

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Cross Timbers	OGRID: 298299
Contact Name: Jeff Waggoner	Contact Telephone: 505-334-7438
Contact email: jwaggoner@ctfieldsvcs.com	Incident # (assigned by OCD) NAPP2223055117
Contact mailing address: 400 West 7th Street	Fort Worth, TX 76102

Location of Release Source

Latitude 36.51119 Longitude -107.48404
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Brech E #104	Site Type: Well Site
Date Release Discovered: 8/18/2022	API# (if applicable): 30-039-06644

Unit Letter	Section	Township	Range	County
P	05	26N	06W	Rio Arriba

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 42	Volume Recovered (bbls) 0
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Leaking tank. This release has been remediated pursuant to the attached closure narrative

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate 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: James McDaniel Title: Project Manager, JAKD Solutions

Signature:  Date: 10/7/2022

email: james@jaksolutions.com Telephone: 505-860-1666

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Nelson Velez Date: 11/17/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

James McDaniel

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Friday, September 30, 2022 10:06 AM
To: James McDaniel
Cc: Jeff Waggoner
Subject: RE: [EXTERNAL] Breech E #104 Release - Release NAPP2223055117

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning James,

Sorry for the delay. OCD agreed with your DTW determination.

Have a great and enjoyable weekend.

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov

Work Hrs.:
7:00am - 11:00pm & 12:00 - 3:30 pm Mon.-Thur.
7:00am - 11:00pm & 12:00 - 4:00 pm Fri.

From: James McDaniel <james@jakdsolutions.com>
Sent: Wednesday, September 28, 2022 9:39 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Jeff Waggoner <JWaggoner@ctfieldsvcs.com>
Subject: [EXTERNAL] Breech E #104 Release - Release NAPP2223055117

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Mr. Velez,

We have completed sampling at the Breech E #104 as outlined in your previous email. 27 total samples were collected, with results attached. All samples were below the most stringent of NMOCD Standards, except for two samples. North Wall #3 came back at 135 ppm TPH, and West Wall #3 came back at 167 ppm TPH. Based on our assessment of the depth to groundwater at this location, we believe that this location would qualify as having a DTW of greater than 100 feet based on water well information collected from XTO Energy (attached). Prior to completing the closure documentation, we wanted to present this our information to you in order to see if the NMOCD agreed with our DTW determination. Thank you for your time in regard to this matter, and please do not hesitate to contact me with any questions regarding this project. All documentation is attached.

James McDaniel, CSP, CHMM, CIT
Project Manager
505-860-1666

James McDaniel

From: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Sent: Wednesday, September 14, 2022 1:15 PM
To: James McDaniel
Cc: Jeff Waggoner; Bratcher, Mike, EMNRD
Subject: RE: [EXTERNAL] Release Sampling NAPP2223055117

Mr. McDaniel,

Thank you for the notice. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Your variance request to expand the sampling area pursuant to Subparagraph b of Paragraph 1 of Subsection D of Section 12 of 19.15.29 NMAC is denied as written. However, OCD will allow the following based on the dimensions given;

1. Base of excavation [approximately (~) 5,950 square feet (sq. ft.)] will require a minimum of thirteen (13) five (5) point composite samples (5-pcs); or [~ 458 sq. ft. per 5-pcs]
2. Each sidewall with ~ 1,700 sq. ft. will require a minimum of four (4) 5-pcs; or ~ 425 sq. ft. per 5-pcs]
3. Each sidewall with ~ 1,400 sq. ft. will require a minimum of three (3) 5-pcs; or ~ 466 sq. ft. per 5-pcs]
4. Individual grab samples from any wet or discolored areas

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@state.nm.us

Office Hrs.:
7:00am - 12:00pm & 1:00 - 3:30 pm Mon.-Thur.
7:00am - 12:00pm & 1:00 - 4:00 pm Fri.

From: James McDaniel <james@jakdsolutions.com>
Sent: Tuesday, September 13, 2022 3:50 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Jeff Waggoner <JWaggoner@ctfieldsvcs.com>
Subject: [EXTERNAL] Release Sampling NAPP2223055117

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Mr. Velez,

Please accept this email as notification for closure sampling to take place at the Cross Timbers Energy well, Breech E #104 wellsite (30-045-06644) regarding release **NAPP2223055117**. Closure Sampling is scheduled for Monday, September 19 at 9:00 AM.

Additionally, based on the size of the excavation, Cross Timbers would like to request an alternative to the 200 square foot sampling requirement. The excavation is approximately 70' x 85' x 20' deep. Walls are approximately 1,400 and 1,700 square feet, while the bottom is approximately 5,950 square feet. Cross Timbers would like to propose two (2) composite samples be collected from each of the four (4) walls of the excavation (8 wall samples total), and six (6) individual composite samples be collected from the bottom of the excavation. This would make the sampling frequency 1 sample per 700 square feet and 1 sample per 850 square feet on the walls, and one sample per 990 square feet on the bottom. Thank you for your time in regards to this matter.

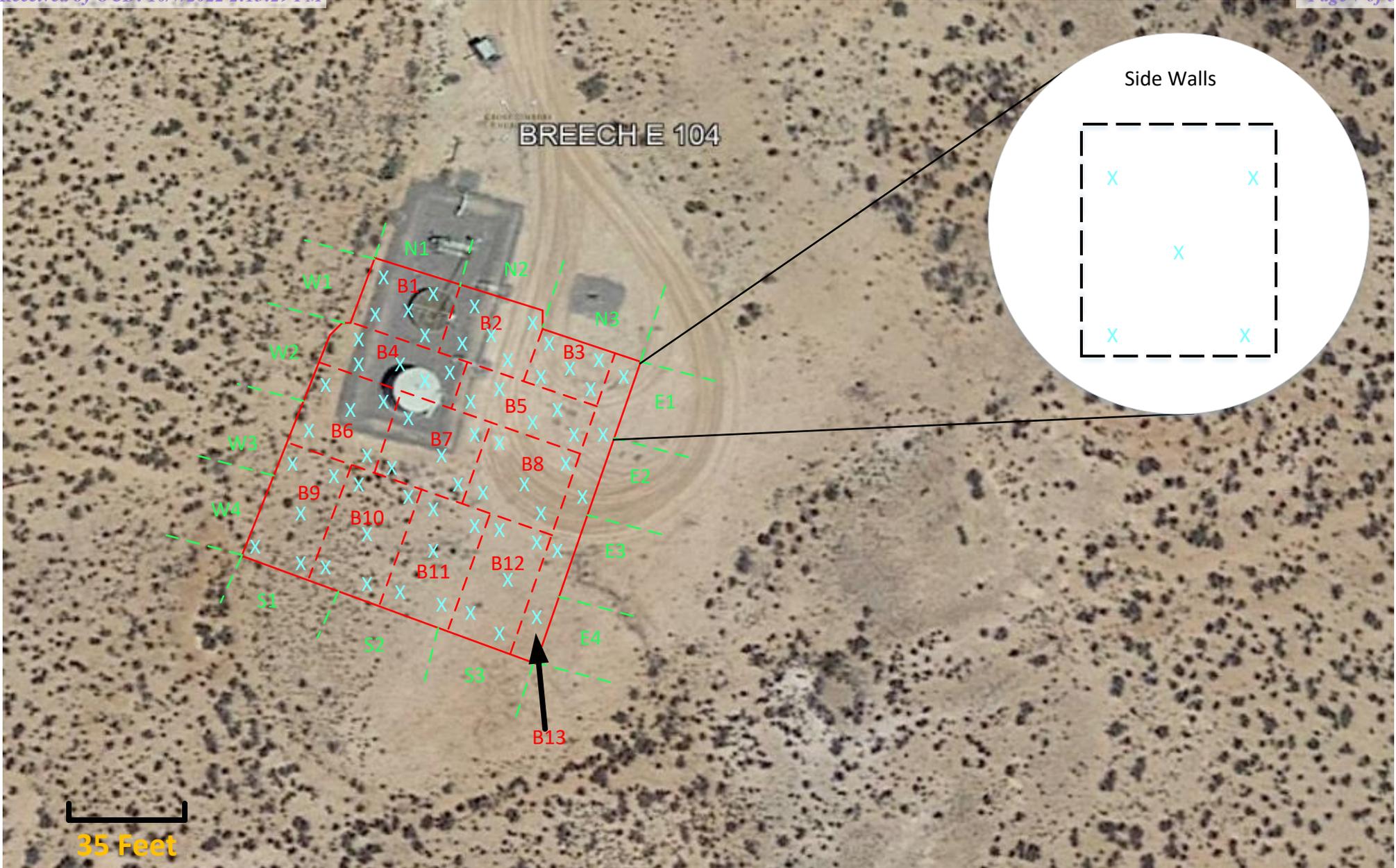
James McDaniel, CSP, CIT, CHMM
Project Manager
505-860-1666
james@jaksolutions.com



Breach E #104 Closure Sampling Results

Sample Name	Map Section	Sampling Cell Size	Square Footage	Date	Time	DRO (ppm)	GRO (ppm)	DRO+GRO (ppm)	MRO (ppm)	Total TPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	BTEX (ppm)	Chloride (ppm)
NMOCD Closure Standard	NA	NA	NA	NA	NA	NA	NA	1,000	NA	2,500	10	NA	NA	NA	50	20,000
Bottom #1	B1	22 x 23'	506	9/19/2022	9:05 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #2	B2	22 x 23'	506	9/19/2022	9:08 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #3	B3	21' x 17'	357	9/19/2022	9:10 AM	ND	18	18	ND	ND	18	ND	ND	ND	ND	ND
Bottom #4	B4	33' x 15'	495	9/19/2022	9:13 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #5	B5	33' x 15'	495	9/19/2022	9:14 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #6	B6	22' x 18'	396	9/19/2022	9:16 AM	ND	11	11	ND	ND	11	ND	ND	ND	ND	ND
Bottom #7	B7	22' x 18'	396	9/19/2022	9:18 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #8	B8	22' x 18'	396	9/19/2022	9:20 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #9	B9	25' x 17'	425	9/19/2022	9:23 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #10	B10	25' x 17'	425	9/19/2022	9:25 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #11	B11	25' x 17'	425	9/19/2022	9:27 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #12	B12	25' x 17'	425	9/19/2022	9:30 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bottom #13	B13	5' x 85'	425	9/19/2022	9:21 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Wall #1	N1	23' X 20'	460	9/19/2022	9:40 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Wall #2	N2	23' X 20'	460	9/19/2022	9:42 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
North Wall #3	N3	23' X 20'	460	9/19/2022	9:45 AM	41	94	135	ND	135	ND	0.074	ND	3	3.074	ND
South Wall #1	S1	23' X 20'	460	9/19/2022	9:48 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140
South Wall #2	S2	23' X 20'	460	9/19/2022	9:50 AM	86	ND	86	ND	86	ND	ND	ND	ND	ND	61
South Wall #3	S3	23' X 20'	460	9/19/2022	9:52 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
East Wall #1	E1	22' x 20'	440	9/19/2022	9:55 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
East Wall #2	E2	22' x 20'	440	9/19/2022	9:58 AM	24	ND	24	ND	24	ND	ND	ND	ND	ND	ND
East Wall #3	E3	22' x 20'	440	9/19/2022	10:00 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140
East Wall #4	E4	22' x 20'	440	9/19/2022	10:02 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
West Wall #1	W1	22' x 20'	440	9/19/2022	10:04 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
West Wall #2	W2	22' x 20'	440	9/19/2022	10:07 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
West Wall #3	W3	22' x 20'	440	9/19/2022	10:10 AM	120	47	167	ND	167	ND	0.05	0.11	1.8	1.96	ND
West Wall #4	W4	22' x 20'	440	9/19/2022	10:13 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND=Non-Detect



Drawn By: James McDaniel
 Date: 10/7/2022



CLOSURE SAMPLING MAP

Company: Cross Timbers Operating
 Facility: Breech E #104
 API: 30-039-06644
 Section 5, Township 26N, Range 6W
 Rio Arriba, New Mexico
 Source: Google Earth

LEGEND

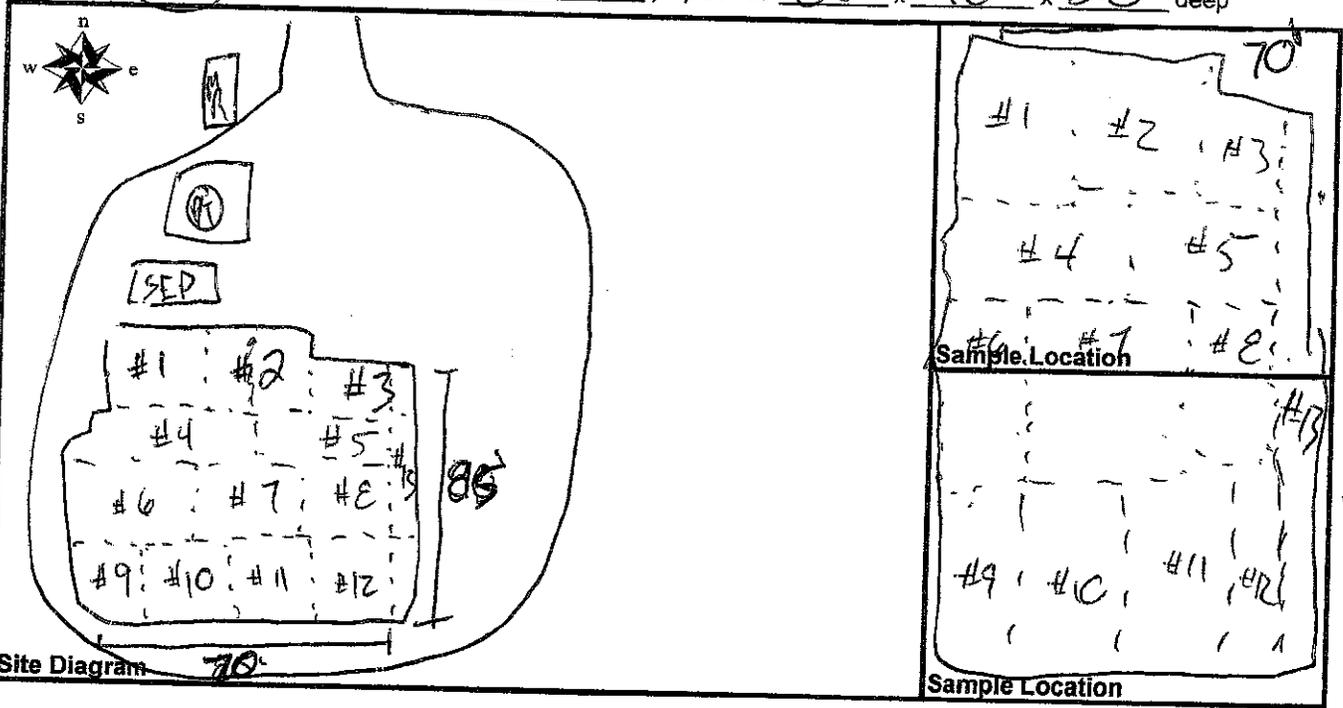
-  Excavation Area
-  Closure Sample Cell Boundaries
-  Approximate Composite Sample Locations
-  Sample Cell Identification



JAKD SOLUTIONS

ON-SITE FORM

Well Name Breech E #104 API # 30-039-06644
 Section 5 Township 26N Range 6W County Rio Arriba State NM
 Contractors On-Site _____ Time On-Site 8:45 AM Time Off-Site 11:00 AM
 Spill Amount 40 bbls Spilled (Oil Produced Water / Other _____) Recovered _____
 Land Use (Range) Residential / Tribe _____) Spill Area 85' x 70' x 20' deep



Comments

Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
	NA	100 Standard	NA		NA
908	1	Bottom #1	Hard, dense shale	-	8015, 8021, C1
908	2	Bottom #2			
910	3	Bottom #3			
913	4	Bottom #4			
914	5	Bottom #5			
916	6	Bottom #6			
918	7	Bottom #7			
920	8	Bottom #8			
923	9	Bottom #9			
925	10	Bottom #10			

Name (Print) James McDaniel Date 9/19/22
 Name (Signature) [Signature] Company JAKD

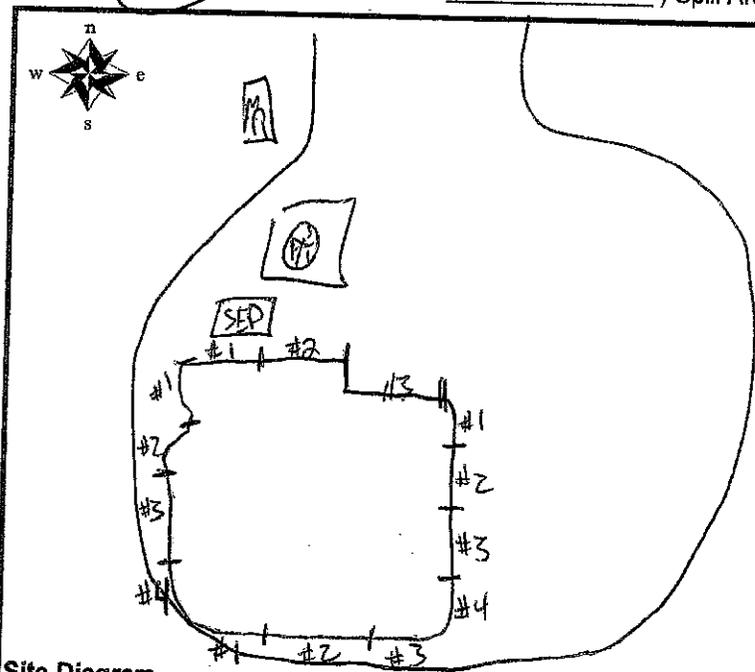
179 1 of 3



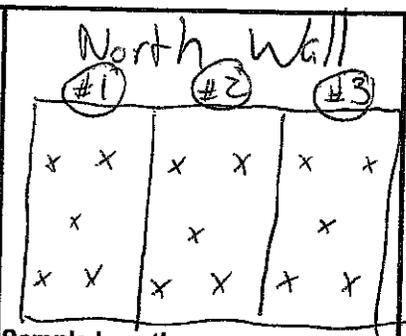
JAKD SOLUTIONS

ON-SITE FORM

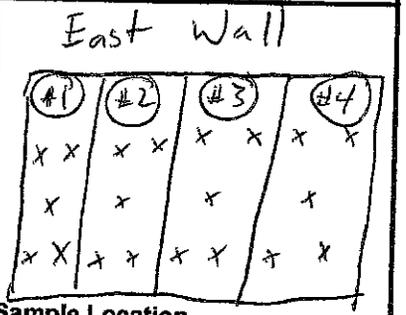
Well Name Breach E #104 API # 30-039-06644
 Section 5 Township 26N Range 6W County Rio Arriba State NM
 Contractors On-Site _____ Time On-Site 8:45 AM Time Off-Site 11:00 AM
 Spill Amount 40 bbls Spilled (Oil/ Produced Water/Other _____) Recovered _____
 Land Use (Range / Residential / Tribe _____) Spill Area 85' x 70' x 20' deep



Site Diagram



Sample Location



Sample Location

Comments

Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
-	NA	100 Standard	NA	-	NA
927	11	Bottom #11	Hard, dense shale		8015, 8021, c1
930	12	Bottom #12			
921	13	Bottom #13			
942	14	North Wall #1	Sandy Mix, no odor		
945	15	North Wall #2	Sand and shale, no odor		
948	16	North Wall #3	Sand and shale, no odor		
950	17	South Wall #1	Shale with sand		
952	18	South Wall #2	Shale, dense, no odor		
955	19	South Wall #3	Sandy shale		
955	20	East Wall #1	loamy sand, some shale		

Name (Print) James McDaniel

Date 9/19/22

Name (Signature) [Signature]

Company JAKD



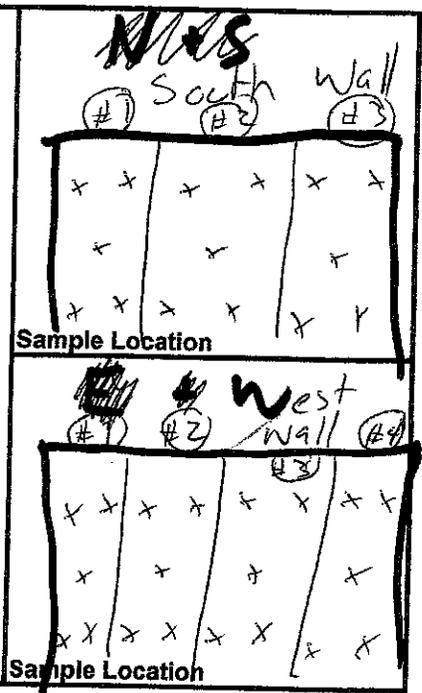
JAKD SOLUTIONS

ON-SITE FORM

Well Name Breach E #104 API# 30-039-06644
 Section 5 Township 26N Range 6W County Rio Arriba State NM
 Contractors On-Site _____ Time On-Site 8⁴⁵ AM Time Off-Site 11⁰⁰ AM
 Spill Amount 40 bbls Spilled (Oil/Produced Water/Other _____) Recovered _____
 Land Use (Range / Residential / Tribe _____) Spill Area 85' x 70' x 20' deep



Site Diagram



Sample Location

Sample Location

Comments

Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
NA	NA	100 Standard	NA	NA	NA
9:58	21	East Wall #2	loamy sand, shale	/	SOIS, SOZ, CI
10:00	22	East Wall #3	dense shale		
10:02	23	East Wall #4	loamy sand + shale		
10:04	24	West Wall #1	shale		
10:07	25	West Wall #2	shale		
10:10	26	West Wall #3	loamy sand + shale		
10:13	27	West Wall #4	shale		

Name (Print) James McDaniel

Date 9/19/2022

Name (Signature) [Signature]

Company JAKD

Pg 3 of 3



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

September 27, 2022

James McDaniel
JAKD Solutions
3811 Crestridge Dr
Farmington, NM 87401
TEL: (505) 860-1666
FAX:

RE: Breech E 104

OrderNo.: 2209953

Dear James McDaniel:

Hall Environmental Analysis Laboratory received 27 sample(s) on 9/20/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
 Lab Order 2209953
 Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions **Client Sample ID:** Bottom #1
Project: Breech E 104 **Collection Date:** 9/19/2022 9:05:00 AM
Lab ID: 2209953-001 **Matrix:** SOIL **Received Date:** 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 3:01:19 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/22/2022 3:01:19 AM
Surr: DNOP	101	21-129		%Rec	1	9/22/2022 3:01:19 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/21/2022 6:01:10 PM
Surr: BFB	99.6	37.7-212		%Rec	1	9/21/2022 6:01:10 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/21/2022 6:01:10 PM
Toluene	ND	0.048		mg/Kg	1	9/21/2022 6:01:10 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/21/2022 6:01:10 PM
Xylenes, Total	ND	0.095		mg/Kg	1	9/21/2022 6:01:10 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	9/21/2022 6:01:10 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 2:46:44 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #2

Project: Breech E 104

Collection Date: 9/19/2022 9:08:00 AM

Lab ID: 2209953-002

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 3:33:41 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/22/2022 3:33:41 AM
Surr: DNOP	100	21-129		%Rec	1	9/22/2022 3:33:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/21/2022 7:11:48 PM
Surr: BFB	103	37.7-212		%Rec	1	9/21/2022 7:11:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 7:11:48 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 7:11:48 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 7:11:48 PM
Xylenes, Total	ND	0.098		mg/Kg	1	9/21/2022 7:11:48 PM
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	9/21/2022 7:11:48 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	61		mg/Kg	20	9/21/2022 3:23:46 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #3

Project: Breech E 104

Collection Date: 9/19/2022 9:10:00 AM

Lab ID: 2209953-003

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 3:44:31 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 3:44:31 AM
Surr: DNOP	84.8	21-129		%Rec	1	9/22/2022 3:44:31 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	18	4.8		mg/Kg	1	9/21/2022 8:22:26 PM
Surr: BFB	167	37.7-212		%Rec	1	9/21/2022 8:22:26 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/21/2022 8:22:26 PM
Toluene	ND	0.048		mg/Kg	1	9/21/2022 8:22:26 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/21/2022 8:22:26 PM
Xylenes, Total	ND	0.097		mg/Kg	1	9/21/2022 8:22:26 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/21/2022 8:22:26 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 3:36:06 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #4

Project: Breech E 104

Collection Date: 9/19/2022 9:13:00 AM

Lab ID: 2209953-004

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 3:55:19 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/22/2022 3:55:19 AM
Surr: DNOP	99.6	21-129		%Rec	1	9/22/2022 3:55:19 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/21/2022 8:45:59 PM
Surr: BFB	100	37.7-212		%Rec	1	9/21/2022 8:45:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 8:45:59 PM
Toluene	ND	0.050		mg/Kg	1	9/21/2022 8:45:59 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/21/2022 8:45:59 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 8:45:59 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/21/2022 8:45:59 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 3:48:27 PM

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

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

Analytical Report

Lab Order **2209953**

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #5

Project: Breech E 104

Collection Date: 9/19/2022 9:14:00 AM

Lab ID: 2209953-005

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/22/2022 4:06:07 AM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	9/22/2022 4:06:07 AM
Surr: DNOP	88.5	21-129		%Rec	1	9/22/2022 4:06:07 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/21/2022 9:09:32 PM
Surr: BFB	98.7	37.7-212		%Rec	1	9/21/2022 9:09:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 9:09:32 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 9:09:32 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 9:09:32 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 9:09:32 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/21/2022 9:09:32 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 4:00:48 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #6

Project: Breech E 104

Collection Date: 9/19/2022 9:16:00 AM

Lab ID: 2209953-006

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 4:16:53 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2022 4:16:53 AM
Surr: DNOP	102	21-129		%Rec	1	9/22/2022 4:16:53 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	11	4.9		mg/Kg	1	9/21/2022 10:43:43 PM
Surr: BFB	173	37.7-212		%Rec	1	9/21/2022 10:43:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 10:43:43 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 10:43:43 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 10:43:43 PM
Xylenes, Total	ND	0.098		mg/Kg	1	9/21/2022 10:43:43 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/21/2022 10:43:43 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 4:13:09 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #7

Project: Breech E 104

Collection Date: 9/19/2022 9:18:00 AM

Lab ID: 2209953-007

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 4:27:41 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/22/2022 4:27:41 AM
Surr: DNOP	115	21-129		%Rec	1	9/22/2022 4:27:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/21/2022 11:07:09 PM
Surr: BFB	99.9	37.7-212		%Rec	1	9/21/2022 11:07:09 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 11:07:09 PM
Toluene	ND	0.050		mg/Kg	1	9/21/2022 11:07:09 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/21/2022 11:07:09 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/21/2022 11:07:09 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/21/2022 11:07:09 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 4:25:29 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #8

Project: Breech E 104

Collection Date: 9/19/2022 9:20:00 AM

Lab ID: 2209953-008

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/22/2022 4:49:08 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/22/2022 4:49:08 AM
Surr: DNOP	88.0	21-129		%Rec	1	9/22/2022 4:49:08 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/21/2022 11:30:33 PM
Surr: BFB	95.9	37.7-212		%Rec	1	9/21/2022 11:30:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 11:30:33 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 11:30:33 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 11:30:33 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 11:30:33 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	9/21/2022 11:30:33 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 4:37:50 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #9

Project: Breech E 104

Collection Date: 9/19/2022 9:23:00 AM

Lab ID: 2209953-009

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 4:59:56 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/22/2022 4:59:56 AM
Surr: DNOP	119	21-129		%Rec	1	9/22/2022 4:59:56 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/21/2022 11:54:00 PM
Surr: BFB	96.7	37.7-212		%Rec	1	9/21/2022 11:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/21/2022 11:54:00 PM
Toluene	ND	0.048		mg/Kg	1	9/21/2022 11:54:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/21/2022 11:54:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	9/21/2022 11:54:00 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	9/21/2022 11:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	9/21/2022 4:50:11 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #10

Project: Breech E 104

Collection Date: 9/19/2022 9:25:00 AM

Lab ID: 2209953-010

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	9/22/2022 5:10:51 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/22/2022 5:10:51 AM
Surr: DNOP	80.2	21-129		%Rec	1	9/22/2022 5:10:51 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/22/2022 12:17:27 AM
Surr: BFB	97.0	37.7-212		%Rec	1	9/22/2022 12:17:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	9/22/2022 12:17:27 AM
Toluene	ND	0.047		mg/Kg	1	9/22/2022 12:17:27 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/22/2022 12:17:27 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/22/2022 12:17:27 AM
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	9/22/2022 12:17:27 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 2:00:13 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #11

Project: Breech E 104

Collection Date: 9/19/2022 9:27:00 AM

Lab ID: 2209953-011

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 5:21:47 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 5:21:47 AM
Surr: DNOP	81.0	21-129		%Rec	1	9/22/2022 5:21:47 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/22/2022 12:40:53 AM
Surr: BFB	95.8	37.7-212		%Rec	1	9/22/2022 12:40:53 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 12:40:53 AM
Toluene	ND	0.049		mg/Kg	1	9/22/2022 12:40:53 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/22/2022 12:40:53 AM
Xylenes, Total	ND	0.098		mg/Kg	1	9/22/2022 12:40:53 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	9/22/2022 12:40:53 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 2:37:26 PM

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

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

Analytical Report
 Lab Order 2209953
 Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions **Client Sample ID:** Bottom #12
Project: Breech E 104 **Collection Date:** 9/19/2022 9:30:00 AM
Lab ID: 2209953-012 **Matrix:** SOIL **Received Date:** 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 5:32:38 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 5:32:38 AM
Surr: DNOP	99.4	21-129		%Rec	1	9/22/2022 5:32:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/22/2022 1:04:27 AM
Surr: BFB	95.9	37.7-212		%Rec	1	9/22/2022 1:04:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/22/2022 1:04:27 AM
Toluene	ND	0.048		mg/Kg	1	9/22/2022 1:04:27 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/22/2022 1:04:27 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/22/2022 1:04:27 AM
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	9/22/2022 1:04:27 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 3:31:22 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: Bottom #13

Project: Breech E 104

Collection Date: 9/19/2022 9:21:00 AM

Lab ID: 2209953-013

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 5:43:31 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/22/2022 5:43:31 AM
Surr: DNOP	84.0	21-129		%Rec	1	9/22/2022 5:43:31 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/22/2022 1:27:55 AM
Surr: BFB	96.4	37.7-212		%Rec	1	9/22/2022 1:27:55 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 1:27:55 AM
Toluene	ND	0.049		mg/Kg	1	9/22/2022 1:27:55 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/22/2022 1:27:55 AM
Xylenes, Total	ND	0.099		mg/Kg	1	9/22/2022 1:27:55 AM
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	9/22/2022 1:27:55 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 4:08:34 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: North Wall #1

Project: Breech E 104

Collection Date: 9/19/2022 9:40:00 AM

Lab ID: 2209953-014

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 5:54:22 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 5:54:22 AM
Surr: DNOP	82.7	21-129		%Rec	1	9/22/2022 5:54:22 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/22/2022 1:51:18 AM
Surr: BFB	96.3	37.7-212		%Rec	1	9/22/2022 1:51:18 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 1:51:18 AM
Toluene	ND	0.050		mg/Kg	1	9/22/2022 1:51:18 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/22/2022 1:51:18 AM
Xylenes, Total	ND	0.099		mg/Kg	1	9/22/2022 1:51:18 AM
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	9/22/2022 1:51:18 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	59		mg/Kg	20	9/21/2022 4:20:59 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: North Wall #2

Project: Breech E 104

Collection Date: 9/19/2022 9:42:00 AM

Lab ID: 2209953-015

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 6:05:10 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/22/2022 6:05:10 AM
Surr: DNOP	82.1	21-129		%Rec	1	9/22/2022 6:05:10 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/22/2022 2:14:45 AM
Surr: BFB	95.9	37.7-212		%Rec	1	9/22/2022 2:14:45 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 2:14:45 AM
Toluene	ND	0.049		mg/Kg	1	9/22/2022 2:14:45 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/22/2022 2:14:45 AM
Xylenes, Total	ND	0.098		mg/Kg	1	9/22/2022 2:14:45 AM
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	9/22/2022 2:14:45 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 4:33:23 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: North Wall #3

Project: Breech E 104

Collection Date: 9/19/2022 9:45:00 AM

Lab ID: 2209953-016

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	41	15		mg/Kg	1	9/22/2022 6:15:54 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2022 6:15:54 AM
Surr: DNOP	85.4	21-129		%Rec	1	9/22/2022 6:15:54 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	94	4.9		mg/Kg	1	9/22/2022 3:01:42 AM
Surr: BFB	504	37.7-212	S	%Rec	1	9/22/2022 3:01:42 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 3:01:42 AM
Toluene	0.074	0.049		mg/Kg	1	9/22/2022 3:01:42 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/22/2022 3:01:42 AM
Xylenes, Total	3.0	0.099		mg/Kg	1	9/22/2022 3:01:42 AM
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	9/22/2022 3:01:42 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 4:45:48 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: South Wall #1

Project: Breech E 104

Collection Date: 9/19/2022 9:48:00 AM

Lab ID: 2209953-017

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 6:26:37 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2022 6:26:37 AM
Surr: DNOP	80.0	21-129		%Rec	1	9/22/2022 6:26:37 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/22/2022 3:25:09 AM
Surr: BFB	103	37.7-212		%Rec	1	9/22/2022 3:25:09 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/22/2022 3:25:09 AM
Toluene	ND	0.048		mg/Kg	1	9/22/2022 3:25:09 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/22/2022 3:25:09 AM
Xylenes, Total	ND	0.097		mg/Kg	1	9/22/2022 3:25:09 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	9/22/2022 3:25:09 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	140	60		mg/Kg	20	9/21/2022 4:58:12 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: South Wall #2

Project: Breech E 104

Collection Date: 9/19/2022 9:50:00 AM

Lab ID: 2209953-018

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8016M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	86	14		mg/Kg	1	9/22/2022 6:37:19 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 6:37:19 AM
Surr: DNOP	80.8	21-129		%Rec	1	9/22/2022 6:37:19 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/22/2022 3:48:44 AM
Surr: BFB	108	37.7-212		%Rec	1	9/22/2022 3:48:44 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/22/2022 3:48:44 AM
Toluene	ND	0.048		mg/Kg	1	9/22/2022 3:48:44 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/22/2022 3:48:44 AM
Xylenes, Total	ND	0.095		mg/Kg	1	9/22/2022 3:48:44 AM
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	9/22/2022 3:48:44 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	61	60		mg/Kg	20	9/21/2022 5:10:36 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: South Wall #3

Project: Breech E 104

Collection Date: 9/19/2022 9:52:00 AM

Lab ID: 2209953-019

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 6:47:58 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 6:47:58 AM
Surr: DNOP	77.6	21-129		%Rec	1	9/22/2022 6:47:58 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/22/2022 4:12:18 AM
Surr: BFB	96.0	37.7-212		%Rec	1	9/22/2022 4:12:18 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 4:12:18 AM
Toluene	ND	0.050		mg/Kg	1	9/22/2022 4:12:18 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/22/2022 4:12:18 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/22/2022 4:12:18 AM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	9/22/2022 4:12:18 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	9/21/2022 5:23:01 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: East Wall #1

Project: Breech E 104

Collection Date: 9/19/2022 9:55:00 AM

Lab ID: 2209953-020

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 6:58:35 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/22/2022 6:58:35 AM
Surr: DNOP	82.3	21-129		%Rec	1	9/22/2022 6:58:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/22/2022 4:35:50 AM
Surr: BFB	95.7	37.7-212		%Rec	1	9/22/2022 4:35:50 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/22/2022 4:35:50 AM
Toluene	ND	0.050		mg/Kg	1	9/22/2022 4:35:50 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/22/2022 4:35:50 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/22/2022 4:35:50 AM
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	9/22/2022 4:35:50 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 1:03:23 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: East Wall #2

Project: Breech E 104

Collection Date: 9/19/2022 9:58:00 AM

Lab ID: 2209953-021

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	24	15		mg/Kg	1	9/22/2022 6:00:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2022 6:00:23 PM
Surr: DNOP	65.6	21-129		%Rec	1	9/22/2022 6:00:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/21/2022 12:06:11 PM
Surr: BFB	102	37.7-212		%Rec	1	9/21/2022 12:06:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/21/2022 12:06:11 PM
Toluene	ND	0.048		mg/Kg	1	9/21/2022 12:06:11 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/21/2022 12:06:11 PM
Xylenes, Total	ND	0.096		mg/Kg	1	9/21/2022 12:06:11 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/21/2022 12:06:11 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 1:15:43 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: East Wall #3

Project: Breech E 104

Collection Date: 9/19/2022 10:00:00 AM

Lab ID: 2209953-022

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/22/2022 6:32:40 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2022 6:32:40 PM
Surr: DNOP	84.7	21-129		%Rec	1	9/22/2022 6:32:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/21/2022 1:17:00 PM
Surr: BFB	98.7	37.7-212		%Rec	1	9/21/2022 1:17:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 1:17:00 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 1:17:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 1:17:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 1:17:00 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	9/21/2022 1:17:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	140	60		mg/Kg	20	9/22/2022 1:52:44 PM

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

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

Analytical Report
 Lab Order 2209953
 Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions **Client Sample ID:** East Wall #4
Project: Breech E 104 **Collection Date:** 9/19/2022 10:02:00 AM
Lab ID: 2209953-023 **Matrix:** SOIL **Received Date:** 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 6:43:26 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/22/2022 6:43:26 PM
Surr: DNOP	61.7	21-129		%Rec	1	9/22/2022 6:43:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/21/2022 3:15:36 PM
Surr: BFB	100	37.7-212		%Rec	1	9/21/2022 3:15:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 3:15:36 PM
Toluene	ND	0.050		mg/Kg	1	9/21/2022 3:15:36 PM
Ethylbenzene	ND	0.050		mg/Kg	1	9/21/2022 3:15:36 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 3:15:36 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/21/2022 3:15:36 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 2:05:05 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: West Wall #1

Project: Breech E 104

Collection Date: 9/19/2022 10:04:00 AM

Lab ID: 2209953-024

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 6:54:11 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/22/2022 6:54:11 PM
Surr: DNOP	69.9	21-129		%Rec	1	9/22/2022 6:54:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/21/2022 3:39:19 PM
Surr: BFB	113	37.7-212		%Rec	1	9/21/2022 3:39:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/21/2022 3:39:19 PM
Toluene	ND	0.048		mg/Kg	1	9/21/2022 3:39:19 PM
Ethylbenzene	ND	0.048		mg/Kg	1	9/21/2022 3:39:19 PM
Xylenes, Total	ND	0.096		mg/Kg	1	9/21/2022 3:39:19 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	9/21/2022 3:39:19 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 2:17:26 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: West Wall #2

Project: Breech E 104

Collection Date: 9/19/2022 10:07:00 AM

Lab ID: 2209953-025

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 7:04:55 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/22/2022 7:04:55 PM
Surr: DNOP	71.1	21-129		%Rec	1	9/22/2022 7:04:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/21/2022 4:02:57 PM
Surr: BFB	106	37.7-212		%Rec	1	9/21/2022 4:02:57 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 4:02:57 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 4:02:57 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 4:02:57 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 4:02:57 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/21/2022 4:02:57 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 2:29:47 PM

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

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

Analytical Report

Lab Order 2209953

Date Reported: 9/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: West Wall #3

Project: Breech E 104

Collection Date: 9/19/2022 10:10:00 AM

Lab ID: 2209953-026

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	120	15		mg/Kg	1	9/22/2022 7:15:38 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/22/2022 7:15:38 PM
Surr: DNOP	81.1	21-129		%Rec	1	9/22/2022 7:15:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	47	4.9		mg/Kg	1	9/21/2022 4:26:40 PM
Surr: BFB	364	37.7-212	S	%Rec	1	9/21/2022 4:26:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/21/2022 4:26:40 PM
Toluene	0.050	0.049		mg/Kg	1	9/21/2022 4:26:40 PM
Ethylbenzene	0.11	0.049		mg/Kg	1	9/21/2022 4:26:40 PM
Xylenes, Total	1.8	0.097		mg/Kg	1	9/21/2022 4:26:40 PM
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	9/21/2022 4:26:40 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 2:42:08 PM

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

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

Analytical Report

Lab Order **2209953**

Date Reported: **9/27/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: JAKD Solutions

Client Sample ID: West Wall #4

Project: Breech E 104

Collection Date: 9/19/2022 10:13:00 AM

Lab ID: 2209953-027

Matrix: SOIL

Received Date: 9/20/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/22/2022 7:26:28 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/22/2022 7:26:28 PM
Surr: DNOP	73.6	21-129		%Rec	1	9/22/2022 7:26:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/21/2022 4:50:20 PM
Surr: BFB	107	37.7-212		%Rec	1	9/21/2022 4:50:20 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/21/2022 4:50:20 PM
Toluene	ND	0.049		mg/Kg	1	9/21/2022 4:50:20 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/21/2022 4:50:20 PM
Xylenes, Total	ND	0.099		mg/Kg	1	9/21/2022 4:50:20 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/21/2022 4:50:20 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	9/22/2022 2:54:28 PM

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2209953

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: MB-70313	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70313	RunNo: 91198								
Prep Date: 9/21/2022	Analysis Date: 9/21/2022	SeqNo: 3263934			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70313	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70313	RunNo: 91198								
Prep Date: 9/21/2022	Analysis Date: 9/21/2022	SeqNo: 3263935			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.4	90	110			

Sample ID: MB-70315	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70315	RunNo: 91197								
Prep Date: 9/21/2022	Analysis Date: 9/21/2022	SeqNo: 3264230			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70315	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70315	RunNo: 91197								
Prep Date: 9/21/2022	Analysis Date: 9/21/2022	SeqNo: 3264231			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-70350	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70350	RunNo: 91229								
Prep Date: 9/22/2022	Analysis Date: 9/22/2022	SeqNo: 3265703			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70350	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70350	RunNo: 91229								
Prep Date: 9/22/2022	Analysis Date: 9/22/2022	SeqNo: 3265704			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

WO#: 2209953

Hall Environmental Analysis Laboratory, Inc.

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: 2209953-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Bottom #1	Batch ID: 70303	RunNo: 91190								
Prep Date: 9/20/2022	Analysis Date: 9/22/2022	SeqNo: 3264085			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	15	48.92	0	73.7	36.1	154			
Surr: DNOP	3.5		4.892		71.6	21	129			

Sample ID: 2209953-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Bottom #1	Batch ID: 70303	RunNo: 91190								
Prep Date: 9/20/2022	Analysis Date: 9/22/2022	SeqNo: 3264086			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	15	48.45	0	72.4	36.1	154	2.83	33.9	
Surr: DNOP	3.3		4.845		68.1	21	129	0	0	

Sample ID: LCS-70303	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 70303	RunNo: 91190								
Prep Date: 9/20/2022	Analysis Date: 9/22/2022	SeqNo: 3264113			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	15	50.00	0	72.3	64.4	127			
Surr: DNOP	3.5		5.000		69.1	21	129			

Sample ID: MB-70303	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 70303	RunNo: 91190								
Prep Date: 9/20/2022	Analysis Date: 9/22/2022	SeqNo: 3264115			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	21	129			

Sample ID: 2209953-021AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: East Wall #2	Batch ID: 70326	RunNo: 91228								
Prep Date: 9/21/2022	Analysis Date: 9/22/2022	SeqNo: 3265898			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	14	47.13	23.55	93.1	36.1	154			
Surr: DNOP	2.0		4.713		41.8	21	129			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2209953

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: 2209953-021AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: East Wall #2	Batch ID: 70326	RunNo: 91228								
Prep Date: 9/21/2022	Analysis Date: 9/22/2022	SeqNo: 3265899							Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	15	49.70	23.55	63.4	36.1	154	20.2	33.9	
Surr: DNOP	1.9		4.970		37.8	21	129	0	0	

Sample ID: LCS-70326	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 70326	RunNo: 91228								
Prep Date: 9/21/2022	Analysis Date: 9/22/2022	SeqNo: 3265930							Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	15	50.00	0	66.9	64.4	127			
Surr: DNOP	2.7		5.000		54.0	21	129			

Sample ID: MB-70326	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 70326	RunNo: 91228								
Prep Date: 9/21/2022	Analysis Date: 9/22/2022	SeqNo: 3265931							Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.1		10.00		71.3	21	129			

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

QC SUMMARY REPORT

WO#: 2209953

Hall Environmental Analysis Laboratory, Inc.

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: mb-70296	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263138	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	980		1000		98.4	37.7	212			

Sample ID: lcs-70296	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263139	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	105	72.3	137			
Surr: BFB	2000		1000		197	37.7	212			

Sample ID: 2209953-021ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: East Wall #2	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263141	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.49	0	116	70	130			
Surr: BFB	2100		979.4		214	37.7	212			S

Sample ID: 2209953-021amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: East Wall #2	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263142	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.30	0	114	70	130	2.49	20	
Surr: BFB	2000		971.8		209	37.7	212	0	0	

Sample ID: mb-70293	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263149	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	970		1000		97.0	37.7	212			

Sample ID: lcs-70293	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263150	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

WO#: 2209953

Hall Environmental Analysis Laboratory, Inc.

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: ics-70293	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263150			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	105	72.3	137			
Surr: BFB	2000		1000		204	37.7	212			

Sample ID: 2209953-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Bottom #1	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263152			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.68	0	109	70	130			
Surr: BFB	2000		987.2		207	37.7	212			

Sample ID: 2209953-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Bottom #1	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263153			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	24.75	0	107	70	130	1.14	20	
Surr: BFB	2100		990.1		207	37.7	212	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2209953

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: mb-70296	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263178	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		99.9	70	130			

Sample ID: LCS-70296	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263179	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	92.8	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: 2209953-022ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: East Wall #3	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263184	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9785	0	103	68.8	120			
Toluene	1.1	0.049	0.9785	0.01680	106	73.6	124			
Ethylbenzene	1.1	0.049	0.9785	0.01393	108	72.7	129			
Xylenes, Total	3.3	0.098	2.935	0.07085	109	75.7	126			
Surr: 4-Bromofluorobenzene	1.0		0.9785		103	70	130			

Sample ID: 2209953-022amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: East Wall #3	Batch ID: 70296	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263185	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9718	0	98.8	68.8	120	4.53	20	
Toluene	1.0	0.049	0.9718	0.01680	102	73.6	124	4.12	20	
Ethylbenzene	1.0	0.049	0.9718	0.01393	104	72.7	129	4.31	20	
Xylenes, Total	3.1	0.097	2.915	0.07085	105	75.7	126	4.08	20	
Surr: 4-Bromofluorobenzene	1.0		0.9718		104	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

WO#: 2209953

Hall Environmental Analysis Laboratory, Inc.

27-Sep-22

Client: JAKD Solutions

Project: Breech E 104

Sample ID: mb-70293	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263191	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	0.98		1.000		98.2	70	130			

Sample ID: LCS-70293	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263192	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.95	0.050	1.000	0	94.7	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: 2209953-002ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: Bottom #2	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263195	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9930	0	103	68.8	120			
Toluene	1.1	0.050	0.9930	0	108	73.6	124			
Ethylbenzene	1.1	0.050	0.9930	0	109	72.7	129			
Xylenes, Total	3.3	0.099	2.979	0.01850	108	75.7	126			
Surr: 4-Bromofluorobenzene	1.0		0.9930		101	70	130			

Sample ID: 2209953-002amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: Bottom #2	Batch ID: 70293	RunNo: 91188								
Prep Date: 9/20/2022	Analysis Date: 9/21/2022	SeqNo: 3263196	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	0.9872	0	94.2	68.8	120	9.49	20	
Toluene	0.96	0.049	0.9872	0	97.7	73.6	124	10.3	20	
Ethylbenzene	0.98	0.049	0.9872	0	99.7	72.7	129	9.44	20	
Xylenes, Total	2.9	0.099	2.962	0.01850	98.7	75.7	126	9.94	20	
Surr: 4-Bromofluorobenzene	1.0		0.9872		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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



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

Sample Log-In Check List

Client Name: JAKD Solutions

Work Order Number: 2209953

RcptNo: 1

Received By: Joseph Alderette 9/20/2022 7:10:00 AM

Completed By: Cheyenne Cason 9/20/2022 8:21:35 AM

Reviewed By: KPL 9.20.22

Handwritten signature

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° 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: JN 9/20/22

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good	Yes			

Chain-of-Custody Record

Client: JAKD Solutions

Mailing Address: 3011 Crestridge Farminglen

Phone #: 505-810-1166

email or Fax#: James@jakdsolutions.com

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other

EDD (Type)

Turn-Around Time:
 5 day Standard Rush

Project Name: Breach E #104

Project #: _____

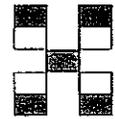
Project Manager: J McDaniel

Sampler: James McDaniel

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CP): 5.3-0-5.3 (°C)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
9/19/22	905	Soil	Bottom #1	1-4oz	Cool	001	X	X					X			
	908		Bottom #2			002										
	910		Bottom #3			003										
	913		Bottom #4			004										
	914		Bottom #5			005										
	916		Bottom #6			006										
	918		Bottom #7			007										
	920		Bottom #8			008										
	923		Bottom #9			009										
	925		Bottom #10			010										

Date: 9/19/22	Time: 1514	Relinquished by: <u>[Signature]</u>	Received by: <u>Christina Waelen</u>	Via: _____	Date: 9/19/22	Time: 1514	Remarks:
Date: 9/19/22	Time: 1749	Relinquished by: <u>Christina Waelen</u>	Received by: <u>[Signature]</u>	Via: <u>courier</u>	Date: 9-20-22	Time: 7:10	

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.

Chain-of-Custody Record

Client: **JAKD Solutions**

Mailing Address: **3811 Creechridge Dr.
Farmington**

Phone #: **505-860-1666**

email or Fax#: **James@jakdsolutions.com**

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____

EDD (Type) _____

Turn-Around Time:
5 day
 Standard Rush

Project Name:
Breech E 104

Project #:
—

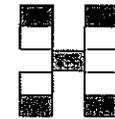
Project Manager:
J McDaniel

Sampler: **James McDaniel**

On Ice: Yes No

of Coolers: **1**

Cooler Temp (including CP): **5.3-0.53** (°C)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
9/19/22	9:27	Soil	Bottom #11	1-4oz	Cool	2209953 011	X	X					X			
	9:30		Bottom #12			012										
	9:21		Bottom #13			013										
	9:40		North Wall #1			014										
	9:42		North Wall #2			015										
	9:45		North Wall #3			016										
	9:48		South Wall #1			017										
	9:50		South Wall #2			018										
	9:52		South Wall #3			019										
	9:55		East Wall #1			020										

Date: 9/19/22	Time: 1514	Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Via: <i>[Signature]</i>	Date: 9/19/22	Time: 1514
Date: 9/19/22	Time: 1749	Relinquished by: <i>Christa Walker</i>	Received by: <i>[Signature]</i>	Via: <i>COURT</i>	Date: 9-20-22	Time: 7:10

Remarks:

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.

Chain-of-Custody Record

Client: JAKD Solutions

Mailing Address: 3811 Crestridge Farmington, NM

Phone #: 505-860-1666

email or Fax#: James @ jakd.solutions.com

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation: Az Compliance
 NELAC Other _____

EDD (Type)

Turn-Around Time: 5 day
 Standard Rush

Project Name: Breach E #104

Project #: _____

Project Manager: J McDaniel

Sampler: James McDaniel

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CF): 5.3-0-5.3 (°C)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
9/19/22	9:58	Soil	East Wall #2	1-4oz	Cool	021	X	X					X			
	10:00		East Wall #3			022										
	10:02		East Wall #4			023										
	10:04		West Wall #1			024										
	10:07		West Wall #2			025										
	10:10		West Wall #3			026										
	10:13		West Wall #4			027										

Date: <u>9/19/22</u>	Time: <u>1514</u>	Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>	Via: _____	Date: <u>9/19/22</u>	Time: <u>1514</u>
Date: <u>9/19/22</u>	Time: <u>1749</u>	Relinquished by: <u>Christa Walker</u>	Received by: <u>[Signature]</u>	Via: <u>Courier</u>	Date: <u>9-20-22</u>	Time: <u>7:10</u>

Remarks:

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.



Cross Timbers Energy
Breach E #104
30-039-06644



Photo 1: Excavated Area (View 1)



Photo 2: Excavated Area (View 2)



Cross Timbers Energy
Breach E #104
30-039-06644



Photo 3: Excavated Area (View 3)



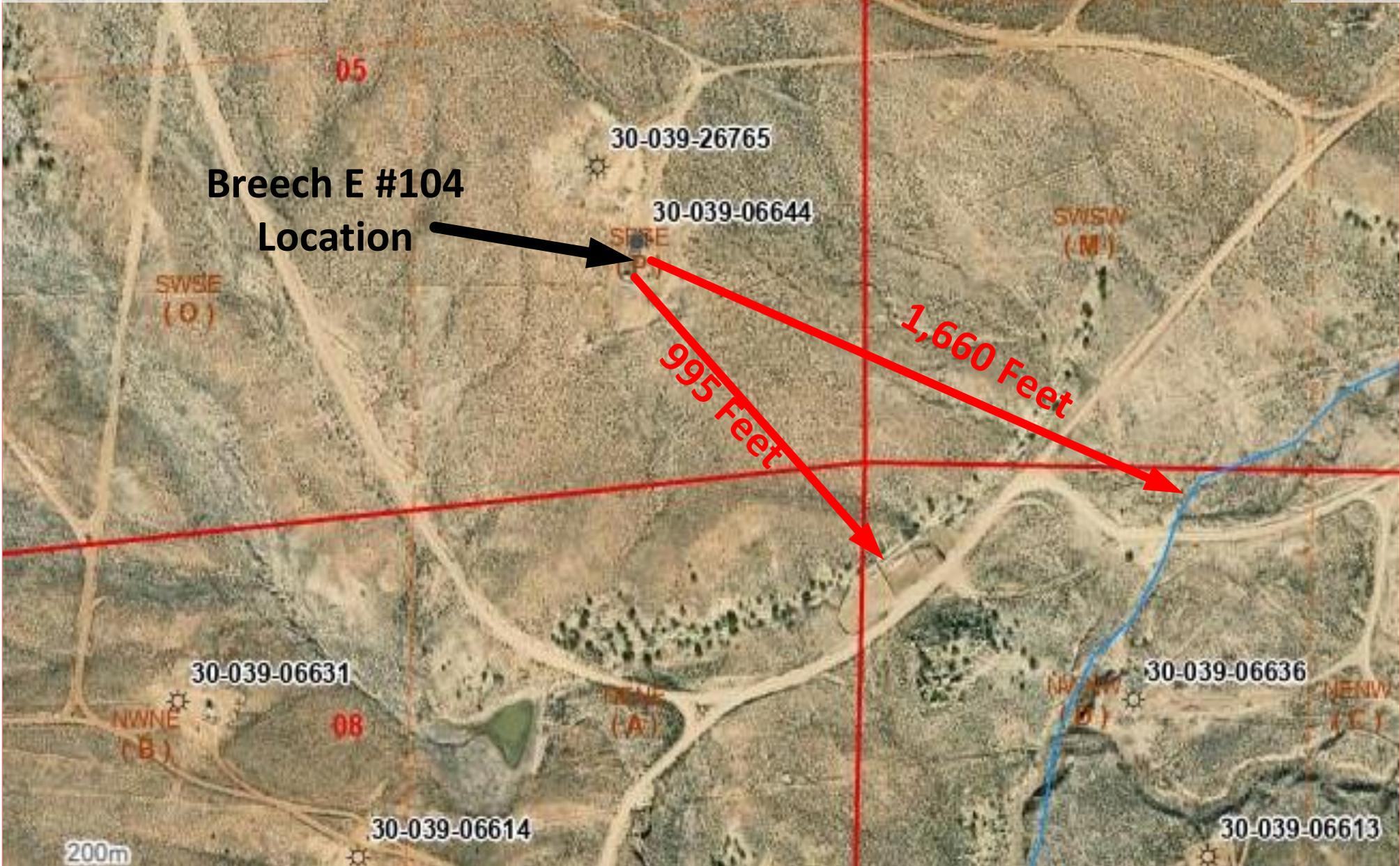
Drawn By: James McDaniel
Date: 9/28/2022



WATERWELL MAP

Company: Cross Timbers Operating
Facility: Breech E #104
API: 30-039-06644
Section 5, Township 26N, Range 6W
Rio Arriba, New Mexico
Source: Google Earth

LEGEND



Drawn By: James McDaniel
 Date: 9/28/2022



WATERCOURSE MAP

Company: Cross Timbers Operating
 Facility: Breach E #104
 API: 30-039-06644
 Section 5, Township 26N, Range 6W
 Rio Arriba, New Mexico
 Source: Google Earth

LEGEND

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 50211

CONDITIONS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 50211
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvez	None	11/17/2022