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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Inital Report ☒ Final Report

Name of Company: BP America Production Co.	Contact: Steve Moskal
Address: 380 Airport Road, Durango, CO 81303	Telephone No.: 505-330-9179
Facility Name: JACQUEZ COM No. 005	Facility Type: Natural Gas Well

Surface Owner: Fee	Mineral Owner: Fee	API No. 3004526833

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: San Juan
A	30	31N	09W	1,095	North	790	East	

Latitude 36.873387° **Longitude** -107.814973°

NATURE OF RELEASE

Type of Release: produced water, condensate	Volume of Release: 10 bbl	Volume Recovered: 1.5 bbls
Source of Release: BGT overfilled during flash flood event	Date and Hour of Occurrence: July 29, 2017	Date and Hour of Discovery: July 31, 2017; 3:30 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Cory Smith – NMOCD – Phone call	OIL CONS. DIV DIST. 3
By Whom?	Date and Hour: 7/31/17 – 3:50 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	JAN -3-1-2018

If a Watercourse was Impacted, Describe Fully.*
Entered private livestock pond while travelling across pasture land.

Describe Cause of Problem and Remedial Action. * During an isolated precipitation event, heavy rains created a flash flood event. The flash flood water broke the earthen berm of the tank containment, entering the below grade tank and washing away the contents. The flood water carried the tank contents approximately ½ mile, across opened pasture land, into a livestock pond. The freestanding oil along the flood flow path was picked up using absorbent pads, the pond was skimmed using hydrophobic water booms and the accessible material in the containment area was removed via hydro-vac. The pond was fenced to prevent livestock and wildlife access. The remedial activities are described in the attached reports including laboratory data.

Describe Area Affected and Cleanup Action Taken.* The impacted area of the flow path is approximately 125,000 square feet; ½ mile by 20-30' wide. The final extents of the flow path and containment areas will be determined through excavation and removal of the impacted soil. The remedial work was negotiated and approved with the private landowner. A total of 1,570 cubic yards of soil was removed from the site for landfarm treatment. BP completed the reclamation of the site on October 31, 2017. BP request no further action at this location.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: Steve Moskal		
Title: Field Environmental Coordinator	Approval Date: 2/27/18	Expiration Date:
E-mail Address: steven.moskal@bp.com	Conditions of Approval: —	Attached ☐ —
Date: January 30, 2018 Phone: 505-326-9497		

* Attach Additional Sheets If Necessary

#NCS1721257101

105

envirotech

October 10, 2017 Project Number 03143-1237

Mr. Steve Moskal
BP America Production Company
200 Energy Court
Farmington, New Mexico 87401

Phone: (505) 330-9179
Email: steven.moskal@bp.com

RE: SPILL CLEANUP REPORT FOR THE JACQUEZ COM 005 WELL SITE, SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Moskal:

Enclosed please find the *Spill Cleanup Report* detailing cleanup activities at the Jacquez Com 005 well site located in Section 30, Township 31 North, Range 9 West, San Juan County, New Mexico.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,
ENVIROTECH, INC.

Brittany Hall
Environmental Field Technician
bhall@envirotech-inc.com

Enclosures: *Spill Cleanup Report*
Site Photography
Vicinity Map
Site Map
Pond Site Map

Cc: Client File 03143

SPILL CLEANUP REPORT

LOCATED AT:
JACQUEZ COM 005
SECTION 30, TOWNSHIP 31 NORTH, RANGE 11 WEST
SAN JUAN COUNTY, NEW MEXICO

PREPARED FOR:
BP AMERICA
MR. STEVE MOSKAL
200 ENERGY COURT
FARMINGTON, NEW MEXICO 87401

PROJECT NUMBER 03143-1237
AUGUST 2017

BP AMERICA
SPILL CLEANUP REPORT
JACQUEZ COM 005
SECTION 30, TOWNSHIP 31N, RANGE 9W
SAN JUAN COUNTY, NEW MEXICO

TABLE OF CONTENTS

INTRODUCTION

Envirotech, Inc. of Farmington, New Mexico, was contracted by BP America to provide spill cleanup activities for a release of produced water at the Jacquez Com 005 well site, located in Section 30, Township 31 North, Range 9 West, San Juan County, New Mexico; see enclosed ***Figure 1, Vicinity Map.*** The below grade tank (BGT) was flooded by storm water, releasing produced water and condensate into the surrounding area. The impacted area included the area surrounding the BGT, an approximately 2,000-foot spill path, and a pond located to the east of the wellsite. Activities included spill cleanup activities.

ACTIVITIES PERFORMED

Envirotech, Inc. was contacted on August 2, 2017, with a request to respond to a release of produced water that occurred at the above referenced location. Oil absorbent booms and pads were used to collect the product along the edges of a pond. Envirotech personnel also utilized a boat in order to remove the sheen from the deeper east side of the pond. Absorbent booms were attached to the boat and Envirotech personnel on the shore kept the booms taut in order to confine and absorb the contaminants floating on the surface of the pond. Absorbent booms and pads were placed on the perimeter of the pond on the west and northeast shorelines to absorb any additional product from the surface of the pond. The booms and pads were left in place by Envirotech personnel to be subsequently removed by BP America, or their representatives.

SUMMARY AND CONCLUSIONS

Spill cleanup activities were performed for a release of produced water and oil at the Jacquez Com 005 well site, located in Section 30, Township 31 North, Range 9 West, San Juan County, New Mexico. Envirotech, Inc. recommends no further action in regards to this incident.

STATEMENT OF LIMITATIONS

Envirotech, Inc. has completed spill cleanup activities for a release of produced water at the Jacquez Com 005 well site, located in Section 30, Township 31 North, Range 9 West, San Juan County, New Mexico. All observations and conclusions provided here are based on the information and current site conditions found at the site of the incident.

The undersigned has conducted this service at the above referenced site. This work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry, and hydrogeology.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,

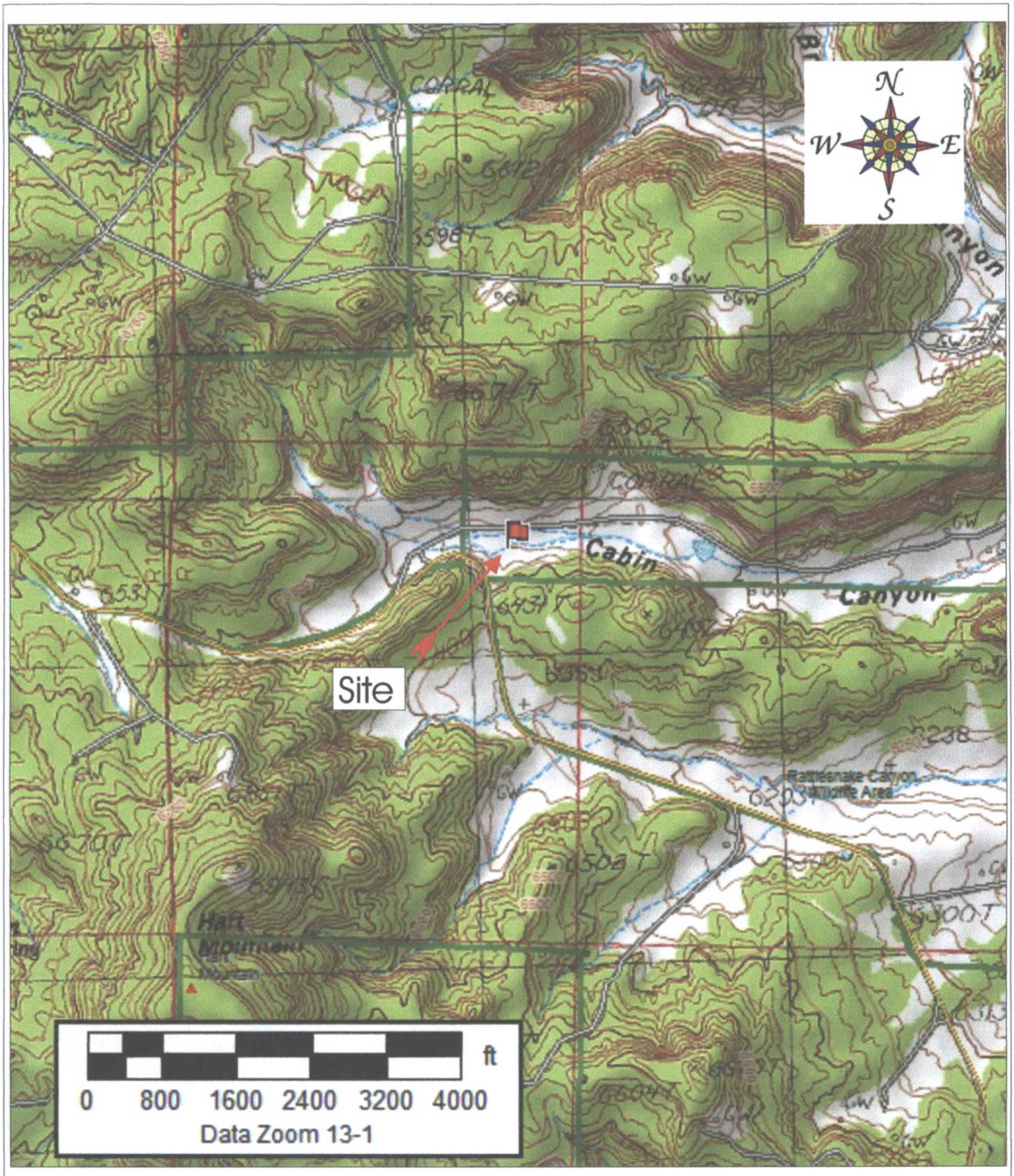
ENVIROTECH, INC.

Brittany Hall
Staff Scientist
bhall@envirotech-inc.com

Reviewed by:

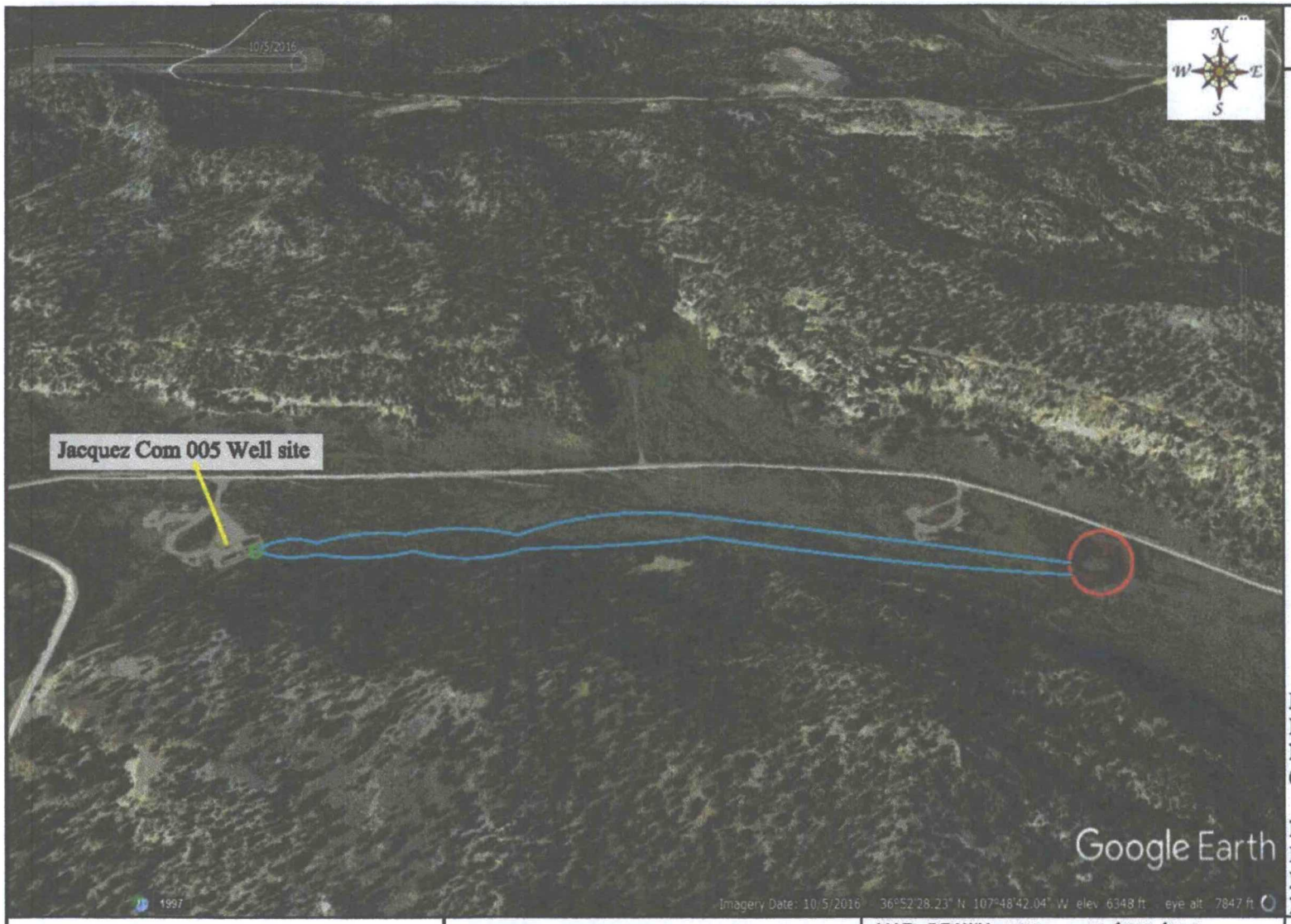
Felipe Aragon, CES
Environmental Coordinator
faragon@envirotech-inc.com

FIGURES



Source: 7.5 Minute, Hart Canyon, San Juan County, New Mexico U.S.G.S. Topographic Quadrangle Map
Scale: 1:24,000 1" = 2000'

BP America Jacquez Com 005 Section 30, Township 31N, Range 9W San Juan County, New Mexico	envirotech ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 Farmington, New Mexico 87401 505.632.0615	Vicinity Map Figure #1
PROJECT Number:03143-1237 Date Drawn: 9/13/17		DRAWN BY: Brittany Hall PROJECT MANAGER: Felipe Aragon



LEGEND

- Location of flooded BGT
- Location of pond
- Path of Release

BASE DRAWING OBTAINED FROM GOOGLE EARTH AND DOES NOT REFLECT THE CURRENT SITE CONDITIONS.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

FIGURE 2: SITE MAP
Jacques Com 005
Section 30, Township 31N, Range 9W
San Juan County, New Mexico
Event ID:

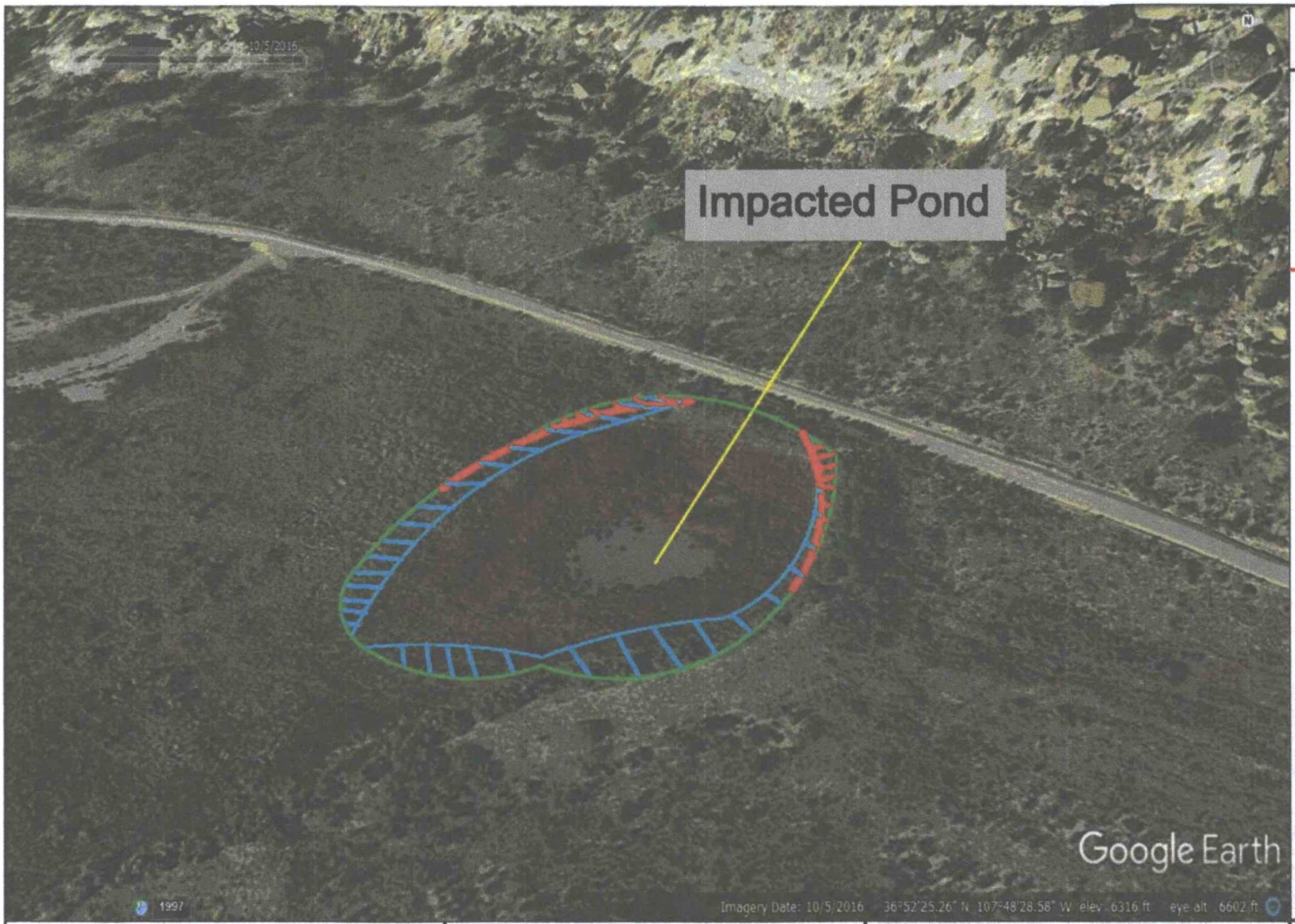
PROJECT NUMBER: 03143-1237
MAP SCALE: NTS
Spill Clean up

MAP DRAWN: BH 9/15/17

REVISIONS

NO.	DATE	BY	DESCRIPTION

envirotech
ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
Farmington, New Mexico 87401
505.632.0615



LEGEND

- High water line
- Areas skimmed with booms
- Booms left in place

BASE DRAWING OBTAINED FROM GOOGLE EARTH AND DOES NOT REFLECT THE CURRENT SITE CONDITIONS.

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES.

FIGURE 3: POND SITE MAP
Jacquez Com 005
Section 30, Township 31N, Range 9W
San Juan County, New Mexico
Event ID:

PROJECT NUMBER: 03143-1237
MAP SCALE: NTS
Spill Clean up

MAP DRAWN: BH 9/15/17

REVISIONS

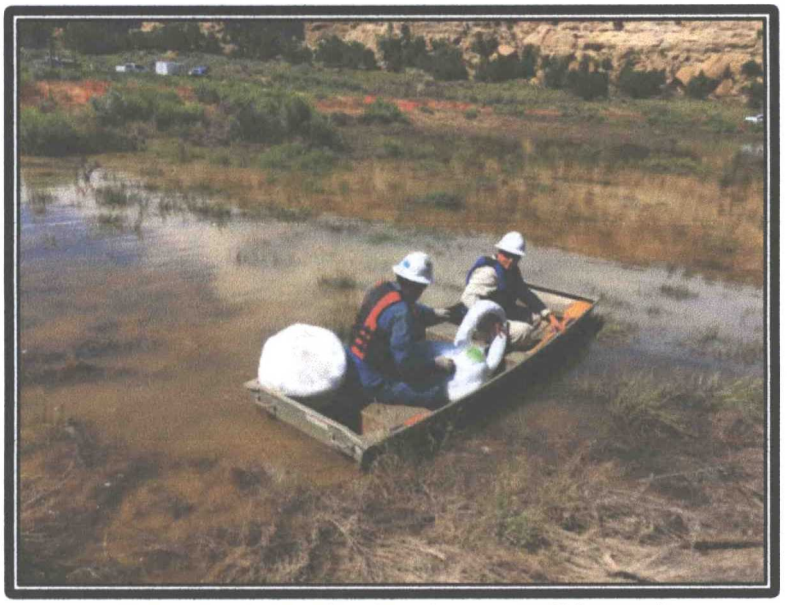
NO.	DATE	BY	DESCRIPTION

envirotech
ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
Farmington, New Mexico 87401
505.632.0615

APPENDIX A

Site Photography

Site Photography
BP America
Jacquez Com 005
Spill Clean Up Report
Project No. 03143-1237
August 2017

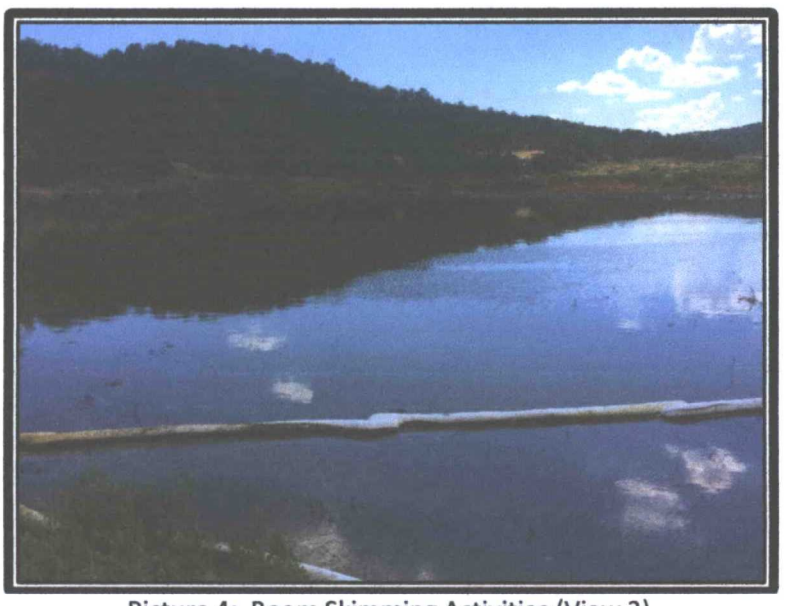


Picture 1: Boat utilized to clean up spill (view 1)

Picture 2: Boom Skimming Activity (View 1)

Site Photography
BP America
Jacquez Com 005
Spill Clean Up Report
Project No. 03143-1237
August 2017

Picture 3: Boom Skimming Activities (View 2)



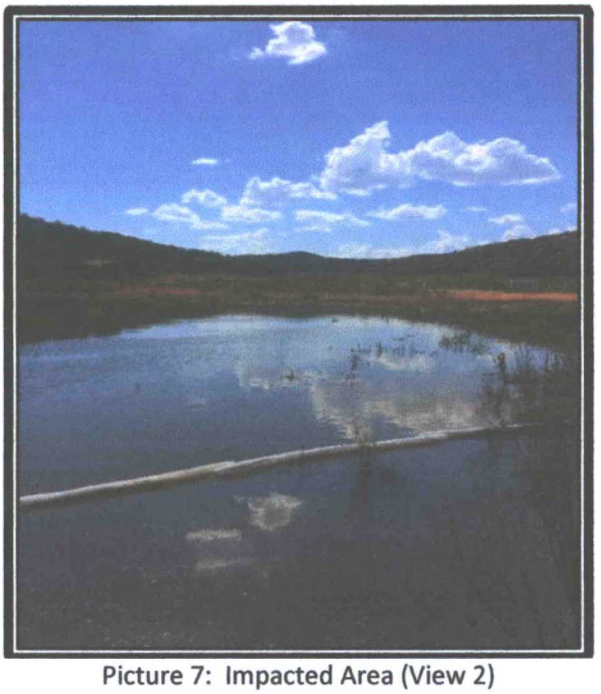
Picture 4: Boom Skimming Activities (View 3)

Site Photography
BP America
Jacquez Com 005
Spill Clean Up Report
Project No. 03143-1237
August 2017

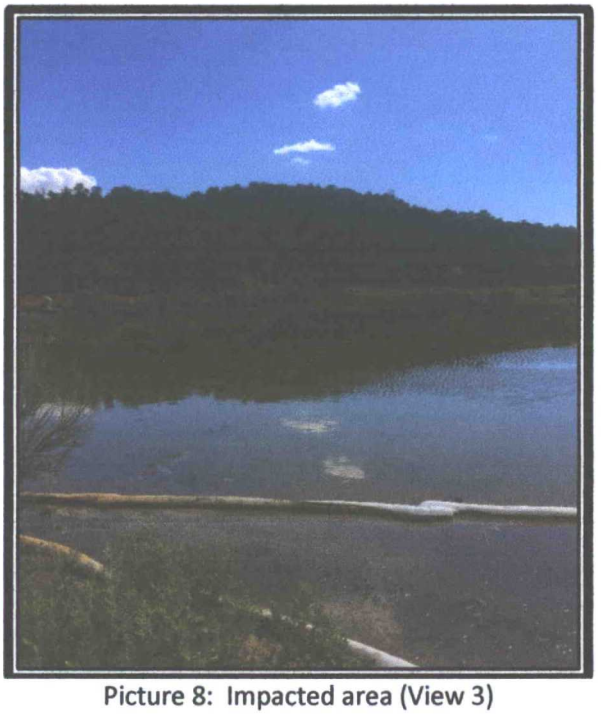
Picture 5: Boom Skimming Activities (View 4)

Picture 6: Impacted Area (View 1)

Site Photography
BP America
Jacquez Com 005
Spill Clean Up Report
Project No. 03143-1237
August 2017



Picture 7: Impacted Area (View 2)



Picture 8: Impacted area (View 3)

Response and Remediation of Hydrocarbon Impacts Resulting from a Catastrophic Storm Event

Jacquez Com 5
(A) Sec 30 – T31N – R9W
API: 30-045-26833
San Juan County, New Mexico

Prepared for:
BP America Production Co.
Farmington, New Mexico

Prepared by:
Blagg Engineering, Inc.
P.O. Box 87
Bloomfield, New Mexico 87413
(505)632-1199

October 31, 2017

JACQUEZ COM 5

RESPONSE AND REMEDIATION OF HYDROCARBON IMPACTS RESULTING FROM A CATASTROPHIC STORM EVENT

TABLE OF CONTENTS

APPENDICES

JACQUEZ COM 5

RESPONSE AND REMEDIATION OF HYDROCARBON IMPACTS RESULTING FROM A CATASTROPHIC STORM EVENT

INTRODUCTION AND RESPONSE TIMELINE

Blagg Engineering Inc. (BEI) has been retained by BP America Production Co. (BP) to monitor, sample and document environmental remediation of hydrocarbon impacts at the Jacquez Com 5, a natural gas well located in rural San Juan County, New Mexico at (A) Sec. 30 – T31N – R9W (Figure 1). On the afternoon of Monday, July 31, 2017 during a routine site inspection it was discovered that one or more storm events resulted in a flash flood that cascaded across the wellpad, breaking through a containment wall and discharging approximately 10 barrels of hydrocarbon from a below grade tank. Localized storm events were known to have been in the region on both Friday and Saturday evenings of July 28 – 29, 2017 and it is believed that one of these events caused the hydrocarbon release. Immediately upon discovery the New Mexico Oil Conservation Division (NMOCD), Aztec District Office, was notified. The flow path of the hydrocarbon release was assessed and found to follow a narrow corridor, approximately 20' – 30' wide, a distance of approximately 700 yards eastward and down-gradient were it entered a man made water stock pond. The flash flood filled the stock pond and caused damage to the earthen dam, allowing water to overflow. A minor amount of hydrocarbon spotting was found immediately east of the pond. No free floating oil was observed in the pond, but there were spots of visible sheen.

On Tuesday, August 1, 2017 an immediate remediation response was initiated. On the wellpad a hydro-vac truck was used to vacuum up the residual oil residue still within the containment berm and within the below grade tank. The stock pond was fenced off to prevent livestock from entering. With NMOCD personnel observing, the pond was sampled and the sample was delivered to an analytical laboratory to determine water quality.

On Wednesday, August 3, 2017 oil soaker rags were used to remove any remaining free standing hydrocarbon from the ground surface along the release flow path. Oil booms were used to skim any sheen off the surface and edges of the pond, and booms were placed along the inlet to capture potential run-in if another storm event were to occur. The private surface owner was apprised of the extent of impacts and further remedial action was postponed pending landowner approval of a remediation plan. Following use, the oil booms and soaker rags were promptly disposed at a NMOCD authorized BP operated special waste bin.

Remedial actions to remove the remaining hydrocarbons on the ground surface were resumed on August 22, 2017 and continued through September 6, 2017. A backhoe was used to excavate impacted soils on the wellpad. Off the wellpad the primary hydrocarbon impacts were on vegetation, which had trapped oil as the flash flood progressed down the narrow corridor to the stock pond. This corridor was first addressed with a brush hog, then both a dozer and grader were used to collect the loose vegetation and first several inches of top soil. This material was stockpiled and then transported to a commercial landfarm for final remediation. Replacement soil was obtained from another area on the private landowners property and placed back into the remediated area. Additionally, the isolated spots of impacts just east of the stock pond were removed by hand and the damaged stock pond dam was repaired. Confirmation closure sampling was conducted in each area remediated, as further discussed in the following report section.

During the remedial actions to remove hydrocarbon impacts BP elected to re-address an unlined earthen pit that was previously closed out in April, 2003 pursuant to NMOCD guidelines. This pit was not affected by the flash flood but the private landowner had concerns with potential remaining hydrocarbons within the pit. The original pit remediation included an excavation of 16' x 15' x 11' deep and sampling at that time tested residual hydrocarbons at 2,000 parts per million (ppm). The pit closure standard was 1,000 ppm TPH. In November, 2003 a mobile drill unit was used to drill a boring to 18' below grade and collect a sample at that depth for determination of residual hydrocarbons. Laboratory analytical testing reported a hydrocarbon level at 663 ppm and no further action was required by NMOCD. However, BP installed a passive vent in the drill hole to facilitate in-situ remediation.

On August 25, 2017 a backhoe was used to dig into the center of the original unlined pit. A NMOCD representative was present to observe the activities. Backfill soils were encountered to a depth of 11' below grade, with fencing debris and short steel pipe pieces discovered within the fill. Native soils were found from 11'-14', and dense sandstone was present from 14'-18'. A composite sample from 11' – 18' was collected for laboratory testing of residual hydrocarbons. On September 6, 2017 an excavator trackhoe was used to re-dig soils from the original pit remediation for removal of all abandoned piping and debris. A landowner representative and NMOCD were present to observe this activity. The pit was backfilled following removal of all abandoned material.

SAMPLING METHODOLOGY AND SUMMARY ANALYTICAL DATA

The stock pond water was sampled on August 1, 2017 with NMOCD observing. A representative sample of water was collected at the west pond inlet at the entrance path of the flash flood. The sample was placed into laboratory supplied containers, labeled and placed in an ice chest with ice for delivery to the laboratory representative. Analytical testing included volatile organics by U.S. EPA Method 8260 and dissolved salts/metals (API Water) by various EPA Methods. Summary results of key hydrocarbon related constituents are presented below in Table 1, Summary Pond Water Analytical Results. No constituents were in excess of New Mexico Water Quality Control Commission standards for domestic drinking water.

Table 1

Summary Pond Water Analytical Data
August 1, 2017

Sample ID	Benzene (ug/L)	Toluene (ug/L)	Ethyl-Benzene (ug/L)	Total Xylenes (ug/L)	Chloride (mg/L)	Sulfate (mg/L)
Stock Pond	ND	5.7	1.0	18	ND	170
NMWQCC Closure Standard	10	750	750	620	250	600

ND = Not Detected

Soil closure confirmation sampling following cleanup of the surface release was conducted using a sampling spade to collect representative composite soils from each sampling zone (Figures 2 and 3). All closure sampling was witnessed by the NMOCD. Representative composite portions of soil were placed into a gallon sized Ziploc® baggie for field headspace analysis of organic vapors with a calibrated IonScience Tiger model photo-ionization detector (PID) containing a 11.2 eV lamp. Split samples were placed into a 4-ounce laboratory supplied jar with Teflon® lid, labeled and placed on ice in an ice chest for further laboratory testing. The jarred samples were hand delivered to a representative of Hall Environmental Analytical Laboratories for analysis via U.S. EPA Method 8021B (volatile organics limited to benzene, toluene, ethyl benzene and total xylenes), U.S. EPA Method 8015 (gasoline range (GRO), diesel range (DRO) and motor oil range (MRO) organics), and chlorides via U.S. EPA Method 300. A chain-of-custody followed the samples.

There were a total of 17 separate composite sampling areas. The soil closure standard for the surface release was assigned a value of 100 ppm TPH due to the proximity of portions of the release to surface drainages and the water stock pond. Groundwater at the site, as documented in the approved permit for the below grade tank, is estimated to be greater than 100 feet from the ground surface. Summary laboratory analytical results are included below in Table 2: Summary Surface Release Closure Analytical Data. Laboratory test reports are attached in Appendix B. No sample was found to exceed the approved closure standard.

Table 2
Summary Surface Release Closure Analytical Data

Sample ID	Date	TPH Total (mg/Kg)	BTEX Total (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)
95 BGT Area, 7-pt	8/23/2017	ND	ND	ND	ND
West On-Pad Area, 7-pt	8/23/2017	ND	ND	ND	ND
Zone 0'-100' (Off Pad) 8-pt	8/28/2017	ND	ND	ND	ND
Zone 100'-200' (Off Pad) 8-pt	8/28/2017	ND	ND	ND	ND
Zone 200'-300' (Off Pad) 8-pt	8/28/2017	ND	ND	ND	ND
Zone 300'-400' (Off Pad) 8-pt	8/28/2017	ND	ND	ND	ND
Zone 400'-500' (Off Pad) 8-pt	8/28/2017	ND	ND	ND	ND
Zone 500'-600' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 600'-700' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 700'-800' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 800'-900' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 900'-1,000' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 1,000'-1,100' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 1,100'-1,200' (Off Pad) 8-pt	8/29/2017	ND	ND	ND	ND
Zone 1,200'-1,493' (Off Pad) 10-pt	8/30/2017	ND	ND	ND	ND
Zone 1,493'-1,855' (Off Pad) 10-pt	8/30/2017	ND	ND	ND	ND
East On-Pad Surface, 5-pt	9/6/2017	ND	ND	ND	ND
NMOCD Closure Standard		100	50	10	600

ND = Not Detected

The historic pit was re-sampled on August 25, 2017 at the request of NMOCD. The agencies primary concern was with soils that remained deeper than the original April 2003 remedial excavation, which extended to a depth of 11' below grade. Following NMOCD's directive, a backhoe was used to collect a 10-point composite sample from 11' – 18' below grade. Pursuant to NMOCD "Spill and Release Guidelines", this pit has been assigned a closure standard of 1,000 ppm TPH which is based on groundwater greater than 100 feet from surface and a measured distance to the nearest surface drainage greater than 200 feet. Summary laboratory analytical data from this sample event are presented below in Table 3. The sample tested within closure standards for all constituents.

Table 3
Summary Historical Pit Analytical Data
August 25, 2017

Sample ID	TPH Total (mg/Kg)	BTEX Total (mg/Kg)	Benzene (mg/Kg)	Chloride (mg/Kg)	
Historic Pit 10-pt (11' – 18')	514	ND	ND	ND	
NMOCD Closure Standard	1,000	50	10	600	

ND = Not Detected

CONCLUSIONS AND RECOMMENDATIONS

Hydrocarbon impacted soil resulting from a catastrophic flash flood event at the BP operated Jacquez Com 5 has been remediated. Additionally, re-examination of a previously closed historic unlined earthen pit has determined that residual soils do not exceed NMOCD site closure standards. Therefore, no additional site remediation of impacts is indicated. Regulatory closure of remedial activities is recommended.

CLOSURE AND LIMITATIONS

This report has been prepared for the exclusive use of BP America Production Company as it pertains to hydrocarbon impact remediation at the Jacquez Com 5 in San Juan County, New Mexico. The data presented herein is based on visual observations, subsurface soil conditions encountered at sampling locations and on information reported by analytical laboratory testing of soils. This report does not reflect variations which may exist between sampling locations.

I certify that the work performed by Blagg Engineering, Inc. as described in this report was directed by my supervision, and that I am personally familiar with the remedial actions and the contents of this report.

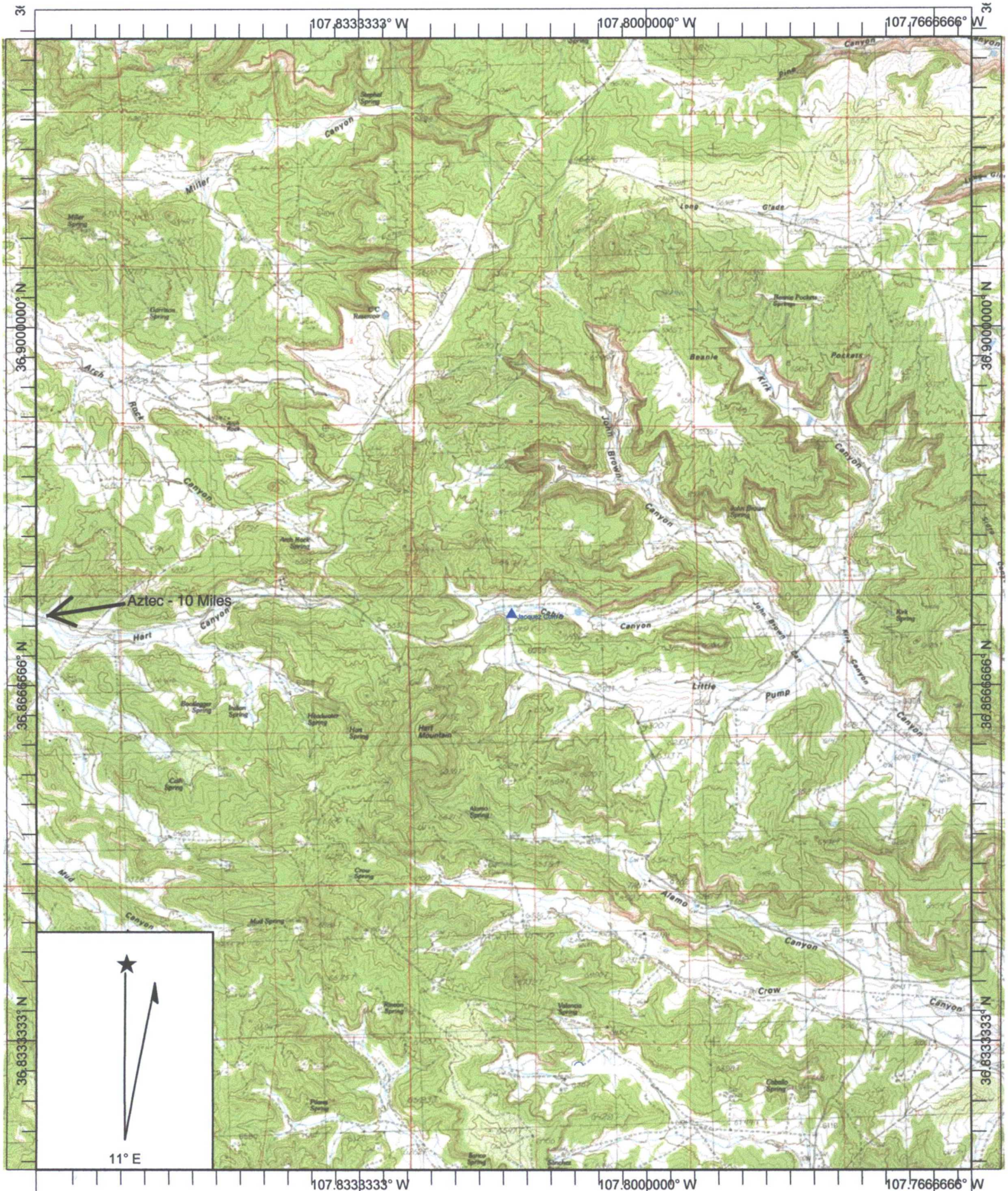
Submitted by:
Blagg Engineering, Inc.

Jeffrey C. Blagg

Jeffrey C. Blagg, PE
NMPE 11607

Appendix A

Figures



Name: TURLEY
Date: 10/11/2017
Scale: 1 inch equals 4000 feet

FIGURE 1
Site Location Map

Location: 036.8742605° N 107.8165872° W
Caption: BP - Jacquez Com 5

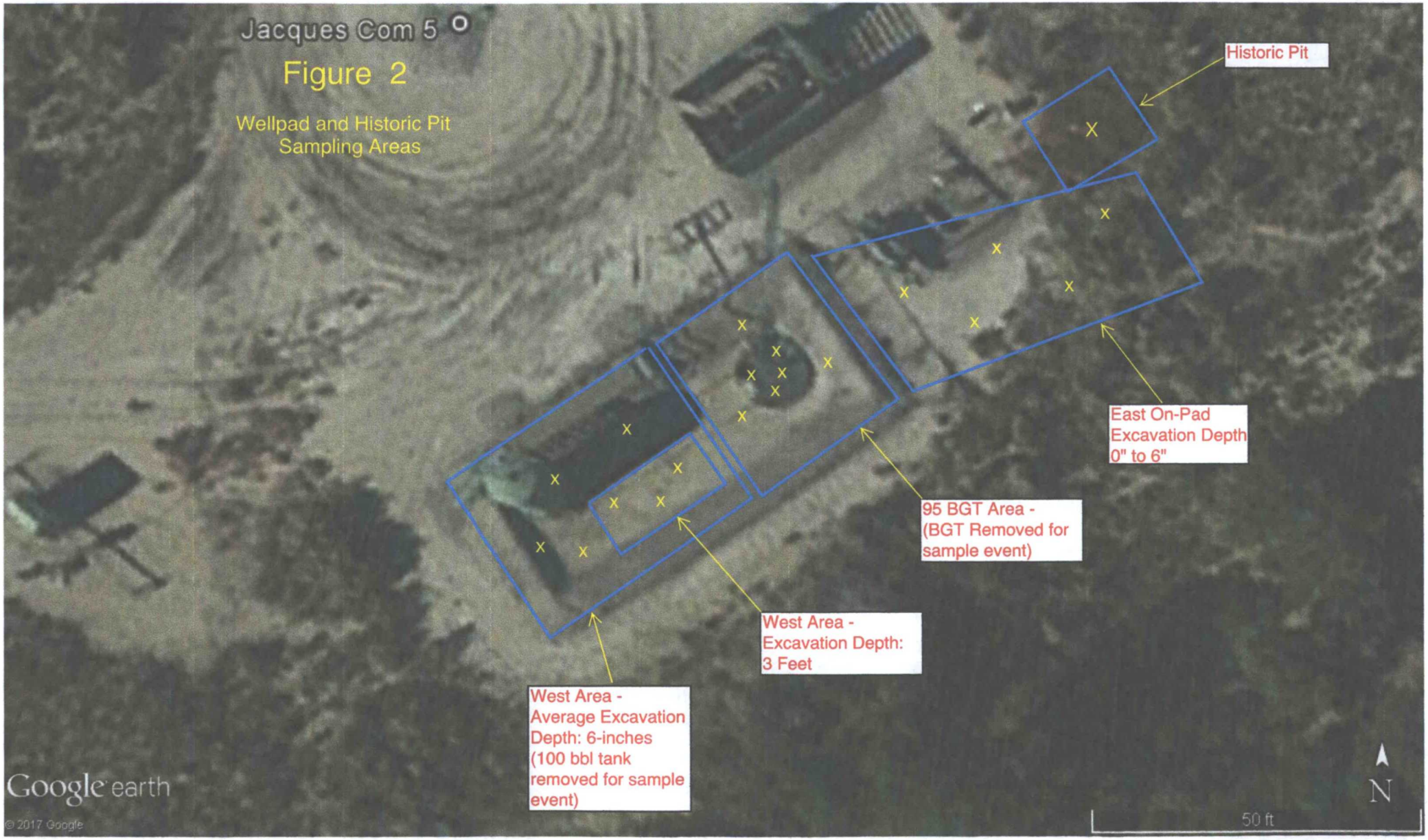
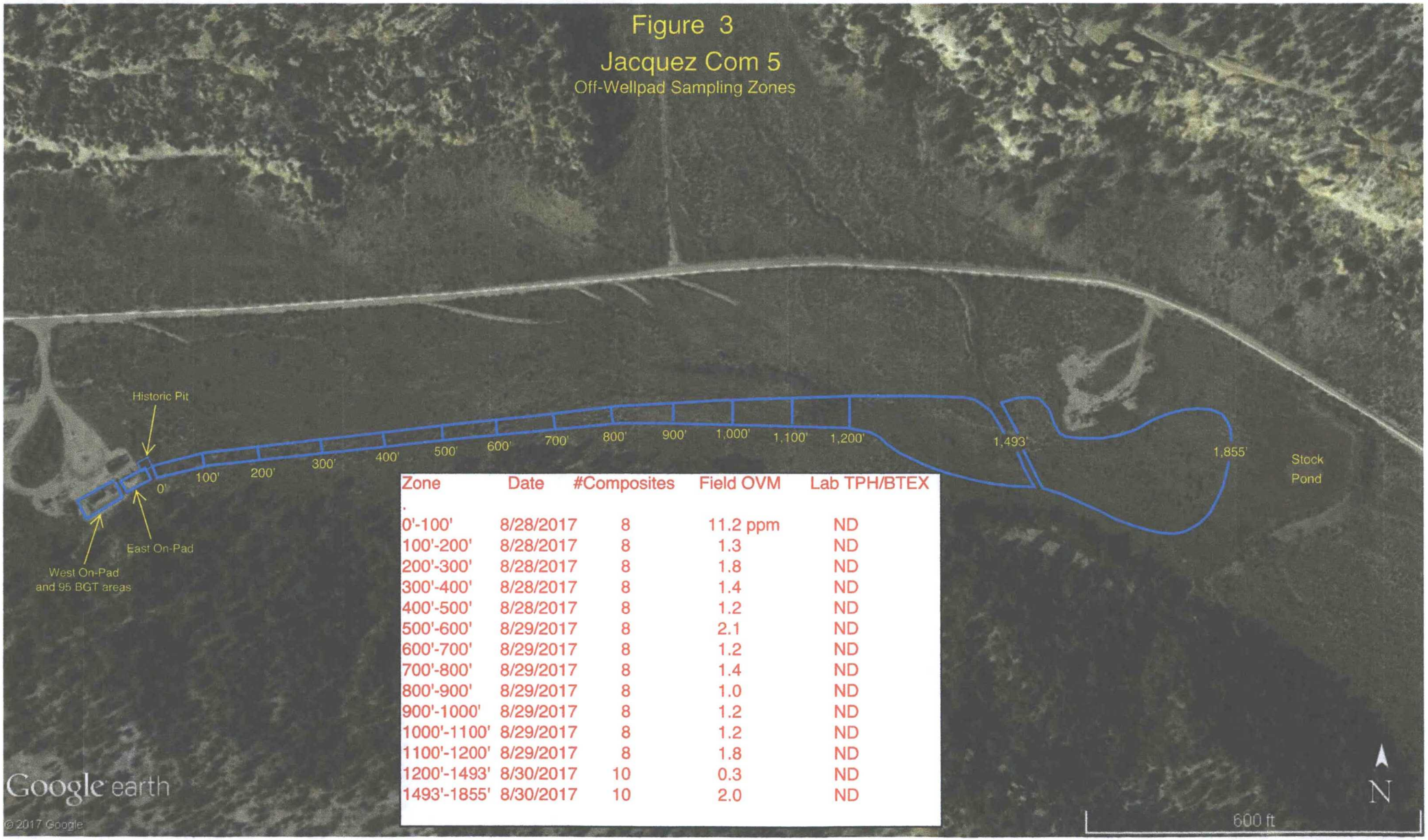

Jacques Com 5
Figure 2
Wellpad and Historic Pit
Sampling Areas
Historic Pit
East On-Pad
Excavation Depth
0" to 6"
95 BGT Area -
(BGT Removed for
sample event)
West Area -
Excavation Depth:
3 Feet
West Area -
Average Excavation
Depth: 6-inches
(100 bbl tank
removed for sample
event)
Google earth
© 2017 Google
N
50 ft

Figure 3

Jacquez Com 5

Off-Wellpad Sampling Zones



Zone	Date	#Composites	Field OVM	Lab TPH/BTEX
.				
0'-100'	8/28/2017	8	11.2 ppm	ND
100'-200'	8/28/2017	8	1.3	ND
200'-300'	8/28/2017	8	1.8	ND
300'-400'	8/28/2017	8	1.4	ND
400'-500'	8/28/2017	8	1.2	ND
500'-600'	8/29/2017	8	2.1	ND
600'-700'	8/29/2017	8	1.2	ND
700'-800'	8/29/2017	8	1.4	ND
800'-900'	8/29/2017	8	1.0	ND
900'-1000'	8/29/2017	8	1.2	ND
1000'-1100'	8/29/2017	8	1.2	ND
1100'-1200'	8/29/2017	8	1.8	ND
1200'-1493'	8/30/2017	10	0.3	ND
1493'-1855'	8/30/2017	10	2.0	ND

Appendix B

Laboratory Analytical Data Reports

Laboratory Data Report

Stock Pond Water Sample

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 16, 2017

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: JACQUEZ COM 5 OrderNo.: 1708109

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/2/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1708109**
Date Reported: **8/16/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: JACQUEZ COM 5
Lab ID: 1708109-001 **Matrix:** AQUEOUS

Client Sample ID: Stock Pond
Collection Date: 8/1/2017 9:05:00 AM
Received Date: 8/2/2017 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
SM2340B: HARDNESS						Analyst: **ELS**	
Hardness (As CaCO3)	190	6.6		mg/L	1	8/12/2017 10:06:00 AM	R44916
SPECIFIC GRAVITY						Analyst: **JRR**	
Specific Gravity	0.9983	0			1	8/3/2017 11:43:00 AM	R44699
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	2.5		mg/L	5	8/2/2017 8:47:58 PM	R44708
Sulfate	170	2.5		mg/L	5	8/2/2017 8:47:58 PM	R44708
SM2510B: SPECIFIC CONDUCTANCE						Analyst: **JRR**	
Conductivity	430	5.0		µmhos/cm	1	8/2/2017 4:46:24 PM	R44694
SM2320B: ALKALINITY						Analyst: **JRR**	
Alkalinity, Hydroxide (As CaCO3)	ND	2.000		mg/L CaCO3	1	8/2/2017 4:46:24 PM	R44694
Bicarbonate (As CaCO3)	33.84	20.00		mg/L CaCO3	1	8/2/2017 4:46:24 PM	R44694
Carbonate (As CaCO3)	ND	2.000		mg/L CaCO3	1	8/2/2017 4:46:24 PM	R44694
Total Alkalinity (as CaCO3)	33.84	20.00		mg/L CaCO3	1	8/2/2017 4:46:24 PM	R44694
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	324	40.0	D	mg/L	1	8/4/2017 5:30:00 PM	33162
SM4500-H+B: PH						Analyst: **JRR**	
pH	6.94		H	pH units	1	8/2/2017 4:46:24 PM	R44694
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **ELS**	
Calcium	67	1.0		mg/L	1	8/12/2017 11:25:04 AM	A44916
Iron	0.028	0.020		mg/L	1	8/12/2017 11:25:04 AM	A44916
Magnesium	6.2	1.0		mg/L	1	8/12/2017 11:25:04 AM	A44916
Potassium	7.8	1.0		mg/L	1	8/12/2017 11:25:04 AM	A44916
Sodium	3.1	1.0		mg/L	1	8/12/2017 11:25:04 AM	A44916
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Toluene	5.7	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Ethylbenzene	1.0	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2,4-Trimethylbenzene	9.0	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,3,5-Trimethylbenzene	4.0	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Naphthalene	2.6	2.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1-Methylnaphthalene	ND	4.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
2-Methylnaphthalene	ND	4.0		µg/L	1	8/2/2017 10:32:17 AM	W44667

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

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: JACQUEZ COM 5
Lab ID: 1708109-001
Matrix: AQUEOUS
Client Sample ID: Stock Pond
Collection Date: 8/1/2017 9:05:00 AM
Received Date: 8/2/2017 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: DJF	
Acetone	ND	10		µg/L	1	8/2/2017 10:32:17 AM	W44667
Bromobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Bromodichloromethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Bromoform	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Bromomethane	ND	3.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
2-Butanone	ND	10		µg/L	1	8/2/2017 10:32:17 AM	W44667
Carbon disulfide	ND	10		µg/L	1	8/2/2017 10:32:17 AM	W44667
Carbon Tetrachloride	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Chlorobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Chloroethane	ND	2.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Chloroform	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Chloromethane	ND	3.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
2-Chlorotoluene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
4-Chlorotoluene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
cis-1,2-DCE	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Dibromochloromethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Dibromomethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1-Dichloroethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1-Dichloroethene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2-Dichloropropane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,3-Dichloropropane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
2,2-Dichloropropane	ND	2.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1-Dichloropropene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Hexachlorobutadiene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
2-Hexanone	ND	10		µg/L	1	8/2/2017 10:32:17 AM	W44667
Isopropylbenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
4-Isopropyltoluene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
4-Methyl-2-pentanone	ND	10		µg/L	1	8/2/2017 10:32:17 AM	W44667
Methylene Chloride	ND	3.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
n-Butylbenzene	ND	3.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
n-Propylbenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
sec-Butylbenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Styrene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667

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Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

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Client Sample ID: Stock Pond
Project: JACQUEZ COM 5
Collection Date: 8/1/2017 9:05:00 AM
Lab ID: 1708109-001
Matrix: AQUEOUS
Received Date: 8/2/2017 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
tert-Butylbenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
trans-1,2-DCE	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Trichlorofluoromethane	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Vinyl chloride	ND	1.0		µg/L	1	8/2/2017 10:32:17 AM	W44667
Xylenes, Total	18	1.5		µg/L	1	8/2/2017 10:32:17 AM	W44667
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	8/2/2017 10:32:17 AM	W44667
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	8/2/2017 10:32:17 AM	W44667
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/2/2017 10:32:17 AM	W44667
Surr: Toluene-d8	102	70-130		%Rec	1	8/2/2017 10:32:17 AM	W44667

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Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708109**

16-Aug-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R44708**	RunNo: **44708**
Prep Date:	Analysis Date: **8/2/2017**	SeqNo: **1413863** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R44708**	RunNo: **44708**
Prep Date:	Analysis Date: **8/2/2017**	SeqNo: **1413864** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	94.8	90	110			
Sulfate	9.5	0.50	10.00	0	94.9	90	110			

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708109

16-Aug-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW	Batch ID: W44667	RunNo: 44667
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1412441 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708109

16-Aug-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID rb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW	Batch ID: W44667	RunNo: 44667
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1412441 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.5	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES
Client ID: LCSW	Batch ID: W44667	RunNo: 44667
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1412442 Units: µg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130			
Toluene	19	1.0	20.00	0	96.6	70	130			
Chlorobenzene	20	1.0	20.00	0	99.9	70	130			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708109

16-Aug-17

Client: Blagg Engineering

Project: JACQUEZ COM 5

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **W44667**	RunNo: **44667**
Prep Date:	Analysis Date: **8/2/2017**	SeqNo: **1412442** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22	1.0	20.00	0	108	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	92.8	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.1		10.00		91.0	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Value above quantitation range
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708109**

16-Aug-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID **MB-A**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A44916**	RunNo: **44916**
Prep Date:	Analysis Date: **8/12/2017**	SeqNo: **1420300** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Iron	ND	0.020								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID **LCS-A**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A44916**	RunNo: **44916**
Prep Date:	Analysis Date: **8/12/2017**	SeqNo: **1420301** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	49	1.0	50.00	0	99.0	80	120			
Iron	0.48	0.020	0.5000	0	96.4	80	120			
Magnesium	51	1.0	50.00	0	102	80	120			
Potassium	50	1.0	50.00	0	99.9	80	120			
Sodium	51	1.0	50.00	0	103	80	120			

Qualifiers:

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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT

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Hall Environmental Analysis Laboratory, Inc.

16-Aug-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID mb-1	SampType: mblk	TestCode: SM2320B: Alkalinity							
Client ID: PBW	Batch ID: R44694	RunNo: 44694							
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1413314	Units: mg/L CaCO3						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID lcs-1	SampType: lcs	TestCode: SM2320B: Alkalinity							
Client ID: LCSW	Batch ID: R44694	RunNo: 44694							
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1413315	Units: mg/L CaCO3						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	77.96	20.00	80.00	0	97.4	90	110			

Sample ID mb-2	SampType: mblk	TestCode: SM2320B: Alkalinity							
Client ID: PBW	Batch ID: R44694	RunNo: 44694							
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1413338	Units: mg/L CaCO3						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	ND	20.00								

Sample ID lcs-2	SampType: lcs	TestCode: SM2320B: Alkalinity							
Client ID: LCSW	Batch ID: R44694	RunNo: 44694							
Prep Date:	Analysis Date: 8/2/2017	SeqNo: 1413340	Units: mg/L CaCO3						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Alkalinity (as CaCO3)	78.52	20.00	80.00	0	98.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708109

16-Aug-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID	MB-33162	SampType:	MBLK		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	PBW	Batch ID:	33162		RunNo:	44736				
Prep Date:	8/3/2017	Analysis Date:	8/4/2017		SeqNo:	1414683	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID	LCS-33162	SampType:	LCS		TestCode:	SM2540C MOD: Total Dissolved Solids				
Client ID:	LCSW	Batch ID:	33162		RunNo:	44736				
Prep Date:	8/3/2017	Analysis Date:	8/4/2017		SeqNo:	1414684	Units:	mg/L		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1010	20.0	1000	0	101	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1708109 | RcptNo: 1

Received By: Anne Thorne 8/2/2017 7:25:00 AM

Completed By: Anne Thorne 8/2/2017 7:51:40 AM

Reviewed By: 8/2/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

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

HNO3

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. 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:			

17. Additional remarks:

SAMPLE POURED OFF, FILTERED & PRESERVED IN LAB w/.25 mL HN03 FOR ACCEPTALBE pH FOR DISSOLVED METALS/at 8/2/17

18. Cooler Information

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 1708109 RcptNo: 1

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes			

Chain-of-Custody Record

Client: BP America
Blagg Engineering Inc
Mailing Address:

Phone #: (505) 320-1183
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: SAME DAY BTEX
☐ Standard ☒ Rush ASAP
Project Name: JACQUEZ COM 5
Project #:
Project Manager: STEVE MOSKAL
Sampler: JEFF BLAGG
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.6-0.5+0.0=3.6

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 Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA) FL AT 08/02/17	8270 (Semi-VOA)	API WATER				Air Bubbles (Y or N)
8/1/2017	0905	WATER	STOCK POND	3 VOA 1 LITER	HCL COOL	1708109 001										X		X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/1/2017	1030	Jeff Blagg	[signature]	8/1/2017	1030
8/1/17	1814	[signature]	[signature]	08/02/17	0125

Remarks: BILL BP CONTACT: STEVE MOSKAL
VID: VMOS6HQFEC

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.

Laboratory Analytical Data Reports

Wellpad Remediation and Historic Pit

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

August 27, 2017

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: Jacquez Com 5 OrderNo.: 1708D72

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/24/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1708D72**
Date Reported: **8/27/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708D72-001

Client Sample ID: 95 BGT Area 7-pt (2'-5.5')
Collection Date: 8/23/2017 2:15:00 PM
Matrix: MEOH (SOIL) **Received Date:** 8/24/2017 6:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/24/2017 12:24:45 PM	33539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/24/2017 10:43:43 AM	33533
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/24/2017 10:43:43 AM	33533
Surr: DNOP	96.8	70-130		%Rec	1	8/24/2017 10:43:43 AM	33533
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/24/2017 10:27:11 AM	33513
Surr: BFB	90.3	54-150		%Rec	1	8/24/2017 10:27:11 AM	33513
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	8/24/2017 10:27:11 AM	33513
Toluene	ND	0.036		mg/Kg	1	8/24/2017 10:27:11 AM	33513
Ethylbenzene	ND	0.036		mg/Kg	1	8/24/2017 10:27:11 AM	33513
Xylenes, Total	ND	0.072		mg/Kg	1	8/24/2017 10:27:11 AM	33513
Surr: 4-Bromofluorobenzene	99.9	66.6-132		%Rec	1	8/24/2017 10:27:11 AM	33513

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708D72-002
Client Sample ID: West Area 7-pt (6"-3')
Collection Date: 8/23/2017 2:24:00 PM
Matrix: MEOH (SOIL)
Received Date: 8/24/2017 6:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/24/2017 12:37:10 PM	33539
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/24/2017 11:11:46 AM	33533
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/24/2017 11:11:46 AM	33533
Surr: DNOP	98.5	70-130		%Rec	1	8/24/2017 11:11:46 AM	33533
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	8/24/2017 10:50:57 AM	33513
Surr: BFB	89.0	54-150		%Rec	1	8/24/2017 10:50:57 AM	33513
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	8/24/2017 10:50:57 AM	33513
Toluene	ND	0.038		mg/Kg	1	8/24/2017 10:50:57 AM	33513
Ethylbenzene	ND	0.038		mg/Kg	1	8/24/2017 10:50:57 AM	33513
Xylenes, Total	ND	0.076		mg/Kg	1	8/24/2017 10:50:57 AM	33513
Surr: 4-Bromofluorobenzene	97.8	66.6-132		%Rec	1	8/24/2017 10:50:57 AM	33513

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708D72**

27-Aug-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33539	SampType:	mblk	TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS	Batch ID:	33539	RunNo:	45189				
Prep Date:	8/24/2017	Analysis Date:	8/24/2017	SeqNo:	1432108	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33539	SampType:	lcs	TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS	Batch ID:	33539	RunNo:	45189				
Prep Date:	8/24/2017	Analysis Date:	8/24/2017	SeqNo:	1432109	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708D72**

27-Aug-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	LCS-33533	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	33533		RunNo:	45181				
Prep Date:	8/24/2017	Analysis Date:	8/24/2017		SeqNo:	1430495	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.1	73.2	114			
Surr: DNOP	4.6		5.000		93.0	70	130			

Sample ID	MB-33533	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	33533		RunNo:	45181				
Prep Date:	8/24/2017	Analysis Date:	8/24/2017		SeqNo:	1430496	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		99.1	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708D72**

27-Aug-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33513	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	33513		RunNo:	45186					
Prep Date:	8/23/2017	Analysis Date:	8/24/2017		SeqNo:	1431549	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	900		1000		89.5	54	150				

Sample ID	LCS-33513	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	33513		RunNo:	45186					
Prep Date:	8/23/2017	Analysis Date:	8/24/2017		SeqNo:	1431550	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	76.4	125				
Surr: BFB	970		1000		97.0	54	150				

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708D72**

27-Aug-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID **MB-33513**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **33513**	RunNo: **45186**
Prep Date: **8/23/2017**	Analysis Date: **8/24/2017**	SeqNo: **1431581** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	66.6	132			

Sample ID **LCS-33513**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **33513**	RunNo: **45186**
Prep Date: **8/23/2017**	Analysis Date: **8/24/2017**	SeqNo: **1431582** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.4	80	120			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	66.6	132			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1708D72 | RcptNo: 1

Received By: Ashley Gallegos 8/24/2017 6:15:00 AM

Completed By: Ashley Gallegos 8/24/2017 6:53:11 AM

Reviewed By: ENM 8/24/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. 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: _____

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

Chain-of-Custody Record

Client: BP America

Blagg Engineering

Mailing Address:

Phone #: 505-320-1183

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: SAME DAY

☐ Standard ☒ Rush

Project Name: JACQUEZ COM 5

Project #:

Project Manager: Steve Moskal

Sampler: Jeff Blagg

On Ice: ☒ Yes ☐ No

Sample Temperature:

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1708D72	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
8/23/17	1415	Soil	QC BGT Area 7-pt (2'-5½')	4oz x1	cool	-001	X		X									X				
11	1424	11	West Area 7-pt (6"-3')	11	11	-002	X		X									X				

Remarks: Bill BP Contact: Steve Moskal

VOC: VH1XONEVRM

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/23/17	1604	Jeff Blagg	Christine Walker	8/23/17	1604
8/23/17	1934	Christine Walker	Ashley Gallegos	08/24/17	0615

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 01, 2017

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: Jacquez Com 5 OrderNo.: 1708F18

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/26/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1708F18**
Date Reported: **9/1/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708F18-001
Matrix: MEOH (SOIL)
Client Sample ID: Historic Pit 10-Pt (11'-18')
Collection Date: 8/25/2017 12:30:00 PM
Received Date: 8/26/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2017 2:18:31 PM	33585
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	44	9.2		mg/Kg	1	8/28/2017 11:42:23 AM	33577
Motor Oil Range Organics (MRO)	470	46		mg/Kg	1	8/28/2017 11:42:23 AM	33577
Surr: DNOP	102	70-130		%Rec	1	8/28/2017 11:42:23 AM	33577
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	16		mg/Kg	5	8/28/2017 1:00:17 PM	G45253
Surr: BFB	78.5	54-150		%Rec	5	8/28/2017 1:00:17 PM	G45253
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.079		mg/Kg	5	8/28/2017 1:00:17 PM	B45253
Toluene	ND	0.16		mg/Kg	5	8/28/2017 1:00:17 PM	B45253
Ethylbenzene	ND	0.16		mg/Kg	5	8/28/2017 1:00:17 PM	B45253
Xylenes, Total	ND	0.31		mg/Kg	5	8/28/2017 1:00:17 PM	B45253
Surr: 4-Bromofluorobenzene	115	66.6-132		%Rec	5	8/28/2017 1:00:17 PM	B45253

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F18**

01-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33585	SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS	Batch ID:	33585		RunNo:	45254				
Prep Date:	8/28/2017	Analysis Date:	8/28/2017		SeqNo:	1434156	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33585	SampType:	lcs		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS	Batch ID:	33585		RunNo:	45254				
Prep Date:	8/28/2017	Analysis Date:	8/28/2017		SeqNo:	1434157	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.3	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F18**

01-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID **LCS-33577**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **33577**			RunNo: **45248**					
Prep Date: **8/28/2017**	Analysis Date: **8/28/2017**			SeqNo: **1432929**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.9	73.2	114			
Surr: DNOP	4.0		5.000		80.9	70	130			

Sample ID **MB-33577**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **33577**			RunNo: **45248**					
Prep Date: **8/28/2017**	Analysis Date: **8/28/2017**			SeqNo: **1432930**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F18**

01-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G45253**	RunNo: **45253**
Prep Date:	Analysis Date: **8/28/2017**	SeqNo: **1433360** 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	830		1000		82.6	54	150			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G45253**	RunNo: **45253**
Prep Date:	Analysis Date: **8/28/2017**	SeqNo: **1433361** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.6	76.4	125			
Surr: BFB	920		1000		91.9	54	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F18**

01-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B45253**	RunNo: **45253**
Prep Date:	Analysis Date: **8/28/2017**	SeqNo: **1433381** 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	1.2		1.000		120	66.6	132			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B45253**	RunNo: **45253**
Prep Date:	Analysis Date: **8/28/2017**	SeqNo: **1433382** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		124	66.6	132			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1708F18 | RcptNo: 1

Received By: Andy Freeman 8/28/2017 10:00:00 AM

Completed By: Erin Melendrez 8/28/2017 8:31:23 AM

Reviewed By: JO 8-28-17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. 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: _____

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

Chain-of-Custody Record

Client: BP AMERICA
BLAGG ENGINEERING
Mailing Address:
Phone #: 505-320-1183
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time: SAME DAY
☐ Standard ☒ Rush
Project Name: JACQUEZ COM S
Project #:
Project Manager: STEVE MOSKAL
Sampler: Jeff Blagg
On Ice: ☒ Yes ☐ No
Sample Temperature: 4.9°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 Request ID	Container Type and #	Preservative Type	HEAL No. 1708F18	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
8/25/17	1230	SOIL	Historic Pit 10-pt (11'-18')	4oz x 1	COOL	-001	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/25/2017	1425	Jeff Blagg		8/26/17	1000
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Bill BP Contact: Steve Moskal
VID: VH600NEVRM

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.

Laboratory Analytical Data Reports

Off Wellpad Soil Remediation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 06, 2017

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL:
FAX

RE: Jacquez Com 5 OrderNo.: 1708F68

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/29/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1708F68**
Date Reported: **9/6/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708F68-001 **Matrix:** SOIL

Client Sample ID: Zone 0'-100'
Collection Date: 8/28/2017 2:24:00 PM
Received Date: 8/29/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 10:59:43 AM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2017 10:23:54 AM	33625
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2017 10:23:54 AM	33625
Surr: DNOP	94.8	70-130		%Rec	1	8/31/2017 10:23:54 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2017 9:28:32 AM	33607
Surr: BFB	80.2	54-150		%Rec	1	8/30/2017 9:28:32 AM	33607
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	8/30/2017 1:33:42 PM	33607
Toluene	ND	0.048		mg/Kg	1	8/30/2017 1:33:42 PM	33607
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2017 1:33:42 PM	33607
Xylenes, Total	ND	0.095		mg/Kg	1	8/30/2017 1:33:42 PM	33607
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	8/30/2017 1:33:42 PM	33607
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	8/30/2017 1:33:42 PM	33607
Surr: Dibromofluoromethane	113	70-130		%Rec	1	8/30/2017 1:33:42 PM	33607
Surr: Toluene-d8	93.1	70-130		%Rec	1	8/30/2017 1:33:42 PM	33607

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

Qualifiers:

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

Analytical Report
Lab Order **1708F68**
Date Reported: **9/6/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708F68-002 **Matrix:** SOIL

Client Sample ID: Zone 100'-200'
Collection Date: 8/28/2017 2:29:00 PM
Received Date: 8/29/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 11:12:08 AM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/31/2017 10:48:26 AM	33625
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2017 10:48:26 AM	33625
Surr: DNOP	94.8	70-130		%Rec	1	8/31/2017 10:48:26 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2017 9:52:35 AM	33607
Surr: BFB	81.0	54-150		%Rec	1	8/30/2017 9:52:35 AM	33607
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	8/30/2017 3:00:46 PM	33607
Toluene	ND	0.047		mg/Kg	1	8/30/2017 3:00:46 PM	33607
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2017 3:00:46 PM	33607
Xylenes, Total	ND	0.094		mg/Kg	1	8/30/2017 3:00:46 PM	33607
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	8/30/2017 3:00:46 PM	33607
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	8/30/2017 3:00:46 PM	33607
Surr: Dibromofluoromethane	111	70-130		%Rec	1	8/30/2017 3:00:46 PM	33607
Surr: Toluene-d8	91.9	70-130		%Rec	1	8/30/2017 3:00:46 PM	33607

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708F68-003 **Matrix:** SOIL

Client Sample ID: Zone 200'-300'
Collection Date: 8/28/2017 2:34:00 PM
Received Date: 8/29/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 11:24:33 AM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/31/2017 11:13:04 AM	33625
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2017 11:13:04 AM	33625
Surr: DNOP	106	70-130		%Rec	1	8/31/2017 11:13:04 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/30/2017 10:16:41 AM	33607
Surr: BFB	78.0	54-150		%Rec	1	8/30/2017 10:16:41 AM	33607
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	8/30/2017 3:29:51 PM	33607
Toluene	ND	0.049		mg/Kg	1	8/30/2017 3:29:51 PM	33607
Ethylbenzene	ND	0.049		mg/Kg	1	8/30/2017 3:29:51 PM	33607
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2017 3:29:51 PM	33607
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	8/30/2017 3:29:51 PM	33607
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	8/30/2017 3:29:51 PM	33607
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/30/2017 3:29:51 PM	33607
Surr: Toluene-d8	94.0	70-130		%Rec	1	8/30/2017 3:29:51 PM	33607

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708F68-004 **Matrix:** SOIL

Client Sample ID: Zone 300'-400'
Collection Date: 8/28/2017 2:40:00 PM
Received Date: 8/29/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 12:01:47 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/31/2017 11:37:40 AM	33625
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2017 11:37:40 AM	33625
Surr: DNOP	106	70-130		%Rec	1	8/31/2017 11:37:40 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2017 10:40:40 AM	33607
Surr: BFB	78.0	54-150		%Rec	1	8/30/2017 10:40:40 AM	33607
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	8/30/2017 3:58:55 PM	33607
Toluene	ND	0.048		mg/Kg	1	8/30/2017 3:58:55 PM	33607
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2017 3:58:55 PM	33607
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2017 3:58:55 PM	33607
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	8/30/2017 3:58:55 PM	33607
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	8/30/2017 3:58:55 PM	33607
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/30/2017 3:58:55 PM	33607
Surr: Toluene-d8	92.8	70-130		%Rec	1	8/30/2017 3:58:55 PM	33607

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708F68-005 **Matrix:** SOIL

Client Sample ID: Zone 400'-500'
Collection Date: 8/28/2017 2:47:00 PM
Received Date: 8/29/2017 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 12:14:12 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/31/2017 12:02:29 PM	33625
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/31/2017 12:02:29 PM	33625
Surr: DNOP	95.1	70-130		%Rec	1	8/31/2017 12:02:29 PM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/30/2017 11:04:43 AM	33607
Surr: BFB	76.4	54-150		%Rec	1	8/30/2017 11:04:43 AM	33607
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	8/30/2017 4:27:54 PM	33607
Toluene	ND	0.049		mg/Kg	1	8/30/2017 4:27:54 PM	33607
Ethylbenzene	ND	0.049		mg/Kg	1	8/30/2017 4:27:54 PM	33607
Xylenes, Total	ND	0.099		mg/Kg	1	8/30/2017 4:27:54 PM	33607
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	8/30/2017 4:27:54 PM	33607
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	8/30/2017 4:27:54 PM	33607
Surr: Dibromofluoromethane	113	70-130		%Rec	1	8/30/2017 4:27:54 PM	33607
Surr: Toluene-d8	92.8	70-130		%Rec	1	8/30/2017 4:27:54 PM	33607

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F68**

06-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33647	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	33647	RunNo:	45341					
Prep Date:	8/31/2017	Analysis Date:	8/31/2017	SeqNo:	1437822	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33647	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	33647	RunNo:	45341					
Prep Date:	8/31/2017	Analysis Date:	8/31/2017	SeqNo:	1437823	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F68**

06-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33625	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	33625		RunNo:	45328				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1436167	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	70	130			

Sample ID	LCS-33625	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	33625		RunNo:	45328				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1436348	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	73.2	114			
Surr: DNOP	4.9		5.000		98.9	70	130			

Sample ID	1708F68-001AMS	SampType:	MS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	Zone 0'-100'	Batch ID:	33625		RunNo:	45328				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1437055	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.2	45.91	5.798	83.4	55.8	122			
Surr: DNOP	4.0		4.591		86.7	70	130			

Sample ID	1708F68-001AMSD	SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	Zone 0'-100'	Batch ID:	33625		RunNo:	45328				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1437056	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.40	5.798	88.6	55.8	122	13.5	20	
Surr: DNOP	4.5		5.040		90.0	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F68**

06-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33607	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	33607		RunNo:	45303				
Prep Date:	8/29/2017	Analysis Date:	8/30/2017		SeqNo:	1435534	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	790		1000		78.6	54	150			

Sample ID	LCS-33607	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	33607		RunNo:	45303				
Prep Date:	8/29/2017	Analysis Date:	8/30/2017		SeqNo:	1435535	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.4	76.4	125			
Surr: BFB	880		1000		87.8	54	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F68**

06-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	mb-33607	SampType:	MBLK		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	PBS	Batch ID:	33607		RunNo:	45322				
Prep Date:	8/29/2017	Analysis Date:	8/30/2017		SeqNo:	1435743	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.58		0.5000		116	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.6	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		115	70	130			
Surr: Toluene-d8	0.47		0.5000		93.1	70	130			

Sample ID	lcs-33607	SampType:	LCS		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	LCSS	Batch ID:	33607		RunNo:	45322				
Prep Date:	8/29/2017	Analysis Date:	8/30/2017		SeqNo:	1435744	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	118	70	130			
Toluene	0.95	0.050	1.000	0	94.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.58		0.5000		116	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.3	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		109	70	130			
Surr: Toluene-d8	0.48		0.5000		96.1	70	130			

Sample ID	1708f68-001ams	SampType:	MS		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	Zone 0'-100'	Batch ID:	33607		RunNo:	45322				
Prep Date:	8/29/2017	Analysis Date:	8/30/2017		SeqNo:	1435746	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.024	0.9407	0	123	61.9	146			
Toluene	0.95	0.047	0.9407	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	0.54		0.4704		114	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.4704		92.7	70	130			
Surr: Dibromofluoromethane	0.51		0.4704		108	70	130			
Surr: Toluene-d8	0.45		0.4704		96.2	70	130			

Sample ID	1708f68-001amsd	SampType:	MSD		TestCode:	EPA Method 8260B: Volatiles Short List				
Client ID:	Zone 0'-100'	Batch ID:	33607		RunNo:	45322				
Prep Date:	8/29/2017	Analysis Date:	8/30/2017		SeqNo:	1435747	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.024	0.9506	0	121	61.9	146	0.843	20	
Toluene	0.91	0.048	0.9506	0	96.0	70	130	4.02	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708F68**

06-Sep-17

Client: Blagg Engineering

Project: Jacquez Com 5

Sample ID	1708f68-001amsd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	Zone 0'-100'	Batch ID:	33607	RunNo:	45322					
Prep Date:	8/29/2017	Analysis Date:	8/30/2017	SeqNo:	1435747	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.55		0.4753		116	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.43		0.4753		89.7	70	130	0	0	
Surr: Dibromofluoromethane	0.50		0.4753		105	70	130	0	0	
Surr: Toluene-d8	0.44		0.4753		92.5	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1708F68 | RcptNo: 1

Received By: Isaiah Ortiz 8/29/2017 8:00:00 AM

Completed By: Erin Melendrez 8/29/2017 8:58:02 AM

Reviewed By: 8/29/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. 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: _____

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: BP America

Blagg Engineering Inc

Mailing Address:

Phone #: (505) 320-1183

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: By Thursday 8/31/2017

☐ Standard ☒ Rush

Project Name: Jacquez Com 5

Project #:

Project Manager: Steve Moskal

Sampler: Jeff Blagg

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1708F68	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	8260 (BTEX only)	Chloride			Air Bubbles (Y or N)
8/28/17	1424	Soil	Zone 0'-100'	4 oz x 1	Cool	-001			X									X	X			
	1429		Zone 100'-200'			-002																
	1434		Zone 200'-300'			-003																
	1440		Zone 300'-400'			-004																
	1447		Zone 400'-500'			-005																

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/28/17	1642	Jeff Blagg	Chris Walls	8/28/2017	1642
8/28/17	2041	Chris Walls	I. Date	8/29/17	08:00

Remarks: Bill BP

VID: YHIXONEVRM

Contact: Steve Moskal

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 06, 2017

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: Jacquez Com 5 OrderNo.: 1708G47

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/30/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1708G47**
Date Reported: **9/6/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-001 **Matrix:** SOIL

Client Sample ID: Zone 500'-600'
Collection Date: 8/29/2017 2:34:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 12:51:27 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/31/2017 10:37:57 AM	33625
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2017 10:37:57 AM	33625
Surr: DNOP	90.8	70-130		%Rec	1	8/31/2017 10:37:57 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2017 1:23:02 PM	33627
Surr: BFB	77.3	54-150		%Rec	1	8/31/2017 1:23:02 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.025		mg/Kg	1	8/31/2017 11:35:12 AM	33627
Toluene	ND	0.049		mg/Kg	1	8/31/2017 11:35:12 AM	33627
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2017 11:35:12 AM	33627
Xylenes, Total	ND	0.098		mg/Kg	1	8/31/2017 11:35:12 AM	33627
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	8/31/2017 11:35:12 AM	33627
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	8/31/2017 11:35:12 AM	33627
Surr: Dibromofluoromethane	114	70-130		%Rec	1	8/31/2017 11:35:12 AM	33627
Surr: Toluene-d8	96.4	70-130		%Rec	1	8/31/2017 11:35:12 AM	33627

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-002 **Matrix:** SOIL

Client Sample ID: Zone 600'-700'
Collection Date: 8/29/2017 2:39:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 1:28:40 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/31/2017 11:05:49 AM	33625
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2017 11:05:49 AM	33625
Surr: DNOP	92.4	70-130		%Rec	1	8/31/2017 11:05:49 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2017 1:46:57 PM	33627
Surr: BFB	79.1	54-150		%Rec	1	8/31/2017 1:46:57 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	8/31/2017 1:01:29 PM	33627
Toluene	ND	0.047		mg/Kg	1	8/31/2017 1:01:29 PM	33627
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2017 1:01:29 PM	33627
Xylenes, Total	ND	0.095		mg/Kg	1	8/31/2017 1:01:29 PM	33627
Surr: 1,2-Dichloroethane-d4	119	70-130		%Rec	1	8/31/2017 1:01:29 PM	33627
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	8/31/2017 1:01:29 PM	33627
Surr: Dibromofluoromethane	116	70-130		%Rec	1	8/31/2017 1:01:29 PM	33627
Surr: Toluene-d8	93.9	70-130		%Rec	1	8/31/2017 1:01:29 PM	33627

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

Qualifiers:

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

Analytical Report
Lab Order **1708G47**
Date Reported: **9/6/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-003 **Matrix:** SOIL

Client Sample ID: Zone 700'-800'
Collection Date: 8/29/2017 2:45:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 1:41:04 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2017 11:33:46 AM	33625
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2017 11:33:46 AM	33625
Surr: DNOP	92.6	70-130		%Rec	1	8/31/2017 11:33:46 AM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/31/2017 2:58:51 PM	33627
Surr: BFB	79.1	54-150		%Rec	1	8/31/2017 2:58:51 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	8/31/2017 1:30:23 PM	33627
Toluene	ND	0.046		mg/Kg	1	8/31/2017 1:30:23 PM	33627
Ethylbenzene	ND	0.046		mg/Kg	1	8/31/2017 1:30:23 PM	33627
Xylenes, Total	ND	0.093		mg/Kg	1	8/31/2017 1:30:23 PM	33627
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	8/31/2017 1:30:23 PM	33627
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	8/31/2017 1:30:23 PM	33627
Surr: Dibromofluoromethane	111	70-130		%Rec	1	8/31/2017 1:30:23 PM	33627
Surr: Toluene-d8	93.9	70-130		%Rec	1	8/31/2017 1:30:23 PM	33627

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-004 **Matrix:** SOIL

Client Sample ID: Zone 800'-900'
Collection Date: 8/29/2017 2:51:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 1:53:29 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/31/2017 12:01:50 PM	33625
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2017 12:01:50 PM	33625
Surr: DNOP	93.0	70-130		%Rec	1	8/31/2017 12:01:50 PM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2017 3:22:51 PM	33627
Surr: BFB	78.3	54-150		%Rec	1	8/31/2017 3:22:51 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	8/31/2017 1:59:11 PM	33627
Toluene	ND	0.047		mg/Kg	1	8/31/2017 1:59:11 PM	33627
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2017 1:59:11 PM	33627
Xylenes, Total	ND	0.095		mg/Kg	1	8/31/2017 1:59:11 PM	33627
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	8/31/2017 1:59:11 PM	33627
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	8/31/2017 1:59:11 PM	33627
Surr: Dibromofluoromethane	113	70-130		%Rec	1	8/31/2017 1:59:11 PM	33627
Surr: Toluene-d8	92.2	70-130		%Rec	1	8/31/2017 1:59:11 PM	33627

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-005 **Matrix:** SOIL

Client Sample ID: Zone 900'-1000'
Collection Date: 8/29/2017 2:56:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 2:30:42 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/31/2017 12:30:02 PM	33625
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/31/2017 12:30:02 PM	33625
Surr: DNOP	87.6	70-130		%Rec	1	8/31/2017 12:30:02 PM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/31/2017 3:46:52 PM	33627
Surr: BFB	80.0	54-150		%Rec	1	8/31/2017 3:46:52 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	8/31/2017 2:28:03 PM	33627
Toluene	ND	0.046		mg/Kg	1	8/31/2017 2:28:03 PM	33627
Ethylbenzene	ND	0.046		mg/Kg	1	8/31/2017 2:28:03 PM	33627
Xylenes, Total	ND	0.092		mg/Kg	1	8/31/2017 2:28:03 PM	33627
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	8/31/2017 2:28:03 PM	33627
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	8/31/2017 2:28:03 PM	33627
Surr: Dibromofluoromethane	114	70-130		%Rec	1	8/31/2017 2:28:03 PM	33627
Surr: Toluene-d8	94.4	70-130		%Rec	1	8/31/2017 2:28:03 PM	33627

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-006 **Matrix:** SOIL

Client Sample ID: Zone 1000'-1100'
Collection Date: 8/29/2017 3:01:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 2:43:06 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/31/2017 12:58:03 PM	33625
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/31/2017 12:58:03 PM	33625
Surr: DNOP	96.6	70-130		%Rec	1	8/31/2017 12:58:03 PM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/31/2017 4:10:54 PM	33627
Surr: BFB	80.2	54-150		%Rec	1	8/31/2017 4:10:54 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	8/31/2017 2:57:00 PM	33627
Toluene	ND	0.049		mg/Kg	1	8/31/2017 2:57:00 PM	33627
Ethylbenzene	ND	0.049		mg/Kg	1	8/31/2017 2:57:00 PM	33627
Xylenes, Total	ND	0.098		mg/Kg	1	8/31/2017 2:57:00 PM	33627
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	8/31/2017 2:57:00 PM	33627
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	8/31/2017 2:57:00 PM	33627
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/31/2017 2:57:00 PM	33627
Surr: Toluene-d8	95.3	70-130		%Rec	1	8/31/2017 2:57:00 PM	33627

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez Com 5
Lab ID: 1708G47-007 **Matrix:** SOIL

Client Sample ID: Zone 1100'-1200'
Collection Date: 8/29/2017 3:06:00 PM
Received Date: 8/30/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/31/2017 2:55:31 PM	33647
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2017 1:26:05 PM	33625
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2017 1:26:05 PM	33625
Surr: DNOP	93.0	70-130		%Rec	1	8/31/2017 1:26:05 PM	33625
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/31/2017 4:34:56 PM	33627
Surr: BFB	78.4	54-150		%Rec	1	8/31/2017 4:34:56 PM	33627
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.023		mg/Kg	1	8/31/2017 3:25:57 PM	33627
Toluene	ND	0.047		mg/Kg	1	8/31/2017 3:25:57 PM	33627
Ethylbenzene	ND	0.047		mg/Kg	1	8/31/2017 3:25:57 PM	33627
Xylenes, Total	ND	0.094		mg/Kg	1	8/31/2017 3:25:57 PM	33627
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	8/31/2017 3:25:57 PM	33627
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	8/31/2017 3:25:57 PM	33627
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/31/2017 3:25:57 PM	33627
Surr: Toluene-d8	92.9	70-130		%Rec	1	8/31/2017 3:25:57 PM	33627

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708G47

06-Sep-17

Client: Blagg Engineering

Project: Jacquez Com 5

Sample ID	MB-33647	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	33647	RunNo:	45341					
Prep Date:	8/31/2017	Analysis Date:	8/31/2017	SeqNo:	1437822	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33647	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	33647	RunNo:	45341					
Prep Date:	8/31/2017	Analysis Date:	8/31/2017	SeqNo:	1437823	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708G47

06-Sep-17

Client: Blagg Engineering

Project: Jacquez Com 5

Sample ID	MB-33625	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	33625		RunNo:	45328				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1436167	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.8	70	130			

Sample ID	LCS-33625	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	33625		RunNo:	45328				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1436348	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	73.2	114			
Surr: DNOP	4.9		5.000		98.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708G47**

06-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID	MB-33627	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	33627		RunNo:	45344				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1437225	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	810		1000		80.8	54	150			

Sample ID	LCS-33627	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	33627		RunNo:	45344				
Prep Date:	8/30/2017	Analysis Date:	8/31/2017		SeqNo:	1437226	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.3	76.4	125			
Surr: BFB	890		1000		88.5	54	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708G47

06-Sep-17

Client: Blagg Engineering
Project: Jacquez Com 5

Sample ID mb-33627	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List
Client ID: PBS	Batch ID: 33627	RunNo: 45355
Prep Date: 8/30/2017	Analysis Date: 8/31/2017	SeqNo: 1437307 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.58		0.5000		115	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.3	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		113	70	130			
Surr: Toluene-d8	0.48		0.5000		95.3	70	130			

Sample ID lcs-33627	SampType: LCS	TestCode: EPA Method 8260B: Volatiles Short List
Client ID: LCSS	Batch ID: 33627	RunNo: 45355
Prep Date: 8/30/2017	Analysis Date: 8/31/2017	SeqNo: 1437308 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	109	70	130			
Toluene	0.92	0.050	1.000	0	91.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.56		0.5000		113	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.4	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		96.5	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1708G47 | RcptNo: 1

Received By: Anne Thorne 8/30/2017 7:10:00 AM
Completed By: Anne Thorne 8/30/2017 7:49:50 AM
Reviewed By: 8/30/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. 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: _____

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: BP AMERICA

BLAGG ENGINEERING INC.

Mailing Address:

Phone #: (505) 320-1183

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: BY FRIDAY 9/1/2017
☐ Standard ☒ Rush

Project Name: JACQUEZ COM 5

Project #:

Project Manager: STEVE MOSKAL

Sampler: JEFF BLAGG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HEAL No. 1708647

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	(8260) (BTEX ONLY)	CHLORIDE			Air Bubbles (Y or N)
8/29/2017	1434	SOIL	ZONE 500'-600'	4 oz x 1	COOL	-001			X									X	X			
	1439		ZONE 600'-700'			-002																
	1445		ZONE 700'-800'			-003																
	1451		ZONE 800'-900'			-004																
	1456		ZONE 900'-1000'			-005																
	1501		ZONE 1000'-1100'			-006																
	1506		ZONE 1100'-1200'			-007																

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/29/2017	1701			8/30/2017	1701
Date:	Time:	Relinquished by:	Received by:	Date	Time
8/29/17	1832			08/30/17	0710

Remarks: BILL BP CONTACT: STEVE MOSKAL
VIA: VHIXONEVRM

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

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

Analysis Request

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 06, 2017

Steve Moskal

Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: JACQUEZ COM 5 OrderNo.: 1708H29

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/31/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1708H29**
Date Reported: **9/6/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: JACQUEZ COM 5
Lab ID: 1708H29-001 **Matrix:** SOIL

Client Sample ID: Zone 1200'-1493'
Collection Date: 8/30/2017 2:02:00 PM
Received Date: 8/31/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	9/1/2017 12:03:10 PM	33671
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2017 11:56:25 AM	33650
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2017 11:56:25 AM	33650
Surr: DNOP	98.0	70-130		%Rec	1	9/1/2017 11:56:25 AM	33650
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2017 2:39:26 PM	33653
Surr: BFB	83.1	54-150		%Rec	1	9/1/2017 2:39:26 PM	33653
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/1/2017 2:39:26 PM	33653
Toluene	ND	0.048		mg/Kg	1	9/1/2017 2:39:26 PM	33653
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2017 2:39:26 PM	33653
Xylenes, Total	ND	0.097		mg/Kg	1	9/1/2017 2:39:26 PM	33653
Surr: 4-Bromofluorobenzene	120	66.6-132		%Rec	1	9/1/2017 2:39:26 PM	33653

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: JACQUEZ COM 5
Lab ID: 1708H29-002 **Matrix:** SOIL

Client Sample ID: Zone 1493'-1855'
Collection Date: 8/30/2017 1:56:00 PM
Received Date: 8/31/2017 7:10:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	9/1/2017 12:40:24 PM	33671
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2017 12:21:06 PM	33650
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2017 12:21:06 PM	33650
Surr: DNOP	110	70-130		%Rec	1	9/1/2017 12:21:06 PM	33650
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/1/2017 3:51:22 PM	33653
Surr: BFB	80.1	54-150		%Rec	1	9/1/2017 3:51:22 PM	33653
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	9/1/2017 3:51:22 PM	33653
Toluene	ND	0.048		mg/Kg	1	9/1/2017 3:51:22 PM	33653
Ethylbenzene	ND	0.048		mg/Kg	1	9/1/2017 3:51:22 PM	33653
Xylenes, Total	ND	0.096		mg/Kg	1	9/1/2017 3:51:22 PM	33653
Surr: 4-Bromofluorobenzene	118	66.6-132		%Rec	1	9/1/2017 3:51:22 PM	33653

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708H29**

06-Sep-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID	MB-33671	SampType:	mblk		TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	33671		RunNo:	45372					
Prep Date:	9/1/2017	Analysis Date:	9/1/2017		SeqNo:	1438456	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-33671	SampType:	lcs		TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	33671		RunNo:	45372					
Prep Date:	9/1/2017	Analysis Date:	9/1/2017		SeqNo:	1438457	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	93.7	90	110				

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708H29**

06-Sep-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID	LCS-33650	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	33650		RunNo:	45364				
Prep Date:	8/31/2017	Analysis Date:	9/1/2017		SeqNo:	1437547	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	73.2	114			
Surr: DNOP	4.8		5.000		95.4	70	130			

Sample ID	MB-33650	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	33650		RunNo:	45364				
Prep Date:	8/31/2017	Analysis Date:	9/1/2017		SeqNo:	1437548	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708H29**

06-Sep-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID	MB-33653	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	33653		RunNo:	45374				
Prep Date:	8/31/2017	Analysis Date:	9/1/2017		SeqNo:	1438048	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	810		1000		80.6	54	150			

Sample ID	LCS-33653	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	33653		RunNo:	45374				
Prep Date:	8/31/2017	Analysis Date:	9/1/2017		SeqNo:	1438049	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.1	76.4	125			
Surr: BFB	920		1000		91.7	54	150			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1708H29**

06-Sep-17

Client: Blagg Engineering
Project: JACQUEZ COM 5

Sample ID	MB-33653	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	33653		RunNo:	45374				
Prep Date:	8/31/2017	Analysis Date:	9/1/2017		SeqNo:	1438062	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	1.2		1.000		122	66.6	132			

Sample ID	LCS-33653	SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	LCSS	Batch ID:	33653		RunNo:	45374				
Prep Date:	8/31/2017	Analysis Date:	9/1/2017		SeqNo:	1438063	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	114	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	66.6	132			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG Work Order Number: 1708H29 RcptNo: 1

Received By: Anne Thorne 8/31/2017 7:10:00 AM
Completed By: Anne Thorne 8/31/2017 8:14:11 AM
Reviewed By: IMO 8-31-2017

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (if applicable)

16. 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:			

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: BP AMERICA

BLAGG ENGINEERING INC.

Mailing Address:

Phone #: (505) 320 - 1183

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: By Monday 9-4-2017
☐ Standard ☒ Rush 5 08/31/17 AR

Project Name: JACQUEZ COM 5

Project #:

Project Manager: STEVE MOSKAL

Sampler: JEFF BLAGG

On Ice: ☒ Yes ☐ No

Sample Temperature: 7.8

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1708128	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
8/30/17	1402	SOIL	Zone 1200' - 1493'	4 oz x 1	COOL	001	X		X									X				
"	1356	"	Zone 1493' - 1855'	"	"	002	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/30/17	1552			8/30/17	1552
8/30/17	1905			08/31/17	0710

Remarks: BILL BP CONTACT: STEVE MOSKAL
VID: VHIXONEVRM

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 14, 2017

Steve Moskal
Blagg Engineering
P. O. Box 87
Bloomfield, NM 87413
TEL: (505) 632-1199
FAX (505) 632-3903

RE: Jacquez COM 5 OrderNo.: 1709295

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/7/2017 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1709295**
Date Reported: **9/14/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez COM 5
Lab ID: 1709295-001 **Matrix:** SOIL

Client Sample ID: Historic Pit Spoils Pile 5-pt
Collection Date: 9/6/2017 12:05:00 PM
Received Date: 9/7/2017 7:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/11/2017 10:18:12 AM	33778
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/8/2017 11:31:41 AM	33745
Surr: BFB	82.5	70-130		%Rec	1	9/8/2017 11:31:41 AM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	70	9.2		mg/Kg	1	9/8/2017 11:27:05 AM	33747
Motor Oil Range Organics (MRO)	410	46		mg/Kg	1	9/8/2017 11:27:05 AM	33747
Surr: DNOP	91.3	70-130		%Rec	1	9/8/2017 11:27:05 AM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/8/2017 11:31:41 AM	33745
Toluene	ND	0.049		mg/Kg	1	9/8/2017 11:31:41 AM	33745
Ethylbenzene	ND	0.049		mg/Kg	1	9/8/2017 11:31:41 AM	33745
Xylenes, Total	ND	0.097		mg/Kg	1	9/8/2017 11:31:41 AM	33745
Surr: 1,2-Dichloroethane-d4	124	70-130		%Rec	1	9/8/2017 11:31:41 AM	33745
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	9/8/2017 11:31:41 AM	33745
Surr: Dibromofluoromethane	123	70-130		%Rec	1	9/8/2017 11:31:41 AM	33745
Surr: Toluene-d8	94.7	70-130		%Rec	1	9/8/2017 11:31:41 AM	33745

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering
Project: Jacquez COM 5
Lab ID: 1709295-002 **Matrix:** SOIL

Client Sample ID: East Pad Surface 5-pt
Collection Date: 9/6/2017 12:12:00 PM
Received Date: 9/7/2017 7:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/11/2017 10:30:36 AM	33778
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/8/2017 12:00:30 PM	33745
Surr: BFB	84.9	70-130		%Rec	1	9/8/2017 12:00:30 PM	33745
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/8/2017 10:59:04 AM	33747
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/8/2017 10:59:04 AM	33747
Surr: DNOP	85.0	70-130		%Rec	1	9/8/2017 10:59:04 AM	33747
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	0.024		mg/Kg	1	9/8/2017 12:00:30 PM	33745
Toluene	ND	0.049		mg/Kg	1	9/8/2017 12:00:30 PM	33745
Ethylbenzene	ND	0.049		mg/Kg	1	9/8/2017 12:00:30 PM	33745
Xylenes, Total	ND	0.098		mg/Kg	1	9/8/2017 12:00:30 PM	33745
Surr: 1,2-Dichloroethane-d4	124	70-130		%Rec	1	9/8/2017 12:00:30 PM	33745
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	9/8/2017 12:00:30 PM	33745
Surr: Dibromofluoromethane	120	70-130		%Rec	1	9/8/2017 12:00:30 PM	33745
Surr: Toluene-d8	93.9	70-130		%Rec	1	9/8/2017 12:00:30 PM	33745

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

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709295**

14-Sep-17

Client: Blagg Engineering
Project: Jacquez COM 5

Sample ID	MB-33778	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	33778	RunNo:	45542					
Prep Date:	9/8/2017	Analysis Date:	9/11/2017	SeqNo:	1443846	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-33778	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	33778	RunNo:	45542					
Prep Date:	9/8/2017	Analysis Date:	9/11/2017	SeqNo:	1443847	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1709295**

14-Sep-17

Client: Blagg Engineering

Project: Jacquez COM 5

Sample ID **MB-33747**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **33747**	RunNo: **45495**
Prep Date: **9/7/2017**	Analysis Date: **9/8/2017**	SeqNo: **1442120** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.3	70	130			

Sample ID **LCS-33747**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **33747**	RunNo: **45495**
Prep Date: **9/7/2017**	Analysis Date: **9/8/2017**	SeqNo: **1442271** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.6	73.2	114			
Surr: DNOP	4.5		5.000		89.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709295

14-Sep-17

Client: Blagg Engineering

Project: Jacquez COM 5

Sample ID mb-33745	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List
Client ID: PBS	Batch ID: 33745	RunNo: 45532
Prep Date: 9/7/2017	Analysis Date: 9/8/2017	SeqNo: 1443300 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.65		0.5000		130	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		84.4	70	130			
Surr: Dibromofluoromethane	0.62		0.5000		124	70	130			
Surr: Toluene-d8	0.49		0.5000		97.2	70	130			

Sample ID lcs-33745	SampType: LCS	TestCode: EPA Method 8260B: Volatiles Short List
Client ID: LCSS	Batch ID: 33745	RunNo: 45532
Prep Date: 9/7/2017	Analysis Date: 9/8/2017	SeqNo: 1443301 Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.025	1.000	0	117	70	130			
Toluene	0.89	0.050	1.000	0	89.2	70	130			
Surr: 1,2-Dichloroethane-d4	0.62		0.5000		124	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.4	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.48		0.5000		95.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1709295

14-Sep-17

Client: Blagg Engineering

Project: Jacquez COM 5

Sample ID	mb-33745	SampType:	MBLK		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	PBS	Batch ID:	33745		RunNo:	45532				
Prep Date:	9/7/2017	Analysis Date:	9/8/2017		SeqNo:	1443325	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	430		500.0		86.2	70	130			

Sample ID	lcs-33745	SampType:	LCS		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	LCSS	Batch ID:	33745		RunNo:	45532				
Prep Date:	9/7/2017	Analysis Date:	9/8/2017		SeqNo:	1443326	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.5	70	130			
Surr: BFB	450		500.0		90.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: BLAGG | Work Order Number: 1709295 | RcptNo: 1

Received By: Anne Thorne 9/7/2017 7:15:00 AM

Completed By: Anne Thorne 9/7/2017 8:56:13 AM

Reviewed By: 09/07/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (If applicable)

16. 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: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: BP America	☐ Standard ☒ Rush 9-11-2017
Blagg Engineering, Inc.	Project Name: JACQUEZ COM 5
Mailing Address:	Project #:
Phone #: (505)320-1183	
email or Fax#:	Project Manager: Steve Moskal
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)	
☐ Other ☐ EDD (Type)	Sampler: Jeff Blagg
	On Ice: ☒ Yes ☐ No
	Sample Temperature: 1.0

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1709295	BTEX (8021)		TPH 8015B (GRO / DRO/ MRO)		Chloride										Air Bubbles (Y or N)
9/6/2017	1205	Soil	Historic MT Spoils Pile 5-pt	4 oz x 1	cool	-001	X		X		X										
"	1212	"	East Pad Surface 5-pt	"	"	-002	X		X		X										

Date: 9/6/2017	Time: 1320	Relinquished by: Jeff Blagg	Received by: Christa Walters	Date: 9/6/2017	Time: 1320
Date: 9/6/17	Time: 2011	Relinquished by: Christa Walters	Received by:	Date: 09/07/17	Time: 0715

Remarks: Bill BP
BP Contact: Steve Moskal
VID: VHIXONEVRM

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.