	7/16/21	-	<0.024	<0.097	<49	<60
SW-6	6/15/21	-	<0.025	<0.099	14	140
SW-7	6/15/21	-	<0.025	<0.099	<46	67
SW-8	6/15/21	-	<0.025	<0.098	<49	130
SW-9	6/15/21	-	<0.025	<0.098	<46	140
SW-10	6/16/21	-	<0.023	<0.093	<47	150
SW-11	6/16/21	-	<0.12	<0.48	360	200
SW-11A	7/8/21	-	<0.12	<0.49	380	78
SW-11B	7/16/21	-	<0.024	<0.098	<46	<60
SW-12	6/16/21	-	<0.12	<0.50	39	200
SW-13	6/17/21	-	<0.024	<0.095	15	100
SW-14	6/18/21	-	<0.025	<0.099	25	560
SW-15	6/18/21	-	<0.025	<0.10	<49	<60
SW-16	6/18/21	-	<0.025	<0.10	<49	460
SW-17	6/18/21	-	<0.024	<0.097	183	400
SW-17A	7/16/21	-	<0.023	<0.093	<49	140
SW-18	6/18/21	-	<0.025	<0.099	<48	990
SW-18A	7/16/21	-	<0.024	<0.096	<48	100
SW-19	6/18/21	-	<0.024	<0.094	<50	96
SW-19	6/21/21	-	<0.024	<0.096	<47	190
SW-20	6/21/21	-	<0.024	<0.097	<48	80
SW-21	6/21/21	-	<0.024	<0.096	<50	170
SW-22	6/21/21	-	<0.024	<0.097	<49	140
SW-23	6/23/21	-	<0.025	<0.097	<47	<60
SW-24	6/23/21	-	<0.024	<0.095	27	150
SW-25	6/23/21	-	<0.024	<0.097	11	83
SW-26	7/16/21	-	<0.024	<0.094	<49	<60

LEGEND

EXCAVATED AREA

DEPTH DEPTH OF SAMPLE (FT)

BTEX BENZENE, TOLUENE, ETHYLBENZENE & XYLENES CONCENTRATION (MG/KG)

TPH TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (MG/KG)

SURFACE SAMPLE POINT EXCAVATED

INDICATES SIDE WALL COMPOSITE SAMPLE

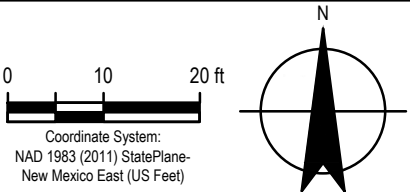
INDICATES SIDE WALL COMPOSITE SAMPLE

INDICATES SIDE WALL COMPOSITE SAMPLE

- NOTES:
1. RESULTS IN MILLIGRAMS PER KILOGRAM (MG/KG).

2. SEE TABLE 1 FOR FULL ANALYTICAL RESULTS/DETAILS.

3. YELLOW SHADED CELLS INDICATE EXCEEDANCE.



EOG RESOURCES
EDDY COUNTY, NEW MEXICO
BRANNIGAN ANF FEDERAL #5 BATTERY

CONFIRMATION SAMPLING:
SOIL ANALYTICAL RESULTS MAP

Project No. 11228319
Date September 2021

FIGURE 3

Tables

Table 1
Summary of Soil Analytical Data
Brannigan ANF Federal 5 Battery
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	(mg/Kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC									
			10 mg/Kg	---	---	---	50 mg/Kg	---	---	---	100 mg/Kg	600 mg/Kg
Initial Assessment Samples - Battery Area												
TP-1	5/18/21	3	<0.12	<0.25	<0.25	<0.50	<0.50	<25	330	480	810	<60
TP-2	5/18/21	3	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	150	220	370	<60
TP-3	5/18/21	3	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	600	1,500	2,100	240
TP-4	5/18/21	3	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.0	<45	<45	<60
TP-5	5/18/21	3	<0.12	<0.24	<0.24	<0.48	<0.48	60	1,700	850	2,610	1,400
TP-6	5/18/21	3	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	48	85	133	660
TP-7	5/18/21	3	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	4,600	3,800	8,400	460
TP-8	5/18/21	3	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.6	<48	<48	110
HA-1	5/18/21	3	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	110	270	380	<61
Confirmation Samples												
BH-1	6/9/2021	11'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.7	<48	<48	130
BH-2	6/9/2021	3-4'	<0.12	<0.25	<0.25	<0.49	<0.49	<25	210	250	460	<60
BH-2A	7/16/2021	11'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<49	<60
BH-3	6/9/2021	3-4'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	97	160	257	<60
BH-3A	7/8/2021	11'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.8	<49	<49	<60
BH-4	6/9/2021	3-4'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	300	480	780	<60
BH-4A	7/8/2021	10'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	180	160	340	<60
BH-4B	7/16/2021	11'	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.3	<46	<46	<60
BH-5	6/9/2021	11'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.3	<46	<46	<60
BH-6	6/9/2021	3-4'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	320	210	630	<60
BH-6A	7/16/2021	11'	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<48	<60
BH-7	6/15/21	6-7'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	1,900	1,100	3,000	<60
BH-7A	7/16/21	11'	<0.023	<0.046	<0.046	<0.091	<0.091	<4.6	<9.8	<49	<49	<60
BH-8	6/15/21	11'	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.0	<45	<45	160
BH-9	6/15/21	6-7'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	210	160	370	<60
BH-9A	7/16/21	11'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<49	<60
BH-10	6/15/21	6-7'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	310	270	580	<60
BH-10A	7/16/21	11'	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.5	<48	<48	<60
BH-11	6/15/21	6-7'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	170	110	280	<59

Table 1
Summary of Soil Analytical Data
Brannigan ANF Federal 5 Battery
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	(mg/Kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC									
			10 mg/Kg	---	---	---	50 mg/Kg	---	---	---	100 mg/Kg	600 mg/Kg
BH-11A	7/16/21	11'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.4	<47	<47	<60
BH-12	6/15/21	6-7'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	320	230	550	280
BH-12A	7/16/21	11'	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.4	<47	<47	<49
BH-13	6/15/21	6-7'	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	1,100	730	1,830	140
BH-13A	7/16/21	11'	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.8	<49	<49	<60
BH-14	6/15/21	3-4'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	12	<49	12	<60
BH-15	6/15/21	6-7'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	860	530	1,390	89
BH-15A	7/16/21	11'	<0.023	<0.046	<0.046	<0.091	<0.091	<4.6	<9.7	<49	<49	<59
BH-16	6/16/21	11'	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.6	<48	<48	<60
BH-17	6/16/21	6.5'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.4	<47	<47	<60
BH-18	6/16/21	6.5'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.7	<48	<48	<61
BH-19	6/16/21	6.5'	<0.12	<0.23	<0.23	<0.46	<0.46	<23	10	<41	10	<60
BH-20	6/17/21	11'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.2	<46	<46	<60
BH-21	6/17/21	3-4'	<0.024	<0.048	<0.048	<0.097	<0.097	4.8	13	<50	13	66
BH-22	6/17/21	3-4'	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	12	<48	12	<60
BH-23	6/18/21	11'	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.7	<48	<48	<59
BH-24	6/18/21	6.5'	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<9.7	<49	<49	<60
BH-25	6/18/21	11'	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.5	<48	<48	81
BH-26	6/18/21	11'	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<48	<60
BH-27	6/18/21	11'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<10	<50	<50	<60
BH-28	6/21/21	5.5-6.5'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	11	<49	11	360
BH-29	6/21/21	6	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	55	87	142	580
BH-29A	7/16/21	6.5'	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.7	<48	<48	<60
BH-30	6/21/21	11'	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.5	<47	<47	<60
BH-31	6/21/21	11'	<0.025	<0.050	<0.050	<0.010	<0.010	<5.0	<9.4	<47	<47	<60
BH-32	6/21/21	11'	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.8	<49	<49	<60
BH-33	6/21/21	11'	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.7	<48	<48	<60
BH-34	6/21/21	11'	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.6	<48	<48	<60

Table 1
Summary of Soil Analytical Data
Brannigan ANF Federal 5 Battery
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride	
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO		
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC										
			10 mg/Kg	---	---	---	50 mg/Kg	---	---	---	100 mg/Kg		600 mg/Kg
BH-35	6/24/21	11'	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.5	<47	<47	160	
BH-36	6/24/21	6.5'	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.4	<47	<47	300	
BH-37	6/24/21	6.5'	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<48	300	
BH-38	6/24/21	11'	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.7	<49	<49	370	
BH-39	6/24/21	6.5'	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	26	<44	26	420	
BH-40	6/24/21	6.5'	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<8.7	<43	<43	310	
BH-41	7/16/21	11'	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.6	<48	<48	<60	
Sidewall Samples													
SW-1	6/9/2021	-	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	120	220	340	130	
SW-1A	7/8/2021	-	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	180	210	390	61	
SW-1B	7/16/2021	-	<0.023	<0.046	<0.046	<0.091	<0.091	<4.6	<9.9	<49	<49	<59	
SW-2	6/9/2021	-	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	24	<48	24	<60	
SW-3	6/9/2021	-	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	12	<50	12	<60	
SW-4	6/15/21	-	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.1	<46	<46	89	
SW-5	6/15/21	-	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	120	180	300	220	
SW-5A	7/8/21	-	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	160	150	310	170	
SW-5B	7/16/21	-	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.9	<49	<49	<60	
SW-6	6/15/21	-	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	14	<44	14	140	
SW-7	6/15/21	-	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.2	<46	<46	67	
SW-8	6/15/21	-	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.9	<49	<49	130	
SW-9	6/15/21	-	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.3	<46	<46	140	
SW-10	6/16/21	-	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.3	<47	<47	150	
SW-11	6/18/21	-	<0.12	<0.24	<0.24	<0.48	<0.48	<24	240	120	360	200	
SW-11A	7/8/21	-	<0.12	<0.25	<0.25	<0.49	<0.49	<25	120	260	380	78	
SW-11B	7/16/21	-	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.2	<46	<46	<60	
SW-12	6/16/21	-	<0.12	<0.25	<0.25	<0.50	<0.50	<25	39	<47	39	200	
SW-13	6/17/21	-	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	15	<50	15	100	
SW-14	6/18/21	-	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	25	<49	25	560	
SW-15	6/18/21	-	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.9	<49	<49	<60	

Table 1
Summary of Soil Analytical Data
Brannigan ANF Federal 5 Battery
EOG Resources
Eddy County, New Mexico

Sample ID	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH				Chloride
			(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO	(mg/Kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMOC									
			10 mg/Kg	---	---	---	50 mg/Kg	---	---	---	100 mg/Kg	600 mg/Kg
SW-16	6/18/21	-	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.9	<49	<49	460
SW-17	6/18/21	-	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	63	120	183	400
SW-17A	7/16/21	-	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.8	<49	<49	140
SW-18	6/18/21	-	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.6	<48	<48	990
SW-18A	7/16/21	-	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.6	<48	<48	100
SW-19	6/18/21	-	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<10	<50	<50	96
SW-19	6/21/21	-	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.4	<47	<47	190
SW-20	6/21/21	-	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.7	<48	<48	80
SW-21	6/21/21	-	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<10	<50	<50	170
SW-22	6/21/21	-	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.7	<49	<49	140
SW-23	6/23/21	-	<0.025	<0.049	<0.049	<0.097	<0.097	<4.9	<9.3	<47	<47	<60
SW-24	6/23/21	-	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	27	<48	27	150
SW-25	6/23/21	-	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	11	<47	11	83
SW-26	7/16/21	-	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.7	<49	<49	<60

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

7. Yellow shaded cells indicate analytical samples that exceed the NMOC 19.15.29.12 Table 1 Closure Criteria for the site.

8. J - the target analytes was positively identified below the quantitation limit and above the detection limit.

 Sample Point Excavated

Table 2
Daily Disposal Summary
Brannigan ANF Federal #5 Battery
EOG Resources
Eddy, County, New Mexico

Date of Disposal	Total Pounds Disposed	Total Tons Disposed
6/8/2021	158,240	79.12
6/9/2021	116,120	58.06
6/15/2021	338,040	169.02
6/16/2021	338,360	169.18
6/17/2021	862,840	431.42
6/18/2021	1,094,860	547.43
6/21/2021	1,216,640	608.32
6/22/2021	1,035,140	517.57
6/23/2021	1,111,340	555.67
7/13/2021	325,840	162.92
7/14/2021	406,860	203.43
7/15/2021	339,820	169.91
7/16/2021	456,940	228.47
7/19/2021	398,620	199.31
7/21/2021	274,440	137.22
7/22/2021	334,200	167.10
7/23/2021	497,580	248.79
7/26/2021	175,180	87.59
Project Total	9,481,060	4,740.53

Attachment A

Site Characterization Documentation

Brannigan ANF Federal #5 Battery

Karst Potential Map

Legend

-  Brannigan ANF Federal #5 Battery
-  High
-  Low
-  Medium

 Brannigan ANF Federal #5 Battery



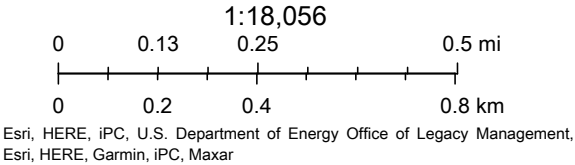
300 ft

Brannigan ANF Federal #5 Battery



7/4/2021 3:31:13 PM

GIS WATERS PODs  OSE District Boundary
 Active  SiteBoundaries

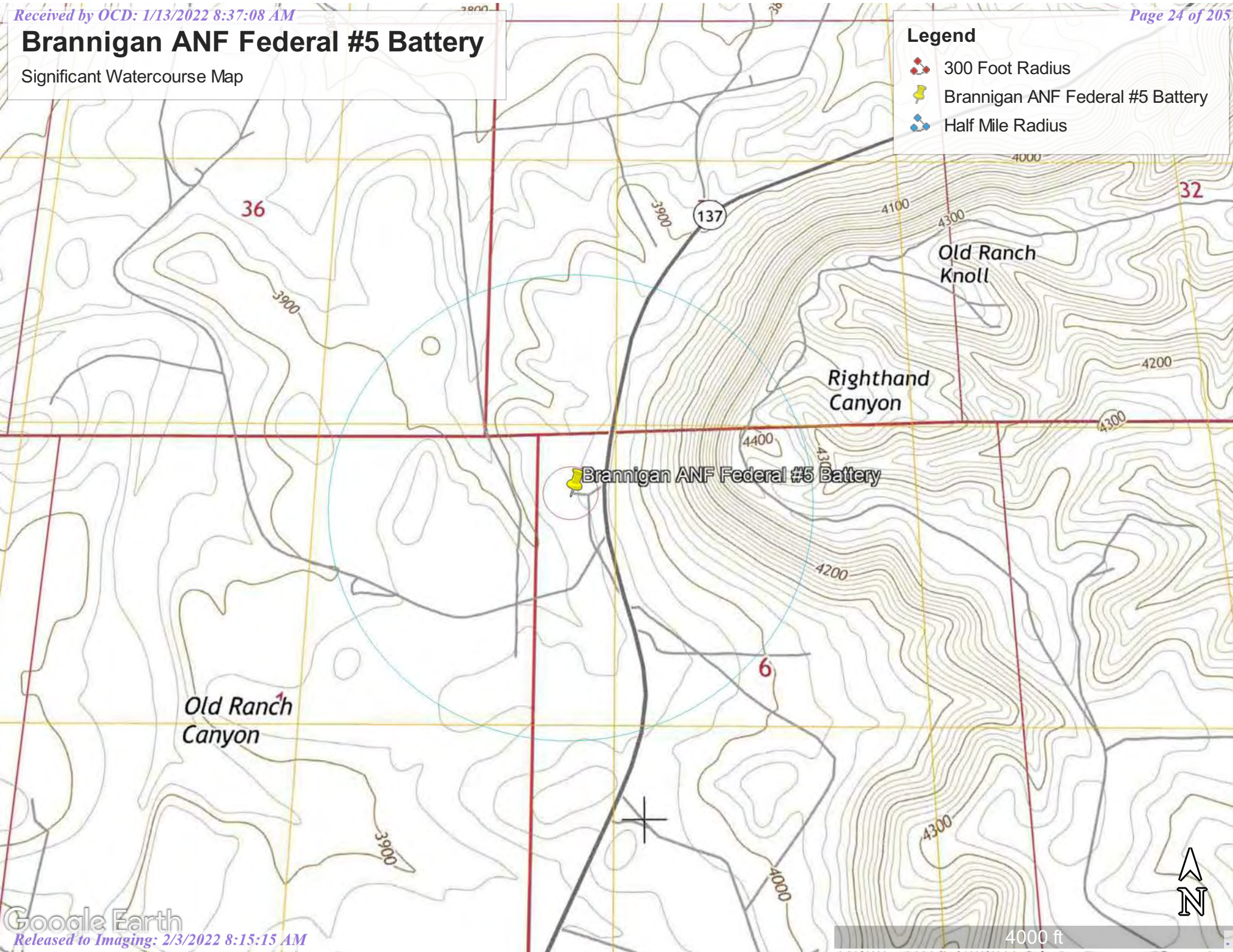


Brannigan ANF Federal #5 Battery

Significant Watercourse Map

Legend

-  300 Foot Radius
-  Brannigan ANF Federal #5 Battery
-  Half Mile Radius





U.S. Fish and Wildlife Service

National Wetlands Inventory

Brannigan ANF Federal #5 Battery



July 4, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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

National Flood Hazard Layer FIRMette



104°32'57"W 32°25'49"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 104°32'20"W 32°25'19"N

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/2/2021 at 3:17 PM 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 Photographic Log

Photo 1: Looking East



Photo 2: Looking Southeast



Site Photograph
EOG Brannigan ANF Federal Battery
Release Site.

GHD | Report for EOG | 11228319

Photo 3: Looking West



Photo 4: Looking Northeast



Site Photograph
EOG Brannigan ANF Federal Battery
Release Site.

GHD | Report for EOG | 11228319

Attachment C

Laboratory Analytical Reports and Chain-of-Custody Documentation



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

May 24, 2021

Tom Larson

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: Brannigan ANF Federal 5 Battery

OrderNo.: 2105798

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 5/19/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2105798

Date Reported: 5/24/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105798

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2105798-001

Collection Date: 5/18/2021 8:10:00 AM

Client Sample ID: TP1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	5/20/2021 1:51:34 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	330	46		mg/Kg	5	5/20/2021 1:29:51 PM	60136
Motor Oil Range Organics (MRO)	480	230		mg/Kg	5	5/20/2021 1:29:51 PM	60136
Surr: DNOP	121	70-130		%Rec	5	5/20/2021 1:29:51 PM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25	D	mg/Kg	5	5/21/2021 2:41:29 AM	60129
Surr: BFB	102	70-130	D	%Rec	5	5/21/2021 2:41:29 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12	D	mg/Kg	5	5/21/2021 2:41:29 AM	60129
Toluene	ND	0.25	D	mg/Kg	5	5/21/2021 2:41:29 AM	60129
Ethylbenzene	ND	0.25	D	mg/Kg	5	5/21/2021 2:41:29 AM	60129
Xylenes, Total	ND	0.50	D	mg/Kg	5	5/21/2021 2:41:29 AM	60129
Surr: 4-Bromofluorobenzene	108	70-130	D	%Rec	5	5/21/2021 2:41:29 AM	60129

Lab ID: 2105798-002

Collection Date: 5/18/2021 8:15:00 AM

Client Sample ID: TP2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	5/20/2021 2:03:59 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	150	9.0		mg/Kg	1	5/20/2021 1:49:21 PM	60136
Motor Oil Range Organics (MRO)	220	45		mg/Kg	1	5/20/2021 1:49:21 PM	60136
Surr: DNOP	123	70-130		%Rec	1	5/20/2021 1:49:21 PM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/21/2021 3:04:53 AM	60129
Surr: BFB	101	70-130		%Rec	1	5/21/2021 3:04:53 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/21/2021 3:04:53 AM	60129
Toluene	ND	0.048		mg/Kg	1	5/21/2021 3:04:53 AM	60129
Ethylbenzene	ND	0.048		mg/Kg	1	5/21/2021 3:04:53 AM	60129
Xylenes, Total	ND	0.095		mg/Kg	1	5/21/2021 3:04:53 AM	60129
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	5/21/2021 3:04:53 AM	60129

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

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

Analytical Report

Lab Order: 2105798

Date Reported: 5/24/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105798

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2105798-003

Collection Date: 5/18/2021 8:20:00 AM

Client Sample ID: TP3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	240	60		mg/Kg	20	5/20/2021 2:16:23 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	600	92		mg/Kg	10	5/20/2021 10:20:57 AM	60136
Motor Oil Range Organics (MRO)	1500	460		mg/Kg	10	5/20/2021 10:20:57 AM	60136
Surr: DNOP	0	70-130	S	%Rec	10	5/20/2021 10:20:57 AM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/21/2021 3:28:16 AM	60129
Surr: BFB	99.6	70-130		%Rec	1	5/21/2021 3:28:16 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/21/2021 3:28:16 AM	60129
Toluene	ND	0.048		mg/Kg	1	5/21/2021 3:28:16 AM	60129
Ethylbenzene	ND	0.048		mg/Kg	1	5/21/2021 3:28:16 AM	60129
Xylenes, Total	ND	0.095		mg/Kg	1	5/21/2021 3:28:16 AM	60129
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	5/21/2021 3:28:16 AM	60129

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

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

Analytical Report

Lab Order: 2105798

Date Reported: 5/24/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105798

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2105798-004

Collection Date: 5/18/2021 8:30:00 AM

Client Sample ID: TP4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	5/20/2021 2:28:47 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	5/20/2021 10:33:08 AM	60136
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/20/2021 10:33:08 AM	60136
Surr: DNOP	114	70-130		%Rec	1	5/20/2021 10:33:08 AM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/21/2021 3:51:47 AM	60129
Surr: BFB	99.8	70-130		%Rec	1	5/21/2021 3:51:47 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/21/2021 3:51:47 AM	60129
Toluene	ND	0.049		mg/Kg	1	5/21/2021 3:51:47 AM	60129
Ethylbenzene	ND	0.049		mg/Kg	1	5/21/2021 3:51:47 AM	60129
Xylenes, Total	ND	0.098		mg/Kg	1	5/21/2021 3:51:47 AM	60129
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	5/21/2021 3:51:47 AM	60129

Lab ID: 2105798-005

Collection Date: 5/18/2021 8:35:00 AM

Client Sample ID: TP5

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1400	60		mg/Kg	20	5/20/2021 2:41:12 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	1700	48		mg/Kg	5	5/20/2021 2:51:03 PM	60136
Motor Oil Range Organics (MRO)	850	240		mg/Kg	5	5/20/2021 2:51:03 PM	60136
Surr: DNOP	123	70-130		%Rec	5	5/20/2021 2:51:03 PM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	60	24		mg/Kg	5	5/21/2021 9:51:44 AM	60129
Surr: BFB	213	70-130	S	%Rec	5	5/21/2021 9:51:44 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	5/21/2021 9:51:44 AM	60129
Toluene	ND	0.24		mg/Kg	5	5/21/2021 9:51:44 AM	60129
Ethylbenzene	ND	0.24		mg/Kg	5	5/21/2021 9:51:44 AM	60129
Xylenes, Total	ND	0.48		mg/Kg	5	5/21/2021 9:51:44 AM	60129
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	5	5/21/2021 9:51:44 AM	60129

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

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

Analytical Report

Lab Order: 2105798

Date Reported: 5/24/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105798

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2105798-006

Collection Date: 5/18/2021 8:40:00 AM

Client Sample ID: TP6

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	660	59		mg/Kg	20	5/20/2021 2:53:36 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	48	9.6		mg/Kg	1	5/20/2021 11:21:41 AM	60136
Motor Oil Range Organics (MRO)	85	48		mg/Kg	1	5/20/2021 11:21:41 AM	60136
Surr: DNOP	127	70-130		%Rec	1	5/20/2021 11:21:41 AM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/21/2021 10:38:41 AM	60129
Surr: BFB	103	70-130		%Rec	1	5/21/2021 10:38:41 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/21/2021 10:38:41 AM	60129
Toluene	ND	0.049		mg/Kg	1	5/21/2021 10:38:41 AM	60129
Ethylbenzene	ND	0.049		mg/Kg	1	5/21/2021 10:38:41 AM	60129
Xylenes, Total	ND	0.098		mg/Kg	1	5/21/2021 10:38:41 AM	60129
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	5/21/2021 10:38:41 AM	60129

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

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

Analytical Report

Lab Order: 2105798

Date Reported: 5/24/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105798

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2105798-007

Collection Date: 5/18/2021 8:50:00 AM

Client Sample ID: TP7

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	460	60		mg/Kg	20	5/20/2021 3:06:00 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	4600	90		mg/Kg	10	5/20/2021 11:13:10 AM	60136
Motor Oil Range Organics (MRO)	3800	450		mg/Kg	10	5/20/2021 11:13:10 AM	60136
Surr: DNOP	0	70-130	S	%Rec	10	5/20/2021 11:13:10 AM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/21/2021 11:02:12 AM	60129
Surr: BFB	119	70-130		%Rec	1	5/21/2021 11:02:12 AM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	5/21/2021 11:02:12 AM	60129
Toluene	ND	0.049		mg/Kg	1	5/21/2021 11:02:12 AM	60129
Ethylbenzene	ND	0.049		mg/Kg	1	5/21/2021 11:02:12 AM	60129
Xylenes, Total	ND	0.098		mg/Kg	1	5/21/2021 11:02:12 AM	60129
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	5/21/2021 11:02:12 AM	60129

Lab ID: 2105798-008

Collection Date: 5/18/2021 9:00:00 AM

Client Sample ID: TP8

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	110	60		mg/Kg	20	5/20/2021 3:18:25 PM	60151
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/20/2021 10:42:49 AM	60136
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/20/2021 10:42:49 AM	60136
Surr: DNOP	126	70-130		%Rec	1	5/20/2021 10:42:49 AM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/21/2021 1:11:11 PM	60129
Surr: BFB	89.3	70-130		%Rec	1	5/21/2021 1:11:11 PM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/21/2021 1:11:11 PM	60129
Toluene	ND	0.049		mg/Kg	1	5/21/2021 1:11:11 PM	60129
Ethylbenzene	ND	0.049		mg/Kg	1	5/21/2021 1:11:11 PM	60129
Xylenes, Total	ND	0.099		mg/Kg	1	5/21/2021 1:11:11 PM	60129
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/21/2021 1:11:11 PM	60129

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

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

Analytical Report

Lab Order: 2105798

Date Reported: 5/24/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2105798

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2105798-009

Collection Date: 5/18/2021 9:20:00 AM

Client Sample ID: HA1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	61		mg/Kg	20	5/20/2021 8:16:11 PM	60159
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	110	8.2		mg/Kg	1	5/20/2021 11:31:26 AM	60136
Motor Oil Range Organics (MRO)	270	41		mg/Kg	1	5/20/2021 11:31:26 AM	60136
Surr: DNOP	102	70-130		%Rec	1	5/20/2021 11:31:26 AM	60136
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/21/2021 1:34:46 PM	60129
Surr: BFB	88.6	70-130		%Rec	1	5/21/2021 1:34:46 PM	60129
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	5/21/2021 1:34:46 PM	60129
Toluene	ND	0.049		mg/Kg	1	5/21/2021 1:34:46 PM	60129
Ethylbenzene	ND	0.049		mg/Kg	1	5/21/2021 1:34:46 PM	60129
Xylenes, Total	ND	0.098		mg/Kg	1	5/21/2021 1:34:46 PM	60129
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	5/21/2021 1:34:46 PM	60129

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

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

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

WO#: 2105798

24-May-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60151	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60151	RunNo: 77526								
Prep Date: 5/20/2021	Analysis Date: 5/20/2021	SeqNo: 2752461 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60151	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60151	RunNo: 77526								
Prep Date: 5/20/2021	Analysis Date: 5/20/2021	SeqNo: 2752462 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

Sample ID: MB-60159	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60159	RunNo: 77526								
Prep Date: 5/20/2021	Analysis Date: 5/20/2021	SeqNo: 2752497 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60159	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60159	RunNo: 77526								
Prep Date: 5/20/2021	Analysis Date: 5/20/2021	SeqNo: 2752498 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	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 Quantitative 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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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2105798

24-May-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: MB-60136	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60136	RunNo: 77529								
Prep Date: 5/19/2021	Analysis Date: 5/20/2021	SeqNo: 2751569 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.0	70	130			

Sample ID: LCS-60136	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 60136	RunNo: 77529								
Prep Date: 5/19/2021	Analysis Date: 5/20/2021	SeqNo: 2751642 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.1	68.9	141			
Surr: DNOP	4.7		5.000		94.9	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 Quantitative 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 8 of 10

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

WO#: 2105798

24-May-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: mb-60129	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 60129		RunNo: 77537							
Prep Date: 5/19/2021	Analysis Date: 5/20/2021		SeqNo: 2752247		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	990		1000		99.4	70	130			

Sample ID: lcs-60129	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 60129		RunNo: 77537							
Prep Date: 5/19/2021	Analysis Date: 5/20/2021		SeqNo: 2752248		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	78.6	131			
Surr: BFB	1100		1000		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 Quantitative 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

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

WO#: 2105798

24-May-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: mb-60129	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60129	RunNo: 77537								
Prep Date: 5/19/2021	Analysis Date: 5/20/2021	SeqNo: 2752291	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	1.1		1.000		108	70	130			

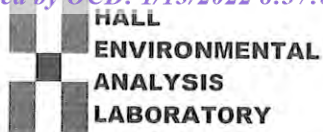
Sample ID: LCS-60129	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60129	RunNo: 77537								
Prep Date: 5/19/2021	Analysis Date: 5/20/2021	SeqNo: 2752292	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.5	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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 Quantitative 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 10 of 10



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: 2105798

RcptNo: 1

Received By: Juan Rojas

5/19/2021 7:28:00 AM

Juan Rojas

Completed By: Cheyenne Cason

5/19/2021 7:54:47 AM

Cason

Reviewed By:

*JR 5/19/21*Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *SPA 5.19.21*Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.0	Good				

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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



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

June 22, 2021

Tom Larson

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: Brannigan ANF Federal Battery 5

OrderNo.: 2106657

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/11/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106657

Date Reported: 6/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106657

Project: Brannigan ANF Federal Battery 5

Lab ID: 2106657-001

Collection Date: 6/9/2021 8:35:00 AM

Client Sample ID: SW-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 1:56:27 AM	60599
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	24	9.7		mg/Kg	1	6/16/2021 2:39:00 AM	60589
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/16/2021 2:39:00 AM	60589
Surr: DNOP	98.2	70-130		%Rec	1	6/16/2021 2:39:00 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/14/2021 9:05:29 AM	60586
Surr: BFB	112	70-130		%Rec	1	6/14/2021 9:05:29 AM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 9:05:29 AM	60586
Toluene	ND	0.049		mg/Kg	1	6/14/2021 9:05:29 AM	60586
Ethylbenzene	ND	0.049		mg/Kg	1	6/14/2021 9:05:29 AM	60586
Xylenes, Total	ND	0.098		mg/Kg	1	6/14/2021 9:05:29 AM	60586
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/14/2021 9:05:29 AM	60586

Lab ID: 2106657-002

Collection Date: 6/9/2021 8:40:00 AM

Client Sample ID: SW-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 2:08:52 AM	60599
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	12	9.9		mg/Kg	1	6/16/2021 3:52:27 AM	60589
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/16/2021 3:52:27 AM	60589
Surr: DNOP	109	70-130		%Rec	1	6/16/2021 3:52:27 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/14/2021 10:26:32 AM	60586
Surr: BFB	103	70-130		%Rec	1	6/14/2021 10:26:32 AM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/14/2021 10:26:32 AM	60586
Toluene	ND	0.049		mg/Kg	1	6/14/2021 10:26:32 AM	60586
Ethylbenzene	ND	0.049		mg/Kg	1	6/14/2021 10:26:32 AM	60586
Xylenes, Total	ND	0.097		mg/Kg	1	6/14/2021 10:26:32 AM	60586
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	6/14/2021 10:26:32 AM	60586

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

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

Analytical Report

Lab Order: 2106657

Date Reported: 6/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106657

Project: Brannigan ANF Federal Battery 5

Lab ID: 2106657-003

Collection Date: 6/9/2021 8:50:00 AM

Client Sample ID: BH-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 2:21:17 AM	60599
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	210	9.3		mg/Kg	1	6/16/2021 4:16:54 AM	60589
Motor Oil Range Organics (MRO)	250	47		mg/Kg	1	6/16/2021 4:16:54 AM	60589
Surr: DNOP	110	70-130		%Rec	1	6/16/2021 4:16:54 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	6/14/2021 11:37:14 AM	60586
Surr: BFB	104	70-130		%Rec	5	6/14/2021 11:37:14 AM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	6/14/2021 11:37:14 AM	60586
Toluene	ND	0.25		mg/Kg	5	6/14/2021 11:37:14 AM	60586
Ethylbenzene	ND	0.25		mg/Kg	5	6/14/2021 11:37:14 AM	60586
Xylenes, Total	ND	0.49		mg/Kg	5	6/14/2021 11:37:14 AM	60586
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	5	6/14/2021 11:37:14 AM	60586

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

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

Analytical Report

Lab Order: 2106657

Date Reported: 6/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106657

Project: Brannigan ANF Federal Battery 5

Lab ID: 2106657-004

Collection Date: 6/9/2021 8:55:00 AM

Client Sample ID: BH-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 2:33:42 AM	60599
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	97	9.6		mg/Kg	1	6/16/2021 4:41:18 AM	60589
Motor Oil Range Organics (MRO)	160	48		mg/Kg	1	6/16/2021 4:41:18 AM	60589
Surr: DNOP	108	70-130		%Rec	1	6/16/2021 4:41:18 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/14/2021 12:00:47 PM	60586
Surr: BFB	106	70-130		%Rec	1	6/14/2021 12:00:47 PM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 12:00:47 PM	60586
Toluene	ND	0.050		mg/Kg	1	6/14/2021 12:00:47 PM	60586
Ethylbenzene	ND	0.050		mg/Kg	1	6/14/2021 12:00:47 PM	60586
Xylenes, Total	ND	0.099		mg/Kg	1	6/14/2021 12:00:47 PM	60586
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	6/14/2021 12:00:47 PM	60586

Lab ID: 2106657-005

Collection Date: 6/9/2021 9:00:00 AM

Client Sample ID: BH-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 2:46:07 AM	60599
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	300	9.5		mg/Kg	1	6/16/2021 5:05:41 AM	60589
Motor Oil Range Organics (MRO)	480	48		mg/Kg	1	6/16/2021 5:05:41 AM	60589
Surr: DNOP	108	70-130		%Rec	1	6/16/2021 5:05:41 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/14/2021 12:24:21 PM	60586
Surr: BFB	114	70-130		%Rec	1	6/14/2021 12:24:21 PM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 12:24:21 PM	60586
Toluene	ND	0.049		mg/Kg	1	6/14/2021 12:24:21 PM	60586
Ethylbenzene	ND	0.049		mg/Kg	1	6/14/2021 12:24:21 PM	60586
Xylenes, Total	ND	0.099		mg/Kg	1	6/14/2021 12:24:21 PM	60586
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	6/14/2021 12:24:21 PM	60586

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

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

Analytical Report

Lab Order: 2106657

Date Reported: 6/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106657

Project: Brannigan ANF Federal Battery 5

Lab ID: 2106657-006

Collection Date: 6/9/2021 2:00:00 PM

Client Sample ID: BH-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	130	61		mg/Kg	20	6/15/2021 2:58:32 AM	60599
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/15/2021 3:08:48 AM	60589
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/15/2021 3:08:48 AM	60589
Surr: DNOP	97.9	70-130		%Rec	1	6/15/2021 3:08:48 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/14/2021 12:47:57 PM	60586
Surr: BFB	107	70-130		%Rec	1	6/14/2021 12:47:57 PM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 12:47:57 PM	60586
Toluene	ND	0.050		mg/Kg	1	6/14/2021 12:47:57 PM	60586
Ethylbenzene	ND	0.050		mg/Kg	1	6/14/2021 12:47:57 PM	60586
Xylenes, Total	ND	0.099		mg/Kg	1	6/14/2021 12:47:57 PM	60586
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/14/2021 12:47:57 PM	60586

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

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

Analytical Report

Lab Order: 2106657

Date Reported: 6/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106657

Project: Brannigan ANF Federal Battery 5

Lab ID: 2106657-007

Collection Date: 6/9/2021 2:05:00 PM

Client Sample ID: SW-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	130	60		mg/Kg	20	6/15/2021 3:43:15 PM	60600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	120	9.3		mg/Kg	1	6/16/2021 5:53:40 AM	60589
Motor Oil Range Organics (MRO)	220	47		mg/Kg	1	6/16/2021 5:53:40 AM	60589
Surr: DNOP	106	70-130		%Rec	1	6/16/2021 5:53:40 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/14/2021 1:11:37 PM	60586
Surr: BFB	112	70-130		%Rec	1	6/14/2021 1:11:37 PM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 1:11:37 PM	60586
Toluene	ND	0.050		mg/Kg	1	6/14/2021 1:11:37 PM	60586
Ethylbenzene	ND	0.050		mg/Kg	1	6/14/2021 1:11:37 PM	60586
Xylenes, Total	ND	0.099		mg/Kg	1	6/14/2021 1:11:37 PM	60586
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/14/2021 1:11:37 PM	60586

Lab ID: 2106657-008

Collection Date: 6/9/2021 2:10:00 PM

Client Sample ID: BH-5

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 4:45:16 PM	60600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/16/2021 6:17:37 AM	60589
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/16/2021 6:17:37 AM	60589
Surr: DNOP	108	70-130		%Rec	1	6/16/2021 6:17:37 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/14/2021 1:35:26 PM	60586
Surr: BFB	108	70-130		%Rec	1	6/14/2021 1:35:26 PM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 1:35:26 PM	60586
Toluene	ND	0.049		mg/Kg	1	6/14/2021 1:35:26 PM	60586
Ethylbenzene	ND	0.049		mg/Kg	1	6/14/2021 1:35:26 PM	60586
Xylenes, Total	ND	0.099		mg/Kg	1	6/14/2021 1:35:26 PM	60586
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/14/2021 1:35:26 PM	60586

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

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

Analytical Report

Lab Order: 2106657

Date Reported: 6/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106657

Project: Brannigan ANF Federal Battery 5

Lab ID: 2106657-009

Collection Date: 6/9/2021 2:20:00 PM

Client Sample ID: BH-6

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/15/2021 5:22:30 PM	60600
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	320	9.9		mg/Kg	1	6/16/2021 6:41:34 AM	60589
Motor Oil Range Organics (MRO)	310	49		mg/Kg	1	6/16/2021 6:41:34 AM	60589
Surr: DNOP	88.8	70-130		%Rec	1	6/16/2021 6:41:34 AM	60589
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/14/2021 1:59:15 PM	60586
Surr: BFB	124	70-130		%Rec	1	6/14/2021 1:59:15 PM	60586
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/14/2021 1:59:15 PM	60586
Toluene	ND	0.050		mg/Kg	1	6/14/2021 1:59:15 PM	60586
Ethylbenzene	ND	0.050		mg/Kg	1	6/14/2021 1:59:15 PM	60586
Xylenes, Total	ND	0.099		mg/Kg	1	6/14/2021 1:59:15 PM	60586
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/14/2021 1:59:15 PM	60586

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

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

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

WO#: 2106657

22-Jun-21

Client: GHD**Project:** Brannigan ANF Federal Battery 5

Sample ID: MB-60599	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60599	RunNo: 79065								
Prep Date: 6/14/2021	Analysis Date: 6/14/2021	SeqNo: 2774558 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60599	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60599	RunNo: 79065								
Prep Date: 6/14/2021	Analysis Date: 6/14/2021	SeqNo: 2774559 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID: MB-60600	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60600	RunNo: 79075								
Prep Date: 6/14/2021	Analysis Date: 6/15/2021	SeqNo: 2776323 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60600	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60600	RunNo: 79075								
Prep Date: 6/14/2021	Analysis Date: 6/15/2021	SeqNo: 2776324 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

Qualifiers:

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

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

WO#: 2106657

22-Jun-21

Client: GHD
Project: Brannigan ANF Federal Battery 5

Sample ID: MB-60589	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60589	RunNo: 79088								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2779775 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		108	70	130			

Sample ID: LCS-60589	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 60589	RunNo: 79088								
Prep Date: 6/12/2021	Analysis Date: 6/16/2021	SeqNo: 2779802 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	68.9	141			
Surr: DNOP	5.9		5.000		118	70	130			

Sample ID: 2106657-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: SW-2	Batch ID: 60589	RunNo: 79088								
Prep Date: 6/12/2021	Analysis Date: 6/16/2021	SeqNo: 2779804 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	72	9.7	48.40	25.02	96.7	15	184			
Surr: DNOP	5.0		4.840		103	70	130			

Sample ID: 2106657-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: SW-2	Batch ID: 60589	RunNo: 79088								
Prep Date: 6/12/2021	Analysis Date: 6/16/2021	SeqNo: 2779805 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	68	9.5	47.44	25.02	89.8	15	184	8.44	23.9	
Surr: DNOP	5.0		4.744		105	70	130	0	0	

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 Quantitative 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 8 of 10

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

WO#: 2106657

22-Jun-21

Client: GHD**Project:** Brannigan ANF Federal Battery 5

Sample ID: mb-60586	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774399 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	1100		1000		115	70	130			

Sample ID: lcs-60586	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774400 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	78.6	131			
Surr: BFB	1300		1000		126	70	130			

Sample ID: 2106657-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SW-2	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774402 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.58	0	108	61.3	114			
Surr: BFB	1200		983.3		125	70	130			

Sample ID: 2106657-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SW-2	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774403 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.58	0	107	61.3	114	0.447	20	
Surr: BFB	1200		983.3		124	70	130	0	0	

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 Quantitative 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

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

WO#: 2106657

22-Jun-21

Client: GHD**Project:** Brannigan ANF Federal Battery 5

Sample ID: mb-60586	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774447 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	1.1		1.000		109	70	130			

Sample ID: LCS-60586	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774448 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.3	80	120			
Toluene	0.99	0.050	1.000	0	99.3	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.8	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	70	130			

Sample ID: 2106657-002ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: SW-3	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774451 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9852	0	104	80	120			
Toluene	1.0	0.049	0.9852	0	106	80	120			
Ethylbenzene	1.1	0.049	0.9852	0	108	80	120			
Xylenes, Total	3.2	0.099	2.956	0	108	80	120			
Surr: 4-Bromofluorobenzene	1.0		0.9852		103	70	130			

Sample ID: 2106657-002amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: SW-3	Batch ID: 60586	RunNo: 79064								
Prep Date: 6/12/2021	Analysis Date: 6/14/2021	SeqNo: 2774452 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9756	0	103	80	120	1.98	20	
Toluene	1.0	0.049	0.9756	0	106	80	120	1.55	20	
Ethylbenzene	1.0	0.049	0.9756	0	106	80	120	2.78	20	
Xylenes, Total	3.1	0.098	2.927	0	106	80	120	2.86	20	
Surr: 4-Bromofluorobenzene	0.99		0.9756		102	70	130	0	0	

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 Quantitative 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



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: 2106657

RcptNo: 1

Received By: Juan Rojas

6/11/2021 7:45:00 AM

Completed By: Sean Livingston

6/11/2021 8:41:46 AM

Reviewed By:

JR 6/11/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

TU

6-11-21

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good				

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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

Remarks:

Please email zach.comino@GHD.com along with others listed above

Direct Bill to EOG Chase Settle



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

June 25, 2021

Tom Larson

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Brannigan ANF Federal 5 Battery

OrderNo.: 2106909

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 15 sample(s) on 6/17/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-001

Collection Date: 6/15/2021 6:10:00 AM

Client Sample ID: BH-7

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/20/2021 9:48:09 AM	60753
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/21/2021 1:01:54 AM	60717
Surr: BFB	92.5	70-130		%Rec	1	6/21/2021 1:01:54 AM	60717
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	1900	94		mg/Kg	10	6/19/2021 4:25:53 PM	60738
Motor Oil Range Organics (MRO)	1100	470		mg/Kg	10	6/19/2021 4:25:53 PM	60738
Surr: DNOP	0	70-130	S	%Rec	10	6/19/2021 4:25:53 PM	60738
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	6/21/2021 1:01:54 AM	60717
Toluene	ND	0.049		mg/Kg	1	6/21/2021 1:01:54 AM	60717
Ethylbenzene	ND	0.049		mg/Kg	1	6/21/2021 1:01:54 AM	60717
Xylenes, Total	ND	0.097		mg/Kg	1	6/21/2021 1:01:54 AM	60717
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/21/2021 1:01:54 AM	60717
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	6/21/2021 1:01:54 AM	60717
Surr: Dibromofluoromethane	82.6	70-130		%Rec	1	6/21/2021 1:01:54 AM	60717
Surr: Toluene-d8	99.0	70-130		%Rec	1	6/21/2021 1:01:54 AM	60717

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-002

Collection Date: 6/15/2021 6:15:00 AM

Client Sample ID: BH-8

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	160	60		mg/Kg	20	6/20/2021 10:25:23 AM	60753
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/21/2021 1:30:31 AM	60717
Surr: BFB	96.6	70-130		%Rec	1	6/21/2021 1:30:31 AM	60717
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	6/19/2021 4:41:59 PM	60738
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	6/19/2021 4:41:59 PM	60738
Surr: DNOP	81.2	70-130		%Rec	1	6/19/2021 4:41:59 PM	60738
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	6/21/2021 1:30:31 AM	60717
Toluene	ND	0.047		mg/Kg	1	6/21/2021 1:30:31 AM	60717
Ethylbenzene	ND	0.047		mg/Kg	1	6/21/2021 1:30:31 AM	60717
Xylenes, Total	ND	0.094		mg/Kg	1	6/21/2021 1:30:31 AM	60717
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	6/21/2021 1:30:31 AM	60717
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	6/21/2021 1:30:31 AM	60717
Surr: Dibromofluoromethane	90.3	70-130		%Rec	1	6/21/2021 1:30:31 AM	60717
Surr: Toluene-d8	99.3	70-130		%Rec	1	6/21/2021 1:30:31 AM	60717

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-003

Collection Date: 6/15/2021 6:20:00 AM

Client Sample ID: BH-9

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/20/2021 11:02:37 AM	60753
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/21/2021 1:59:14 AM	60717
Surr: BFB	94.9	70-130		%Rec	1	6/21/2021 1:59:14 AM	60717
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	210	10		mg/Kg	1	6/19/2021 4:57:25 PM	60738
Motor Oil Range Organics (MRO)	160	50		mg/Kg	1	6/19/2021 4:57:25 PM	60738
Surr: DNOP	94.5	70-130		%Rec	1	6/19/2021 4:57:25 PM	60738
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	6/21/2021 1:59:14 AM	60717
Toluene	ND	0.050		mg/Kg	1	6/21/2021 1:59:14 AM	60717
Ethylbenzene	ND	0.050		mg/Kg	1	6/21/2021 1:59:14 AM	60717
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2021 1:59:14 AM	60717
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	6/21/2021 1:59:14 AM	60717
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	6/21/2021 1:59:14 AM	60717
Surr: Dibromofluoromethane	89.9	70-130		%Rec	1	6/21/2021 1:59:14 AM	60717
Surr: Toluene-d8	102	70-130		%Rec	1	6/21/2021 1:59:14 AM	60717

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-004

Collection Date: 6/15/2021 6:25:00 AM

Client Sample ID: BH-10

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/20/2021 11:39:52 AM	60753
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/21/2021 2:27:56 AM	60717
Surr: BFB	97.5	70-130		%Rec	1	6/21/2021 2:27:56 AM	60717
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	310	10		mg/Kg	1	6/19/2021 5:12:46 PM	60738
Motor Oil Range Organics (MRO)	270	50		mg/Kg	1	6/19/2021 5:12:46 PM	60738
Surr: DNOP	98.2	70-130		%Rec	1	6/19/2021 5:12:46 PM	60738
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	6/21/2021 2:27:56 AM	60717
Toluene	ND	0.050		mg/Kg	1	6/21/2021 2:27:56 AM	60717
Ethylbenzene	ND	0.050		mg/Kg	1	6/21/2021 2:27:56 AM	60717
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2021 2:27:56 AM	60717
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	6/21/2021 2:27:56 AM	60717
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/21/2021 2:27:56 AM	60717
Surr: Dibromofluoromethane	87.2	70-130		%Rec	1	6/21/2021 2:27:56 AM	60717
Surr: Toluene-d8	103	70-130		%Rec	1	6/21/2021 2:27:56 AM	60717

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-005

Collection Date: 6/15/2021 6:30:00 AM

Client Sample ID: BH-11

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	6/20/2021 11:52:17 AM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	170	9.4		mg/Kg	1	6/20/2021 5:15:04 AM	60742
Motor Oil Range Organics (MRO)	110	47		mg/Kg	1	6/20/2021 5:15:04 AM	60742
Surr: DNOP	104	70-130		%Rec	1	6/20/2021 5:15:04 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/22/2021 3:07:59 AM	60719
Surr: BFB	114	70-130		%Rec	1	6/22/2021 3:07:59 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/22/2021 3:07:59 AM	60719
Toluene	ND	0.050		mg/Kg	1	6/22/2021 3:07:59 AM	60719
Ethylbenzene	ND	0.050		mg/Kg	1	6/22/2021 3:07:59 AM	60719
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2021 3:07:59 AM	60719
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	6/22/2021 3:07:59 AM	60719

Lab ID: 2106909-006

Collection Date: 6/15/2021 6:35:00 AM

Client Sample ID: SW-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	89	60		mg/Kg	20	6/20/2021 12:04:41 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	6/20/2021 6:02:41 AM	60742
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/20/2021 6:02:41 AM	60742
Surr: DNOP	102	70-130		%Rec	1	6/20/2021 6:02:41 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/19/2021 11:50:00 PM	60719
Surr: BFB	99.6	70-130		%Rec	1	6/19/2021 11:50:00 PM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/19/2021 11:50:00 PM	60719
Toluene	ND	0.049		mg/Kg	1	6/19/2021 11:50:00 PM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/19/2021 11:50:00 PM	60719
Xylenes, Total	ND	0.099		mg/Kg	1	6/19/2021 11:50:00 PM	60719
Surr: 4-Bromofluorobenzene	83.9	70-130		%Rec	1	6/19/2021 11:50:00 PM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-007

Collection Date: 6/15/2021 6:40:00 AM

Client Sample ID: SW-5

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	220	60		mg/Kg	20	6/20/2021 12:17:06 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	120	8.2		mg/Kg	1	6/20/2021 6:26:31 AM	60742
Motor Oil Range Organics (MRO)	180	41		mg/Kg	1	6/20/2021 6:26:31 AM	60742
Surr: DNOP	104	70-130		%Rec	1	6/20/2021 6:26:31 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 12:50:00 AM	60719
Surr: BFB	100	70-130		%Rec	1	6/20/2021 12:50:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	6/20/2021 12:50:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 12:50:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 12:50:00 AM	60719
Xylenes, Total	ND	0.098		mg/Kg	1	6/20/2021 12:50:00 AM	60719
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	6/20/2021 12:50:00 AM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-008

Collection Date: 6/15/2021 6:45:00 AM

Client Sample ID: SW-6

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	140	60		mg/Kg	20	6/20/2021 12:29:31 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	14	8.8		mg/Kg	1	6/20/2021 7:14:09 AM	60742
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/20/2021 7:14:09 AM	60742
Surr: DNOP	108	70-130		%Rec	1	6/20/2021 7:14:09 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 1:10:00 AM	60719
Surr: BFB	98.6	70-130		%Rec	1	6/20/2021 1:10:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/20/2021 1:10:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 1:10:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 1:10:00 AM	60719
Xylenes, Total	ND	0.099		mg/Kg	1	6/20/2021 1:10:00 AM	60719
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	6/20/2021 1:10:00 AM	60719

Lab ID: 2106909-009

Collection Date: 6/15/2021 6:50:00 AM

Client Sample ID: SW-7

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	67	60		mg/Kg	20	6/20/2021 12:41:55 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	6/20/2021 7:38:00 AM	60742
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/20/2021 7:38:00 AM	60742
Surr: DNOP	87.2	70-130		%Rec	1	6/20/2021 7:38:00 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/20/2021 1:29:00 AM	60719
Surr: BFB	101	70-130		%Rec	1	6/20/2021 1:29:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/20/2021 1:29:00 AM	60719
Toluene	ND	0.050		mg/Kg	1	6/20/2021 1:29:00 AM	60719
Ethylbenzene	ND	0.050		mg/Kg	1	6/20/2021 1:29:00 AM	60719
Xylenes, Total	ND	0.099		mg/Kg	1	6/20/2021 1:29:00 AM	60719
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	6/20/2021 1:29:00 AM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-010

Collection Date: 6/15/2021 6:55:00 AM

Client Sample ID: BH-12

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	280	60		mg/Kg	20	6/20/2021 12:54:20 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	320	9.7		mg/Kg	1	6/20/2021 8:01:58 AM	60742
Motor Oil Range Organics (MRO)	230	48		mg/Kg	1	6/20/2021 8:01:58 AM	60742
Surr: DNOP	93.4	70-130		%Rec	1	6/20/2021 8:01:58 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 1:49:00 AM	60719
Surr: BFB	107	70-130		%Rec	1	6/20/2021 1:49:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	6/20/2021 1:49:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 1:49:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 1:49:00 AM	60719
Xylenes, Total	ND	0.098		mg/Kg	1	6/20/2021 1:49:00 AM	60719
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	6/20/2021 1:49:00 AM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-011

Collection Date: 6/15/2021 7:00:00 AM

Client Sample ID: BH-13

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	140	60		mg/Kg	20	6/20/2021 1:06:45 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	1100	85		mg/Kg	10	6/23/2021 5:39:17 PM	60742
Motor Oil Range Organics (MRO)	730	430		mg/Kg	10	6/23/2021 5:39:17 PM	60742
Surr: DNOP	0	70-130	S	%Rec	10	6/23/2021 5:39:17 PM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/20/2021 2:09:00 AM	60719
Surr: BFB	120	70-130		%Rec	1	6/20/2021 2:09:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	6/20/2021 2:09:00 AM	60719
Toluene	ND	0.048		mg/Kg	1	6/20/2021 2:09:00 AM	60719
Ethylbenzene	ND	0.048		mg/Kg	1	6/20/2021 2:09:00 AM	60719
Xylenes, Total	ND	0.097		mg/Kg	1	6/20/2021 2:09:00 AM	60719
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	6/20/2021 2:09:00 AM	60719

Lab ID: 2106909-012

Collection Date: 6/15/2021 7:05:00 AM

Client Sample ID: BH-14

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/20/2021 1:19:10 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	6/20/2021 9:13:41 AM	60742
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/20/2021 9:13:41 AM	60742
Surr: DNOP	90.5	70-130		%Rec	1	6/20/2021 9:13:41 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 2:29:00 AM	60719
Surr: BFB	97.2	70-130		%Rec	1	6/20/2021 2:29:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/20/2021 2:29:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 2:29:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 2:29:00 AM	60719
Xylenes, Total	ND	0.098		mg/Kg	1	6/20/2021 2:29:00 AM	60719
Surr: 4-Bromofluorobenzene	84.1	70-130		%Rec	1	6/20/2021 2:29:00 AM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106909-013

Collection Date: 6/15/2021 7:10:00 AM

Client Sample ID: BH-15

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	69	60		mg/Kg	20	6/20/2021 1:31:34 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	860	9.0		mg/Kg	1	6/20/2021 9:37:37 AM	60742
Motor Oil Range Organics (MRO)	530	45		mg/Kg	1	6/20/2021 9:37:37 AM	60742
Surr: DNOP	111	70-130		%Rec	1	6/20/2021 9:37:37 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 2:49:00 AM	60719
Surr: BFB	107	70-130		%Rec	1	6/20/2021 2:49:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/20/2021 2:49:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 2:49:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 2:49:00 AM	60719
Xylenes, Total	ND	0.099		mg/Kg	1	6/20/2021 2:49:00 AM	60719
Surr: 4-Bromofluorobenzene	82.7	70-130		%Rec	1	6/20/2021 2:49:00 AM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Brannigan ANF Federal 5 Battery

Lab Order: 2106909

Lab ID: 2106909-014

Collection Date: 6/15/2021 7:15:00 AM

Client Sample ID: SW-8

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	130	59		mg/Kg	20	6/20/2021 2:08:48 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/20/2021 10:25:35 AM	60742
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/20/2021 10:25:35 AM	60742
Surr: DNOP	99.6	70-130		%Rec	1	6/20/2021 10:25:35 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 3:08:00 AM	60719
Surr: BFB	100	70-130		%Rec	1	6/20/2021 3:08:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/20/2021 3:08:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 3:08:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 3:08:00 AM	60719
Xylenes, Total	ND	0.098		mg/Kg	1	6/20/2021 3:08:00 AM	60719
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	1	6/20/2021 3:08:00 AM	60719

Lab ID: 2106909-015

Collection Date: 6/15/2021 7:20:00 AM

Client Sample ID: SW-9

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	140	60		mg/Kg	20	6/20/2021 2:21:13 PM	60753
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/20/2021 10:49:39 AM	60742
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/20/2021 10:49:39 AM	60742
Surr: DNOP	92.2	70-130		%Rec	1	6/20/2021 10:49:39 AM	60742
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/20/2021 4:28:00 AM	60719
Surr: BFB	98.6	70-130		%Rec	1	6/20/2021 4:28:00 AM	60719
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	6/20/2021 4:28:00 AM	60719
Toluene	ND	0.049		mg/Kg	1	6/20/2021 4:28:00 AM	60719
Ethylbenzene	ND	0.049		mg/Kg	1	6/20/2021 4:28:00 AM	60719
Xylenes, Total	ND	0.098		mg/Kg	1	6/20/2021 4:28:00 AM	60719
Surr: 4-Bromofluorobenzene	84.5	70-130		%Rec	1	6/20/2021 4:28:00 AM	60719

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

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

Analytical Report

Lab Order: 2106909

Date Reported: 6/25/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106909

Project: Brannigan ANF Federal 5 Battery

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2106909

25-Jun-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60753	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60753	RunNo: 79212								
Prep Date: 6/19/2021	Analysis Date: 6/20/2021	SeqNo: 2780840	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60753	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60753	RunNo: 79212								
Prep Date: 6/19/2021	Analysis Date: 6/20/2021	SeqNo: 2780841	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	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 Quantitative 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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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2106909

25-Jun-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60738	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60738			RunNo: 79195						
Prep Date: 6/18/2021	Analysis Date: 6/19/2021			SeqNo: 2782640		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.0	70	130			

Sample ID: MB-60739	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60739			RunNo: 79195						
Prep Date: 6/18/2021	Analysis Date: 6/19/2021			SeqNo: 2782641		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.6		10.00		85.8	70	130			

Sample ID: LCS-60739	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60739			RunNo: 79195						
Prep Date: 6/18/2021	Analysis Date: 6/19/2021			SeqNo: 2782668		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.4	70	130			

Sample ID: LCS-60738	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60738			RunNo: 79195						
Prep Date: 6/18/2021	Analysis Date: 6/19/2021			SeqNo: 2782790		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.5	68.9	141			
Surr: DNOP	4.6		5.000		92.9	70	130			

Sample ID: MB-60742	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60742			RunNo: 79227						
Prep Date: 6/18/2021	Analysis Date: 6/20/2021			SeqNo: 2783470		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.7	70	130			

Sample ID: LCS-60742	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60742			RunNo: 79227						
Prep Date: 6/18/2021	Analysis Date: 6/20/2021			SeqNo: 2783473		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2106909

25-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: LCS-60742	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60742				RunNo: 79227					
Prep Date: 6/18/2021	Analysis Date: 6/20/2021				SeqNo: 2783473	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	68.9	141			
Surr: DNOP	5.1		5.000		102	70	130			

Sample ID: MB-60851	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60851				RunNo: 79290					
Prep Date: 6/23/2021	Analysis Date: 6/23/2021				SeqNo: 2786477	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		114	70	130			

Sample ID: LCS-60851	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60851				RunNo: 79290					
Prep Date: 6/23/2021	Analysis Date: 6/23/2021				SeqNo: 2786478	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	70	130			

Qualifiers:

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

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

WO#: 2106909

25-Jun-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: LCS-60719	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60719			RunNo: 79207						
Prep Date: 6/17/2021	Analysis Date: 6/19/2021			SeqNo: 2780934		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	78.6	131			
Surr: BFB	1100		1000		110	70	130			

Sample ID: MB-60719	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60719			RunNo: 79207						
Prep Date: 6/17/2021	Analysis Date: 6/19/2021			SeqNo: 2780936		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	990		1000		99.1	70	130			

Sample ID: 2106909-005ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-11	Batch ID: 60719			RunNo: 79236						
Prep Date: 6/17/2021	Analysis Date: 6/22/2021			SeqNo: 2782310		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.95	0	102	61.3	114			
Surr: BFB	1200		998.0		121	70	130			

Sample ID: 2106909-005amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-11	Batch ID: 60719			RunNo: 79236						
Prep Date: 6/17/2021	Analysis Date: 6/22/2021			SeqNo: 2782311		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.75	0	101	61.3	114	1.63	20	
Surr: BFB	1100		990.1		116	70	130	0	0	

Sample ID: mb-60734	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60734			RunNo: 79236						
Prep Date: 6/18/2021	Analysis Date: 6/21/2021			SeqNo: 2782312		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.6	70	130			

Sample ID: lcs-60734	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60734			RunNo: 79236						
Prep Date: 6/18/2021	Analysis Date: 6/21/2021			SeqNo: 2782313		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		109	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 Quantitative 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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QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2106909

25-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-60726	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 60726				RunNo: 79236					
Prep Date: 6/17/2021	Analysis Date: 6/21/2021				SeqNo: 2782336	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.0	70	130			

Sample ID: lcs-60726	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 60726				RunNo: 79236					
Prep Date: 6/17/2021	Analysis Date: 6/21/2021				SeqNo: 2782337	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		114	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 Quantitative 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

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

WO#: 2106909

25-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: LCS-60719	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60719	RunNo: 79207								
Prep Date: 6/17/2021	Analysis Date: 6/19/2021	SeqNo: 2780964 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.3	80	120			
Toluene	0.88	0.050	1.000	0	87.8	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.0	80	120			
Surr: 4-Bromofluorobenzene	0.83		1.000		82.5	70	130			

Sample ID: MB-60719	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60719	RunNo: 79207								
Prep Date: 6/17/2021	Analysis Date: 6/19/2021	SeqNo: 2780965 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		84.2	70	130			

Sample ID: 2106909-006amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: SW-4	Batch ID: 60719	RunNo: 79207								
Prep Date: 6/17/2021	Analysis Date: 6/20/2021	SeqNo: 2780969 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9728	0	89.3	80	120	0	20	
Toluene	0.87	0.049	0.9728	0	89.6	80	120	0	20	
Ethylbenzene	0.89	0.049	0.9728	0	91.8	80	120	0	20	
Xylenes, Total	2.6	0.097	2.918	0	90.6	80	120	0	20	
Surr: 4-Bromofluorobenzene	0.82		0.9728		84.7	70	130	0	0	

Sample ID: 2106909-006ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: SW-4	Batch ID: 60719	RunNo: 79207								
Prep Date: 6/17/2021	Analysis Date: 6/20/2021	SeqNo: 2781005 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9747	0	89.4	80	120			
Toluene	0.88	0.049	0.9747	0	89.8	80	120			
Ethylbenzene	0.90	0.049	0.9747	0	92.2	80	120			
Xylenes, Total	2.7	0.097	2.924	0	91.1	80	120			
Surr: 4-Bromofluorobenzene	0.83		0.9747		85.0	70	130			

Qualifiers:

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

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

WO#: 2106909

25-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-60734	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 60734				RunNo: 79236					
Prep Date: 6/18/2021	Analysis Date: 6/21/2021				SeqNo: 2782356	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.5	70	130			

Sample ID: LCS-60734	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 60734				RunNo: 79236					
Prep Date: 6/18/2021	Analysis Date: 6/21/2021				SeqNo: 2782357	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.5	70	130			

Sample ID: mb-60726	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 60726				RunNo: 79236					
Prep Date: 6/17/2021	Analysis Date: 6/21/2021				SeqNo: 2782380	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	70	130			

Sample ID: LCS-60726	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 60726				RunNo: 79236					
Prep Date: 6/17/2021	Analysis Date: 6/21/2021				SeqNo: 2782381	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

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 Quantitative 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

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

WO#: 2106909

25-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: lcs-60717	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 60717	RunNo: 79220								
Prep Date: 6/17/2021	Analysis Date: 6/20/2021	SeqNo: 2781797	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.6	80	120			
Toluene	1.1	0.050	1.000	0	105	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.7	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.2	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: mb-60717	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 60717	RunNo: 79220								
Prep Date: 6/17/2021	Analysis Date: 6/20/2021	SeqNo: 2781799	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: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.6	70	130			
Surr: Toluene-d8	0.51		0.5000		102	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 Quantitative 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

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

WO#: 2106909

25-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

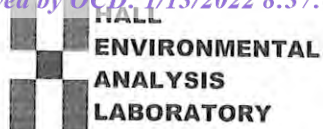
Sample ID: lcs-60717	SampType: LCS				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: LCSS	Batch ID: 60717				RunNo: 79220					
Prep Date: 6/17/2021	Analysis Date: 6/20/2021				SeqNo: 2781848	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	70	130			
Surr: BFB	480		500.0		95.6	70	130			

Sample ID: mb-60717	SampType: MBLK				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: PBS	Batch ID: 60717				RunNo: 79220					
Prep Date: 6/17/2021	Analysis Date: 6/20/2021				SeqNo: 2781850	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	470		500.0		93.8	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 Quantitative 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



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: 2106909

RcptNo: 1

Received By: Juan Rojas

6/17/2021 7:35:00 AM

Juan Rojas

Completed By: Cheyenne Cason

6/17/2021 9:03:47 AM

Cason

Reviewed By:

*JR 6/17/21*Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *T.C 6.17.21*Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.4	Good				
2	0.3	Good				

Chain-of-Custody Record

Client: GHD

Mailing Address:

324 W. Main St. Suite 108, Artesia NM 88210

Phone #: (505)377-4218

email or Fax#: Becky.Haskell@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard☐ Rush

Project Name:

Becky Haskell ANF Federal #58K

Project #:

11228519

Project Manager:

Becky Haskell

Tom Larson

Sampler:

Zach Comino

On Ice: ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CP):

2.4-0.5-2.4

Container Type and #

Preservative Type

HEAL No.

2106909

001

002

003

004

005

006

007

008

009

010

011

012

013

014

015

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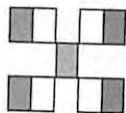
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record

Client: GHD

Mailing Address:

324 W. Main St. Suite 108, Artesia NM 88210

Phone #: (505)377-4218

email or Fax#: Becky.Haskell@ghd.com

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard

☐ Rush

Project Name:

Becky Haskell #5344

Project #:

11228319

Project Manager:

Becky Haskell

Tom Larson

Sampler: Zach Comino

On Ice: ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CP): 2.4-0 = 2.4

Container Type and #

Preservative Type

HEAL No.

2106909

013

014

015

Date Time Matrix Sample Name

6/6/21 0710 S BH-15

1 0715 1 SW-8

0720 SW-9

8081 Pesticides/8082 PCB's

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

8015D(GRO/DRO/MRO)

Date: 6/6/21 0800

Relinquished by: Zach Comino

Date: 6/6/21 1900

Relinquished by: Becky Haskell

Received by: Via: Date Time

Becky Haskell 6/6/21 7:35

Received by: Via: Date Time

Becky Haskell 6/6/21 7:35

Remarks: Please email: Chase_Settle@eogresources.com; Tom.Larson@ghd.com; Zach.Comino@ghd.com. Along with Becky Haskell listed above.

Direct Bill to EOG Chase Settle

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



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

Tom Larson

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Brannigan ANF Federal 5 Battery

OrderNo.: 2106984

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/18/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-001

Collection Date: 6/16/2021 6:40:00 AM

Client Sample ID: SW-10

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	150	60		mg/Kg	20	6/25/2021 3:31:58 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/26/2021 8:57:58 PM	60799
Surr: BFB	95.9	70-130		%Rec	1	6/26/2021 8:57:58 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/25/2021 11:03:39 PM	60876
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/25/2021 11:03:39 PM	60876
Surr: DNOP	71.3	70-130		%Rec	1	6/25/2021 11:03:39 PM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	6/26/2021 8:57:58 PM	60799
Toluene	ND	0.047		mg/Kg	1	6/26/2021 8:57:58 PM	60799
Ethylbenzene	ND	0.047		mg/Kg	1	6/26/2021 8:57:58 PM	60799
Xylenes, Total	ND	0.093		mg/Kg	1	6/26/2021 8:57:58 PM	60799
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	6/26/2021 8:57:58 PM	60799
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	6/26/2021 8:57:58 PM	60799
Surr: Dibromofluoromethane	80.0	70-130		%Rec	1	6/26/2021 8:57:58 PM	60799
Surr: Toluene-d8	105	70-130		%Rec	1	6/26/2021 8:57:58 PM	60799

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

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

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-002

Collection Date: 6/16/2021 6:45:00 AM

Client Sample ID: SW-11

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	200	60		mg/Kg	20	6/25/2021 3:44:23 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	6/26/2021 9:26:29 PM	60799
Surr: BFB	95.7	70-130		%Rec	5	6/26/2021 9:26:29 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	240	9.5		mg/Kg	1	6/25/2021 11:28:15 PM	60876
Motor Oil Range Organics (MRO)	120	47		mg/Kg	1	6/25/2021 11:28:15 PM	60876
Surr: DNOP	79.4	70-130		%Rec	1	6/25/2021 11:28:15 PM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.12		mg/Kg	5	6/26/2021 9:26:29 PM	60799
Toluene	ND	0.24		mg/Kg	5	6/26/2021 9:26:29 PM	60799
Ethylbenzene	ND	0.24		mg/Kg	5	6/26/2021 9:26:29 PM	60799
Xylenes, Total	ND	0.48		mg/Kg	5	6/26/2021 9:26:29 PM	60799
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	5	6/26/2021 9:26:29 PM	60799
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	5	6/26/2021 9:26:29 PM	60799
Surr: Dibromofluoromethane	86.9	70-130		%Rec	5	6/26/2021 9:26:29 PM	60799
Surr: Toluene-d8	113	70-130		%Rec	5	6/26/2021 9:26:29 PM	60799

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

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

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-003

Collection Date: 6/16/2021 6:50:00 AM

Client Sample ID: SW-12

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	200	61		mg/Kg	20	6/25/2021 3:56:47 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	6/26/2021 9:55:01 PM	60799
Surr: BFB	96.8	70-130		%Rec	5	6/26/2021 9:55:01 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	39	9.4		mg/Kg	1	6/25/2021 11:52:43 PM	60876
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/25/2021 11:52:43 PM	60876
Surr: DNOP	56.0	70-130	S	%Rec	1	6/25/2021 11:52:43 PM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.12		mg/Kg	5	6/26/2021 9:55:01 PM	60799
Toluene	ND	0.25		mg/Kg	5	6/26/2021 9:55:01 PM	60799
Ethylbenzene	ND	0.25		mg/Kg	5	6/26/2021 9:55:01 PM	60799
Xylenes, Total	ND	0.50		mg/Kg	5	6/26/2021 9:55:01 PM	60799
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	5	6/26/2021 9:55:01 PM	60799
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	5	6/26/2021 9:55:01 PM	60799
Surr: Dibromofluoromethane	82.4	70-130		%Rec	5	6/26/2021 9:55:01 PM	60799
Surr: Toluene-d8	109	70-130		%Rec	5	6/26/2021 9:55:01 PM	60799

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

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

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-004

Collection Date: 6/16/2021 7:50:00 AM

Client Sample ID: BH-16

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	6/25/2021 4:09:11 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/26/2021 10:23:32 PM	60799
Surr: BFB	93.8	70-130		%Rec	1	6/26/2021 10:23:32 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/26/2021 12:17:16 AM	60876
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 12:17:16 AM	60876
Surr: DNOP	72.1	70-130		%Rec	1	6/26/2021 12:17:16 AM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	6/26/2021 10:23:32 PM	60799
Toluene	ND	0.047		mg/Kg	1	6/26/2021 10:23:32 PM	60799
Ethylbenzene	ND	0.047		mg/Kg	1	6/26/2021 10:23:32 PM	60799
Xylenes, Total	ND	0.095		mg/Kg	1	6/26/2021 10:23:32 PM	60799
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	6/26/2021 10:23:32 PM	60799
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/26/2021 10:23:32 PM	60799
Surr: Dibromofluoromethane	77.8	70-130		%Rec	1	6/26/2021 10:23:32 PM	60799
Surr: Toluene-d8	105	70-130		%Rec	1	6/26/2021 10:23:32 PM	60799

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

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

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-005

Collection Date: 6/16/2021 7:55:00 AM

Client Sample ID: BH-17

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	6/25/2021 4:46:24 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/26/2021 10:52:04 PM	60799
Surr: BFB	95.9	70-130		%Rec	1	6/26/2021 10:52:04 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/26/2021 12:41:42 AM	60876
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/26/2021 12:41:42 AM	60876
Surr: DNOP	66.5	70-130	S	%Rec	1	6/26/2021 12:41:42 AM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	6/26/2021 10:52:04 PM	60799
Toluene	ND	0.050		mg/Kg	1	6/26/2021 10:52:04 PM	60799
Ethylbenzene	ND	0.050		mg/Kg	1	6/26/2021 10:52:04 PM	60799
Xylenes, Total	ND	0.10		mg/Kg	1	6/26/2021 10:52:04 PM	60799
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	6/26/2021 10:52:04 PM	60799
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/26/2021 10:52:04 PM	60799
Surr: Dibromofluoromethane	82.1	70-130		%Rec	1	6/26/2021 10:52:04 PM	60799
Surr: Toluene-d8	111	70-130		%Rec	1	6/26/2021 10:52:04 PM	60799

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

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

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-006

Collection Date: 6/16/2021 8:00:00 AM

Client Sample ID: BH-18

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	61		mg/Kg	20	6/25/2021 4:58:49 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/26/2021 11:20:42 PM	60799
Surr: BFB	94.2	70-130		%Rec	1	6/26/2021 11:20:42 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/26/2021 1:06:11 AM	60876
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 1:06:11 AM	60876
Surr: DNOP	70.8	70-130		%Rec	1	6/26/2021 1:06:11 AM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	6/26/2021 11:20:42 PM	60799
Toluene	ND	0.048		mg/Kg	1	6/26/2021 11:20:42 PM	60799
Ethylbenzene	ND	0.048		mg/Kg	1	6/26/2021 11:20:42 PM	60799
Xylenes, Total	ND	0.096		mg/Kg	1	6/26/2021 11:20:42 PM	60799
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	1	6/26/2021 11:20:42 PM	60799
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/26/2021 11:20:42 PM	60799
Surr: Dibromofluoromethane	86.4	70-130		%Rec	1	6/26/2021 11:20:42 PM	60799
Surr: Toluene-d8	111	70-130		%Rec	1	6/26/2021 11:20:42 PM	60799

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

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

Analytical Report

Lab Order: 2106984

Date Reported: 6/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106984

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106984-007

Collection Date: 6/16/2021 8:05:00 AM

Client Sample ID: BH-19

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	6/25/2021 5:11:13 AM	60890
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	6/26/2021 11:49:22 PM	60799
Surr: BFB	93.5	70-130		%Rec	5	6/26/2021 11:49:22 PM	60799
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	10	8.3		mg/Kg	1	6/26/2021 1:30:32 AM	60876
Motor Oil Range Organics (MRO)	ND	41		mg/Kg	1	6/26/2021 1:30:32 AM	60876
Surr: DNOP	70.6	70-130		%Rec	1	6/26/2021 1:30:32 AM	60876
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.12		mg/Kg	5	6/26/2021 11:49:22 PM	60799
Toluene	ND	0.23		mg/Kg	5	6/26/2021 11:49:22 PM	60799
Ethylbenzene	ND	0.23		mg/Kg	5	6/26/2021 11:49:22 PM	60799
Xylenes, Total	ND	0.46		mg/Kg	5	6/26/2021 11:49:22 PM	60799
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	5	6/26/2021 11:49:22 PM	60799
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	5	6/26/2021 11:49:22 PM	60799
Surr: Dibromofluoromethane	84.5	70-130		%Rec	5	6/26/2021 11:49:22 PM	60799
Surr: Toluene-d8	110	70-130		%Rec	5	6/26/2021 11:49:22 PM	60799

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

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2106984
30-Jun-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60890	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 60890	RunNo: 79336
Prep Date: 6/24/2021	Analysis Date: 6/25/2021	SeqNo: 2788102 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-60890	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 60890	RunNo: 79336
Prep Date: 6/24/2021	Analysis Date: 6/25/2021	SeqNo: 2788103 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.6 90 110

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative 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

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

WO#: 2106984

30-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: LCS-60867	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60867				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/24/2021				SeqNo: 2787407	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.6	70	130			

Sample ID: MB-60867	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60867				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/24/2021				SeqNo: 2787409	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		86.7	70	130			

Sample ID: LCS-60876	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60876				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/25/2021				SeqNo: 2789216	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.7	68.9	141			
Surr: DNOP	4.2		5.000		83.2	70	130			

Sample ID: MB-60876	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60876				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/25/2021				SeqNo: 2789218	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		92.6	70	130			

Sample ID: MB-60900	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60900				RunNo: 79325					
Prep Date: 6/24/2021	Analysis Date: 6/26/2021				SeqNo: 2789502	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		93.6	70	130			

Sample ID: LCS-60900	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60900				RunNo: 79325					
Prep Date: 6/24/2021	Analysis Date: 6/26/2021				SeqNo: 2789504	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.2	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 Quantitative 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

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

WO#: 2106984

30-Jun-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60925	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60925			RunNo: 79364						
Prep Date: 6/25/2021	Analysis Date: 6/26/2021			SeqNo: 2789749		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	70	130			

Sample ID: LCS-60925	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60925			RunNo: 79364						
Prep Date: 6/25/2021	Analysis Date: 6/26/2021			SeqNo: 2789750		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		112	70	130			

Sample ID: LCS-60942	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789806		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.7		5.000		74.6	70	130			

Sample ID: MB-60942	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789807		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		74.2	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 Quantitative 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 10 of 12

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

WO#: 2106984

30-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: lcs-60799	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 60799	RunNo: 79394								
Prep Date: 6/21/2021	Analysis Date: 6/26/2021	SeqNo: 2790446	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.7	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 1,2-Dichloroethane-d4	0.56		0.5000		112	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		89.0	70	130			
Surr: Toluene-d8	0.53		0.5000		107	70	130			

Sample ID: mb-60799	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 60799	RunNo: 79394								
Prep Date: 6/21/2021	Analysis Date: 6/26/2021	SeqNo: 2790447	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: 1,2-Dichloroethane-d4	0.55		0.5000		110	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.1	70	130			
Surr: Dibromofluoromethane	0.40		0.5000		80.6	70	130			
Surr: Toluene-d8	0.55		0.5000		110	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 Quantitative 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 11 of 12

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

WO#: 2106984

30-Jun-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

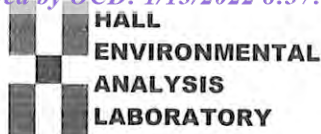
Sample ID: lcs-60799	SampType: LCS				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: LCSS	Batch ID: 60799				RunNo: 79394					
Prep Date: 6/21/2021	Analysis Date: 6/26/2021				SeqNo: 2790467	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	110	70	130			
Surr: BFB	460		500.0		91.3	70	130			

Sample ID: mb-60799	SampType: MBLK				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: PBS	Batch ID: 60799				RunNo: 79394					
Prep Date: 6/21/2021	Analysis Date: 6/26/2021				SeqNo: 2790468	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		91.2	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 Quantitative 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



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: 2106984

RcptNo: 1

Received By: Cheyenne Cason

6/18/2021 7:40:00 AM

Chen

Completed By: Cheyenne Cason

6/18/2021 8:19:51 AM

Chen

Reviewed By:

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: T.C. 6.18.21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good				



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

July 01, 2021

Becky Haskell

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX:

RE: Brannigan ANF Federal 5 Battery

OrderNo.: 2106A59

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/19/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106A59

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106A59

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106A59-001

Collection Date: 6/17/2021 6:25:00 AM

Client Sample ID: SW-13

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	100	61		mg/Kg	20	6/24/2021 7:52:56 PM	60891
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	15	10		mg/Kg	1	6/26/2021 3:56:47 AM	60871
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/26/2021 3:56:47 AM	60871
Surr: DNOP	104	70-130		%Rec	1	6/26/2021 3:56:47 AM	60871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/28/2021 4:08:00 AM	60830
Surr: BFB	92.0	70-130		%Rec	1	6/28/2021 4:08:00 AM	60830
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/28/2021 4:08:00 AM	60830
Toluene	ND	0.048		mg/Kg	1	6/28/2021 4:08:00 AM	60830
Ethylbenzene	ND	0.048		mg/Kg	1	6/28/2021 4:08:00 AM	60830
Xylenes, Total	ND	0.095		mg/Kg	1	6/28/2021 4:08:00 AM	60830
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	6/28/2021 4:08:00 AM	60830

Lab ID: 2106A59-002

Collection Date: 6/17/2021 6:30:00 AM

Client Sample ID: BH-20

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	6/24/2021 8:30:09 PM	60891
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	6/26/2021 4:21:16 AM	60871
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/26/2021 4:21:16 AM	60871
Surr: DNOP	89.7	70-130		%Rec	1	6/26/2021 4:21:16 AM	60871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/28/2021 5:07:00 AM	60830
Surr: BFB	92.1	70-130		%Rec	1	6/28/2021 5:07:00 AM	60830
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/28/2021 5:07:00 AM	60830
Toluene	ND	0.049		mg/Kg	1	6/28/2021 5:07:00 AM	60830
Ethylbenzene	ND	0.049		mg/Kg	1	6/28/2021 5:07:00 AM	60830
Xylenes, Total	ND	0.098		mg/Kg	1	6/28/2021 5:07:00 AM	60830
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	6/28/2021 5:07:00 AM	60830

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 Quantitative 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

Analytical Report

Lab Order: 2106A59

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106A59

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106A59-003

Collection Date: 6/17/2021 6:35:00 AM

Client Sample ID: BH-21

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	66	60		mg/Kg	20	6/24/2021 8:42:33 PM	60891
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	13	10		mg/Kg	1	6/26/2021 4:45:35 AM	60871
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/26/2021 4:45:35 AM	60871
Surr: DNOP	87.4	70-130		%Rec	1	6/26/2021 4:45:35 AM	60871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/28/2021 5:27:00 AM	60830
Surr: BFB	87.7	70-130		%Rec	1	6/28/2021 5:27:00 AM	60830
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/28/2021 5:27:00 AM	60830
Toluene	ND	0.048		mg/Kg	1	6/28/2021 5:27:00 AM	60830
Ethylbenzene	ND	0.048		mg/Kg	1	6/28/2021 5:27:00 AM	60830
Xylenes, Total	ND	0.097		mg/Kg	1	6/28/2021 5:27:00 AM	60830
Surr: 4-Bromofluorobenzene	88.0	70-130		%Rec	1	6/28/2021 5:27:00 AM	60830

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

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

Analytical Report

Lab Order: 2106A59

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106A59

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106A59-004

Collection Date: 6/17/2021 6:40:00 AM

Client Sample ID: BH-22

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	6/24/2021 8:54:57 PM	60891
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	12	9.7		mg/Kg	1	6/26/2021 5:09:58 AM	60871
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 5:09:58 AM	60871
Surr: DNOP	89.7	70-130		%Rec	1	6/26/2021 5:09:58 AM	60871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/28/2021 5:47:00 AM	60830
Surr: BFB	96.6	70-130		%Rec	1	6/28/2021 5:47:00 AM	60830
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	6/28/2021 5:47:00 AM	60830
Toluene	ND	0.046		mg/Kg	1	6/28/2021 5:47:00 AM	60830
Ethylbenzene	ND	0.046		mg/Kg	1	6/28/2021 5:47:00 AM	60830
Xylenes, Total	ND	0.092		mg/Kg	1	6/28/2021 5:47:00 AM	60830
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	6/28/2021 5:47:00 AM	60830

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

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2106A59
01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60891	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 60891	RunNo: 79336
Prep Date: 6/24/2021	Analysis Date: 6/24/2021	SeqNo: 2788070 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-60891	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 60891	RunNo: 79336
Prep Date: 6/24/2021	Analysis Date: 6/24/2021	SeqNo: 2788071 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.4 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 Quantitative 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

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

WO#: 2106A59

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: LCS-60867	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60867				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/24/2021				SeqNo: 2787407	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.6	70	130			

Sample ID: MB-60867	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60867				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/24/2021				SeqNo: 2787409	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		86.7	70	130			

Sample ID: LCS-60871	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60871				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/26/2021				SeqNo: 2789215	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.2	68.9	141			
Surr: DNOP	3.7		5.000		73.3	70	130			

Sample ID: LCS-60876	SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 60876				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/25/2021				SeqNo: 2789216	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.2	70	130			

Sample ID: MB-60871	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60871				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/26/2021				SeqNo: 2789217	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.0		10.00		79.6	70	130			

Sample ID: MB-60876	SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 60876				RunNo: 79325					
Prep Date: 6/23/2021	Analysis Date: 6/25/2021				SeqNo: 2789218	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		92.6	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 Quantitative 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

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

WO#: 2106A59

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-60915	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60915			RunNo: 79325						
Prep Date: 6/24/2021	Analysis Date: 6/26/2021			SeqNo: 2789501		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		98.4	70	130			

Sample ID: LCS-60915	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60915			RunNo: 79325						
Prep Date: 6/24/2021	Analysis Date: 6/26/2021			SeqNo: 2789503		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.7	70	130			

Sample ID: MB-60925	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60925			RunNo: 79364						
Prep Date: 6/25/2021	Analysis Date: 6/26/2021			SeqNo: 2789749		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	70	130			

Sample ID: LCS-60925	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60925			RunNo: 79364						
Prep Date: 6/25/2021	Analysis Date: 6/26/2021			SeqNo: 2789750		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		112	70	130			

Sample ID: LCS-60942	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789806		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.7		5.000		74.6	70	130			

Sample ID: MB-60942	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789807		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		74.2	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 Quantitative 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

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

WO#: 2106A59

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-60830	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 60830	RunNo: 79409								
Prep Date: 6/22/2021	Analysis Date: 6/28/2021	SeqNo: 2791288 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	940		1000		93.7	70	130			

Sample ID: lcs-60830	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 60830	RunNo: 79409								
Prep Date: 6/22/2021	Analysis Date: 6/28/2021	SeqNo: 2791290 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.7	78.6	131			
Surr: BFB	1000		1000		102	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 Quantitative 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

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

WO#: 2106A59

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-60830	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60830	RunNo: 79409								
Prep Date: 6/22/2021	Analysis Date: 6/28/2021	SeqNo: 2791399 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	70	130			

Sample ID: lcs-60830	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60830	RunNo: 79409								
Prep Date: 6/22/2021	Analysis Date: 6/28/2021	SeqNo: 2791401 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	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	0.91		1.000		90.6	70	130			

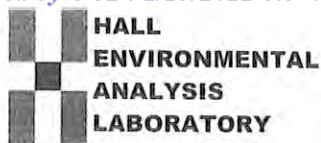
Sample ID: 2106a59-001ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: SW-13	Batch ID: 60830	RunNo: 79409								
Prep Date: 6/22/2021	Analysis Date: 6/28/2021	SeqNo: 2791403 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.023	0.9320	0	89.1	80	120			
Toluene	0.88	0.047	0.9320	0	94.5	80	120			
Ethylbenzene	0.91	0.047	0.9320	0	97.4	80	120			
Xylenes, Total	2.7	0.093	2.796	0	97.8	80	120			
Surr: 4-Bromofluorobenzene	0.83		0.9320		88.8	70	130			

Sample ID: 2106a59-001amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: SW-13	Batch ID: 60830	RunNo: 79409								
Prep Date: 6/22/2021	Analysis Date: 6/28/2021	SeqNo: 2791405 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9434	0	90.8	80	120	3.12	20	
Toluene	0.91	0.047	0.9434	0	96.9	80	120	3.76	20	
Ethylbenzene	0.94	0.047	0.9434	0	99.8	80	120	3.65	20	
Xylenes, Total	2.8	0.094	2.830	0	100	80	120	3.83	20	
Surr: 4-Bromofluorobenzene	0.83		0.9434		88.5	70	130	0	0	

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 Quantitative 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



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: **2106A59**

RcptNo: 1

Received By: **Desiree Dominguez** 6/19/2021 8:40:00 AMCompleted By: **Desiree Dominguez** 6/19/2021 9:54:26 AM

Reviewed By:

TR 6/21/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: DAD 6.19.21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good				



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

July 01, 2021

Becky Haskell

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Brannigan ANF Federal 5

OrderNo.: 2106B23

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/22/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Brannigan ANF Federal 5

Lab Order: 2106B23

Lab ID: 2106B23-001

Collection Date: 6/18/2021 6:00:00 AM

Client Sample ID: SW-14

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	560	60		mg/Kg	20	6/29/2021 2:54:57 PM	60959
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	25	9.9		mg/Kg	1	6/27/2021 10:52:46 AM	60900
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/27/2021 10:52:46 AM	60900
Surr: DNOP	65.7	70-130	S	%Rec	1	6/27/2021 10:52:46 AM	60900
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/29/2021 6:55:00 PM	60884
Surr: BFB	91.4	70-130		%Rec	1	6/29/2021 6:55:00 PM	60884
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/29/2021 6:55:00 PM	60884
Toluene	ND	0.050		mg/Kg	1	6/29/2021 6:55:00 PM	60884
Ethylbenzene	ND	0.050		mg/Kg	1	6/29/2021 6:55:00 PM	60884
Xylenes, Total	ND	0.099		mg/Kg	1	6/29/2021 6:55:00 PM	60884
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	6/29/2021 6:55:00 PM	60884

Lab ID: 2106B23-002

Collection Date: 6/18/2021 6:05:00 AM

Client Sample ID: SW-15

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/29/2021 3:07:21 PM	60959
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/27/2021 11:41:27 AM	60900
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/27/2021 11:41:27 AM	60900
Surr: DNOP	57.9	70-130	S	%Rec	1	6/27/2021 11:41:27 AM	60900
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/29/2021 7:15:00 PM	60884
Surr: BFB	86.4	70-130		%Rec	1	6/29/2021 7:15:00 PM	60884
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/29/2021 7:15:00 PM	60884
Toluene	ND	0.050		mg/Kg	1	6/29/2021 7:15:00 PM	60884
Ethylbenzene	ND	0.050		mg/Kg	1	6/29/2021 7:15:00 PM	60884
Xylenes, Total	ND	0.10		mg/Kg	1	6/29/2021 7:15:00 PM	60884
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	6/29/2021 7:15:00 PM	60884

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

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

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B23

Project: Brannigan ANF Federal 5

Lab ID: 2106B23-003

Collection Date: 6/18/2021 6:10:00 AM

Client Sample ID: SW-16

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	460	60		mg/Kg	20	6/28/2021 1:28:26 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/27/2021 12:30:14 PM	60900
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/27/2021 12:30:14 PM	60900
Surr: DNOP	76.3	70-130		%Rec	1	6/27/2021 12:30:14 PM	60900
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/29/2021 7:35:00 PM	60884
Surr: BFB	90.6	70-130		%Rec	1	6/29/2021 7:35:00 PM	60884
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/29/2021 7:35:00 PM	60884
Toluene	ND	0.050		mg/Kg	1	6/29/2021 7:35:00 PM	60884
Ethylbenzene	ND	0.050		mg/Kg	1	6/29/2021 7:35:00 PM	60884
Xylenes, Total	ND	0.10		mg/Kg	1	6/29/2021 7:35:00 PM	60884
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	6/29/2021 7:35:00 PM	60884

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

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

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B23

Project: Brannigan ANF Federal 5

Lab ID: 2106B23-004

Collection Date: 6/18/2021 6:15:00 AM

Client Sample ID: SW-17

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	400	60		mg/Kg	20	6/28/2021 2:05:31 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	63	9.7		mg/Kg	1	6/27/2021 4:05:08 PM	60900
Motor Oil Range Organics (MRO)	120	49		mg/Kg	1	6/27/2021 4:05:08 PM	60900
Surr: DNOP	97.1	70-130		%Rec	1	6/27/2021 4:05:08 PM	60900
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/29/2021 7:55:00 PM	60884
Surr: BFB	89.3	70-130		%Rec	1	6/29/2021 7:55:00 PM	60884
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/29/2021 7:55:00 PM	60884
Toluene	ND	0.048		mg/Kg	1	6/29/2021 7:55:00 PM	60884
Ethylbenzene	ND	0.048		mg/Kg	1	6/29/2021 7:55:00 PM	60884
Xylenes, Total	ND	0.097		mg/Kg	1	6/29/2021 7:55:00 PM	60884
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	6/29/2021 7:55:00 PM	60884

Lab ID: 2106B23-005

Collection Date: 6/18/2021 6:20:00 AM

Client Sample ID: SW-18

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	990	60		mg/Kg	20	6/28/2021 2:42:36 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/27/2021 1:48:12 PM	60900
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/27/2021 1:48:12 PM	60900
Surr: DNOP	60.7	70-130	S	%Rec	1	6/27/2021 1:48:12 PM	60900
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/29/2021 8:14:00 PM	60884
Surr: BFB	86.8	70-130		%Rec	1	6/29/2021 8:14:00 PM	60884
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/29/2021 8:14:00 PM	60884
Toluene	ND	0.049		mg/Kg	1	6/29/2021 8:14:00 PM	60884
Ethylbenzene	ND	0.049		mg/Kg	1	6/29/2021 8:14:00 PM	60884
Xylenes, Total	ND	0.099		mg/Kg	1	6/29/2021 8:14:00 PM	60884
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	6/29/2021 8:14:00 PM	60884

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

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

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B23

Project: Brannigan ANF Federal 5

Lab ID: 2106B23-006

Collection Date: 6/18/2021 6:30:00 AM

Client Sample ID: SW-19

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	96	60		mg/Kg	20	6/28/2021 2:54:57 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/26/2021 4:39:15 PM	60915
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/26/2021 4:39:15 PM	60915
Surr: DNOP	82.4	70-130		%Rec	1	6/26/2021 4:39:15 PM	60915
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/29/2021 5:08:21 PM	60893
Surr: BFB	102	70-130		%Rec	1	6/29/2021 5:08:21 PM	60893
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/29/2021 5:08:21 PM	60893
Toluene	ND	0.047		mg/Kg	1	6/29/2021 5:08:21 PM	60893
Ethylbenzene	ND	0.047		mg/Kg	1	6/29/2021 5:08:21 PM	60893
Xylenes, Total	ND	0.094		mg/Kg	1	6/29/2021 5:08:21 PM	60893
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/29/2021 5:08:21 PM	60893

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

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

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Brannigan ANF Federal 5

Lab Order: 2106B23

Lab ID: 2106B23-007

Collection Date: 6/18/2021 6:50:00 AM

Client Sample ID: BH-23

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	6/28/2021 3:32:00 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/26/2021 5:03:32 PM	60915
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 5:03:32 PM	60915
Surr: DNOP	82.2	70-130		%Rec	1	6/26/2021 5:03:32 PM	60915
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/29/2021 5:31:54 PM	60893
Surr: BFB	101	70-130		%Rec	1	6/29/2021 5:31:54 PM	60893
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/29/2021 5:31:54 PM	60893
Toluene	ND	0.048		mg/Kg	1	6/29/2021 5:31:54 PM	60893
Ethylbenzene	ND	0.048		mg/Kg	1	6/29/2021 5:31:54 PM	60893
Xylenes, Total	ND	0.096		mg/Kg	1	6/29/2021 5:31:54 PM	60893
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/29/2021 5:31:54 PM	60893

Lab ID: 2106B23-008

Collection Date: 6/18/2021 6:55:00 AM

Client Sample ID: BH-24

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/28/2021 3:44:22 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/26/2021 5:27:50 PM	60915
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/26/2021 5:27:50 PM	60915
Surr: DNOP	74.6	70-130		%Rec	1	6/26/2021 5:27:50 PM	60915
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/29/2021 5:55:21 PM	60893
Surr: BFB	102	70-130		%Rec	1	6/29/2021 5:55:21 PM	60893
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/29/2021 5:55:21 PM	60893
Toluene	ND	0.048		mg/Kg	1	6/29/2021 5:55:21 PM	60893
Ethylbenzene	ND	0.048		mg/Kg	1	6/29/2021 5:55:21 PM	60893
Xylenes, Total	ND	0.095		mg/Kg	1	6/29/2021 5:55:21 PM	60893
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/29/2021 5:55:21 PM	60893

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

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

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Brannigan ANF Federal 5

Lab Order: 2106B23

Lab ID: 2106B23-009

Collection Date: 6/18/2021 7:40:00 AM

Client Sample ID: BH-25

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	81	60		mg/Kg	20	6/28/2021 3:56:42 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/26/2021 5:52:12 PM	60915
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 5:52:12 PM	60915
Surr: DNOP	81.2	70-130		%Rec	1	6/26/2021 5:52:12 PM	60915
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/29/2021 6:18:56 PM	60893
Surr: BFB	99.0	70-130		%Rec	1	6/29/2021 6:18:56 PM	60893
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/29/2021 6:18:56 PM	60893
Toluene	ND	0.047		mg/Kg	1	6/29/2021 6:18:56 PM	60893
Ethylbenzene	ND	0.047		mg/Kg	1	6/29/2021 6:18:56 PM	60893
Xylenes, Total	ND	0.095		mg/Kg	1	6/29/2021 6:18:56 PM	60893
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/29/2021 6:18:56 PM	60893

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

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

Analytical Report

Lab Order: 2106B23

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Project: Brannigan ANF Federal 5

Lab Order: 2106B23

Lab ID: 2106B23-010

Collection Date: 6/18/2021 7:45:00 AM

Client Sample ID: BH-26

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/28/2021 4:09:04 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/26/2021 6:16:35 PM	60915
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 6:16:35 PM	60915
Surr: DNOP	81.0	70-130		%Rec	1	6/26/2021 6:16:35 PM	60915
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/29/2021 6:42:19 PM	60893
Surr: BFB	99.3	70-130		%Rec	1	6/29/2021 6:42:19 PM	60893
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	6/29/2021 6:42:19 PM	60893
Toluene	ND	0.047		mg/Kg	1	6/29/2021 6:42:19 PM	60893
Ethylbenzene	ND	0.047		mg/Kg	1	6/29/2021 6:42:19 PM	60893
Xylenes, Total	ND	0.094		mg/Kg	1	6/29/2021 6:42:19 PM	60893
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	6/29/2021 6:42:19 PM	60893

Lab ID: 2106B23-011

Collection Date: 6/18/2021 7:50:00 AM

Client Sample ID: BH-27

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/28/2021 4:21:25 PM	60963
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/26/2021 6:40:56 PM	60915
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/26/2021 6:40:56 PM	60915
Surr: DNOP	81.4	70-130		%Rec	1	6/26/2021 6:40:56 PM	60915
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/29/2021 7:05:44 PM	60893
Surr: BFB	101	70-130		%Rec	1	6/29/2021 7:05:44 PM	60893
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/29/2021 7:05:44 PM	60893
Toluene	ND	0.049		mg/Kg	1	6/29/2021 7:05:44 PM	60893
Ethylbenzene	ND	0.049		mg/Kg	1	6/29/2021 7:05:44 PM	60893
Xylenes, Total	ND	0.097		mg/Kg	1	6/29/2021 7:05:44 PM	60893
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/29/2021 7:05:44 PM	60893

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

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

Analytical ReportLab Order: **2106B23**

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** GHD**Lab Order:** 2106B23**Project:** Brannigan ANF Federal 5

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

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

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

WO#: 2106B23

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: MB-60963	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60963	RunNo: 79430								
Prep Date: 6/28/2021	Analysis Date: 6/28/2021	SeqNo: 2792218 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60963	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60963	RunNo: 79430								
Prep Date: 6/28/2021	Analysis Date: 6/28/2021	SeqNo: 2792219 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Sample ID: MB-60959	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 60959	RunNo: 79432								
Prep Date: 6/28/2021	Analysis Date: 6/28/2021	SeqNo: 2792330 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-60959	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 60959	RunNo: 79432								
Prep Date: 6/28/2021	Analysis Date: 6/28/2021	SeqNo: 2792332 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	90	110			

Qualifiers:

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

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

WO#: 2106B23

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: MB-60915	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60915	RunNo: 79325								
Prep Date: 6/24/2021	Analysis Date: 6/26/2021	SeqNo: 2789501 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.4	70	130			

Sample ID: MB-60900	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60900	RunNo: 79325								
Prep Date: 6/24/2021	Analysis Date: 6/26/2021	SeqNo: 2789502 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.6	70	130			

Sample ID: LCS-60915	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 60915	RunNo: 79325								
Prep Date: 6/24/2021	Analysis Date: 6/26/2021	SeqNo: 2789503 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	107	68.9	141			
Surr: DNOP	4.7		5.000		93.7	70	130			

Sample ID: LCS-60900	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 60900	RunNo: 79325								
Prep Date: 6/24/2021	Analysis Date: 6/26/2021	SeqNo: 2789504 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	68.9	141			
Surr: DNOP	4.3		5.000		85.2	70	130			

Sample ID: MB-60925	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60925	RunNo: 79364								
Prep Date: 6/25/2021	Analysis Date: 6/26/2021	SeqNo: 2789749 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		109	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 Quantitative 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

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

WO#: 2106B23

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: LCS-60925	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60925			RunNo: 79364						
Prep Date: 6/25/2021	Analysis Date: 6/26/2021			SeqNo: 2789750	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		112	70	130			

Sample ID: LCS-60942	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789806	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.7		5.000		74.6	70	130			

Sample ID: MB-60942	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789807	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.4		10.00		74.2	70	130			

Sample ID: MB-60943	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790235	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	70	130			

Sample ID: LCS-60943	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790236	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.000		107	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 Quantitative 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

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

WO#: 2106B23

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: mb-60893	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60893			RunNo: 79456						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2792789		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	990		1000		99.0	70	130			

Sample ID: lcs-60893	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60893			RunNo: 79456						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2792790		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	78.6	131			
Surr: BFB	1100		1000		112	70	130			

Sample ID: mb-60933	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60933			RunNo: 79456						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2792813		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.1	70	130			

Sample ID: lcs-60933	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60933			RunNo: 79456						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2792814		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	70	130			

Sample ID: mb-60884	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60884			RunNo: 79458						
Prep Date: 6/23/2021	Analysis Date: 6/29/2021			SeqNo: 2793253		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.0	70	130			

Sample ID: mb-60919	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60919			RunNo: 79458						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2793254		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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 12 of 15

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2106B23
01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: Ics-60884	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 60884	RunNo: 79458								
Prep Date: 6/23/2021	Analysis Date: 6/29/2021	SeqNo: 2793255			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	78.6	131			
Surr: BFB	1000		1000		100	70	130			

Sample ID: Ics-60919	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 60919	RunNo: 79458								
Prep Date: 6/24/2021	Analysis Date: 6/29/2021	SeqNo: 2793256			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	70	130			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2106B23

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: mb-60893	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60893	RunNo: 79456								
Prep Date: 6/24/2021	Analysis Date: 6/29/2021	SeqNo: 2792832 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		101	70	130			

Sample ID: LCS-60893	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60893	RunNo: 79456								
Prep Date: 6/24/2021	Analysis Date: 6/29/2021	SeqNo: 2792833 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	1.000	0	81.1	80	120			
Toluene	0.92	0.050	1.000	0	91.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: mb-60933	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60933	RunNo: 79456								
Prep Date: 6/25/2021	Analysis Date: 6/30/2021	SeqNo: 2792854 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130			

Sample ID: LCS-60933	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60933	RunNo: 79456								
Prep Date: 6/25/2021	Analysis Date: 6/30/2021	SeqNo: 2792856 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: mb-60884	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60884	RunNo: 79458								
Prep Date: 6/23/2021	Analysis Date: 6/29/2021	SeqNo: 2793305 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								

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 Quantitative 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

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

WO#: 2106B23

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal 5

Sample ID: mb-60884	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 60884				RunNo: 79458					
Prep Date: 6/23/2021	Analysis Date: 6/29/2021				SeqNo: 2793305	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		89.2	70	130			

Sample ID: mb-60919	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 60919				RunNo: 79458					
Prep Date: 6/24/2021	Analysis Date: 6/29/2021				SeqNo: 2793306	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	70	130			

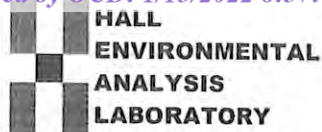
Sample ID: lcs-60884	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 60884				RunNo: 79458					
Prep Date: 6/23/2021	Analysis Date: 6/29/2021				SeqNo: 2793307	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.7	70	130			

Sample ID: lcs-60919	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 60919				RunNo: 79458					
Prep Date: 6/24/2021	Analysis Date: 6/29/2021				SeqNo: 2793308	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	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 Quantitative 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



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: 2106B23

RcptNo: 1

Received By: Juan Rojas

6/22/2021 7:30:00 AM

Completed By: Desiree Dominguez

6/22/2021 8:29:13 AM

Reviewed By: SPA 6.22.21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SPA 6/22/21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				
2	1.2	Good				



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

July 01, 2021

Becky Haskell

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Brannigan ANF Federal 5 Battery

OrderNo.: 2106B88

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 11 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-001

Collection Date: 6/21/2021 6:30:00 AM

Client Sample ID: SW-19

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	190	60		mg/Kg	20	6/29/2021 6:25:52 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/26/2021 4:37:46 PM	60925
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/26/2021 4:37:46 PM	60925
Surr: DNOP	70.2	70-130		%Rec	1	6/26/2021 4:37:46 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/30/2021 1:12:00 AM	60919
Surr: BFB	95.7	70-130		%Rec	1	6/30/2021 1:12:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 1:12:00 AM	60919
Toluene	ND	0.048		mg/Kg	1	6/30/2021 1:12:00 AM	60919
Ethylbenzene	ND	0.048		mg/Kg	1	6/30/2021 1:12:00 AM	60919
Xylenes, Total	ND	0.096		mg/Kg	1	6/30/2021 1:12:00 AM	60919
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	6/30/2021 1:12:00 AM	60919

Lab ID: 2106B88-002

Collection Date: 6/21/2021 6:35:00 AM

Client Sample ID: BH-28

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	360	60		mg/Kg	20	6/29/2021 6:38:16 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	11	9.8		mg/Kg	1	6/26/2021 4:50:16 PM	60925
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/26/2021 4:50:16 PM	60925
Surr: DNOP	80.6	70-130		%Rec	1	6/26/2021 4:50:16 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 1:32:00 AM	60919
Surr: BFB	93.2	70-130		%Rec	1	6/30/2021 1:32:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/30/2021 1:32:00 AM	60919
Toluene	ND	0.049		mg/Kg	1	6/30/2021 1:32:00 AM	60919
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 1:32:00 AM	60919
Xylenes, Total	ND	0.098		mg/Kg	1	6/30/2021 1:32:00 AM	60919
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	6/30/2021 1:32:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-003

Collection Date: 6/21/2021 6:40:00 AM

Client Sample ID: BH-29

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	580	60		mg/Kg	20	6/29/2021 6:50:40 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	55	9.8		mg/Kg	1	6/26/2021 5:02:48 PM	60925
Motor Oil Range Organics (MRO)	87	49		mg/Kg	1	6/26/2021 5:02:48 PM	60925
Surr: DNOP	90.1	70-130		%Rec	1	6/26/2021 5:02:48 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 1:52:00 AM	60919
Surr: BFB	92.6	70-130		%Rec	1	6/30/2021 1:52:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 1:52:00 AM	60919
Toluene	ND	0.049		mg/Kg	1	6/30/2021 1:52:00 AM	60919
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 1:52:00 AM	60919
Xylenes, Total	ND	0.098		mg/Kg	1	6/30/2021 1:52:00 AM	60919
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	6/30/2021 1:52:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-004

Collection Date: 6/21/2021 6:45:00 AM

Client Sample ID: SW-20

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	80	60		mg/Kg	20	6/29/2021 7:03:05 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/26/2021 5:15:11 PM	60925
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 5:15:11 PM	60925
Surr: DNOP	99.6	70-130		%Rec	1	6/26/2021 5:15:11 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 2:12:00 AM	60919
Surr: BFB	91.9	70-130		%Rec	1	6/30/2021 2:12:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 2:12:00 AM	60919
Toluene	ND	0.049		mg/Kg	1	6/30/2021 2:12:00 AM	60919
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 2:12:00 AM	60919
Xylenes, Total	ND	0.097		mg/Kg	1	6/30/2021 2:12:00 AM	60919
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	6/30/2021 2:12:00 AM	60919

Lab ID: 2106B88-005

Collection Date: 6/21/2021 6:50:00 AM

Client Sample ID: SW-21

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	170	60		mg/Kg	20	6/29/2021 7:15:29 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/26/2021 5:27:50 PM	60925
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/26/2021 5:27:50 PM	60925
Surr: DNOP	108	70-130		%Rec	1	6/26/2021 5:27:50 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/30/2021 2:32:00 AM	60919
Surr: BFB	93.1	70-130		%Rec	1	6/30/2021 2:32:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 2:32:00 AM	60919
Toluene	ND	0.048		mg/Kg	1	6/30/2021 2:32:00 AM	60919
Ethylbenzene	ND	0.048		mg/Kg	1	6/30/2021 2:32:00 AM	60919
Xylenes, Total	ND	0.096		mg/Kg	1	6/30/2021 2:32:00 AM	60919
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	6/30/2021 2:32:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-006

Collection Date: 6/21/2021 6:55:00 AM

Client Sample ID: SW-22

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	140	60		mg/Kg	20	6/29/2021 7:52:43 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/26/2021 5:40:23 PM	60925
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/26/2021 5:40:23 PM	60925
Surr: DNOP	108	70-130		%Rec	1	6/26/2021 5:40:23 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 2:52:00 AM	60919
Surr: BFB	94.6	70-130		%Rec	1	6/30/2021 2:52:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 2:52:00 AM	60919
Toluene	ND	0.049		mg/Kg	1	6/30/2021 2:52:00 AM	60919
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 2:52:00 AM	60919
Xylenes, Total	ND	0.097		mg/Kg	1	6/30/2021 2:52:00 AM	60919
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	6/30/2021 2:52:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-007

Collection Date: 6/21/2021 7:00:00 AM

Client Sample ID: BH-30

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/29/2021 8:05:07 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/26/2021 5:52:52 PM	60925
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/26/2021 5:52:52 PM	60925
Surr: DNOP	101	70-130		%Rec	1	6/26/2021 5:52:52 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/30/2021 4:11:00 AM	60919
Surr: BFB	91.5	70-130		%Rec	1	6/30/2021 4:11:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/30/2021 4:11:00 AM	60919
Toluene	ND	0.050		mg/Kg	1	6/30/2021 4:11:00 AM	60919
Ethylbenzene	ND	0.050		mg/Kg	1	6/30/2021 4:11:00 AM	60919
Xylenes, Total	ND	0.099		mg/Kg	1	6/30/2021 4:11:00 AM	60919
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	6/30/2021 4:11:00 AM	60919

Lab ID: 2106B88-008

Collection Date: 6/21/2021 7:10:00 AM

Client Sample ID: BH-31

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/29/2021 8:17:31 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/26/2021 6:05:23 PM	60925
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/26/2021 6:05:23 PM	60925
Surr: DNOP	99.7	70-130		%Rec	1	6/26/2021 6:05:23 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/30/2021 4:31:00 AM	60919
Surr: BFB	98.3	70-130		%Rec	1	6/30/2021 4:31:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/30/2021 4:31:00 AM	60919
Toluene	ND	0.050		mg/Kg	1	6/30/2021 4:31:00 AM	60919
Ethylbenzene	ND	0.050		mg/Kg	1	6/30/2021 4:31:00 AM	60919
Xylenes, Total	ND	0.10		mg/Kg	1	6/30/2021 4:31:00 AM	60919
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	6/30/2021 4:31:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-009

Collection Date: 6/21/2021 7:20:00 AM

Client Sample ID: BH-32

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/29/2021 8:29:56 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/26/2021 6:17:52 PM	60925
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/26/2021 6:17:52 PM	60925
Surr: DNOP	106	70-130		%Rec	1	6/26/2021 6:17:52 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/30/2021 4:51:00 AM	60919
Surr: BFB	96.0	70-130		%Rec	1	6/30/2021 4:51:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 4:51:00 AM	60919
Toluene	ND	0.048		mg/Kg	1	6/30/2021 4:51:00 AM	60919
Ethylbenzene	ND	0.048		mg/Kg	1	6/30/2021 4:51:00 AM	60919
Xylenes, Total	ND	0.097		mg/Kg	1	6/30/2021 4:51:00 AM	60919
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	6/30/2021 4:51:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2106B88-010

Collection Date: 6/21/2021 7:25:00 AM

Client Sample ID: BH-33

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/29/2021 9:07:08 PM	61012
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/26/2021 6:30:16 PM	60925
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 6:30:16 PM	60925
Surr: DNOP	100	70-130		%Rec	1	6/26/2021 6:30:16 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/30/2021 5:11:00 AM	60919
Surr: BFB	95.9	70-130		%Rec	1	6/30/2021 5:11:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 5:11:00 AM	60919
Toluene	ND	0.047		mg/Kg	1	6/30/2021 5:11:00 AM	60919
Ethylbenzene	ND	0.047		mg/Kg	1	6/30/2021 5:11:00 AM	60919
Xylenes, Total	ND	0.094		mg/Kg	1	6/30/2021 5:11:00 AM	60919
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	6/30/2021 5:11:00 AM	60919

Lab ID: 2106B88-011

Collection Date: 6/21/2021 7:40:00 AM

Client Sample ID: BH-34

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/30/2021 1:57:28 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/26/2021 6:42:37 PM	60925
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/26/2021 6:42:37 PM	60925
Surr: DNOP	99.9	70-130		%Rec	1	6/26/2021 6:42:37 PM	60925
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 5:31:00 AM	60919
Surr: BFB	98.7	70-130		%Rec	1	6/30/2021 5:31:00 AM	60919
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/30/2021 5:31:00 AM	60919
Toluene	ND	0.049		mg/Kg	1	6/30/2021 5:31:00 AM	60919
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 5:31:00 AM	60919
Xylenes, Total	ND	0.098		mg/Kg	1	6/30/2021 5:31:00 AM	60919
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	6/30/2021 5:31:00 AM	60919

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

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

Analytical Report

Lab Order: 2106B88

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106B88

Project: Brannigan ANF Federal 5 Battery

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

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

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

WO#: 2106B88

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: MB-61012	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61012	RunNo: 79428								
Prep Date: 6/29/2021	Analysis Date: 6/30/2021	SeqNo: 2793004 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61012	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61012	RunNo: 79428								
Prep Date: 6/29/2021	Analysis Date: 6/30/2021	SeqNo: 2793005 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

Sample ID: MB-61024	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61024	RunNo: 79428								
Prep Date: 6/29/2021	Analysis Date: 6/30/2021	SeqNo: 2793007 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61024	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61024	RunNo: 79428								
Prep Date: 6/29/2021	Analysis Date: 6/30/2021	SeqNo: 2793008 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID: MB-61012	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61012	RunNo: 79443								
Prep Date: 6/29/2021	Analysis Date: 6/29/2021	SeqNo: 2793801 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61012	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61012	RunNo: 79443								
Prep Date: 6/29/2021	Analysis Date: 6/29/2021	SeqNo: 2793802 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	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 Quantitative 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

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

WO#: 2106B88

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: MB-60925	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 60925	RunNo: 79364								
Prep Date: 6/25/2021	Analysis Date: 6/26/2021	SeqNo: 2789749 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		109	70	130			

Sample ID: LCS-60925	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 60925	RunNo: 79364								
Prep Date: 6/25/2021	Analysis Date: 6/26/2021	SeqNo: 2789750 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	68.9	141			
Surr: DNOP	5.6		5.000		112	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 Quantitative 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

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

WO#: 2106B88

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-60919	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 60919				RunNo: 79458					
Prep Date: 6/24/2021	Analysis Date: 6/29/2021				SeqNo: 2793254	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	900		1000		90.1	70	130			

Sample ID: lcs-60919	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 60919				RunNo: 79458					
Prep Date: 6/24/2021	Analysis Date: 6/29/2021				SeqNo: 2793256	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	78.6	131			
Surr: BFB	1000		1000		104	70	130			

Qualifiers:

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

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

WO#: 2106B88

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-60919	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 60919	RunNo: 79458								
Prep Date: 6/24/2021	Analysis Date: 6/29/2021	SeqNo: 2793306	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	70	130			

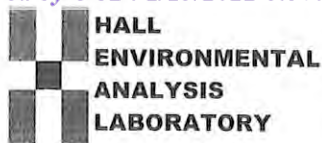
Sample ID: lcs-60919	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 60919	RunNo: 79458								
Prep Date: 6/24/2021	Analysis Date: 6/29/2021	SeqNo: 2793308	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	105	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	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 Quantitative 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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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: 2106B88

RcptNo: 1

Received By: Juan Rojas

6/23/2021 7:30:00 AM

Completed By: Desiree Dominguez

6/23/2021 8:27:51 AM

Reviewed By:

JR 6/23/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: KRG/RLC

6/23/21

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good				



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

July 01, 2021

Becky Haskell

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Brannigan ANF Federal #5 Battery

OrderNo.: 2106D58

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/25/2021 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 2106D58

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106D58

Project: Brannigan ANF Federal #5 Battery

Lab ID: 2106D58-001

Collection Date: 6/23/2021 7:00:00 AM

Client Sample ID: SW-23

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	6/30/2021 2:34:42 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	6/27/2021 11:31:50 PM	60942
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/27/2021 11:31:50 PM	60942
Surr: DNOP	80.0	70-130		%Rec	1	6/27/2021 11:31:50 PM	60942
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 2:32:34 PM	60933
Surr: BFB	102	70-130		%Rec	1	6/30/2021 2:32:34 PM	60933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/30/2021 2:32:34 PM	60933
Toluene	0.055	0.049		mg/Kg	1	6/30/2021 2:32:34 PM	60933
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 2:32:34 PM	60933
Xylenes, Total	ND	0.099		mg/Kg	1	6/30/2021 2:32:34 PM	60933
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/30/2021 2:32:34 PM	60933

Lab ID: 2106D58-002

Collection Date: 6/23/2021 7:05:00 AM

Client Sample ID: SW-24

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	150	60		mg/Kg	20	6/30/2021 3:11:56 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	27	9.6		mg/Kg	1	6/27/2021 11:56:09 PM	60942
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/27/2021 11:56:09 PM	60942
Surr: DNOP	64.2	70-130	S	%Rec	1	6/27/2021 11:56:09 PM	60942
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/30/2021 2:56:04 PM	60933
Surr: BFB	103	70-130		%Rec	1	6/30/2021 2:56:04 PM	60933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/30/2021 2:56:04 PM	60933
Toluene	ND	0.047		mg/Kg	1	6/30/2021 2:56:04 PM	60933
Ethylbenzene	ND	0.047		mg/Kg	1	6/30/2021 2:56:04 PM	60933
Xylenes, Total	ND	0.095		mg/Kg	1	6/30/2021 2:56:04 PM	60933
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	6/30/2021 2:56:04 PM	60933

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

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

Analytical Report

Lab Order: 2106D58

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106D58

Project: Brannigan ANF Federal #5 Battery

Lab ID: 2106D58-003

Collection Date: 6/23/2021 7:10:00 AM

Client Sample ID: SW-25

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	83	60		mg/Kg	20	6/30/2021 3:24:21 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	11	9.4		mg/Kg	1	6/27/2021 11:41:07 AM	60943
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/27/2021 11:41:07 AM	60943
Surr: DNOP	116	70-130		%Rec	1	6/27/2021 11:41:07 AM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 3:19:32 PM	60933
Surr: BFB	104	70-130		%Rec	1	6/30/2021 3:19:32 PM	60933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/30/2021 3:19:32 PM	60933
Toluene	ND	0.049		mg/Kg	1	6/30/2021 3:19:32 PM	60933
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 3:19:32 PM	60933
Xylenes, Total	ND	0.097		mg/Kg	1	6/30/2021 3:19:32 PM	60933
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	6/30/2021 3:19:32 PM	60933

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

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

Analytical Report

Lab Order: 2106D58

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106D58

Project: Brannigan ANF Federal #5 Battery

Lab ID: 2106D58-004

Collection Date: 6/24/2021 6:45:00 AM

Client Sample ID: BH-35

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	160	60		mg/Kg	20	6/30/2021 3:36:46 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/27/2021 12:19:00 PM	60943
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/27/2021 12:19:00 PM	60943
Surr: DNOP	95.8	70-130		%Rec	1	6/27/2021 12:19:00 PM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/30/2021 3:43:03 PM	60933
Surr: BFB	103	70-130		%Rec	1	6/30/2021 3:43:03 PM	60933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/30/2021 3:43:03 PM	60933
Toluene	ND	0.048		mg/Kg	1	6/30/2021 3:43:03 PM	60933
Ethylbenzene	ND	0.048		mg/Kg	1	6/30/2021 3:43:03 PM	60933
Xylenes, Total	ND	0.097		mg/Kg	1	6/30/2021 3:43:03 PM	60933
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/30/2021 3:43:03 PM	60933

Lab ID: 2106D58-005

Collection Date: 6/24/2021 6:50:00 AM

Client Sample ID: BH-36

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	300	60		mg/Kg	20	6/30/2021 3:49:10 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/27/2021 12:32:00 PM	60943
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/27/2021 12:32:00 PM	60943
Surr: DNOP	104	70-130		%Rec	1	6/27/2021 12:32:00 PM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/30/2021 4:06:38 PM	60933
Surr: BFB	104	70-130		%Rec	1	6/30/2021 4:06:38 PM	60933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/30/2021 4:06:38 PM	60933
Toluene	ND	0.047		mg/Kg	1	6/30/2021 4:06:38 PM	60933
Ethylbenzene	ND	0.047		mg/Kg	1	6/30/2021 4:06:38 PM	60933
Xylenes, Total	ND	0.095		mg/Kg	1	6/30/2021 4:06:38 PM	60933
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	6/30/2021 4:06:38 PM	60933

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

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

Analytical Report

Lab Order: 2106D58

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106D58

Project: Brannigan ANF Federal #5 Battery

Lab ID: 2106D58-006

Collection Date: 6/24/2021 6:55:00 AM

Client Sample ID: BH-37

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	300	60		mg/Kg	20	6/30/2021 4:01:35 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/27/2021 12:44:00 PM	60943
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/27/2021 12:44:00 PM	60943
Surr: DNOP	120	70-130		%Rec	1	6/27/2021 12:44:00 PM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 4:30:04 PM	60933
Surr: BFB	101	70-130		%Rec	1	6/30/2021 4:30:04 PM	60933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/30/2021 4:30:04 PM	60933
Toluene	ND	0.049		mg/Kg	1	6/30/2021 4:30:04 PM	60933
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 4:30:04 PM	60933
Xylenes, Total	ND	0.097		mg/Kg	1	6/30/2021 4:30:04 PM	60933
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	6/30/2021 4:30:04 PM	60933

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

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

Analytical Report

Lab Order: 2106D58

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106D58

Project: Brannigan ANF Federal #5 Battery

Lab ID: 2106D58-007

Collection Date: 6/24/2021 7:15:00 AM

Client Sample ID: BH-38

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	370	60		mg/Kg	20	6/30/2021 4:14:00 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/27/2021 12:57:00 PM	60943
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/27/2021 12:57:00 PM	60943
Surr: DNOP	114	70-130		%Rec	1	6/27/2021 12:57:00 PM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 11:28:00 AM	60934
Surr: BFB	93.5	70-130		%Rec	1	6/30/2021 11:28:00 AM	60934
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	6/30/2021 11:28:00 AM	60934
Toluene	ND	0.049		mg/Kg	1	6/30/2021 11:28:00 AM	60934
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 11:28:00 AM	60934
Xylenes, Total	ND	0.099		mg/Kg	1	6/30/2021 11:28:00 AM	60934
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	6/30/2021 11:28:00 AM	60934

Lab ID: 2106D58-008

Collection Date: 6/24/2021 7:20:00 AM

Client Sample ID: BH-39

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	420	60		mg/Kg	20	6/30/2021 4:26:24 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	26	8.8		mg/Kg	1	6/27/2021 1:10:00 PM	60943
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/27/2021 1:10:00 PM	60943
Surr: DNOP	100	70-130		%Rec	1	6/27/2021 1:10:00 PM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/30/2021 12:27:00 PM	60934
Surr: BFB	88.2	70-130		%Rec	1	6/30/2021 12:27:00 PM	60934
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 12:27:00 PM	60934
Toluene	ND	0.049		mg/Kg	1	6/30/2021 12:27:00 PM	60934
Ethylbenzene	ND	0.049		mg/Kg	1	6/30/2021 12:27:00 PM	60934
Xylenes, Total	ND	0.098		mg/Kg	1	6/30/2021 12:27:00 PM	60934
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	6/30/2021 12:27:00 PM	60934

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

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

Analytical Report

Lab Order: 2106D58

Date Reported: 7/1/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 2106D58

Project: Brannigan ANF Federal #5 Battery

Lab ID: 2106D58-009

Collection Date: 6/24/2021 7:25:00 AM

Client Sample ID: BH-40

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	310	60		mg/Kg	20	6/30/2021 4:38:48 AM	61024
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	6/27/2021 1:23:06 PM	60943
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	6/27/2021 1:23:06 PM	60943
Surr: DNOP	117	70-130		%Rec	1	6/27/2021 1:23:06 PM	60943
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/30/2021 1:27:00 PM	60934
Surr: BFB	90.7	70-130		%Rec	1	6/30/2021 1:27:00 PM	60934
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	6/30/2021 1:27:00 PM	60934
Toluene	ND	0.047		mg/Kg	1	6/30/2021 1:27:00 PM	60934
Ethylbenzene	ND	0.047		mg/Kg	1	6/30/2021 1:27:00 PM	60934
Xylenes, Total	ND	0.095		mg/Kg	1	6/30/2021 1:27:00 PM	60934
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	6/30/2021 1:27:00 PM	60934

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

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2106D58
01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: MB-61024	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 61024	RunNo: 79428
Prep Date: 6/29/2021	Analysis Date: 6/30/2021	SeqNo: 2793007 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-61024	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 61024	RunNo: 79428
Prep Date: 6/29/2021	Analysis Date: 6/30/2021	SeqNo: 2793008 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 94.0 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 Quantitative 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

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

WO#: 2106D58

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: MB-60915	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60915			RunNo: 79325						
Prep Date: 6/24/2021	Analysis Date: 6/26/2021			SeqNo: 2789501		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		98.4	70	130			

Sample ID: LCS-60915	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60915			RunNo: 79325						
Prep Date: 6/24/2021	Analysis Date: 6/26/2021			SeqNo: 2789503		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.7	70	130			

Sample ID: LCS-60942	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789806		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.9	68.9	141			
Surr: DNOP	3.7		5.000		74.6	70	130			

Sample ID: MB-60942	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60942			RunNo: 79325						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2789807		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.4		10.00		74.2	70	130			

Sample ID: MB-60943	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790235		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	70	130			

Sample ID: LCS-60943	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790236		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

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

WO#: 2106D58

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: LCS-60943	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790236		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.3	68.9	141			
Surr: DNOP	5.4		5.000		107	70	130			

Sample ID: 2106D58-003AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: SW-25	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790237		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	9.2	46.21	11.09	96.3	15	184			
Surr: DNOP	4.9		4.621		105	70	130			

Sample ID: 2106D58-003AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: SW-25	Batch ID: 60943			RunNo: 79391						
Prep Date: 6/26/2021	Analysis Date: 6/27/2021			SeqNo: 2790238		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.4	46.90	11.09	66.2	15	184	27.5	23.9	R
Surr: DNOP	4.4		4.690		94.2	70	130	0	0	

Sample ID: MB-60944	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60944			RunNo: 79401						
Prep Date: 6/26/2021	Analysis Date: 6/28/2021			SeqNo: 2790929		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.2		10.00		82.1	70	130			

Sample ID: LCS-60944	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 60944			RunNo: 79401						
Prep Date: 6/26/2021	Analysis Date: 6/28/2021			SeqNo: 2790930		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		79.9	70	130			

Sample ID: MB-60955	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 60955			RunNo: 79401						
Prep Date: 6/27/2021	Analysis Date: 6/28/2021			SeqNo: 2791434		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.7		10.00		77.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2106D58
01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: LCS-60955		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS		Batch ID: 60955		RunNo: 79401						
Prep Date: 6/27/2021		Analysis Date: 6/28/2021		SeqNo: 2791435		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.5		5.000		70.4	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 Quantitative 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

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

WO#: 2106D58

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: mb-60893	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60893			RunNo: 79456						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2792789			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.0	70	130			

Sample ID: lcs-60893	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60893			RunNo: 79456						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2792790			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		112	70	130			

Sample ID: mb-60933	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60933			RunNo: 79456						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2792813			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	990		1000		99.1	70	130			

Sample ID: lcs-60933	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60933			RunNo: 79456						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2792814			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	78.6	131			
Surr: BFB	1100		1000		110	70	130			

Sample ID: mb-60946	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60946			RunNo: 79481						
Prep Date: 6/26/2021	Analysis Date: 6/30/2021			SeqNo: 2794481			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	70	130			

Sample ID: lcs-60946	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60946			RunNo: 79481						
Prep Date: 6/26/2021	Analysis Date: 6/30/2021			SeqNo: 2794482			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		114	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 Quantitative 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

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

WO#: 2106D58

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: mb-60934	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60934			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795359		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	900		1000		89.7	70	130			

Sample ID: mb-60938	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 60938			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795360		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.2	70	130			

Sample ID: lcs-60934	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60934			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795361		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	96.6	78.6	131			
Surr: BFB	1100		1000		107	70	130			

Sample ID: lcs-60938	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 60938			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795362		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		113	70	130			

Sample ID: 2106D58-007ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-38	Batch ID: 60934			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795363		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.44	0	94.8	61.3	114			
Surr: BFB	1100		977.5		108	70	130			

Sample ID: 2106D58-007amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-38	Batch ID: 60934			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795365		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	23.90	0	90.9	61.3	114	6.40	20	
Surr: BFB	1100		956.0		110	70	130	0	0	

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

WO#: 2106D58

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

Sample ID: mb-60893	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 60893			RunNo: 79456						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2792832		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: LCS-60893	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 60893			RunNo: 79456						
Prep Date: 6/24/2021	Analysis Date: 6/29/2021			SeqNo: 2792833		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: mb-60933	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 60933			RunNo: 79456						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2792854		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: LCS-60933	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 60933			RunNo: 79456						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2792856		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.3	80	120			
Toluene	0.92	0.050	1.000	0	91.7	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: mb-60946	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 60946			RunNo: 79481						
Prep Date: 6/26/2021	Analysis Date: 6/30/2021			SeqNo: 2794525		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

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 Quantitative 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

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

WO#: 2106D58

01-Jul-21

Client: GHD**Project:** Brannigan ANF Federal #5 Battery

Sample ID: LCS-60946	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 60946		RunNo: 79481							
Prep Date: 6/26/2021	Analysis Date: 6/30/2021		SeqNo: 2794526		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: mb-60934	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 60934		RunNo: 79503							
Prep Date: 6/25/2021	Analysis Date: 6/30/2021		SeqNo: 2795510		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	70	130			

Sample ID: mb-60938	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 60938		RunNo: 79503							
Prep Date: 6/25/2021	Analysis Date: 6/30/2021		SeqNo: 2795511		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	70	130			

Sample ID: lcs-60934	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 60934		RunNo: 79503							
Prep Date: 6/25/2021	Analysis Date: 6/30/2021		SeqNo: 2795512		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.7	80	120			
Toluene	0.95	0.050	1.000	0	95.4	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.9	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.4	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.5	70	130			

Sample ID: lcs-60938	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 60938		RunNo: 79503							
Prep Date: 6/25/2021	Analysis Date: 6/30/2021		SeqNo: 2795514		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		96.2	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 Quantitative 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

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

WO#: 2106D58

01-Jul-21

Client: GHD
Project: Brannigan ANF Federal #5 Battery

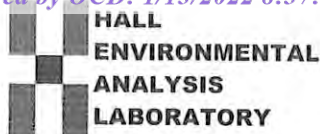
Sample ID: 2106D58-008ams		SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: BH-39		Batch ID: 60934			RunNo: 79503					
Prep Date: 6/25/2021		Analysis Date: 6/30/2021			SeqNo: 2795529		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.023	0.9302	0	91.8	80	120			
Toluene	0.87	0.047	0.9302	0	93.5	80	120			
Ethylbenzene	0.89	0.047	0.9302	0	95.6	80	120			
Xylenes, Total	2.7	0.093	2.791	0	96.2	80	120			
Surr: 4-Bromofluorobenzene	0.81		0.9302		86.6	70	130			

Sample ID: 2106D58-008amsd		SampType: MSD			TestCode: EPA Method 8021B: Volatiles					
Client ID: BH-39	Batch ID: 60934			RunNo: 79503						
Prep Date: 6/25/2021	Analysis Date: 6/30/2021			SeqNo: 2795542		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9766	0	86.3	80	120	1.37	20	
Toluene	0.86	0.049	0.9766	0	88.2	80	120	0.903	20	
Ethylbenzene	0.88	0.049	0.9766	0	90.3	80	120	0.907	20	
Xylenes, Total	2.7	0.098	2.930	0	90.5	80	120	1.20	20	
Surr: 4-Bromofluorobenzene	0.85		0.9766		86.9	70	130	0	0	

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 Quantitative 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



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: 2106D58

RcptNo: 1

Received By: Juan Rojas

6/25/2021 7:30:00 AM

Juan Rojas

Completed By: Cheyenne Cason

6/25/2021 8:26:45 AM

Cheyenne Cason

Reviewed By: DAD 6.25.21

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☐ No ☒ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐ Not Frozen
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(≤ 2 or >12 unless noted)

Adjusted?

Checked by: T.C. 6.25.21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	-1.1	Good				



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

July 19, 2021

Tom Larson
GHD Midland
2135 S Loop 250 W
Midland, TX 79703
TEL: (432) 686-0086
FAX:

RE: Brannigan ANF Federal 5 Battery

OrderNo.: 2107467

Dear Tom Larson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/10/2021 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order: 2107467

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2107467

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2107467-001

Collection Date: 7/8/2021 3:13:00 PM

Client Sample ID: BH-3A

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/13/2021 3:47:34 PM	61263
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/14/2021 11:37:18 AM	61259
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2021 11:37:18 AM	61259
Surr: DNOP	93.3	70-130		%Rec	1	7/14/2021 11:37:18 AM	61259
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/13/2021 9:06:14 AM	61241
Surr: BFB	95.7	70-130		%Rec	1	7/13/2021 9:06:14 AM	61241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/13/2021 9:06:14 AM	61241
Toluene	ND	0.049		mg/Kg	1	7/13/2021 9:06:14 AM	61241
Ethylbenzene	ND	0.049		mg/Kg	1	7/13/2021 9:06:14 AM	61241
Xylenes, Total	ND	0.099		mg/Kg	1	7/13/2021 9:06:14 AM	61241
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	7/13/2021 9:06:14 AM	61241

Lab ID: 2107467-002

Collection Date: 7/8/2021 3:16:00 PM

Client Sample ID: BH-4A

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/13/2021 3:59:58 PM	61263
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	180	8.8		mg/Kg	1	7/14/2021 12:48:35 PM	61259
Motor Oil Range Organics (MRO)	160	44		mg/Kg	1	7/14/2021 12:48:35 PM	61259
Surr: DNOP	98.9	70-130		%Rec	1	7/14/2021 12:48:35 PM	61259
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/13/2021 10:16:52 AM	61241
Surr: BFB	90.6	70-130		%Rec	1	7/13/2021 10:16:52 AM	61241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/13/2021 10:16:52 AM	61241
Toluene	ND	0.050		mg/Kg	1	7/13/2021 10:16:52 AM	61241
Ethylbenzene	ND	0.050		mg/Kg	1	7/13/2021 10:16:52 AM	61241
Xylenes, Total	ND	0.099		mg/Kg	1	7/13/2021 10:16:52 AM	61241
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	7/13/2021 10:16:52 AM	61241

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

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

Analytical Report

Lab Order: 2107467

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2107467

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2107467-003

Collection Date: 7/8/2021 3:43:00 PM

Client Sample ID: SW-1A

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	61	60		mg/Kg	20	7/13/2021 4:12:22 PM	61263
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	180	9.6		mg/Kg	1	7/14/2021 1:12:20 PM	61259
Motor Oil Range Organics (MRO)	210	48		mg/Kg	1	7/14/2021 1:12:20 PM	61259
Surr: DNOP	92.6	70-130		%Rec	1	7/14/2021 1:12:20 PM	61259
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/13/2021 11:27:38 AM	61241
Surr: BFB	96.1	70-130		%Rec	1	7/13/2021 11:27:38 AM	61241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/13/2021 11:27:38 AM	61241
Toluene	ND	0.049		mg/Kg	1	7/13/2021 11:27:38 AM	61241
Ethylbenzene	ND	0.049		mg/Kg	1	7/13/2021 11:27:38 AM	61241
Xylenes, Total	ND	0.099		mg/Kg	1	7/13/2021 11:27:38 AM	61241
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/13/2021 11:27:38 AM	61241

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

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

Analytical Report

Lab Order: 2107467

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Lab Order: 2107467

Project: Brannigan ANF Federal 5 Battery

Lab ID: 2107467-004

Collection Date: 7/8/2021 3:46:00 PM

Client Sample ID: SW-5A

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	170	60		mg/Kg	20	7/13/2021 4:24:46 PM	61263
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	160	9.6		mg/Kg	1	7/15/2021 11:09:18 AM	61259
Motor Oil Range Organics (MRO)	150	48		mg/Kg	1	7/15/2021 11:09:18 AM	61259
Surr: DNOP	99.3	70-130		%Rec	1	7/15/2021 11:09:18 AM	61259
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/13/2021 11:51:17 AM	61241
Surr: BFB	95.5	70-130		%Rec	1	7/13/2021 11:51:17 AM	61241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/13/2021 11:51:17 AM	61241
Toluene	ND	0.049		mg/Kg	1	7/13/2021 11:51:17 AM	61241
Ethylbenzene	ND	0.049		mg/Kg	1	7/13/2021 11:51:17 AM	61241
Xylenes, Total	ND	0.098		mg/Kg	1	7/13/2021 11:51:17 AM	61241
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	7/13/2021 11:51:17 AM	61241

Lab ID: 2107467-005

Collection Date: 7/8/2021 3:49:00 PM

Client Sample ID: SW-11A

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	78	60		mg/Kg	20	7/13/2021 4:37:10 PM	61263
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	120	9.7		mg/Kg	1	7/15/2021 2:39:32 PM	61259
Motor Oil Range Organics (MRO)	260	49		mg/Kg	1	7/15/2021 2:39:32 PM	61259
Surr: DNOP	94.6	70-130		%Rec	1	7/15/2021 2:39:32 PM	61259
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	7/13/2021 12:15:02 PM	61241
Surr: BFB	97.6	70-130		%Rec	5	7/13/2021 12:15:02 PM	61241
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	7/13/2021 12:15:02 PM	61241
Toluene	ND	0.25		mg/Kg	5	7/13/2021 12:15:02 PM	61241
Ethylbenzene	ND	0.25		mg/Kg	5	7/13/2021 12:15:02 PM	61241
Xylenes, Total	ND	0.49		mg/Kg	5	7/13/2021 12:15:02 PM	61241
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	5	7/13/2021 12:15:02 PM	61241

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

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

Analytical Report

Lab Order: 2107467

Date Reported: 7/19/2021

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** GHD Midland**Lab Order:** 2107467**Project:** Brannigan ANF Federal 5 Battery

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

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

Page 4 of 8

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2107467
19-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal 5 Battery

Sample ID: MB-61263	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 61263	RunNo: 79769
Prep Date: 7/13/2021	Analysis Date: 7/13/2021	SeqNo: 2806180 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-61263	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 61263	RunNo: 79769
Prep Date: 7/13/2021	Analysis Date: 7/13/2021	SeqNo: 2806181 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.9 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 Quantitative 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

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

WO#: 2107467

19-Jul-21

Client: GHD Midland**Project:** Brannigan ANF Federal 5 Battery

Sample ID: MB-61259	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 61259	RunNo: 79789								
Prep Date: 7/13/2021	Analysis Date: 7/14/2021	SeqNo: 2806762 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		91.6	70	130			

Sample ID: LCS-61259	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 61259	RunNo: 79789								
Prep Date: 7/13/2021	Analysis Date: 7/14/2021	SeqNo: 2806763 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.1	68.9	141			
Surr: DNOP	4.5		5.000		90.9	70	130			

Sample ID: 2107467-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH-3A	Batch ID: 61259	RunNo: 79789								
Prep Date: 7/13/2021	Analysis Date: 7/14/2021	SeqNo: 2806765 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.4	47.13	0	84.2	15	184			
Surr: DNOP	4.3		4.713		92.0	70	130			

Sample ID: 2107467-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH-3A	Batch ID: 61259	RunNo: 79789								
Prep Date: 7/13/2021	Analysis Date: 7/14/2021	SeqNo: 2806766 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	9.3	46.30	0	85.2	15	184	0.660	23.9	
Surr: DNOP	4.3		4.630		93.5	70	130	0	0	

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 Quantitative 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

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

WO#: 2107467

19-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal 5 Battery

Sample ID: mb-61241	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2805977 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	960		1000		96.1	70	130			

Sample ID: lcs-61241	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2805978 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.0	78.6	131			
Surr: BFB	1100		1000		105	70	130			

Sample ID: 2107467-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH-3A	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2805980 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	24.95	0	99.2	61.3	114			
Surr: BFB	1000		998.0		105	70	130			

Sample ID: 2107467-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH-3A	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2805981 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.78	0	95.8	61.3	114	4.14	20	
Surr: BFB	1000		991.1		105	70	130	0	0	

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 Quantitative 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

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

WO#: 2107467

19-Jul-21

Client: GHD Midland**Project:** Brannigan ANF Federal 5 Battery

Sample ID: mb-61241	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2806025 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		101	70	130			

Sample ID: LCS-61241	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2806026 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

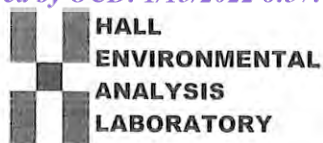
Sample ID: 2107467-002ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH-4A	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2806029 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9524	0	96.5	80	120			
Toluene	0.94	0.048	0.9524	0	99.1	80	120			
Ethylbenzene	0.94	0.048	0.9524	0	98.4	80	120			
Xylenes, Total	2.8	0.095	2.857	0	99.4	80	120			
Surr: 4-Bromofluorobenzene	0.96		0.9524		101	70	130			

Sample ID: 2107467-002amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH-4A	Batch ID: 61241	RunNo: 79767								
Prep Date: 7/12/2021	Analysis Date: 7/13/2021	SeqNo: 2806030 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9662	0	96.6	80	120	1.54	20	
Toluene	0.95	0.048	0.9662	0	98.1	80	120	0.465	20	
Ethylbenzene	0.95	0.048	0.9662	0	98.4	80	120	1.38	20	
Xylenes, Total	2.9	0.097	2.899	0	98.7	80	120	0.749	20	
Surr: 4-Bromofluorobenzene	1.0		0.9662		103	70	130	0	0	

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 Quantitative 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



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 Midland**Work Order Number: **2107467**

RcptNo: 1

Received By: **Cheyenne Cason** 7/10/2021 8:00:00 AMCompleted By: **Cheyenne Cason** 7/10/2021 8:41:41 AMReviewed By: *MC 07/10/2021**Cason**Cason*

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *Cee 7/10/21*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.5	Good				

Chain-of-Custody Record

Client: GHD

Mailing Address:

324 W. Main St. Suite 108, Artesia NM 88210

Phone #: (505)377-4218

email or Fax#: Becky.Haskell@ghd.com

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Turn-Around Time:

Standard

Project Name:

Project #:

Project Manager:

Becky Haskell

Tom Larson

Sampler: Zach Comino

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF) 0.5-0.5

Date Time Matrix Sample Name

07/21/15 1513 S BH-3A

1516 BH-4A

1543 SW-1A

1546 SW-5A

1549 SW-11A

Container Type and #

Jar

Preservative Type

None

HEAL No.

2107467

BTX / MTBE / TMBs (8021)

X

TPH:8015D(GRO / DRO / MRO)

X

8081 Pesticides/8082 PCB's

X

EDB (Method 504.1)

X

PAHs by 8310 or 8270SIMS

X

RCRA 8 Metals

X

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

X

8260 (VOA)

X

8270 (Semi-VOA)

X

Total Coliform (Present/Absent)

X

Date: 07/21/15

Time: 0800

Relinquished by: Zach Comino

Relinquished by: Zach Comino

Date: 07/21/15

Time: 1900

Received by: Becky Haskell

Received by: Becky Haskell

Via: Zach Comino

Via: Zach Comino

Date: 7/21/15

Time: 0800

Date: 7/21/15

Time: 0800

Date: 7/21/15

Time: 0800

Date: 7/21/15

Time: 0800

Date: 7/21/15

Time: 0800

Remarks: Please email: Chase_Settle@eogresources.com; Tom.Larson@ghd.com; Zach.Comino@ghd.com; Along with Becky Haskell listed above.

Direct Bill to EOG Chase Settle

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



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

July 28, 2021

Becky Haskell
GHD Midland
2135 S Loop 250 W
Midland, TX 79703
TEL: (432) 686-0086
FAX

RE: Brannigan ANF Federal #5 Battery

OrderNo.: 2107925

Dear Becky Haskell:

Hall Environmental Analysis Laboratory received 18 sample(s) on 7/20/2021 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-2A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:20:00 AM

Lab ID: 2107925-001

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 1:21:33 PM	61547
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/21/2021 1:28:59 PM	61434
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 1:28:59 PM	61434
Surr: DNOP	110	70-130		%Rec	1	7/21/2021 1:28:59 PM	61434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/21/2021 10:27:00 PM	61430
Surr: BFB	113	70-130		%Rec	1	7/21/2021 10:27:00 PM	61430
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	7/21/2021 10:27:00 PM	61430
Toluene	ND	0.049		mg/Kg	1	7/21/2021 10:27:00 PM	61430
Ethylbenzene	ND	0.049		mg/Kg	1	7/21/2021 10:27:00 PM	61430
Xylenes, Total	ND	0.098		mg/Kg	1	7/21/2021 10:27:00 PM	61430
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	7/21/2021 10:27:00 PM	61430

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-4B

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:25:00 AM

Lab ID: 2107925-002

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 1:33:57 PM	61547
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	7/21/2021 2:00:11 PM	61434
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/21/2021 2:00:11 PM	61434
Surr: DNOP	97.4	70-130		%Rec	1	7/21/2021 2:00:11 PM	61434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/21/2021 10:47:00 PM	61430
Surr: BFB	105	70-130		%Rec	1	7/21/2021 10:47:00 PM	61430
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	7/21/2021 10:47:00 PM	61430
Toluene	ND	0.046		mg/Kg	1	7/21/2021 10:47:00 PM	61430
Ethylbenzene	ND	0.046		mg/Kg	1	7/21/2021 10:47:00 PM	61430
Xylenes, Total	ND	0.092		mg/Kg	1	7/21/2021 10:47:00 PM	61430
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	7/21/2021 10:47:00 PM	61430

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-6A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:30:00 AM

Lab ID: 2107925-003

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 1:46:21 PM	61547
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/21/2021 2:12:00 PM	61434
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/21/2021 2:12:00 PM	61434
Surr: DNOP	101	70-130		%Rec	1	7/21/2021 2:12:00 PM	61434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/21/2021 11:07:00 PM	61430
Surr: BFB	103	70-130		%Rec	1	7/21/2021 11:07:00 PM	61430
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	7/21/2021 11:07:00 PM	61430
Toluene	ND	0.047		mg/Kg	1	7/21/2021 11:07:00 PM	61430
Ethylbenzene	ND	0.047		mg/Kg	1	7/21/2021 11:07:00 PM	61430
Xylenes, Total	ND	0.094		mg/Kg	1	7/21/2021 11:07:00 PM	61430
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/21/2021 11:07:00 PM	61430

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-9A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:35:00 AM

Lab ID: 2107925-004

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 1:58:46 PM	61547
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/21/2021 2:35:49 PM	61434
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 2:35:49 PM	61434
Surr: DNOP	101	70-130		%Rec	1	7/21/2021 2:35:49 PM	61434
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/21/2021 11:27:00 PM	61430
Surr: BFB	105	70-130		%Rec	1	7/21/2021 11:27:00 PM	61430
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	7/21/2021 11:27:00 PM	61430
Toluene	ND	0.049		mg/Kg	1	7/21/2021 11:27:00 PM	61430
Ethylbenzene	ND	0.049		mg/Kg	1	7/21/2021 11:27:00 PM	61430
Xylenes, Total	ND	0.098		mg/Kg	1	7/21/2021 11:27:00 PM	61430
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	7/21/2021 11:27:00 PM	61430

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-7A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:40:00 AM

Lab ID: 2107925-005

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 2:11:11 PM	61547
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/21/2021 9:06:19 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 9:06:19 AM	61437
Surr: DNOP	149	70-130	S	%Rec	1	7/21/2021 9:06:19 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/22/2021 5:58:47 PM	61436
Surr: BFB	100	70-130		%Rec	1	7/22/2021 5:58:47 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 5:58:47 PM	61436
Toluene	ND	0.046		mg/Kg	1	7/22/2021 5:58:47 PM	61436
Ethylbenzene	ND	0.046		mg/Kg	1	7/22/2021 5:58:47 PM	61436
Xylenes, Total	ND	0.091		mg/Kg	1	7/22/2021 5:58:47 PM	61436
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/22/2021 5:58:47 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-10A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:45:00 AM

Lab ID: 2107925-006

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 1:47:27 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	7/21/2021 9:35:08 AM	61437
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/21/2021 9:35:08 AM	61437
Surr: DNOP	177	70-130	S	%Rec	1	7/21/2021 9:35:08 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2021 7:10:06 PM	61436
Surr: BFB	101	70-130		%Rec	1	7/22/2021 7:10:06 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 7:10:06 PM	61436
Toluene	ND	0.047		mg/Kg	1	7/22/2021 7:10:06 PM	61436
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2021 7:10:06 PM	61436
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2021 7:10:06 PM	61436
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/22/2021 7:10:06 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-13A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:50:00 AM

Lab ID: 2107925-007

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 1:59:52 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/21/2021 10:01:49 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 10:01:49 AM	61437
Surr: DNOP	174	70-130	S	%Rec	1	7/21/2021 10:01:49 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/22/2021 8:21:07 PM	61436
Surr: BFB	101	70-130		%Rec	1	7/22/2021 8:21:07 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 8:21:07 PM	61436
Toluene	ND	0.046		mg/Kg	1	7/22/2021 8:21:07 PM	61436
Ethylbenzene	ND	0.046		mg/Kg	1	7/22/2021 8:21:07 PM	61436
Xylenes, Total	ND	0.092		mg/Kg	1	7/22/2021 8:21:07 PM	61436
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/22/2021 8:21:07 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-15A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 9:55:00 AM

Lab ID: 2107925-008

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	7/26/2021 3:26:43 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/21/2021 10:11:24 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 10:11:24 AM	61437
Surr: DNOP	128	70-130		%Rec	1	7/21/2021 10:11:24 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/22/2021 8:44:44 PM	61436
Surr: BFB	99.4	70-130		%Rec	1	7/22/2021 8:44:44 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 8:44:44 PM	61436
Toluene	ND	0.046		mg/Kg	1	7/22/2021 8:44:44 PM	61436
Ethylbenzene	ND	0.046		mg/Kg	1	7/22/2021 8:44:44 PM	61436
Xylenes, Total	ND	0.091		mg/Kg	1	7/22/2021 8:44:44 PM	61436
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/22/2021 8:44:44 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-11A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 10:00:00 AM

Lab ID: 2107925-009

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 3:39:08 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/21/2021 10:21:03 AM	61437
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/21/2021 10:21:03 AM	61437
Surr: DNOP	143	70-130	S	%Rec	1	7/21/2021 10:21:03 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/22/2021 9:08:25 PM	61436
Surr: BFB	98.6	70-130		%Rec	1	7/22/2021 9:08:25 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/22/2021 9:08:25 PM	61436
Toluene	ND	0.049		mg/Kg	1	7/22/2021 9:08:25 PM	61436
Ethylbenzene	ND	0.049		mg/Kg	1	7/22/2021 9:08:25 PM	61436
Xylenes, Total	ND	0.098		mg/Kg	1	7/22/2021 9:08:25 PM	61436
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/22/2021 9:08:25 PM	61436

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

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

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Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-12A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 10:05:00 AM

Lab ID: 2107925-010

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	7/26/2021 3:51:32 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	7/21/2021 10:30:42 AM	61437
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/21/2021 10:30:42 AM	61437
Surr: DNOP	119	70-130		%Rec	1	7/21/2021 10:30:42 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2021 9:31:58 PM	61436
Surr: BFB	96.6	70-130		%Rec	1	7/22/2021 9:31:58 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 9:31:58 PM	61436
Toluene	ND	0.047		mg/Kg	1	7/22/2021 9:31:58 PM	61436
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2021 9:31:58 PM	61436
Xylenes, Total	ND	0.093		mg/Kg	1	7/22/2021 9:31:58 PM	61436
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	7/22/2021 9:31:58 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-29A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 10:10:00 AM

Lab ID: 2107925-011

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 4:03:56 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/21/2021 10:40:23 AM	61437
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/21/2021 10:40:23 AM	61437
Surr: DNOP	128	70-130		%Rec	1	7/21/2021 10:40:23 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2021 9:55:33 PM	61436
Surr: BFB	96.5	70-130		%Rec	1	7/22/2021 9:55:33 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 9:55:33 PM	61436
Toluene	ND	0.047		mg/Kg	1	7/22/2021 9:55:33 PM	61436
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2021 9:55:33 PM	61436
Xylenes, Total	ND	0.094		mg/Kg	1	7/22/2021 9:55:33 PM	61436
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/22/2021 9:55:33 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: BH-41

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021 10:12:00 AM

Lab ID: 2107925-012

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 4:16:20 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/21/2021 10:50:03 AM	61437
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/21/2021 10:50:03 AM	61437
Surr: DNOP	129	70-130		%Rec	1	7/21/2021 10:50:03 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/22/2021 10:19:05 PM	61436
Surr: BFB	98.0	70-130		%Rec	1	7/22/2021 10:19:05 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/22/2021 10:19:05 PM	61436
Toluene	ND	0.050		mg/Kg	1	7/22/2021 10:19:05 PM	61436
Ethylbenzene	ND	0.050		mg/Kg	1	7/22/2021 10:19:05 PM	61436
Xylenes, Total	ND	0.10		mg/Kg	1	7/22/2021 10:19:05 PM	61436
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/22/2021 10:19:05 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SW-17A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021

Lab ID: 2107925-013

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	140	60		mg/Kg	20	7/26/2021 4:28:45 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/21/2021 10:59:44 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 10:59:44 AM	61437
Surr: DNOP	139	70-130	S	%Rec	1	7/21/2021 10:59:44 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/22/2021 10:42:37 PM	61436
Surr: BFB	97.9	70-130		%Rec	1	7/22/2021 10:42:37 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/22/2021 10:42:37 PM	61436
Toluene	ND	0.047		mg/Kg	1	7/22/2021 10:42:37 PM	61436
Ethylbenzene	ND	0.047		mg/Kg	1	7/22/2021 10:42:37 PM	61436
Xylenes, Total	ND	0.093		mg/Kg	1	7/22/2021 10:42:37 PM	61436
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/22/2021 10:42:37 PM	61436

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

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

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Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SW-18A

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021

Lab ID: 2107925-014

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	100	60		mg/Kg	20	7/26/2021 5:05:57 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/21/2021 11:09:28 AM	61437
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/21/2021 11:09:28 AM	61437
Surr: DNOP	141	70-130	S	%Rec	1	7/21/2021 11:09:28 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/22/2021 11:06:07 PM	61436
Surr: BFB	99.2	70-130		%Rec	1	7/22/2021 11:06:07 PM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/22/2021 11:06:07 PM	61436
Toluene	ND	0.048		mg/Kg	1	7/22/2021 11:06:07 PM	61436
Ethylbenzene	ND	0.048		mg/Kg	1	7/22/2021 11:06:07 PM	61436
Xylenes, Total	ND	0.096		mg/Kg	1	7/22/2021 11:06:07 PM	61436
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/22/2021 11:06:07 PM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SW-26

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021

Lab ID: 2107925-015

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 5:18:22 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	7/21/2021 11:19:11 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 11:19:11 AM	61437
Surr: DNOP	141	70-130	S	%Rec	1	7/21/2021 11:19:11 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/23/2021 12:16:44 AM	61436
Surr: BFB	98.5	70-130		%Rec	1	7/23/2021 12:16:44 AM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/23/2021 12:16:44 AM	61436
Toluene	ND	0.047		mg/Kg	1	7/23/2021 12:16:44 AM	61436
Ethylbenzene	ND	0.047		mg/Kg	1	7/23/2021 12:16:44 AM	61436
Xylenes, Total	ND	0.094		mg/Kg	1	7/23/2021 12:16:44 AM	61436
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/23/2021 12:16:44 AM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SW-11B

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021

Lab ID: 2107925-016

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 5:30:46 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	7/21/2021 11:28:56 AM	61437
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/21/2021 11:28:56 AM	61437
Surr: DNOP	127	70-130		%Rec	1	7/21/2021 11:28:56 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/23/2021 12:40:10 AM	61436
Surr: BFB	97.6	70-130		%Rec	1	7/23/2021 12:40:10 AM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/23/2021 12:40:10 AM	61436
Toluene	ND	0.049		mg/Kg	1	7/23/2021 12:40:10 AM	61436
Ethylbenzene	ND	0.049		mg/Kg	1	7/23/2021 12:40:10 AM	61436
Xylenes, Total	ND	0.098		mg/Kg	1	7/23/2021 12:40:10 AM	61436
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/23/2021 12:40:10 AM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SW-1B

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021

Lab ID: 2107925-017

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	59		mg/Kg	20	7/26/2021 5:43:11 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/21/2021 11:38:42 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 11:38:42 AM	61437
Surr: DNOP	119	70-130		%Rec	1	7/21/2021 11:38:42 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/23/2021 1:03:46 AM	61436
Surr: BFB	95.2	70-130		%Rec	1	7/23/2021 1:03:46 AM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/23/2021 1:03:46 AM	61436
Toluene	ND	0.046		mg/Kg	1	7/23/2021 1:03:46 AM	61436
Ethylbenzene	ND	0.046		mg/Kg	1	7/23/2021 1:03:46 AM	61436
Xylenes, Total	ND	0.091		mg/Kg	1	7/23/2021 1:03:46 AM	61436
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	7/23/2021 1:03:46 AM	61436

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

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

Analytical Report

Lab Order 2107925

Date Reported: 7/28/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD Midland

Client Sample ID: SW-5B

Project: Brannigan ANF Federal #5 Battery

Collection Date: 7/16/2021

Lab ID: 2107925-018

Matrix: SOIL

Received Date: 7/20/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	7/26/2021 5:55:35 PM	61549
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/21/2021 11:48:27 AM	61437
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/21/2021 11:48:27 AM	61437
Surr: DNOP	115	70-130		%Rec	1	7/21/2021 11:48:27 AM	61437
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/23/2021 1:27:16 AM	61436
Surr: BFB	96.8	70-130		%Rec	1	7/23/2021 1:27:16 AM	61436
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/23/2021 1:27:16 AM	61436
Toluene	ND	0.048		mg/Kg	1	7/23/2021 1:27:16 AM	61436
Ethylbenzene	ND	0.048		mg/Kg	1	7/23/2021 1:27:16 AM	61436
Xylenes, Total	ND	0.097		mg/Kg	1	7/23/2021 1:27:16 AM	61436
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	7/23/2021 1:27:16 AM	61436

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

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

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

WO#: 2107925

28-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal #5 Battery

Sample ID: MB-61547	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61547	RunNo: 80053								
Prep Date: 7/26/2021	Analysis Date: 7/26/2021	SeqNo: 2818226 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61547	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61547	RunNo: 80053								
Prep Date: 7/26/2021	Analysis Date: 7/26/2021	SeqNo: 2818227 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.4	90	110			

Sample ID: MB-61549	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 61549	RunNo: 80086								
Prep Date: 7/26/2021	Analysis Date: 7/26/2021	SeqNo: 2818838 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-61549	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 61549	RunNo: 80086								
Prep Date: 7/26/2021	Analysis Date: 7/26/2021	SeqNo: 2818839 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2107925

28-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal #5 Battery

Sample ID: MB-61434	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 61434	RunNo: 79955								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2813627 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	70	130			

Sample ID: LCS-61434	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 61434	RunNo: 79955								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2813628 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	81.6	68.9	141			
Surr: DNOP	4.2		5.000		84.3	70	130			

Sample ID: MB-61437	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 61437	RunNo: 79982								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2814484 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	17		10.00		173	70	130			S

Sample ID: LCS-61437	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 61437	RunNo: 79982								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2814486 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	85	10	50.00	0	170	68.9	141			S
Surr: DNOP	8.8		5.000		176	70	130			S

Sample ID: 2107925-005AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH-7A	Batch ID: 61437	RunNo: 79982								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2814488 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	9.9	49.26	5.324	109	15	184			
Surr: DNOP	5.6		4.926		114	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 Quantitative 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 20 of 25

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2107925
28-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal #5 Battery

Sample ID: 2107925-005AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: BH-7A		Batch ID: 61437		RunNo: 79982						
Prep Date: 7/20/2021		Analysis Date: 7/21/2021		SeqNo: 2814490		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.5	47.35	5.324	110	15	184	2.89	23.9	
Surr: DNOP	5.3		4.735		112	70	130	0	0	

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2107925

28-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal #5 Battery

Sample ID: mb-61430	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 61430			RunNo: 79951						
Prep Date: 7/20/2021	Analysis Date: 7/21/2021			SeqNo: 2814610		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	1100		1000		111	70	130			

Sample ID: lcs-61430	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 61430			RunNo: 79951						
Prep Date: 7/20/2021	Analysis Date: 7/21/2021			SeqNo: 2814611		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	94.6	78.6	131			
Surr: BFB	1200		1000		121	70	130			

Sample ID: mb-61436	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 61436			RunNo: 80010						
Prep Date: 7/20/2021	Analysis Date: 7/22/2021			SeqNo: 2815323		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	1100		1000		105	70	130			

Sample ID: lcs-61436	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 61436			RunNo: 80010						
Prep Date: 7/20/2021	Analysis Date: 7/22/2021			SeqNo: 2815324		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Sample ID: 2107925-005ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-7A	Batch ID: 61436			RunNo: 80010						
Prep Date: 7/20/2021	Analysis Date: 7/22/2021			SeqNo: 2815326		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	22.79	0	103	61.3	114			
Surr: BFB	1000		911.6		114	70	130			

Sample ID: 2107925-005amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-7A	Batch ID: 61436			RunNo: 80010						
Prep Date: 7/20/2021	Analysis Date: 7/22/2021			SeqNo: 2815327		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2107925
28-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal #5 Battery

Sample ID: 2107925-005amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH-7A		Batch ID: 61436		RunNo: 80010						
Prep Date: 7/20/2021		Analysis Date: 7/22/2021		SeqNo: 2815327		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.53	0	103	61.3	114	7.72	20	
Surr: BFB	1100		981.4		114	70	130	0	0	

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 Quantitative 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2107925

28-Jul-21

Client: GHD Midland

Project: Brannigan ANF Federal #5 Battery

Sample ID: mb-61430	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 61430	RunNo: 79951								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2814634 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	1.1		1.000		109	70	130			

Sample ID: lcs-61430	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 61430	RunNo: 79951								
Prep Date: 7/20/2021	Analysis Date: 7/21/2021	SeqNo: 2814635 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.3	80	120			
Toluene	0.96	0.050	1.000	0	96.3	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	70	130			

Sample ID: mb-61436	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 61436	RunNo: 80010								
Prep Date: 7/20/2021	Analysis Date: 7/22/2021	SeqNo: 2815364 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		103	70	130			

Sample ID: LCS-61436	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 61436	RunNo: 80010								
Prep Date: 7/20/2021	Analysis Date: 7/22/2021	SeqNo: 2815365 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.6	80	120			
Toluene	0.97	0.050	1.000	0	96.9	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	98.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	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 Quantitative 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

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

WO#: 2107925

28-Jul-21

Client: GHD Midland
Project: Brannigan ANF Federal #5 Battery

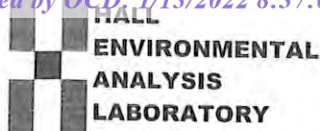
Sample ID: 2107925-006ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH-10A	Batch ID: 61436	RunNo: 80010								
Prep Date: 7/20/2021	Analysis Date: 7/22/2021	SeqNo: 2815368	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.023	0.9166	0	99.3	80	120			
Toluene	0.92	0.046	0.9166	0	101	80	120			
Ethylbenzene	0.92	0.046	0.9166	0	100	80	120			
Xylenes, Total	2.8	0.092	2.750	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.96		0.9166		105	70	130			

Sample ID: 2107925-006amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH-10A	Batch ID: 61436	RunNo: 80010								
Prep Date: 7/20/2021	Analysis Date: 7/22/2021	SeqNo: 2815369	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.023	0.9234	0	97.5	80	120	1.09	20	
Toluene	0.90	0.046	0.9234	0	97.0	80	120	3.04	20	
Ethylbenzene	0.91	0.046	0.9234	0	98.0	80	120	1.40	20	
Xylenes, Total	2.7	0.092	2.770	0	98.9	80	120	1.52	20	
Surr: 4-Bromofluorobenzene	0.98		0.9234		106	70	130	0	0	

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 Quantitative 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



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 Midland

Work Order Number: 2107925

RcptNo: 1

Received By: Cheyenne Cason 7/19/2021 3:00:00 PM

Completed By: Cheyenne Cason 7/20/2021 8:03:16 AM

Reviewed By: JN 7/20/21

Chad

Chad

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JMC 7-19-21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.6	Good				

Attachment D

Approved C-138

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

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

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: EOG Resources, Inc. 104 South Fourth Street, Artesia, NM 88210
2. Originating Site: Brannigan ANF Federal Battery
3. Location of Material (Street Address, City, State or ULSTR): Section 6-T22S-R24E, Eddy County, NM
4. Source and Description of Waste: Soil impacted by produced water and oil
EOG Resources, Inc. authorizes Gandy Marley to complete the required testing and sign the Generator Waste Testing Certificate.
Estimated Volume 1,325 yd ³ / bbls Known Volume (to be entered by the operator at the end of the haul) yd ³ / bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Tina Huerta <i>Tina Huerta</i> , representative or authorized agent for EOG Resources, Inc do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) ☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☒ Monthly ☐ Weekly ☐ Per Load ☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: BDS

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Lea Land, LLC Permit #WM-1-035

Address of Facility: MM64 US Highway 62/180 East, Carlsbad, NM 88220

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED**

☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Shelley Denton

TITLE: Manager

DATE: 5-26-21

SIGNATURE: *Shelley Denton*
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 405-576-4257

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

EOG Resources, Inc. 104 South Fourth Street, Artesia, NM 88210

2. Originating Site:

Brannigan ANF Federal Battery

3. Location of Material (Street Address, City, State or ULSTR):

Section 6-22S-R24E, Eddy County, NM

4. Source and Description of Waste:

Soil impacted by produced water and oil

EOG Resources, Inc. authorizes Lea Land, LLC to complete the required testing and sign the Generator Waste Testing Certificate.

Estimated Volume 1325 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Tina Huerta *Tina Huerta*, representative or authorized agent for EOG Resources, Inc do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☒ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

CCI

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Lea Land, LLC Permit #WM-1-035

Address of Facility: MM64 US Highway 62/180 East, Carlsbad, NM 88220

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED**

☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: *Shelley Denton*

TITLE: *Manager*

DATE: *6-14-21*

SIGNATURE: *Shelley Denton*
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: *405-236-4257*

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

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

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

EOG Resources, Inc. 104 South Fourth Street, Artesia, NM 88210

2. Originating Site:

Brannigan ANF Federal Battery

3. Location of Material (Street Address, City, State or ULSTR):

Section 6-22S-R24E, Eddy County, NM

4. Source and Description of Waste:

Soil impacted by produced water and oil

EOG Resources, Inc. authorizes Lea Land, LLC to complete the required testing and sign the Generator Waste Testing Certificate.

Estimated Volume 1325 yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) _____ yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Tina Huerta Tina Huerta, representative or authorized agent for EOG Resources, Inc do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☒ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, _____, representative for _____ do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter:

CCI

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Lea Land, LLC Permit #WM-1-035

Address of Facility: MM64 US Highway 62/180 East, Carlsbad, NM 88220

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☒ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Shelley Denton

TITLE: Manager DATE: 7-9-21

SIGNATURE: Shelley Denton
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 405-236-4257

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

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

CONDITIONS

Action 72154

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 72154
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	2/3/2022