

NMOCD

APR 17 2018

Form C-141
Revised April 3, 2017

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

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

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Benson-Montin-Greer Drilling Corp.	Contact	Zach Stradling
Address	4900 College Blvd., Farmington, NM 87402	Telephone No.	505-325-8874
Facility Name	Homestead Ranch A #2	Facility Type	Producing Well
Surface Owner	Private	Mineral Owner	Private
		API No.	30-039-23586

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	34	25N	02W	990'	South	1850'	West	Rio Arriba, NM

Latitude N36.349903 Longitude W107.040127 NAD83

NATURE OF RELEASE

Type of Release	Condensate	Volume of Release	Unknown	Volume Recovered	None
Source of Release	Former drilling reserve pit	Date and Hour of Occurrence	Unknown	Date and Hour of Discovery	Nov 8, 2017
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*

NMOCD

APR 17 2018

Describe Cause of Problem and Remedial Action Taken.*
On November 8th, 2017, BMG discovered evidence of historic contamination approximately 4 feet below ground surface. Other debris also found included surface trash, weeds and vegetation, timers, and a crushed/cut drum containing soils saturated with product and paraffin. BMG continued to excavate to a depth of approximately 17 feet before deciding to remediate remaining contaminated soil via soil shredding. Please see attached remediation report.

Describe Area Affected and Cleanup Action Taken.*
BMG remediated the remainder of the contaminated soil by means of soil shredding. Please see attached remediation report.

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:		<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Zach Stradling		Approved by Environmental Specialist:	
Title: Vice President		Approval Date: 4/23/2018	Expiration Date:
E-mail Address: zstradling@bmgdrilling.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 04/16/2018	Phone: 505-325-8874		

NOK 1206030214

* Attach Additional Sheets If Necessary

123

**Remediaton
of
Hydrocarbon Impacted Soil**

**Homestead Ranch A #2
(N) Sec 34 – T25N – R2W
API: 30-039-23586
Rio Arriba County, New Mexico**

Prepared for:
Benson-Montin-Greer Drilling Corp.
Farmington, New Mexico

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

April 13, 2018

NMOC
APR 17 2018
DISTRICT III

**REMEDICATION
OF
HYDROCARBON IMPACTED SOIL**

TABLE OF CONTENTS

Introduction	1
Remediation Activities	1
Conclusions and Recommendations	3
Closure and Limitations	4

TABLES

Table 1: Summary Excavation Closure Analytical Data

Table 2: Summary Treated Soil Pile Analytical Data

Table 3: Summary Vadose Zone Analytical Data

APPENDICES

Appendix A: Figures

Figure 1: Site Map

Figure 2: Contour Map of Remedial Excavation

Figure 3: Remedial Excavation Sampling Zones

Figure 4: Vadose Zone Map

Figure 5: Previous Excavation (Provided by Animas Environmental)

Appendix B: Excavation Closure - Laboratory Analytical Data Reports

Appendix C: Treated Soil – Laboratory Analytical Data Reports

Appendix D: Vadose Zone – Laboratory Analytical Data Report

Appendix E: Site Photographs

REMEDIAION
OF
HYDROCARBON IMPACTED SOILS

INTRODUCTION

Blagg Engineering Inc. (BEI) has been retained by Benson-Montin-Greer Drilling Corp. (BMG) to monitor, sample and document environmental remediation of hydrocarbon impacts at the Homestead Ranch A #2, an oil well located in rural Rio Arriba County, New Mexico at (N) Sec. 34 – T25N – R2W (Figure 1). The historical origin of the hydrocarbon release at the site is not known but may have been from potential flow line leaks or use of unlined discharge pits, a practice previously authorized by regulatory agencies. BMG began remedial excavations in 2017 with other contractors to mitigate the impacts. However, dig and haul did not appear to be the best available technology for remediation and BMG contracted with Unlimited Construction, Inc. to complete site remediation via ‘soil shredding,’ a proprietary process for on-site chemical removal of hydrocarbons from soil. This work was resumed on January 29, 2018 and impact removal was completed on February 14, 2018. Final soil shredding was completed on February 15, 2018 and final site backfilling, contouring and background sampling was concluded on March 9, 2018.

REMEDIAION ACTIVITIES

Site remediation consisted of 3 separate activities: (1) excavation of impacted soil in all directions until site closure standards had been achieved, (2) on-site treatment of impacted media to remove hydrocarbon impacts to below site closure standards, followed by placing the treated soil back into cleaned up areas of the remedial excavation, and (3) post remedial sampling of temporary use areas outside of impact zones to confirm residual hydrocarbon impacts were not present in concentrations exceeding site closure standards. The procedures to carry out these activities are discussed below.

The closure standard for the site as determined by the New Mexico Oil Conservation Division (NMOCD) was based on the potential risk to ground and surface water from hydrocarbon impacts. At this site the closure standard was established as follows:

Total Petroleum Hydrocarbons (TPH) = 1,000 mg/Kg (parts per million)
Benzene = 10 mg/Kg
Benzene, Toluene, Ethyl-Benzene and Total Xylenes (BTEX) combined = 50 mg/Kg
Total Chlorides = 600 mg/Kg

Excavation of Impacted Media to Achieve Site Remediation

Remedial work at the site in 2017 by other contractors included removal of approximately 3,000 cubic yards of soil to a total depth of 17 feet below surface grade (bsg) within the original source

area (Figure 5). Prior drilling by others identified impacts exceeding the 1,000 ppm site closure standard were present to a depth of 40 feet bsg in the source area.

Remediation was resumed by Unlimited Construction on January 29, 2018 by removal of impacted soil using trackhoe excavators, front end loaders and a dozer to strip clean top soils and excavate impacted media. Clean top soils were stacked on the east, west and south sides of the advancing excavation. Excavated impacted media was stacked and stored on the well pad for subsequent treatment via shredding and chemical treatment (discussed below). Excavation continued in all directions until composite samples submitted for laboratory analytical testing confirmed that sidewalls and base areas were within site closure standards. The final excavating and sampling was concluded on February 14, 2018. The excavated area was conical shaped and approximately 275' in diameter with a maximum depth of approximately 48' bgs (Figure 2). A total of approximately 35,440 cubic yards (CY) of soil was disturbed during the remediation, and of this approximately 10,870 CY was chemically treated on-site. Included in the total excavated volume was approximately 3,000 CY that had previously been excavated by others, with approximately 1,260 CY of this transported to a commercial landfarm for off-site remediation.

Closure sampling was progressive as the excavation advanced. Sampling areas were marked out on the excavation walls and base for collection of 5-point composites from each area (Figure 3). Due to the slumping nature of the loose soils and risk of entering the excavation most sampling was performed using an excavator trackhoe to retrieve soils for composite collection. All closure sampling was witnessed by the NMOCD. Representative composite portions of sample 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.

A summary of laboratory analytical results is included in Table 1: Summary Excavation Closure Analytical Data. Laboratory test reports are attached in Appendix B.

At the completion of remedial excavations there were a total of 21 separate composite sampling areas. All areas passed laboratory testing for the site closure standard.

Remediation of Excavated Impacted Media via Soil Shredding

A proprietary process (termed 'soil shredding') was used to mix and chemically treat the fine grained media with hydrogen peroxide to remove hydrocarbons. Following soil shredding, the treated material was placed into labeled stock piles and subsequently sampled to confirm that site

closure standards had been achieved. This process progressed at the same approximate rate as the excavation advanced.

The pile sampling was performed using an excavator trackhoe to dig into each pile and collect composite samples for initial field analysis and subsequent laboratory testing. Sample handling, regulatory witnessing, preservation, chain-of-custody and laboratory test procedures were the same as previously described. A summary of treated soil laboratory test data is presented in Table 2, Summary Treated Soil Pile Analytical Data. Laboratory test reports are attached in Appendix C.

Vadose Zone Closure

The original well pad area was insufficient in size for storage of both excavated impacted material and storage of treated shredded soil. It was necessary to temporarily place treated soils off the well pad for this storage (Figure 4). These areas were located on the east and west sides of the well pad.

Following completion of the remedial excavation and backfilling with shredded soils, the temporary storage areas, and the treating zone area, were sampled to insure no residual hydrocarbon impacts exceeding site closure standards were present. This sampling was performed on March 9, 2018 by hand sampling composites from each use area. Sample handling, preservation, chain-of-custody and laboratory test procedures were the same as previously described. All areas tested below site closure standards. A summary of the test data is presented in Table 3, Vadose Zone Analytical Data. Laboratory test reports are attached in Appendix D.

CONCLUSIONS AND RECOMMENDATIONS

- 1) Hydrocarbon impacted soil at the Homestead Ranch A #2, apparently historical in nature, from BMG operations has been successfully excavated and treated. Excavation sampling and analytical testing has confirmed that all 21 separate sampling zones within the remedial excavation test below site closure standards. No additional site remediation of impacts is indicated. Regulatory closure of remedial activities is recommended.
- 2) All soils treated on-site via the proprietary 'soil shredding' process and backfilled into the remedial excavation have demonstrated via analytical testing to be within site closure standards. These treated soils are not indicated to contribute a risk to surface or groundwater. No additional treatment is recommended.

- 3) Off-pad temporary use areas have been sampled and analytical testing has indicated that the residual ground surface meets site closure standards. No additional confirmation sampling is recommended.

CLOSURE AND LIMITATIONS

This report has been prepared for the exclusive use of Benson-Montin-Greer Drilling Corp. as it pertains to hydrocarbon impact remediation at the Homestead Ranch A #2 in Rio Arriba 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, PE

Digitally signed by Jeffrey C Blagg, PE
DN: cn=Jeffrey C Blagg, PE, o, ou,
email=jefcblagg@aol.com, c=US
Date: 2018.04.13 12:51:01 -06'00'

Jeffrey C. Blagg, PE
NMPE 11607

TABLES

Benson-Montin-Greer Homestead Ranch A No. 2

TABLE 1
Summary Excavation Closure Test Results
Updated: February 22, 2018

Sample ID	Figure ID	Depth Range	No. Comps	Date Sampled	Field OVM (ppm)	Benz. (mg/Kg)	BTEX (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH Total (mg/Kg)	Cl- (mg/Kg)
East Base	1	48'	5	2/8/2018	22.8	ND	ND	ND	ND	ND	ND	ND
NE Wall	2	35'-45'	5	2/8/2018	14.7	ND	ND	ND	ND	ND	ND	ND
NW Wall	3	35'-45'	5	2/8/2018	2,099	ND	3.2	200	540	78	818	ND
SE Wall	4	35'-45'	5	2/8/2018	15.2	ND	ND	ND	ND	ND	ND	ND
NE Wall	5	21'-35'	5	2/8/2018	12.3	ND	ND	ND	ND	ND	ND	ND
NW Wall	6	21'-35'	5	2/8/2018	13.9	ND	ND	ND	130	130	260	ND
SE Wall	7	21'-35'	5	2/8/2018	4.9	ND	ND	ND	ND	ND	ND	39
NE Wall	8	10'-21'	5	2/8/2018	2.9	ND	ND	ND	ND	ND	ND	ND
N Wall	9	10'-21'	5	2/8/2018	849	ND	1.9	97	30	ND	127	ND
E Wall	10	10'-21'	5	2/8/2018	10.3	ND	ND	ND	ND	ND	ND	ND
S Wall	11	10'-21'	5	2/8/2018	6.0	ND	ND	ND	ND	ND	ND	ND
West Base	12	45'	5	2/14/2018	15.6	ND	ND	ND	ND	ND	ND	ND
NW Wall	13	25'-45'	5	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
NW Wall	14	15'-25'	5	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
West Wall	15	25'-45'	5	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
West Wall	16	15'-25'	5	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
SW Wall	17	25'-45'	5	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
SW Wall	18	15'-25'	5	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
West Wall	19	10'-15'	6	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
NW Wall	20	10'-15'	3	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND
West Top	21	0'-10'	7	2/14/2018	0.0	ND	ND	ND	ND	ND	ND	ND

Site Closure Standard = 1,000 ppm total TPH, 10 ppm Benzene, 50 ppm BTEX and 600 ppm Chloride

Benson-Montin-Greer Homestead Ranch A No. 2

TABLE 2
Summary Treated Soil Pile Test Results
Updated: February 24, 2018

Pile ID	Volume (CY)	No. Comps	Date Created	Date Sampled	Field OVM (ppm)	Benz. (mg/Kg)	BTEX Total (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH Total (mg/Kg)	Cl- (mg/Kg)
TSP-1	100	5	2/1/2018	2/5/2018	890	ND	14.1	400	200	ND	600	ND
TSP-2	100	5	2/1/2018	2/5/2018	975	ND	11.93	350	240	ND	590	ND
TSP-3	100	5	2/1/2018	2/5/2018	1,128	ND	8.61	300	140	ND	440	ND
TSP-4	100	5	2/1/2018	2/5/2018	1,180	ND	6.93	260	120	ND	380	ND
TSP-5	100	5	2/1/2018	2/5/2018	1,026	ND	13.53	430	160	ND	590	ND
TSP-6	100	5	2/1/2018	2/5/2018	1,375	ND	12.1	400	170	ND	570	ND
TSP-7	100	5	2/1/2018	2/5/2018	1,293	ND	7.35	280	170	ND	450	ND
TSP-8	100	5	2/1/2018	2/5/2018	883	ND	8.17	320	130	ND	450	ND
TSP-9	100	5	2/1/2018	2/5/2018	912	ND	10.6	430	96	ND	526	ND
TSP-10	100	5	2/1/2018	2/5/2018	883	ND	7.97	280	120	ND	400	ND
TSP-11	500	7	2/6/2018	2/8/2018	781	ND	0.86	68	63	ND	131	ND
TSP-12	500	7	2/6/2018	2/8/2018	662	ND	4.8	200	100	ND	300	ND
TSP-13	500	7	2/6/2018	2/8/2018	812	ND	2.1	130	110	ND	240	ND
TSP-14	500	7	2/6/2018	2/8/2018	1,081	ND	5.1	190	180	ND	370	ND
TSP-15	500	7	2/5/2018	2/8/2018	1,740	ND	8.82	220	140	ND	360	ND
TSP-16	500	7	2/8/2018	2/14/2018	382	ND	ND	50	63	ND	113	ND
TSP-17	500	7	2/8/2018	2/14/2018	0.0	ND	ND	23	39	ND	62	ND
TSP-18	500	7	2/9/2018	2/14/2018	0.0	ND	ND	ND	30	ND	30	ND
TSP-19	500	7	2/9/2018	2/14/2018	0.0	ND	1.8	120	120	ND	240	ND
TSP-20	500	7	2/9/2018	2/14/2018	0.0	ND	ND	29	44	ND	73	ND
TSP-21	500	7	2/12/2018	2/14/2018	0.0	ND	0.66	46	94	ND	140	ND
TSP-22	500	7	2/12/2018	2/14/2018	0.0	ND	0.76	60	95	ND	155	ND
TSP-23	500	7	2/13/2018	2/14/2018	0.0	ND	ND	ND	25	ND	25	ND
TSP-24	500	7	2/13/2018	2/14/2018	0.0	ND	ND	36	54	ND	90	ND
TSP-25	1,000	10	2/14/2018	2/16/2018	396	ND	1.4	73	80	ND	153	ND
TSP-26	1,000	10	2/14/2018	2/16/2018	239	ND	ND	23	39	ND	62	ND
TSP-27	870	10	2/15/2018	2/16/2018	310	ND	1.0	52	41	ND	93	ND
Total:	10,870											

Site Closure Standard = 1,000 ppm total TPH, 10 ppm Benzene, 50 ppm BTEX and 600 ppm Chloride

TABLE 3
BMG – Homestead Ranch A #2
Summary Vadose Zone Analytical Data

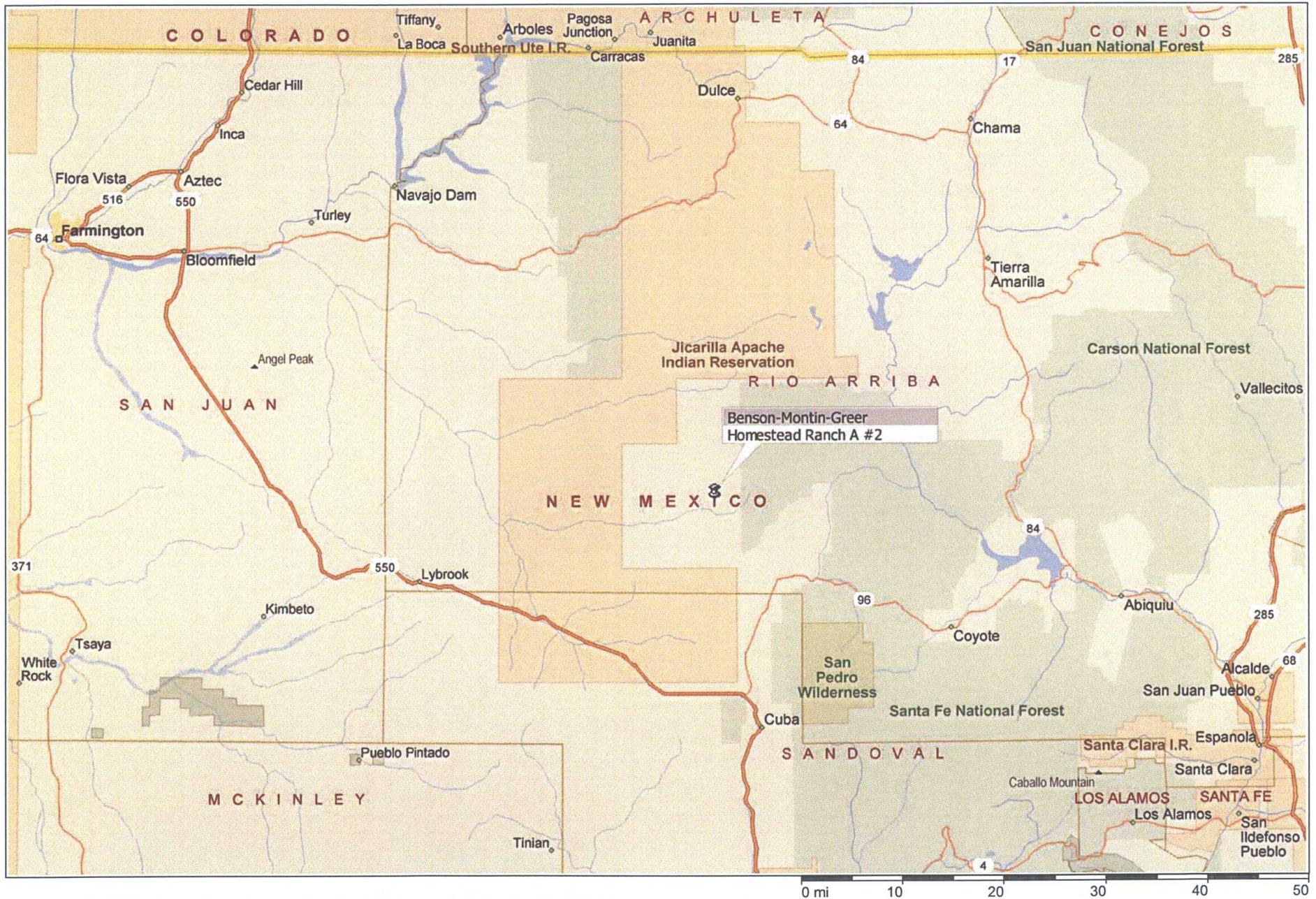
Sample ID	Date	BTEX (mg/Kg)	Benzene (mg/Kg)	TPH GRO (mg/Kg)	TPH DRO (mg/Kg)	TPH MRO (mg/Kg)	TPH Total (mg/Kg)	Chloride
Zone 1 (5-pt Comp)	5/1/2017	ND	ND	ND	ND	ND	ND	ND
Zone 2 (5-pt Comp)	5/1/2017	ND	ND	ND	ND	ND	ND	ND
Zone 3 (5-pt Comp)	5/1/2017	ND	ND	ND	ND	ND	ND	ND
Zone 4 (5-pt Comp)	5/1/2017	ND	ND	ND	ND	ND	ND	ND
NMOCD Closure Standard		50	10				1,000	600

ND = Not Detected

Appendix A

Figures

Figure 1
Homestead Ranch A #2



Copyright © and (P) 1988–2007 Microsoft Corporation and/or its suppliers. All rights reserved. <http://www.microsoft.com/streets/>
Certain mapping and direction data © 2007 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario. NAVTEQ and NAVTEQ ON BOARD are trademarks of NAVTEQ. © 2007 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc.

Benson-Montin-Greer
Homestead Ranch A #2

Remedial Excavation Contour Figure

Excavation Total Volume: 35,440 CY
Treated Soil Volume: 10,870 CY
Total Overburden Volume: 24,570 CY
Animas Excavation Volume: 3,000 CY
Unlimited Overburden Volume: 21,570 CY

Figure 2



Blagg Engineering, Inc.
February 23, 2018



Original Grade (0') Excavation Perimeter

Excavation Grade @ -15' Perimeter

Excavation Grade @ -25' Perimeter

Excavation Grade @ -35' Perimeter

Excavation Base @ -45' Average Depth

Google earth

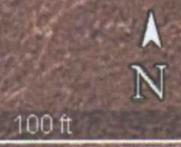
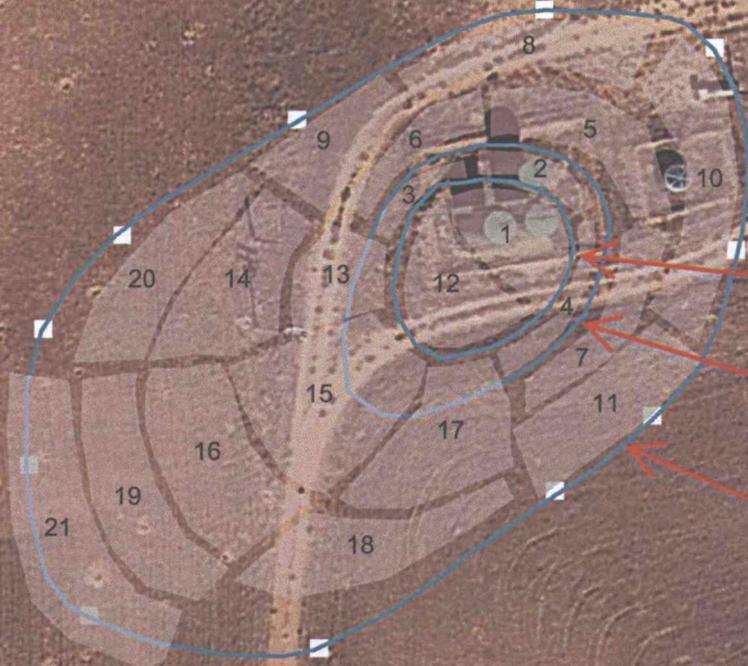


Figure 3
BMG
Homestead Ranch A #2
Excavation Sampling Zones



Excavation @ 45' - 48' Below Grade

Excavation @ 35' +/- Below Grade

Primary Excavation @ 5' +/- Below Grade



Figure 4

BMG
Homestead Ranch A #2
Vadose Sampling Zones

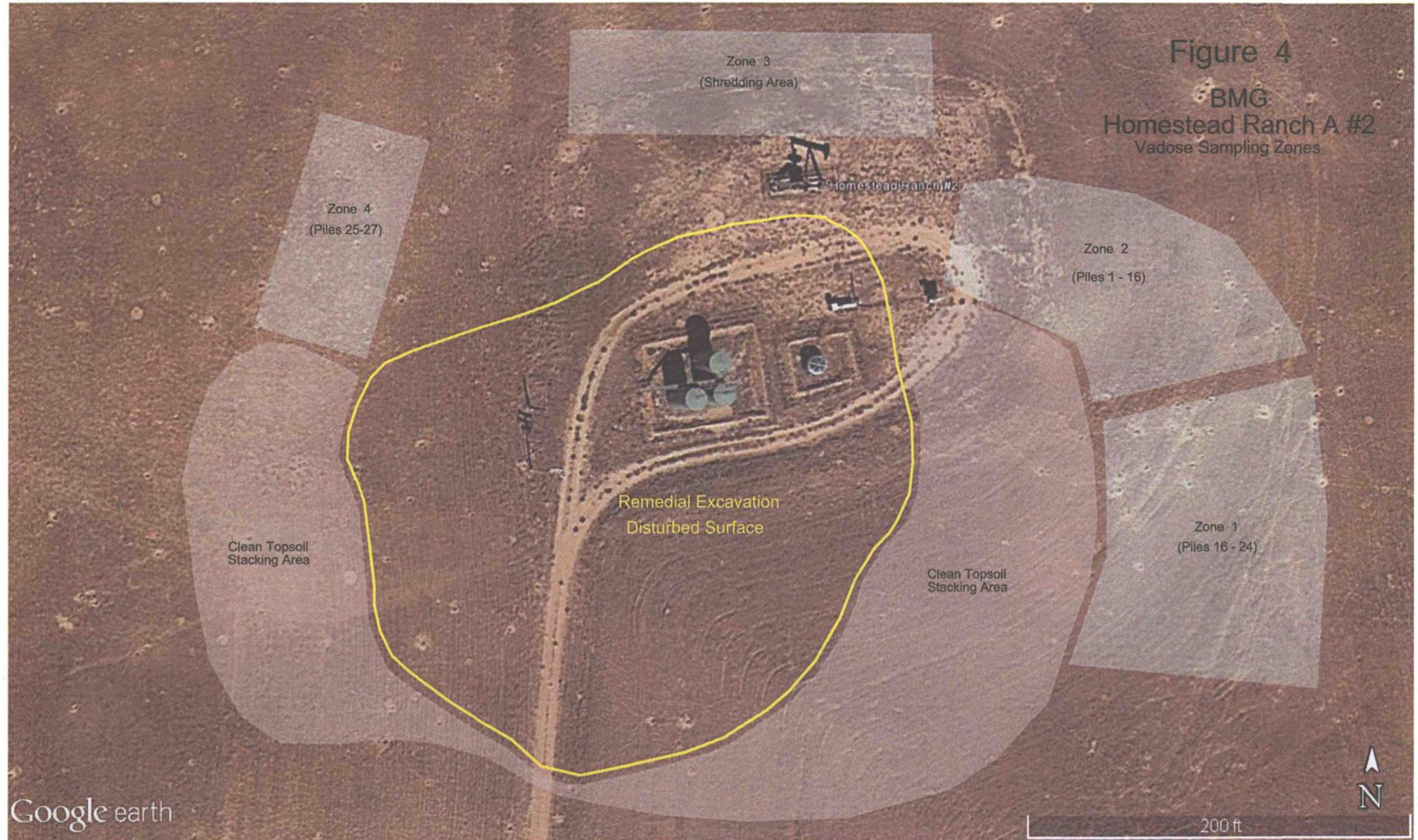
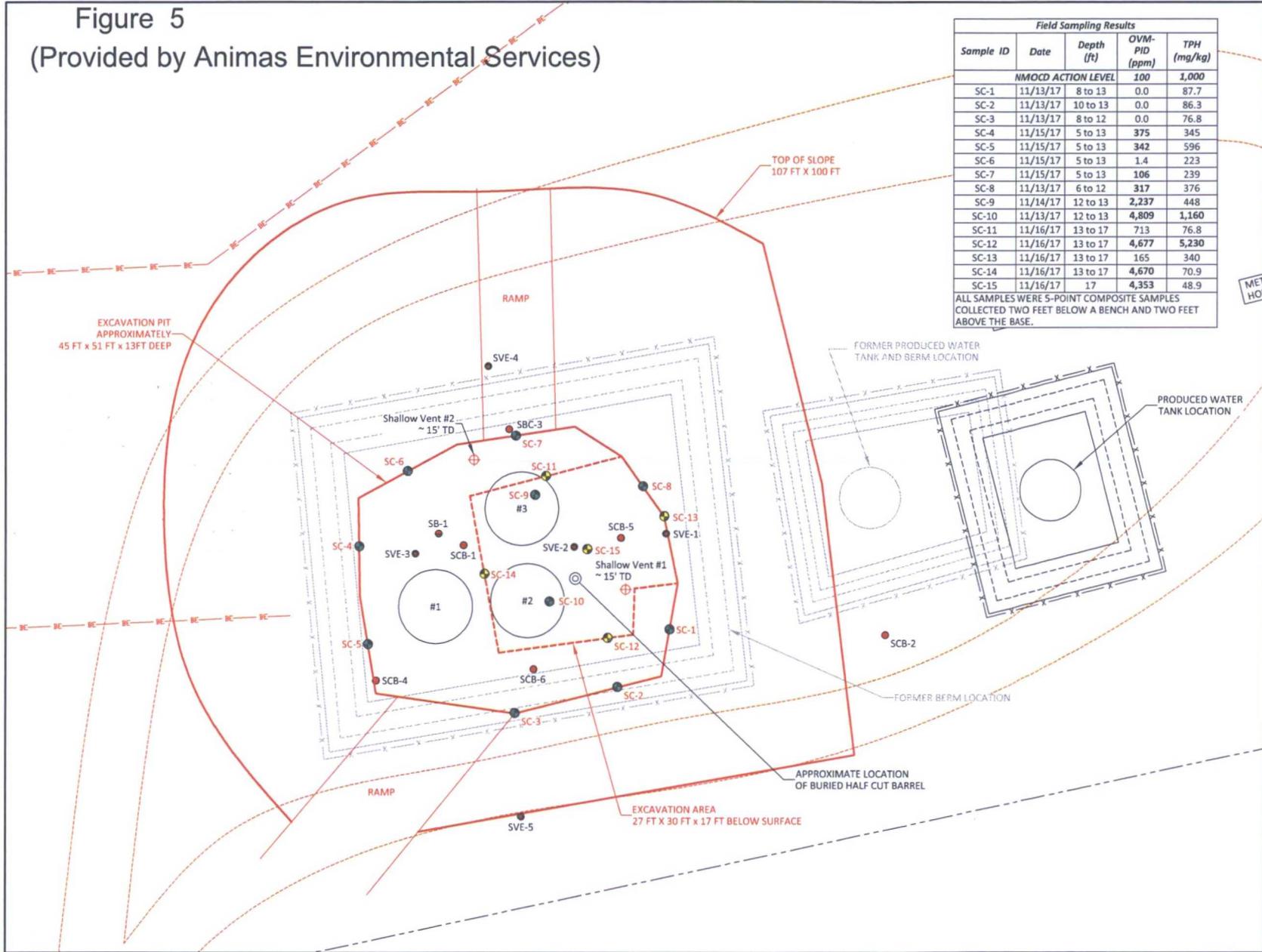


Figure 5
(Provided by Animas Environmental Services)



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOC ACTION LEVEL			100	1,000
SC-1	11/13/17	8 to 13	0.0	87.7
SC-2	11/13/17	10 to 13	0.0	86.3
SC-3	11/13/17	8 to 12	0.0	76.8
SC-4	11/15/17	5 to 13	375	345
SC-5	11/15/17	5 to 13	342	596
SC-6	11/15/17	5 to 13	1.4	223
SC-7	11/15/17	5 to 13	106	239
SC-8	11/13/17	6 to 12	317	376
SC-9	11/14/17	12 to 13	2,237	448
SC-10	11/13/17	12 to 13	4,809	1,160
SC-11	11/16/17	13 to 17	713	76.8
SC-12	11/16/17	13 to 17	4,677	5,230
SC-13	11/16/17	13 to 17	165	340
SC-14	11/16/17	13 to 17	4,670	70.9
SC-15	11/16/17	17	4,353	48.9

ALL SAMPLES WERE 5-POINT COMPOSITE SAMPLES COLLECTED TWO FEET BELOW A BENCH AND TWO FEET ABOVE THE BASE.

Excavation area as of 11-17-17
 BENSON-MONTIN-GREER
 HOMESTEAD RANCH #2
 SE ¼ SW ¼, SECTION 34, T25N, R2W
 RIO ARRIBA COUNTY, NEW MEXICO
 N36.34990, W107.04006

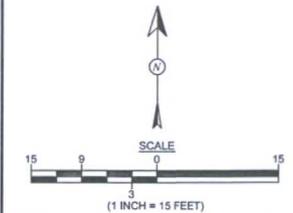


animas environmental services
 Farmington, NM • Durango, CO
 animasenvironmental.com

DRAWN BY: C. Lameman	DATE DRAWN: September 21, 2017
REVISIONS BY: C. Lameman	DATE REVISED: September 21, 2017
CHECKED BY: R. Flegal	DATE CHECKED: December 6, 2017
APPROVED BY: E. McNally	DATE APPROVED: December 6, 2017

LEGEND

- SVE EXTRACTION WELL
 - ⊕ SVE EXTRACTION WELL (INSTALLED AUGUST 2017)
 - ⊙ TEST HOLE (AUGUST 2017)
 - SOIL BORING CONFIRMATION (SEPTEMBER 2017)
 - SOIL COMPOSITE SAMPLE LOCATION
 - SOIL COMPOSITE SAMPLE LOCATION (LOWER BENCH EXCAVATION AREA)
 - BURIED OIL AND GAS PIPELINE
 - BURIED ELECTRIC LINE
 - x- FENCE LINE
 - ==== SECONDARY CONTAINMENT
- NOTE: SOIL CONFIRMATION BORING LOCATIONS SPECIFIED BY NEW MEXICO OIL CONSERVATION DIVISION.



Appendix B

Excavation Closure Analytical Data Reports



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

February 12, 2018

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

RE: Homestead Ranch 2

OrderNo.: 1802538

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 11 sample(s) on 2/9/2018 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1802538

Date Reported: 2/12/2018

CLIENT: Blagg Engineering

Client Sample ID: Base @ 48'

Project: Homestead Ranch 2

Collection Date: 2/8/2018 10:30:00 AM

Lab ID: 1802538-001

Matrix: SOIL

Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 10:39:35 AM	36450
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/9/2018 9:38:31 AM	36444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2018 9:38:31 AM	36444
Surr: DNOP	93.6	70-130		%Rec	1	2/9/2018 9:38:31 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	2/9/2018 9:47:11 AM	36440
Surr: BFB	112	15-316		%Rec	5	2/9/2018 9:47:11 AM	36440
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.091		mg/Kg	5	2/9/2018 9:47:11 AM	36440
Toluene	ND	0.18		mg/Kg	5	2/9/2018 9:47:11 AM	36440
Ethylbenzene	ND	0.18		mg/Kg	5	2/9/2018 9:47:11 AM	36440
Xylenes, Total	ND	0.36		mg/Kg	5	2/9/2018 9:47:11 AM	36440
Surr: 4-Bromofluorobenzene	119	80-120		%Rec	5	2/9/2018 9:47:11 AM	36440

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

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

Analytical Report

Lab Order 1802538

Date Reported: 2/12/2018

CLIENT: Blagg Engineering

Client Sample ID: NE Wall (35'-45')

Project: Homestead Ranch 2

Collection Date: 2/8/2018 10:37:00 AM

Lab ID: 1802538-002

Matrix: SOIL

Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 10:52:00 AM	36450
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/9/2018 10:00:37 AM	36444
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2018 10:00:37 AM	36444
Surr: DNOP	98.2	70-130		%Rec	1	2/9/2018 10:00:37 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	8.6		mg/Kg	2	2/9/2018 10:10:41 AM	36440
Surr: BFB	115	15-316		%Rec	2	2/9/2018 10:10:41 AM	36440
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.043		mg/Kg	2	2/9/2018 10:10:41 AM	36440
Toluene	ND	0.086		mg/Kg	2	2/9/2018 10:10:41 AM	36440
Ethylbenzene	ND	0.086		mg/Kg	2	2/9/2018 10:10:41 AM	36440
Xylenes, Total	ND	0.17		mg/Kg	2	2/9/2018 10:10:41 AM	36440
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	2	2/9/2018 10:10:41 AM	36440

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

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

Analytical Report

Lab Order 1802538

Date Reported: 2/12/2018

CLIENT: Blagg Engineering

Client Sample ID: NE Wall (21'-35')

Project: Homestead Ranch 2

Collection Date: 2/8/2018 10:50:00 AM

Lab ID: 1802538-005

Matrix: SOIL

Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 11:29:14 AM	36450
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/9/2018 11:06:35 AM	36444
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/9/2018 11:06:35 AM	36444
Surr: DNOP	97.2	70-130		%Rec	1	2/9/2018 11:06:35 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	2/9/2018 10:57:41 AM	36440
Surr: BFB	117	15-316		%Rec	1	2/9/2018 10:57:41 AM	36440
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	2/9/2018 10:57:41 AM	36440
Toluene	ND	0.045		mg/Kg	1	2/9/2018 10:57:41 AM	36440
Ethylbenzene	ND	0.045		mg/Kg	1	2/9/2018 10:57:41 AM	36440
Xylenes, Total	ND	0.091		mg/Kg	1	2/9/2018 10:57:41 AM	36440
Surr: 4-Bromofluorobenzene	124	80-120	S	%Rec	1	2/9/2018 10:57:41 AM	36440

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

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

Analytical Report

Lab Order 1802538

Date Reported: 2/12/2018

CLIENT: Blagg Engineering

Client Sample ID: NW Wall (21'-35')

Project: Homestead Ranch 2

Collection Date: 2/8/2018 10:45:00 AM

Lab ID: 1802538-006

Matrix: SOIL

Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 11:41:38 AM	36450
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	130	9.6		mg/Kg	1	2/9/2018 12:23:57 PM	36444
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	2/9/2018 12:23:57 PM	36444
Surr: DNOP	108	70-130		%Rec	1	2/9/2018 12:23:57 PM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	2/9/2018 11:44:38 AM	36440
Surr: BFB	118	15-316		%Rec	1	2/9/2018 11:44:38 AM	36440
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	2/9/2018 11:44:38 AM	36440
Toluene	ND	0.039		mg/Kg	1	2/9/2018 11:44:38 AM	36440
Ethylbenzene	ND	0.039		mg/Kg	1	2/9/2018 11:44:38 AM	36440
Xylenes, Total	ND	0.078		mg/Kg	1	2/9/2018 11:44:38 AM	36440
Surr: 4-Bromofluorobenzene	127	80-120	S	%Rec	1	2/9/2018 11:44:38 AM	36440

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

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

Analytical Report

Lab Order 1802538

Date Reported: 2/12/2018

CLIENT: Blagg Engineering

Client Sample ID: N Wall (10'-21')

Project: Homestead Ranch 2

Collection Date: 2/8/2018 12:09:00 PM

Lab ID: 1802538-008

Matrix: SOIL

Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 12:06:28 PM	36450
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	30	9.7		mg/Kg	1	2/9/2018 12:12:56 PM	36444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2018 12:12:56 PM	36444
Surr: DNOP	97.6	70-130		%Rec	1	2/9/2018 12:12:56 PM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	97	4.2		mg/Kg	1	2/9/2018 12:31:40 PM	36440
Surr: BFB	998	15-316	S	%Rec	1	2/9/2018 12:31:40 PM	36440
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	2/9/2018 12:31:40 PM	36440
Toluene	ND	0.042		mg/Kg	1	2/9/2018 12:31:40 PM	36440
Ethylbenzene	ND	0.042		mg/Kg	1	2/9/2018 12:31:40 PM	36440
Xylenes, Total	1.9	0.084		mg/Kg	1	2/9/2018 12:31:40 PM	36440
Surr: 4-Bromofluorobenzene	147	80-120	S	%Rec	1	2/9/2018 12:31:40 PM	36440

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

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

Analytical Report
 Lab Order **1802538**
 Date Reported: **2/12/2018**

CLIENT: Blagg Engineering **Client Sample ID:** NE Wall (10'-21')
Project: Homestead Ranch 2 **Collection Date:** 2/8/2018 11:05:00 AM
Lab ID: 1802538-009 **Matrix:** SOIL **Received Date:** 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 11:05:56 AM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/9/2018 11:59:27 AM	36444
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/9/2018 11:59:27 AM	36444
Surr: DNOP	103	70-130		%Rec	1	2/9/2018 11:59:27 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	2/9/2018 11:41:45 AM	G49019
Surr: BFB	93.4	15-316		%Rec	1	2/9/2018 11:41:45 AM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	2/9/2018 11:41:45 AM	B49019
Toluene	ND	0.039		mg/Kg	1	2/9/2018 11:41:45 AM	B49019
Ethylbenzene	ND	0.039		mg/Kg	1	2/9/2018 11:41:45 AM	B49019
Xylenes, Total	ND	0.078		mg/Kg	1	2/9/2018 11:41:45 AM	B49019
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	1	2/9/2018 11:41:45 AM	B49019

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

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

Analytical Report

Lab Order 1802538

Date Reported: 2/12/2018

CLIENT: Blagg Engineering

Client Sample ID: E Wall (10'-21')

Project: Homestead Ranch 2

Collection Date: 2/8/2018 12:12:00 PM

Lab ID: 1802538-010

Matrix: SOIL

Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	ND	30		mg/Kg	20	2/9/2018 11:18:20 AM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/9/2018 11:35:09 AM	36444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2018 11:35:09 AM	36444
Surr: DNOP	101	70-130		%Rec	1	2/9/2018 11:35:09 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	2/9/2018 12:05:22 PM	G49019
Surr: BFB	90.6	15-316		%Rec	1	2/9/2018 12:05:22 PM	G49019
EPA METHOD 8021B: VOLATILES							
Benzene	ND	0.020		mg/Kg	1	2/9/2018 12:05:22 PM	B49019
Toluene	ND	0.040		mg/Kg	1	2/9/2018 12:05:22 PM	B49019
Ethylbenzene	ND	0.040		mg/Kg	1	2/9/2018 12:05:22 PM	B49019
Xylenes, Total	ND	0.079		mg/Kg	1	2/9/2018 12:05:22 PM	B49019
Surr: 4-Bromofluorobenzene	91.8	80-120		%Rec	1	2/9/2018 12:05:22 PM	B49019

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

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

Analytical Report
 Lab Order 1802538
 Date Reported: 2/12/2018

CLIENT: Blagg Engineering **Client Sample ID:** S Wall (10'-21')
Project: Homestead Ranch 2 **Collection Date:** 2/8/2018 12:15:00 PM
Lab ID: 1802538-011 **Matrix:** SOIL **Received Date:** 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 11:30:44 AM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/9/2018 11:10:46 AM	36444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2018 11:10:46 AM	36444
Surr: DNOP	101	70-130		%Rec	1	2/9/2018 11:10:46 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	2/9/2018 12:28:57 PM	G49019
Surr: BFB	90.6	15-316		%Rec	1	2/9/2018 12:28:57 PM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	2/9/2018 12:28:57 PM	B49019
Toluene	ND	0.040		mg/Kg	1	2/9/2018 12:28:57 PM	B49019
Ethylbenzene	ND	0.040		mg/Kg	1	2/9/2018 12:28:57 PM	B49019
Xylenes, Total	ND	0.081		mg/Kg	1	2/9/2018 12:28:57 PM	B49019
Surr: 4-Bromofluorobenzene	92.2	80-120		%Rec	1	2/9/2018 12:28:57 PM	B49019

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1802538
 12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	MB-36450	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36450	RunNo:	49015					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1578602	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36450	SampType:	ics	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36450	RunNo:	49015					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1578603	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			

Sample ID	MB-36451	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36451	RunNo:	49016					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1578762	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36451	SampType:	ics	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36451	RunNo:	49016					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1578763	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1802538

12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	LCS-36444		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	36444		RunNo:	49006				
Prep Date:	2/9/2018		Analysis Date:	2/9/2018		SeqNo:	1577367		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	95.6	70	130				
Surr: DNOP	4.6		5.000		91.0	70	130				

Sample ID	MB-36444		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	36444		RunNo:	49006				
Prep Date:	2/9/2018		Analysis Date:	2/9/2018		SeqNo:	1577368		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		97.6	70	130				

Sample ID	1802538-001AMS		SampType:	MS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	Base @ 48'		Batch ID:	36444		RunNo:	49006				
Prep Date:	2/9/2018		Analysis Date:	2/9/2018		SeqNo:	1578371		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	53	9.7	48.31	3.071	103	55.8	125				
Surr: DNOP	4.7		4.831		96.8	70	130				

Sample ID	1802538-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	Base @ 48'		Batch ID:	36444		RunNo:	49006				
Prep Date:	2/9/2018		Analysis Date:	2/9/2018		SeqNo:	1578372		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	50	10	50.56	3.071	93.3	55.8	125	4.63	20		
Surr: DNOP	4.6		5.056		90.6	70	130	0	0		

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1802538

12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID MB-36440	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 36440	RunNo: 49018								
Prep Date: 2/8/2018	Analysis Date: 2/9/2018	SeqNo: 1578201			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		110	15	316			

Sample ID LCS-36440	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 36440	RunNo: 49018								
Prep Date: 2/8/2018	Analysis Date: 2/9/2018	SeqNo: 1578202			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	75.9	131			
Surr: BFB	1200		1000		116	15	316			

Sample ID RB	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: G49019	RunNo: 49019								
Prep Date:	Analysis Date: 2/9/2018	SeqNo: 1578224			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	930		1000		93.5	15	316			

Sample ID 2.5UG GRO LCS	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: G49019	RunNo: 49019								
Prep Date:	Analysis Date: 2/9/2018	SeqNo: 1578225			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	75.9	131			
Surr: BFB	1100		1000		109	15	316			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802538

12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID MB-36440	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 36440	RunNo: 49018								
Prep Date: 2/8/2018	Analysis Date: 2/9/2018	SeqNo: 1578215	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		115	80	120			

Sample ID LCS-36440	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 36440	RunNo: 49018								
Prep Date: 2/8/2018	Analysis Date: 2/9/2018	SeqNo: 1578216	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	103	77.3	128			
Toluene	1.0	0.050	1.000	0	104	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	104	80.7	127			
Xylenes, Total	3.2	0.10	3.000	0	107	81.6	129			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B49019	RunNo: 49019								
Prep Date:	Analysis Date: 2/9/2018	SeqNo: 1578234	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	80	120			

Sample ID 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B49019	RunNo: 49019								
Prep Date:	Analysis Date: 2/9/2018	SeqNo: 1578235	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	77.3	128			
Toluene	0.87	0.050	1.000	0	87.1	79.2	125			
Ethylbenzene	0.90	0.050	1.000	0	89.9	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	91.1	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Qualifiers:

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



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: **1802538**

RcptNo: **1**

Received By: **Anne Thorne** 2/9/2018 7:00:00 AM

Anne Thorne

Completed By: **Anne Thorne** 2/9/2018 7:26:46 AM

Anne Thorne

Reviewed By: *H. G. G.*

Chain of Custody

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

Log In

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

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____	Date: _____
By Whom: _____	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding: _____	
Client Instructions: _____	

16. Additional remarks:

Cooler Information

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



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

February 16, 2018

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

RE: Homestead Ranch 2

OrderNo.: 1802858

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 10 sample(s) on 2/15/2018 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
 Lab Order 1802858
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering **Client Sample ID:** West Base @ 45'
Project: Homestead Ranch 2 **Collection Date:** 2/14/2018 10:35:00 AM
Lab ID: 1802858-001 **Matrix:** SOIL **Received Date:** 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 11:37:55 AM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2018 9:32:30 AM	36540
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	2/15/2018 9:32:30 AM	36540
Surr: DNOP	98.3	70-130		%Rec	1	2/15/2018 9:32:30 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	2/15/2018 9:40:40 AM	G49154
Surr: BFB	91.3	15-316		%Rec	5	2/15/2018 9:40:40 AM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.086		mg/Kg	5	2/15/2018 9:40:40 AM	B49154
Toluene	ND	0.17		mg/Kg	5	2/15/2018 9:40:40 AM	B49154
Ethylbenzene	ND	0.17		mg/Kg	5	2/15/2018 9:40:40 AM	B49154
Xylenes, Total	ND	0.34		mg/Kg	5	2/15/2018 9:40:40 AM	B49154
Surr: 4-Bromofluorobenzene	89.3	80-120		%Rec	5	2/15/2018 9:40:40 AM	B49154

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

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

Analytical Report

Lab Order 1802858

Date Reported: 2/16/2018

CLIENT: Blagg Engineering

Client Sample ID: NW Wall @ 25'-45'

Project: Homestead Ranch 2

Collection Date: 2/14/2018 10:42:00 AM

Lab ID: 1802858-002

Matrix: SOIL

Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 11:50:20 AM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	2/15/2018 9:56:59 AM	36540
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/15/2018 9:56:59 AM	36540
Surr: DNOP	98.1	70-130		%Rec	1	2/15/2018 9:56:59 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	2/15/2018 10:04:03 AM	G49154
Surr: BFB	93.9	15-316		%Rec	5	2/15/2018 10:04:03 AM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.090		mg/Kg	5	2/15/2018 10:04:03 AM	B49154
Toluene	ND	0.18		mg/Kg	5	2/15/2018 10:04:03 AM	B49154
Ethylbenzene	ND	0.18		mg/Kg	5	2/15/2018 10:04:03 AM	B49154
Xylenes, Total	ND	0.36		mg/Kg	5	2/15/2018 10:04:03 AM	B49154
Surr: 4-Bromofluorobenzene	89.7	80-120		%Rec	5	2/15/2018 10:04:03 AM	B49154

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

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

Analytical Report
 Lab Order 1802858
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering
 Project: Homestead Ranch 2
 Lab ID: 1802858-003

Matrix: SOIL

Client Sample ID: NW Wall @ 15'-25'
 Collection Date: 2/14/2018 10:45:00 AM
 Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 12:02:45 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/15/2018 10:21:06 AM	36540
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/15/2018 10:21:06 AM	36540
Surr: DNOP	99.5	70-130		%Rec	1	2/15/2018 10:21:06 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	2/15/2018 10:27:23 AM	G49154
Surr: BFB	90.3	15-316		%Rec	5	2/15/2018 10:27:23 AM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.10		mg/Kg	5	2/15/2018 10:27:23 AM	B49154
Toluene	ND	0.20		mg/Kg	5	2/15/2018 10:27:23 AM	B49154
Ethylbenzene	ND	0.20		mg/Kg	5	2/15/2018 10:27:23 AM	B49154
Xylenes, Total	ND	0.40		mg/Kg	5	2/15/2018 10:27:23 AM	B49154
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	5	2/15/2018 10:27:23 AM	B49154

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

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

Analytical Report

Lab Order 1802858

Date Reported: 2/16/2018

CLIENT: Blagg Engineering

Client Sample ID: West Wall @ 15'-25'

Project: Homestead Ranch 2

Collection Date: 2/14/2018 10:49:00 AM

Lab ID: 1802858-005

Matrix: SOIL

Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 12:27:35 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/15/2018 11:09:32 AM	36540
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/15/2018 11:09:32 AM	36540
Surr: DNOP	93.9	70-130		%Rec	1	2/15/2018 11:09:32 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	2/15/2018 10:50:42 AM	G49154
Surr: BFB	89.5	15-316		%Rec	1	2/15/2018 10:50:42 AM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	2/15/2018 10:50:42 AM	B49154
Toluene	ND	0.035		mg/Kg	1	2/15/2018 10:50:42 AM	B49154
Ethylbenzene	ND	0.035		mg/Kg	1	2/15/2018 10:50:42 AM	B49154
Xylenes, Total	ND	0.069		mg/Kg	1	2/15/2018 10:50:42 AM	B49154
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	2/15/2018 10:50:42 AM	B49154

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

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

Analytical Report

Lab Order 1802858

Date Reported: 2/16/2018

CLIENT: Blagg Engineering

Client Sample ID: SW Wall @ 25'-45'

Project: Homestead Ranch 2

Collection Date: 2/14/2018 10:52:00 AM

Lab ID: 1802858-006

Matrix: SOIL

Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 12:39:59 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/15/2018 11:33:47 AM	36540
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/15/2018 11:33:47 AM	36540
Surr: DNOP	96.4	70-130		%Rec	1	2/15/2018 11:33:47 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	2/15/2018 11:14:08 AM	G49154
Surr: BFB	88.7	15-316		%Rec	1	2/15/2018 11:14:08 AM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	2/15/2018 11:14:08 AM	B49154
Toluene	ND	0.037		mg/Kg	1	2/15/2018 11:14:08 AM	B49154
Ethylbenzene	ND	0.037		mg/Kg	1	2/15/2018 11:14:08 AM	B49154
Xylenes, Total	ND	0.073		mg/Kg	1	2/15/2018 11:14:08 AM	B49154
Surr: 4-Bromofluorobenzene	89.5	80-120		%Rec	1	2/15/2018 11:14:08 AM	B49154

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

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

Analytical Report
 Lab Order **1802858**
 Date Reported: **2/16/2018**

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802858-007

Matrix: SOIL

Client Sample ID: SW Wall @ 15'-25'
Collection Date: 2/14/2018 10:57:00 AM
Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 12:52:23 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2018 11:58:07 AM	36540
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2018 11:58:07 AM	36540
Surr: DNOP	92.5	70-130		%Rec	1	2/15/2018 11:58:07 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	2/15/2018 1:11:31 PM	G49154
Surr: BFB	93.6	15-316		%Rec	1	2/15/2018 1:11:31 PM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	2/15/2018 1:11:31 PM	B49154
Toluene	ND	0.038		mg/Kg	1	2/15/2018 1:11:31 PM	B49154
Ethylbenzene	ND	0.038		mg/Kg	1	2/15/2018 1:11:31 PM	B49154
Xylenes, Total	ND	0.077		mg/Kg	1	2/15/2018 1:11:31 PM	B49154
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	2/15/2018 1:11:31 PM	B49154

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

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

Analytical Report
 Lab Order 1802858
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering **Client Sample ID:** West Wall @ 10'-15'
Project: Homestead Ranch 2 **Collection Date:** 2/14/2018 11:00:00 AM
Lab ID: 1802858-008 **Matrix:** SOIL **Received Date:** 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 1:04:47 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	2/15/2018 12:22:30 PM	36540
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/15/2018 12:22:30 PM	36540
Surr: DNOP	94.7	70-130		%Rec	1	2/15/2018 12:22:30 PM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	2/15/2018 11:37:35 AM	G49154
Surr: BFB	93.2	15-316		%Rec	1	2/15/2018 11:37:35 AM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	2/15/2018 11:37:35 AM	B49154
Toluene	ND	0.035		mg/Kg	1	2/15/2018 11:37:35 AM	B49154
Ethylbenzene	ND	0.035		mg/Kg	1	2/15/2018 11:37:35 AM	B49154
Xylenes, Total	ND	0.071		mg/Kg	1	2/15/2018 11:37:35 AM	B49154
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	2/15/2018 11:37:35 AM	B49154

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

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

Analytical Report

Lab Order 1802858

Date Reported: 2/16/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802858-009

Matrix: SOIL

Client Sample ID: NW Wall @ 10'-15'
Collection Date: 2/14/2018 11:06:00 AM
Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 1:42:01 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/15/2018 12:46:59 PM	36540
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/15/2018 12:46:59 PM	36540
Surr: DNOP	97.6	70-130		%Rec	1	2/15/2018 12:46:59 PM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	2/15/2018 12:01:01 PM	G49154
Surr: BFB	91.5	15-316		%Rec	1	2/15/2018 12:01:01 PM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	2/15/2018 12:01:01 PM	B49154
Toluene	ND	0.035		mg/Kg	1	2/15/2018 12:01:01 PM	B49154
Ethylbenzene	ND	0.035		mg/Kg	1	2/15/2018 12:01:01 PM	B49154
Xylenes, Total	ND	0.069		mg/Kg	1	2/15/2018 12:01:01 PM	B49154
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	2/15/2018 12:01:01 PM	B49154

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

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

Analytical Report

Lab Order 1802858

Date Reported: 2/16/2018

CLIENT: Blagg Engineering

Client Sample ID: West Top @ 0'-10'

Project: Homestead Ranch 2

Collection Date: 2/14/2018 11:12:00 AM

Lab ID: 1802858-010

Matrix: SOIL

Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 1:54:25 PM	36544
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/15/2018 1:11:23 PM	36540
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2018 1:11:23 PM	36540
Surr: DNOP	95.5	70-130		%Rec	1	2/15/2018 1:11:23 PM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	2/15/2018 12:24:31 PM	G49154
Surr: BFB	91.7	15-316		%Rec	1	2/15/2018 12:24:31 PM	G49154
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	2/15/2018 12:24:31 PM	B49154
Toluene	ND	0.037		mg/Kg	1	2/15/2018 12:24:31 PM	B49154
Ethylbenzene	ND	0.037		mg/Kg	1	2/15/2018 12:24:31 PM	B49154
Xylenes, Total	ND	0.074		mg/Kg	1	2/15/2018 12:24:31 PM	B49154
Surr: 4-Bromofluorobenzene	90.3	80-120		%Rec	1	2/15/2018 12:24:31 PM	B49154

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1802858

16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	MB-36544	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36544	RunNo:	49157					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1585942	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36544	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36544	RunNo:	49157					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1585943	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802858

16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	LCS-36540	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	36540	RunNo:	49144					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1584635	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.4	70	130			
Surr: DNOP	4.5		5.000		89.8	70	130			

Sample ID	MB-36540	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	36540	RunNo:	49144					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1584636	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.7	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 Quantitative 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#: 1802858
 16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585380		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.4	15	316			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585381		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.6	75.9	131			
Surr: BFB	1100		1000		106	15	316			

Sample ID 1802858-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: West Base @ 45'	Batch ID: G49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585382		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	86	17	85.91	0	100	77.8	128			
Surr: BFB	3600		3437		106	15	316			

Sample ID 1802858-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: West Base @ 45'	Batch ID: G49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585383		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	85	17	85.91	0	99.1	77.8	128	1.24	20	
Surr: BFB	3700		3437		108	15	316	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802858

16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: B49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585412		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.2	80	120			

Sample ID 100NG BTEX LCS	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: B49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585413		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	77.3	128			
Toluene	1.0	0.050	1.000	0	101	79.2	125			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	103	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.5	80	120			

Sample ID 1802858-002AMS	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: NW Wall @ 25'-45'	Batch ID: B49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585414		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.8	0.090	3.613	0	104	80.9	132			
Toluene	3.8	0.18	3.613	0.03649	103	79.8	136			
Ethylbenzene	3.7	0.18	3.613	0	102	79.4	140			
Xylenes, Total	11	0.36	10.84	0	106	78.5	142			
Surr: 4-Bromofluorobenzene	3.4		3.613		93.4	80	120			

Sample ID 1802858-002AMSD	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: NW Wall @ 25'-45'	Batch ID: B49154		RunNo: 49154							
Prep Date:	Analysis Date: 2/15/2018		SeqNo: 1585415		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.7	0.090	3.613	0	102	80.9	132	2.51	20	
Toluene	3.6	0.18	3.613	0.03649	99.4	79.8	136	3.45	20	
Ethylbenzene	3.6	0.18	3.613	0	99.5	79.4	140	2.43	20	
Xylenes, Total	11	0.36	10.84	0	103	78.5	142	3.11	20	
Surr: 4-Bromofluorobenzene	3.3		3.613		92.6	80	120	0	0	

Qualifiers:

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



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: **1802858**

RcptNo: **1**

Received By: **Anne Thorne** 2/15/2018 7:00:00 AM

Anne Thorne

Completed By: **Anne Thorne** 2/15/2018 8:13:54 AM

Anne Thorne

Reviewed By: **SRE 02/15/18**
Labeled By DDS

Chain of Custody

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

Log In

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

of preserved bottles checked for pH: _____ (<2 or >12 unless noted) Adjusted? _____ Checked by: _____
--

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

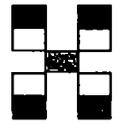
17. Cooler Information

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

Chain-of-Custody Record

Client: **BENSON - MONTH - GREER**
BLAGE 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:
 Standard Rush **same day**
 Project Name:
HOMESTEAD RANCH #2
 Project #:
 Project Manager:
JEFF BLAGE
 Sampler: **NELSON VELEZ**
 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	BTEX + MTBE (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	# PTS. COMPOSITE	Air Bubbles (Y or N)	
4/14/18	1035	SOIL	WEST BASE @ 45'	402.-1	COOL	1802858	201	✓	✓										✓	5	
	1042		NW WALL @ 25'-45'				202	✓	✓										✓	5	
	1045		NW WALL @ 15'-25'				203	✓	✓										✓	5	
	1047		WEST WALL @ 25'-45'				204	✓	✓										✓	5	
	1049		WEST WALL @ 15'-25'				205	✓	✓										✓	5	
	1052		SW WALL @ 25'-45'				206	✓	✓										✓	5	
	1057		SW WALL @ 15'-25'				207	✓	✓										✓	5	
	1100		WEST WALL @ 10'-15'				208	✓	✓										✓	6	
	1106		NW WALL @ 10'-15'				209	✓	✓										✓	3	
	1112		WEST TOP @ 0'-10'				210	✓	✓										✓	7	

Date: 4/14/18 Time: 1740 Relinquished by: *[Signature]*
 Received by: *[Signature]* Date: 4/14/18 Time: 1740
 Date: 4/14/18 Time: 1904 Relinquished by: *[Signature]*
 Received by: *[Signature]* Date: 02/15/18 Time: 0700

Remarks: **BILL BMG**
CONTACT: ZACH STRADLING

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.

Appendix C
Treated Soil Pile
Analytical Data Reports



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

February 08, 2018

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199

FAX (505) 632-3903

RE: Homestead Ranch 2

OrderNo.: 1802226

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 10 sample(s) on 2/6/2018 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-1
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:05:00 AM
Lab ID: 1802226-001 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 9:21:22 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	200	9.7		mg/Kg	1	2/6/2018 11:32:17 AM	36366
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2018 11:32:17 AM	36366
Surr: DNOP	96.8	70-130		%Rec	1	2/6/2018 11:32:17 AM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	400	67		mg/Kg	20	2/6/2018 9:45:44 AM	36352
Surr: BFB	341	15-316	S	%Rec	20	2/6/2018 9:45:44 AM	36352
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.33		mg/Kg	20	2/6/2018 9:45:44 AM	36352
Toluene	ND	0.67		mg/Kg	20	2/6/2018 9:45:44 AM	36352
Ethylbenzene	1.1	0.67		mg/Kg	20	2/6/2018 9:45:44 AM	36352
Xylenes, Total	13	1.3		mg/Kg	20	2/6/2018 9:45:44 AM	36352
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	20	2/6/2018 9:45:44 AM	36352

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-2
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:08:00 AM
Lab ID: 1802226-002 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 9:35:20 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	240	9.9		mg/Kg	1	2/6/2018 11:54:21 AM	36366
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/6/2018 11:54:21 AM	36366
Surr: DNOP	100	70-130		%Rec	1	2/6/2018 11:54:21 AM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	350	64		mg/Kg	20	2/6/2018 10:09:09 AM	36352
Surr: BFB	286	15-316		%Rec	20	2/6/2018 10:09:09 AM	36352
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.32		mg/Kg	20	2/6/2018 10:09:09 AM	36352
Toluene	ND	0.64		mg/Kg	20	2/6/2018 10:09:09 AM	36352
Ethylbenzene	0.93	0.64		mg/Kg	20	2/6/2018 10:09:09 AM	36352
Xylenes, Total	11	1.3		mg/Kg	20	2/6/2018 10:09:09 AM	36352
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	20	2/6/2018 10:09:09 AM	36352

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering
 Project: Homestead Ranch 2
 Lab ID: 1802226-003

Matrix: SOIL

Client Sample ID: TSP-3
 Collection Date: 2/5/2018 10:11:00 AM
 Received Date: 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 9:47:44 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	140	9.2		mg/Kg	1	2/6/2018 12:16:16 PM	36366
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/6/2018 12:16:16 PM	36366
Surr: DNOP	100	70-130		%Rec	1	2/6/2018 12:16:16 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	300	33		mg/Kg	10	2/6/2018 10:27:07 AM	G48931
Surr: BFB	537	15-316	S	%Rec	10	2/6/2018 10:27:07 AM	G48931
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.16		mg/Kg	10	2/6/2018 10:27:07 AM	B48931
Toluene	ND	0.33		mg/Kg	10	2/6/2018 10:27:07 AM	B48931
Ethylbenzene	0.81	0.33		mg/Kg	10	2/6/2018 10:27:07 AM	B48931
Xylenes, Total	7.8	0.66		mg/Kg	10	2/6/2018 10:27:07 AM	B48931
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	10	2/6/2018 10:27:07 AM	B48931

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-4
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:14:00 AM
Lab ID: 1802226-004 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 10:00:09 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	120	10		mg/Kg	1	2/6/2018 12:38:13 PM	36366
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	2/6/2018 12:38:13 PM	36366
Surr: DNOP	99.2	70-130		%Rec	1	2/6/2018 12:38:13 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	260	30		mg/Kg	10	2/6/2018 10:50:48 AM	G48931
Surr: BFB	517	15-316	S	%Rec	10	2/6/2018 10:50:48 AM	G48931
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.15		mg/Kg	10	2/6/2018 10:50:48 AM	B48931
Toluene	ND	0.30		mg/Kg	10	2/6/2018 10:50:48 AM	B48931
Ethylbenzene	0.63	0.30		mg/Kg	10	2/6/2018 10:50:48 AM	B48931
Xylenes, Total	6.3	0.60		mg/Kg	10	2/6/2018 10:50:48 AM	B48931
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	10	2/6/2018 10:50:48 AM	B48931

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-5
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:16:00 AM
Lab ID: 1802226-005 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 10:12:33 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	160	9.8		mg/Kg	1	2/6/2018 1:00:07 PM	36366
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2018 1:00:07 PM	36366
Surr: DNOP	101	70-130		%Rec	1	2/6/2018 1:00:07 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	430	30		mg/Kg	10	2/6/2018 11:14:36 AM	G48931
Surr: BFB	795	15-316	S	%Rec	10	2/6/2018 11:14:36 AM	G48931
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.15		mg/Kg	10	2/6/2018 11:14:36 AM	B48931
Toluene	0.33	0.30		mg/Kg	10	2/6/2018 11:14:36 AM	B48931
Ethylbenzene	1.2	0.30		mg/Kg	10	2/6/2018 11:14:36 AM	B48931
Xylenes, Total	12	0.60		mg/Kg	10	2/6/2018 11:14:36 AM	B48931
Surr: 4-Bromofluorobenzene	121	80-120	S	%Rec	10	2/6/2018 11:14:36 AM	B48931

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

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

Analytical Report

Lab Order 1802226

Date Reported: 2/8/2018

CLIENT: Blagg Engineering

Client Sample ID: TSP-6

Project: Homestead Ranch 2

Collection Date: 2/5/2018 10:18:00 AM

Lab ID: 1802226-006

Matrix: SOIL

Received Date: 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 10:24:57 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
							Analyst: TOM
Diesel Range Organics (DRO)	170	9.7		mg/Kg	1	2/6/2018 1:22:24 PM	36366
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/6/2018 1:22:24 PM	36366
Surr: DNOP	104	70-130		%Rec	1	2/6/2018 1:22:24 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							
							Analyst: NSB
Gasoline Range Organics (GRO)	400	31		mg/Kg	10	2/6/2018 11:38:16 AM	G48931
Surr: BFB	697	15-316	S	%Rec	10	2/6/2018 11:38:16 AM	G48931
EPA METHOD 8021B: VOLATILES							
							Analyst: NSB
Benzene	ND	0.16		mg/Kg	10	2/6/2018 11:38:16 AM	B48931
Toluene	ND	0.31		mg/Kg	10	2/6/2018 11:38:16 AM	B48931
Ethylbenzene	1.1	0.31		mg/Kg	10	2/6/2018 11:38:16 AM	B48931
Xylenes, Total	11	0.63		mg/Kg	10	2/6/2018 11:38:16 AM	B48931
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	10	2/6/2018 11:38:16 AM	B48931

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-7
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:20:00 AM
Lab ID: 1802226-007 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 10:37:22 AM	36366
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	170	9.8		mg/Kg	1	2/6/2018 1:44:26 PM	36366
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/6/2018 1:44:26 PM	36366
Surr: DNOP	102	70-130		%Rec	1	2/6/2018 1:44:26 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	280	35		mg/Kg	10	2/6/2018 12:01:56 PM	G48931
Surr: BFB	503	15-316	S	%Rec	10	2/6/2018 12:01:56 PM	G48931
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.18		mg/Kg	10	2/6/2018 12:01:56 PM	B48931
Toluene	ND	0.35		mg/Kg	10	2/6/2018 12:01:56 PM	B48931
Ethylbenzene	0.75	0.35		mg/Kg	10	2/6/2018 12:01:56 PM	B48931
Xylenes, Total	6.6	0.70		mg/Kg	10	2/6/2018 12:01:56 PM	B48931
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	10	2/6/2018 12:01:56 PM	B48931

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-8
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:22:00 AM
Lab ID: 1802226-008 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 10:49:47 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	130	9.5		mg/Kg	1	2/6/2018 2:06:35 PM	36366
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/6/2018 2:06:35 PM	36366
Surr: DNOP	101	70-130		%Rec	1	2/6/2018 2:06:35 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	320	33		mg/Kg	10	2/6/2018 12:25:33 PM	G48931
Surr: BFB	564	15-316	S	%Rec	10	2/6/2018 12:25:33 PM	G48931
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.17		mg/Kg	10	2/6/2018 12:25:33 PM	B48931
Toluene	ND	0.33		mg/Kg	10	2/6/2018 12:25:33 PM	B48931
Ethylbenzene	0.77	0.33		mg/Kg	10	2/6/2018 12:25:33 PM	B48931
Xylenes, Total	7.4	0.67		mg/Kg	10	2/6/2018 12:25:33 PM	B48931
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	10	2/6/2018 12:25:33 PM	B48931

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802226-009

Matrix: SOIL

Client Sample ID: TSP-9
Collection Date: 2/5/2018 10:24:00 AM
Received Date: 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	ND	30		mg/Kg	20	2/6/2018 11:27:01 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	96	9.3		mg/Kg	1	2/6/2018 2:28:39 PM	36366
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2018 2:28:39 PM	36366
Surr: DNOP	102	70-130		%Rec	1	2/6/2018 2:28:39 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							
Gasoline Range Organics (GRO)	430	39		mg/Kg	10	2/6/2018 12:49:08 PM	G48931
Surr: BFB	598	15-316	S	%Rec	10	2/6/2018 12:49:08 PM	G48931
EPA METHOD 8021B: VOLATILES							
Benzene	ND	0.19		mg/Kg	10	2/6/2018 12:49:08 PM	B48931
Toluene	ND	0.39		mg/Kg	10	2/6/2018 12:49:08 PM	B48931
Ethylbenzene	1.1	0.39		mg/Kg	10	2/6/2018 12:49:08 PM	B48931
Xylenes, Total	9.5	0.78		mg/Kg	10	2/6/2018 12:49:08 PM	B48931
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	10	2/6/2018 12:49:08 PM	B48931

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

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

Analytical Report
 Lab Order 1802226
 Date Reported: 2/8/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-10
Project: Homestead Ranch 2 **Collection Date:** 2/5/2018 10:26:00 AM
Lab ID: 1802226-010 **Matrix:** SOIL **Received Date:** 2/6/2018 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/6/2018 11:39:25 AM	36368
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	120	9.4		mg/Kg	1	2/6/2018 2:50:51 PM	36366
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/6/2018 2:50:51 PM	36366
Surr: DNOP	102	70-130		%Rec	1	2/6/2018 2:50:51 PM	36366
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	280	33		mg/Kg	10	2/6/2018 1:12:43 PM	G48931
Surr: BFB	523	15-316	S	%Rec	10	2/6/2018 1:12:43 PM	G48931
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.17		mg/Kg	10	2/6/2018 1:12:43 PM	B48931
Toluene	ND	0.33		mg/Kg	10	2/6/2018 1:12:43 PM	B48931
Ethylbenzene	0.77	0.33		mg/Kg	10	2/6/2018 1:12:43 PM	B48931
Xylenes, Total	7.2	0.66		mg/Kg	10	2/6/2018 1:12:43 PM	B48931
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	10	2/6/2018 1:12:43 PM	B48931

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1802226

08-Feb-18

Client: Blagg Engineering

Project: Homestead Ranch 2

Sample ID	MB-36368	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36368	RunNo:	48924					
Prep Date:	2/6/2018	Analysis Date:	2/6/2018	SeqNo:	1575789	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36368	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36368	RunNo:	48924					
Prep Date:	2/6/2018	Analysis Date:	2/6/2018	SeqNo:	1575790	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802226
08-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	LCS-36366		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	36366		RunNo:	48919				
Prep Date:	2/6/2018		Analysis Date:	2/6/2018		SeqNo:	1574281		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	47	10	50.00	0	93.8	70	130				
Surr: DNOP	4.4		5.000		87.9	70	130				

Sample ID	MB-36366		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	36366		RunNo:	48919				
Prep Date:	2/6/2018		Analysis Date:	2/6/2018		SeqNo:	1574282		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	9.6		10.00		96.4	70	130				

Sample ID	1802226-001AMS		SampType:	MS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	TSP-1		Batch ID:	36366		RunNo:	48919				
Prep Date:	2/6/2018		Analysis Date:	2/6/2018		SeqNo:	1574702		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	240	9.4	46.82	198.6	91.2	55.8	125				
Surr: DNOP	4.7		4.682		99.6	70	130				

Sample ID	1802226-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	TSP-1		Batch ID:	36366		RunNo:	48919				
Prep Date:	2/6/2018		Analysis Date:	2/6/2018		SeqNo:	1574703		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	240	9.6	47.85	198.6	94.1	55.8	125	0.959	20		
Surr: DNOP	4.8		4.785		99.5	70	130	0	0		

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802226
08-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G48931		RunNo: 48931							
Prep Date:	Analysis Date: 2/6/2018		SeqNo: 1574759		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	910		1000		91.2	15	316			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G48931		RunNo: 48931							
Prep Date:	Analysis Date: 2/6/2018		SeqNo: 1574760		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.8	75.9	131			
Surr: BFB	1100		1000		109	15	316			

Sample ID MB-36352	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 36352		RunNo: 48930							
Prep Date: 2/5/2018	Analysis Date: 2/6/2018		SeqNo: 1574768		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	15	316			

Sample ID LCS-36352	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 36352		RunNo: 48930							
Prep Date: 2/5/2018	Analysis Date: 2/6/2018		SeqNo: 1574769		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	75.9	131			
Surr: BFB	1200		1000		119	15	316			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802226

08-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: B48931		RunNo: 48931							
Prep Date:	Analysis Date: 2/6/2018		SeqNo: 1574763		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.2	80	120			

Sample ID 100NG BTEX LCS	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: B48931		RunNo: 48931							
Prep Date:	Analysis Date: 2/6/2018		SeqNo: 1574764		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	77.3	128			
Toluene	0.85	0.050	1.000	0	84.6	79.2	125			
Ethylbenzene	0.87	0.050	1.000	0	87.4	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	88.3	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID MB-36352	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 36352		RunNo: 48930							
Prep Date: 2/5/2018	Analysis Date: 2/6/2018		SeqNo: 1574788		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID LCS-36352	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 36352		RunNo: 48930							
Prep Date: 2/5/2018	Analysis Date: 2/6/2018		SeqNo: 1574789		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	107	77.3	128			
Toluene	1.1	0.050	1.000	0	106	79.2	125			
Ethylbenzene	1.1	0.050	1.000	0	106	80.7	127			
Xylenes, Total	3.2	0.10	3.000	0	108	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Qualifiers:

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



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: **1802226**

RcptNo: **1**

Received By: **Anne Thorne**

2/6/2018 7:30:00 AM

Anne Thorne

Completed By: **Anne Thorne**

2/6/2018 7:44:48 AM

Anne Thorne

Reviewed By: **DDS**

2/6/18

Chain of Custody

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

Log In

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

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

17. Cooler Information

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

Chain-of-Custody Record

Client: BENSON - MOUNTAIN - GREER
BLAKE 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:

Standard Rush Same Day

Project Name:

HONESTED RANCH #2

Project #:

Project Manager:

JEFF BLAKE

Sampler: JEFF BLAKE

On Ice: YES NO

Sample Temperature: 0°C

0.2 L/0.1 R AT Container Type and # NEWETT

Preservative Type COOL

<input checked="" type="checkbox"/>	BTEX + MTBE + LMBS (8021)
<input checked="" type="checkbox"/>	BTEX + MTBE + TPH (Gas only)
<input checked="" type="checkbox"/>	TPH 8015B (GRO / DRO / MRO)
<input type="checkbox"/>	TPH (Method 418.1)
<input type="checkbox"/>	EDB (Method 504.1)
<input type="checkbox"/>	PAH's (8310 or 8270 SIMS)
<input type="checkbox"/>	RCRA 8 Metals
<input type="checkbox"/>	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
<input type="checkbox"/>	8081 Pesticides / 8082 PCB's
<input type="checkbox"/>	8260B (VOA)
<input type="checkbox"/>	8270 (Semi-VOA)
<input checked="" type="checkbox"/>	CHLORIDE
<input type="checkbox"/>	Air Bubbles (Y or N)

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	Time
5/18/18	1005	SOIL	TSP-1	4oz x 1	COOL	201
	1008		TSP-2			202
	1011		TSP-3			203
	1014		TSP-4			204
	1016		TSP-5			205
	1018		TSP-6			206
	1020		TSP-7			207
	1022		TSP-8			208
	1024		TSP-9			209
	1026		TSP-10			210

Date: 5/18 Time: 1533 Relinquished by: Jeff Blake

Date: 5/18 Time: 1820 Relinquished by: Michelle Walker

Received by: Michelle Walker Date: 5/18/2018 Time: 1533

Received by: John J. ... Date: 02/10/18 Time: 0730

Remarks: BILL BMG

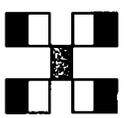
CONTRACT: ZACH STRANLUC

4900 College Blvd. 871402

FARMINGTON, NM

NOTE: SAMPLES TREATED WITH H₂O₂

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

February 12, 2018

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

RE: Homestead Ranch 2

OrderNo.: 1802539

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/9/2018 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
 Lab Order 1802539
 Date Reported: 2/12/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-11
Project: Homestead Ranch 2 **Collection Date:** 2/8/2018 11:46:00 AM
Lab ID: 1802539-001 **Matrix:** SOIL **Received Date:** 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 11:43:09 AM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	63	9.7		mg/Kg	1	2/9/2018 9:08:50 AM	36444
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/9/2018 9:08:50 AM	36444
Surr: DNOP	102	70-130		%Rec	1	2/9/2018 9:08:50 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	68	16		mg/Kg	5	2/9/2018 11:17:56 AM	G49019
Surr: BFB	289	15-316		%Rec	5	2/9/2018 11:17:56 AM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.082		mg/Kg	5	2/9/2018 11:17:56 AM	B49019
Toluene	ND	0.16		mg/Kg	5	2/9/2018 11:17:56 AM	B49019
Ethylbenzene	ND	0.16		mg/Kg	5	2/9/2018 11:17:56 AM	B49019
Xylenes, Total	0.86	0.33		mg/Kg	5	2/9/2018 11:17:56 AM	B49019
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	5	2/9/2018 11:17:56 AM	B49019

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

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

Analytical Report
 Lab Order 1802539
 Date Reported: 2/12/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-12
Project: Homestead Ranch 2 **Collection Date:** 2/8/2018 11:50:00 AM
Lab ID: 1802539-002 **Matrix:** SOIL **Received Date:** 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 11:55:33 AM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	100	9.6		mg/Kg	1	2/9/2018 9:33:14 AM	36444
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2018 9:33:14 AM	36444
Surr: DNOP	104	70-130		%Rec	1	2/9/2018 9:33:14 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	200	16		mg/Kg	5	2/9/2018 9:43:05 AM	G49019
Surr: BFB	792	15-316	S	%Rec	5	2/9/2018 9:43:05 AM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.080		mg/Kg	5	2/9/2018 9:43:05 AM	B49019
Toluene	ND	0.16		mg/Kg	5	2/9/2018 9:43:05 AM	B49019
Ethylbenzene	ND	0.16		mg/Kg	5	2/9/2018 9:43:05 AM	B49019
Xylenes, Total	4.8	0.32		mg/Kg	5	2/9/2018 9:43:05 AM	B49019
Surr: 4-Bromofluorobenzene	120	80-120		%Rec	5	2/9/2018 9:43:05 AM	B49019

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

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

Analytical Report
 Lab Order 1802539
 Date Reported: 2/12/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-13
Project: Homestead Ranch 2 **Collection Date:** 2/8/2018 11:54:00 AM
Lab ID: 1802539-003 **Matrix:** SOIL **Received Date:** 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 12:07:58 PM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	110	9.9		mg/Kg	1	2/9/2018 9:57:48 AM	36444
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/9/2018 9:57:48 AM	36444
Surr: DNOP	105	70-130		%Rec	1	2/9/2018 9:57:48 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	130	16		mg/Kg	5	2/9/2018 10:06:46 AM	G49019
Surr: BFB	436	15-316	S	%Rec	5	2/9/2018 10:06:46 AM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.080		mg/Kg	5	2/9/2018 10:06:46 AM	B49019
Toluene	ND	0.16		mg/Kg	5	2/9/2018 10:06:46 AM	B49019
Ethylbenzene	ND	0.16		mg/Kg	5	2/9/2018 10:06:46 AM	B49019
Xylenes, Total	2.1	0.32		mg/Kg	5	2/9/2018 10:06:46 AM	B49019
Surr: 4-Bromofluorobenzene	115	80-120		%Rec	5	2/9/2018 10:06:46 AM	B49019

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

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

Analytical Report
 Lab Order 1802539
 Date Reported: 2/12/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-14
Project: Homestead Ranch 2 **Collection Date:** 2/8/2018 11:57:00 AM
Lab ID: 1802539-004 **Matrix:** SOIL **Received Date:** 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 12:20:22 PM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	180	9.9		mg/Kg	1	2/9/2018 10:22:02 AM	36444
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/9/2018 10:22:02 AM	36444
Surr: DNOP	99.9	70-130		%Rec	1	2/9/2018 10:22:02 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	190	15		mg/Kg	5	2/9/2018 10:30:29 AM	G49019
Surr: BFB	790	15-316	S	%Rec	5	2/9/2018 10:30:29 AM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.075		mg/Kg	5	2/9/2018 10:30:29 AM	B49019
Toluene	ND	0.15		mg/Kg	5	2/9/2018 10:30:29 AM	B49019
Ethylbenzene	ND	0.15		mg/Kg	5	2/9/2018 10:30:29 AM	B49019
Xylenes, Total	5.1	0.30		mg/Kg	5	2/9/2018 10:30:29 AM	B49019
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	5	2/9/2018 10:30:29 AM	B49019

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

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

Analytical Report

Lab Order 1802539

Date Reported: 2/12/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802539-005

Matrix: SOIL

Client Sample ID: TSP-15
Collection Date: 2/8/2018 12:01:00 PM
Received Date: 2/9/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	2/9/2018 12:32:47 PM	36451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	140	9.1		mg/Kg	1	2/9/2018 10:46:25 AM	36444
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2018 10:46:25 AM	36444
Surr: DNOP	98.9	70-130		%Rec	1	2/9/2018 10:46:25 AM	36444
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	220	3.0		mg/Kg	1	2/9/2018 10:54:19 AM	G49019
Surr: BFB	2960	15-316	S	%Rec	1	2/9/2018 10:54:19 AM	G49019
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.015		mg/Kg	1	2/9/2018 10:54:19 AM	B49019
Toluene	0.12	0.030		mg/Kg	1	2/9/2018 10:54:19 AM	B49019
Ethylbenzene	ND	0.030		mg/Kg	1	2/9/2018 10:54:19 AM	B49019
Xylenes, Total	8.7	1.2		mg/Kg	20	2/9/2018 3:14:33 PM	B49019
Surr: 4-Bromofluorobenzene	398	80-120	S	%Rec	1	2/9/2018 10:54:19 AM	B49019

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1802539
 12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	MB-36451	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36451	RunNo:	49016					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1578762	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36451	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36451	RunNo:	49016					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1578763	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1802539
 12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	LCS-36444	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	36444	RunNo:	49006					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1577367	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	95.6	70	130			
Surr: DNOP	4.6		5.000		91.0	70	130			

Sample ID	MB-36444	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	36444	RunNo:	49006					
Prep Date:	2/9/2018	Analysis Date:	2/9/2018	SeqNo:	1577368	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		97.6	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802539

12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578224		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	930		1000		93.5	15	316			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578225		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	75.9	131			
Surr: BFB	1100		1000		109	15	316			

Sample ID 1802539-002AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: TSP-12	Batch ID: G49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578226		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	280	16	80.34	201.3	99.9	77.8	128			
Surr: BFB	25000		3214		777	15	316			S

Sample ID 1802539-002AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: TSP-12	Batch ID: G49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578227		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	280	16	80.34	201.3	103	77.8	128	0.864	20	
Surr: BFB	25000		3214		769	15	316	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802539

12-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: B49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578234		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	80	120			

Sample ID 100NG BTEX LCS	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: B49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578235		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	77.3	128			
Toluene	0.87	0.050	1.000	0	87.1	79.2	125			
Ethylbenzene	0.90	0.050	1.000	0	89.9	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	91.1	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID 1802539-003AMS	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: TSP-13	Batch ID: B49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578236		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.2	0.080	3.205	0	100	80.9	132			
Toluene	3.5	0.16	3.205	0	108	79.8	136			
Ethylbenzene	3.5	0.16	3.205	0	108	79.4	140			
Xylenes, Total	12	0.32	9.615	2.051	100	78.5	142			
Surr: 4-Bromofluorobenzene	3.7		3.205		116	80	120			

Sample ID 1802539-003AMSD	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: TSP-13	Batch ID: B49019		RunNo: 49019							
Prep Date:	Analysis Date: 2/9/2018		SeqNo: 1578237		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.1	0.080	3.205	0	98.3	80.9	132	1.72	20	
Toluene	3.1	0.16	3.205	0	97.4	79.8	136	10.6	20	
Ethylbenzene	3.4	0.16	3.205	0	107	79.4	140	0.871	20	
Xylenes, Total	11	0.32	9.615	2.051	97.9	78.5	142	1.74	20	
Surr: 4-Bromofluorobenzene	3.7		3.205		117	80	120	0	0	

Qualifiers:

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



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: **1802539**

RcptNo: **1**

Received By: **Anne Thorne**

2/9/2018 7:00:00 AM

Anne Thorne

Completed By: **Anne Thorne**

2/9/2018 8:16:22 AM

Anne Thorne

Reviewed By: **IDS**

2/9/18

Chain of Custody

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

Log In

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

of preserved bottles checked for pH: _____ (<2 or >12 unless noted) Adjusted? _____ Checked by: _____
--

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

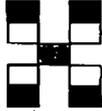
17. Cooler Information

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

Chain-of-Custody Record

Client: **BENSON-MONTIN-GREER**
BLABB 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:
 Standard Rush Same Day
 Project Name:
HOMESTEAD RANCH #2
 Project #:
 Project Manager:
JEFF BLABB
 Sampler: **JEFF BLABB**
 On Site 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	150 mL Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TPH (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MIRO)	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)
2/8/2018	1146	SOIL	TSP-11	4oz x 1	COOL	1802539	X	X										X	
	1150		TSP-12																
	1154		TSP-13																
	1157		TSP-14																
	1201		TSP-15																

Date: 2/8/18	Time: 1540	Relinquished by: Jeff Blagg	Received by: Christopher Waley	Date: 2/8/2018	Time: 1540	Remarks: Bill BMG CONTACT: ZACH STRAYLING NOTE: SAMPLES TREATED WITH H₂O₂
Date: 2/8/18	Time: 1851	Relinquished by: Christopher Waley	Received by: [Signature]	Date: 02/08/18	Time: 0700	

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



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

February 16, 2018

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

RE: Homestead Ranch 2

OrderNo.: 1802857

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 9 sample(s) on 2/15/2018 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
 Lab Order 1802857
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-16
Project: Homestead Ranch 2 **Collection Date:** 2/14/2018 11:55:00 AM
Lab ID: 1802857-001 **Matrix:** SOIL **Received Date:** 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 11:15:59 AM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	63	9.4		mg/Kg	1	2/15/2018 9:35:29 AM	36540
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/15/2018 9:35:29 AM	36540
Surr: DNOP	99.2	70-130		%Rec	1	2/15/2018 9:35:29 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	50	16		mg/Kg	5	2/15/2018 12:22:47 PM	G49155
Surr: BFB	273	15-316		%Rec	5	2/15/2018 12:22:47 PM	G49155
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.081		mg/Kg	5	2/15/2018 12:22:47 PM	B49155
Toluene	ND	0.16		mg/Kg	5	2/15/2018 12:22:47 PM	B49155
Ethylbenzene	ND	0.16		mg/Kg	5	2/15/2018 12:22:47 PM	B49155
Xylenes, Total	0.63	0.32		mg/Kg	5	2/15/2018 12:22:47 PM	B49155
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	5	2/15/2018 12:22:47 PM	B49155

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

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

Analytical Report

Lab Order 1802857

Date Reported: 2/16/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802857-002

Client Sample ID: TSP-17
Collection Date: 2/14/2018 12:00:00 PM
Received Date: 2/15/2018 7:00:00 AM

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 11:28:23 AM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	39	9.3		mg/Kg	1	2/15/2018 9:57:29 AM	36540
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/15/2018 9:57:29 AM	36540
Surr: DNOP	98.3	70-130		%Rec	1	2/15/2018 9:57:29 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	23	16		mg/Kg	5	2/15/2018 12:46:31 PM	G49155
Surr: BFB	164	15-316		%Rec	5	2/15/2018 12:46:31 PM	G49155
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.080		mg/Kg	5	2/15/2018 12:46:31 PM	B49155
Toluene	ND	0.16		mg/Kg	5	2/15/2018 12:46:31 PM	B49155
Ethylbenzene	ND	0.16		mg/Kg	5	2/15/2018 12:46:31 PM	B49155
Xylenes, Total	ND	0.32		mg/Kg	5	2/15/2018 12:46:31 PM	B49155
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	5	2/15/2018 12:46:31 PM	B49155

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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 **Client Sample ID:** TSP-18
Project: Homestead Ranch 2 **Collection Date:** 2/14/2018 12:05:00 PM
Lab ID: 1802857-003 **Matrix:** SOIL **Received Date:** 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 11:40:48 AM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	30	9.8		mg/Kg	1	2/15/2018 10:19:28 AM	36540
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/15/2018 10:19:28 AM	36540
Surr: DNOP	99.0	70-130		%Rec	1	2/15/2018 10:19:28 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	16		mg/Kg	5	2/15/2018 9:36:33 AM	G49155
Surr: BFB	133	15-316		%Rec	5	2/15/2018 9:36:33 AM	G49155
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.079		mg/Kg	5	2/15/2018 9:36:33 AM	B49155
Toluene	ND	0.16		mg/Kg	5	2/15/2018 9:36:33 AM	B49155
Ethylbenzene	ND	0.16		mg/Kg	5	2/15/2018 9:36:33 AM	B49155
Xylenes, Total	ND	0.32		mg/Kg	5	2/15/2018 9:36:33 AM	B49155
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	5	2/15/2018 9:36:33 AM	B49155

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

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

Analytical Report
 Lab Order 1802857
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802857-004

Matrix: SOIL

Client Sample ID: TSP-19
Collection Date: 2/14/2018 12:10:00 PM
Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	ND	30		mg/Kg	20	2/15/2018 11:53:13 AM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	120	9.7		mg/Kg	1	2/15/2018 10:41:35 AM	36540
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/15/2018 10:41:35 AM	36540
Surr: DNOP	95.3	70-130		%Rec	1	2/15/2018 10:41:35 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							
Gasoline Range Organics (GRO)	120	16		mg/Kg	5	2/15/2018 10:00:15 AM	G49155
Surr: BFB	446	15-316	S	%Rec	5	2/15/2018 10:00:15 AM	G49155
EPA METHOD 8021B: VOLATILES							
Benzene	ND	0.081		mg/Kg	5	2/15/2018 10:00:15 AM	B49155
Toluene	ND	0.16		mg/Kg	5	2/15/2018 10:00:15 AM	B49155
Ethylbenzene	ND	0.16		mg/Kg	5	2/15/2018 10:00:15 AM	B49155
Xylenes, Total	1.8	0.32		mg/Kg	5	2/15/2018 10:00:15 AM	B49155
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	5	2/15/2018 10:00:15 AM	B49155

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

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

Analytical Report
 Lab Order 1802857
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-20
Project: Homestead Ranch 2 **Collection Date:** 2/14/2018 12:15:00 PM
Lab ID: 1802857-005 **Matrix:** SOIL **Received Date:** 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	ND	30		mg/Kg	20	2/15/2018 12:05:38 PM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	44	9.6		mg/Kg	1	2/15/2018 11:03:37 AM	36540
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/15/2018 11:03:37 AM	36540
Surr: DNOP	99.0	70-130		%Rec	1	2/15/2018 11:03:37 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							
Gasoline Range Organics (GRO)	29	19		mg/Kg	5	2/15/2018 10:23:58 AM	G49155
Surr: BFB	167	15-316		%Rec	5	2/15/2018 10:23:58 AM	G49155
EPA METHOD 8021B: VOLATILES							
Benzene	ND	0.095		mg/Kg	5	2/15/2018 10:23:58 AM	B49155
Toluene	ND	0.19		mg/Kg	5	2/15/2018 10:23:58 AM	B49155
Ethylbenzene	ND	0.19		mg/Kg	5	2/15/2018 10:23:58 AM	B49155
Xylenes, Total	ND	0.38		mg/Kg	5	2/15/2018 10:23:58 AM	B49155
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	5	2/15/2018 10:23:58 AM	B49155

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

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

Analytical Report

Lab Order **1802857**

Date Reported: **2/16/2018**

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802857-006

Matrix: SOIL

Client Sample ID: TSP-21
Collection Date: 2/14/2018 12:20:00 PM
Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 12:18:02 PM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	94	9.9		mg/Kg	1	2/15/2018 11:25:31 AM	36540
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/15/2018 11:25:31 AM	36540
Surr: DNOP	97.2	70-130		%Rec	1	2/15/2018 11:25:31 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	46	16		mg/Kg	5	2/15/2018 10:47:48 AM	G49155
Surr: BFB	251	15-316		%Rec	5	2/15/2018 10:47:48 AM	G49155
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.081		mg/Kg	5	2/15/2018 10:47:48 AM	B49155
Toluene	ND	0.16		mg/Kg	5	2/15/2018 10:47:48 AM	B49155
Ethylbenzene	ND	0.16		mg/Kg	5	2/15/2018 10:47:48 AM	B49155
Xylenes, Total	0.66	0.33		mg/Kg	5	2/15/2018 10:47:48 AM	B49155
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	5	2/15/2018 10:47:48 AM	B49155

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

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

Analytical Report
 Lab Order 1802857
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering **Client Sample ID:** TSP-22
Project: Homestead Ranch 2 **Collection Date:** 2/14/2018 12:25:00 PM
Lab ID: 1802857-007 **Matrix:** SOIL **Received Date:** 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							
Chloride	ND	30		mg/Kg	20	2/15/2018 12:30:27 PM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							
Diesel Range Organics (DRO)	95	9.8		mg/Kg	1	2/15/2018 11:47:30 AM	36540
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/15/2018 11:47:30 AM	36540
Surr: DNOP	102	70-130		%Rec	1	2/15/2018 11:47:30 AM	36540
EPA METHOD 8015D: GASOLINE RANGE							
Gasoline Range Organics (GRO)	60	20		mg/Kg	5	2/15/2018 11:11:34 AM	G49155
Surr: BFB	255	15-316		%Rec	5	2/15/2018 11:11:34 AM	G49155
EPA METHOD 8021B: VOLATILES							
Benzene	ND	0.099		mg/Kg	5	2/15/2018 11:11:34 AM	B49155
Toluene	ND	0.20		mg/Kg	5	2/15/2018 11:11:34 AM	B49155
Ethylbenzene	ND	0.20		mg/Kg	5	2/15/2018 11:11:34 AM	B49155
Xylenes, Total	0.76	0.39		mg/Kg	5	2/15/2018 11:11:34 AM	B49155
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	5	2/15/2018 11:11:34 AM	B49155

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

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

Analytical Report
 Lab Order 1802857
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802857-008

Matrix: SOIL

Client Sample ID: TSP-23
Collection Date: 2/14/2018 12:30:00 PM
Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 12:42:51 PM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	25	9.2		mg/Kg	1	2/15/2018 12:09:25 PM	36540
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/15/2018 12:09:25 PM	36540
Surr: DNOP	103	70-130		%Rec	1	2/15/2018 12:09:25 PM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	16		mg/Kg	5	2/15/2018 11:35:21 AM	G49155
Surr: BFB	137	15-316		%Rec	5	2/15/2018 11:35:21 AM	G49155
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.079		mg/Kg	5	2/15/2018 11:35:21 AM	B49155
Toluene	ND	0.16		mg/Kg	5	2/15/2018 11:35:21 AM	B49155
Ethylbenzene	ND	0.16		mg/Kg	5	2/15/2018 11:35:21 AM	B49155
Xylenes, Total	ND	0.32		mg/Kg	5	2/15/2018 11:35:21 AM	B49155
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	5	2/15/2018 11:35:21 AM	B49155

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

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

Analytical Report
 Lab Order 1802857
 Date Reported: 2/16/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1802857-009

Matrix: SOIL

Client Sample ID: TSP-24
Collection Date: 2/14/2018 12:35:00 PM
Received Date: 2/15/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/15/2018 1:20:04 PM	36542
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	54	9.7		mg/Kg	1	2/15/2018 12:31:34 PM	36540
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/15/2018 12:31:34 PM	36540
Surr: DNOP	102	70-130		%Rec	1	2/15/2018 12:31:34 PM	36540
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	36	17		mg/Kg	5	2/15/2018 11:59:02 AM	G49155
Surr: BFB	199	15-316		%Rec	5	2/15/2018 11:59:02 AM	G49155
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.085		mg/Kg	5	2/15/2018 11:59:02 AM	B49155
Toluene	ND	0.17		mg/Kg	5	2/15/2018 11:59:02 AM	B49155
Ethylbenzene	ND	0.17		mg/Kg	5	2/15/2018 11:59:02 AM	B49155
Xylenes, Total	ND	0.34		mg/Kg	5	2/15/2018 11:59:02 AM	B49155
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	5	2/15/2018 11:59:02 AM	B49155

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1802857

16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	MB-36542	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36542	RunNo:	49156					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1586301	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36542	SampType:	ics	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36542	RunNo:	49156					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1586302	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802857

16-Feb-18

Client: Blagg Engineering

Project: Homestead Ranch 2

Sample ID	LCS-36540	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	36540	RunNo:	49144					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1584635	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.4	70	130			
Surr: DNOP	4.5		5.000		89.8	70	130			

Sample ID	MB-36540	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	36540	RunNo:	49144					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1584636	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.7	70	130			

Sample ID	1802857-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	TSP-16	Batch ID:	36540	RunNo:	49144					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1585370	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	120	10	51.07	63.10	103	55.8	125			
Surr: DNOP	4.8		5.107		93.8	70	130			

Sample ID	1802857-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	TSP-16	Batch ID:	36540	RunNo:	49144					
Prep Date:	2/15/2018	Analysis Date:	2/15/2018	SeqNo:	1585371	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	9.6	47.76	63.10	80.0	55.8	125	13.1	20	
Surr: DNOP	4.5		4.776		94.5	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802857
16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: G49155	RunNo: 49155								
Prep Date:	Analysis Date: 2/15/2018	SeqNo: 1585450	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.2	15	316			

Sample ID 2.5UG GRO LCS	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: G49155	RunNo: 49155								
Prep Date:	Analysis Date: 2/15/2018	SeqNo: 1585455	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	75.9	131			
Surr: BFB	1100		1000		113	15	316			

Sample ID 1802857-003AMS	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: TSP-18	Batch ID: G49155	RunNo: 49155								
Prep Date:	Analysis Date: 2/15/2018	SeqNo: 1585457	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	97	16	79.06	11.29	108	77.8	128			
Surr: BFB	5100		3162		161	15	316			

Sample ID 1802857-003AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: TSP-18	Batch ID: G49155	RunNo: 49155								
Prep Date:	Analysis Date: 2/15/2018	SeqNo: 1585458	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	96	16	79.06	11.29	107	77.8	128	0.720	20	
Surr: BFB	4800		3162		151	15	316	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802857
16-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	B49155	RunNo:	49155					
Prep Date:		Analysis Date:	2/15/2018	SeqNo:	1585487	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.4	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	B49155	RunNo:	49155					
Prep Date:		Analysis Date:	2/15/2018	SeqNo:	1585489	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.5	77.3	128			
Toluene	0.88	0.050	1.000	0	88.0	79.2	125			
Ethylbenzene	0.90	0.050	1.000	0	89.5	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	90.9	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	1802857-004AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	TSP-19	Batch ID:	B49155	RunNo:	49155					
Prep Date:		Analysis Date:	2/15/2018	SeqNo:	1585490	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.081	3.238	0	102	80.9	132			
Toluene	3.6	0.16	3.238	0	110	79.8	136			
Ethylbenzene	3.5	0.16	3.238	0	108	79.4	140			
Xylenes, Total	12	0.32	9.716	1.769	105	78.5	142			
Surr: 4-Bromofluorobenzene	3.7		3.238		115	80	120			

Sample ID	1802857-004AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	TSP-19	Batch ID:	B49155	RunNo:	49155					
Prep Date:		Analysis Date:	2/15/2018	SeqNo:	1585491	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.081	3.238	0	101	80.9	132	0.872	20	
Toluene	3.3	0.16	3.238	0	103	79.8	136	6.62	20	
Ethylbenzene	3.5	0.16	3.238	0	107	79.4	140	0.582	20	
Xylenes, Total	12	0.32	9.716	1.769	103	78.5	142	1.22	20	
Surr: 4-Bromofluorobenzene	3.8		3.238		117	80	120	0	0	

Qualifiers:

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



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: **1802857**

RcptNo: **1**

Received By: **Anne Thorne** 2/15/2018 7:00:00 AM

Anne Thorne

Completed By: **Anne Thorne** 2/15/2018 7:27:05 AM

Anne Thorne

Reviewed By: **pt 2.15.18**

Chain of Custody

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

Log In

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

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

17. Cooler Information

Cooler No.	Temp.°C	Condition	Seal Intact	Seal No.	Seal Date	Signed By
2	1.0	Good	Yes			

Chain-of-Custody Record

Client: BESSON-MONTIN-GREER

BLASS 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

Standard Rush

Project Name:
HOMESTEAD RANCH #2

Project #:

Project Manager:
JEFF BLASS

Sampler: NESON VELEZ RV

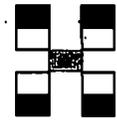
On Ice: Yes No

Sample Temperature: 1.0 2 weeks

Container Type and #
4oz. - 1

Preservative Type
COOL

HEAL No.
1802857



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 (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	7 FT. COMPOSITE	Air Bubbles (Y or N)
2/14/18	1155	SOIL	TSP-16	4oz. - 1	COOL	201	✓		✓									✓	✓	
	1200		TSP-17			202	✓		✓									✓	✓	
	1205		TSP-18			203	✓		✓									✓	✓	
	1210		TSP-19			204	✓		✓									✓	✓	
	1215		TSP-20			205	✓		✓									✓	✓	
	1220		TSP-21			206	✓		✓									✓	✓	
	1225		TSP-22			207	✓		✓									✓	✓	
	1230		TSP-23			208	✓		✓									✓	✓	
	1235		TSP-24			209	✓		✓									✓	✓	

Date: 2/14/18 Time: 1740 Relinquished by: [Signature]

Received by: [Signature] Date: 2/14/18 Time: 1740

Remarks: BILL BMS
CONTACT: ZACH STRADLING

Date: 1/14/18 Time: 1904 Relinquished by: [Signature]

Received by: [Signature] Date: 02/15/18 Time: 0700

NOTE: SAMPLES TREATED WITH H₂O₂

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



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

February 21, 2018

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199

FAX (505) 632-3903

RE: Homestead Ranch 2

OrderNo.: 1802973

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/17/2018 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: TSP-25

Project: Homestead Ranch 2

Collection Date: 2/16/2018 10:40:00 AM

Lab ID: 1802973-001

Matrix: SOIL

Received Date: 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/19/2018 11:15:36 AM	36589
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	80	9.9		mg/Kg	1	2/19/2018 11:29:13 AM	36587
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/19/2018 11:29:13 AM	36587
Surr: DNOP	101	70-130		%Rec	1	2/19/2018 11:29:13 AM	36587
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	73	18		mg/Kg	5	2/19/2018 9:42:54 AM	G49216
Surr: BFB	378	15-316	S	%Rec	5	2/19/2018 9:42:54 AM	G49216
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.089		mg/Kg	5	2/19/2018 9:42:54 AM	B49216
Toluene	ND	0.18		mg/Kg	5	2/19/2018 9:42:54 AM	B49216
Ethylbenzene	ND	0.18		mg/Kg	5	2/19/2018 9:42:54 AM	B49216
Xylenes, Total	1.4	0.36		mg/Kg	5	2/19/2018 9:42:54 AM	B49216
Surr: 4-Bromofluorobenzene	128	80-120	S	%Rec	5	2/19/2018 9:42:54 AM	B49216

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting 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: Homestead Ranch 2
 Lab ID: 1802973-003

Matrix: SOIL

Client Sample ID: TSP-27
 Collection Date: 2/16/2018 11:00:00 AM
 Received Date: 2/17/2018 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	2/19/2018 11:40:25 AM	36589
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	41	9.9		mg/Kg	1	2/19/2018 12:13:26 PM	36587
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/19/2018 12:13:26 PM	36587
Surr: DNOP	105	70-130		%Rec	1	2/19/2018 12:13:26 PM	36587
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	52	16		mg/Kg	5	2/19/2018 10:31:08 AM	G49216
Surr: BFB	293	15-316		%Rec	5	2/19/2018 10:31:08 AM	G49216
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.081		mg/Kg	5	2/19/2018 10:31:08 AM	B49216
Toluene	ND	0.16		mg/Kg	5	2/19/2018 10:31:08 AM	B49216
Ethylbenzene	ND	0.16		mg/Kg	5	2/19/2018 10:31:08 AM	B49216
Xylenes, Total	1.0	0.33		mg/Kg	5	2/19/2018 10:31:08 AM	B49216
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	5	2/19/2018 10:31:08 AM	B49216

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

Qualifiers:	• Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1802973

21-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	MB-36589	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	36589	RunNo:	49214					
Prep Date:	2/19/2018	Analysis Date:	2/19/2018	SeqNo:	1588713	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36589	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	36589	RunNo:	49214					
Prep Date:	2/19/2018	Analysis Date:	2/19/2018	SeqNo:	1588714	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1802973
 21-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	LCS-36587	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	36587	RunNo:	49208					
Prep Date:	2/19/2018	Analysis Date:	2/19/2018	SeqNo:	1587555	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	70	130			
Surr: DNOP	4.6		5.000		91.9	70	130			

Sample ID	MB-36587	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	36587	RunNo:	49208					
Prep Date:	2/19/2018	Analysis Date:	2/19/2018	SeqNo:	1587556	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		98.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1802973

21-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G49216		RunNo: 49216							
Prep Date:	Analysis Date: 2/19/2018		SeqNo: 1587978		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	1200		1000		116	15	316			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G49216		RunNo: 49216							
Prep Date:	Analysis Date: 2/19/2018		SeqNo: 1587979		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	118	75.9	131			
Surr: BFB	1300		1000		134	15	316			

Sample ID 1802973-002AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: TSP-26	Batch ID: G49216		RunNo: 49216							
Prep Date:	Analysis Date: 2/19/2018		SeqNo: 1587981		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	15	77.25	23.05	132	77.8	128			S
Surr: BFB	6800		3090		219	15	316			

Sample ID 1802973-002AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: TSP-26	Batch ID: G49216		RunNo: 49216							
Prep Date:	Analysis Date: 2/19/2018		SeqNo: 1587982		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	120	15	77.25	23.05	131	77.8	128	0.843	20	S
Surr: BFB	6700		3090		218	15	316	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 Quantitative 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#: 1802973

21-Feb-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	B49216	RunNo:	49216					
Prep Date:		Analysis Date:	2/19/2018	SeqNo:	1587988	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		115	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	B49216	RunNo:	49216					
Prep Date:		Analysis Date:	2/19/2018	SeqNo:	1587989	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	89.7	77.3	128			
Toluene	0.84	0.050	1.000	0	84.2	79.2	125			
Ethylbenzene	0.87	0.050	1.000	0	86.6	80.7	127			
Xylenes, Total	2.6	0.10	3.000	0	87.9	81.6	129			
Surr: 4-Bromofluorobenzene	1.2		1.000		118	80	120			

Sample ID	1802973-001AMS	SampType:	MS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	TSP-25	Batch ID:	B49216	RunNo:	49216					
Prep Date:		Analysis Date:	2/19/2018	SeqNo:	1587990	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.089	3.564	0	91.5	80.9	132			
Toluene	3.2	0.18	3.564	0	88.5	79.8	136			
Ethylbenzene	3.4	0.18	3.564	0	96.1	79.4	140			
Xylenes, Total	12	0.36	10.69	1.402	96.8	78.5	142			
Surr: 4-Bromofluorobenzene	3.7		3.564		103	80	120			

Sample ID	1802973-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	TSP-25	Batch ID:	B49216	RunNo:	49216					
Prep Date:		Analysis Date:	2/19/2018	SeqNo:	1587991	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.4	0.089	3.564	0	96.3	80.9	132	5.12	20	
Toluene	3.4	0.18	3.564	0	94.6	79.8	136	6.64	20	
Ethylbenzene	3.5	0.18	3.564	0	98.8	79.4	140	2.71	20	
Xylenes, Total	12	0.36	10.69	1.402	96.6	78.5	142	0.245	20	
Surr: 4-Bromofluorobenzene	3.7		3.564		105	80	120	0	0	

Qualifiers:

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



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: 1802973

RcptNo: 1

Received By: **Ashley Gallegos** 2/17/2018
 Completed By: **Anne Thorne** 2/19/2018 10:02:09 AM
 Reviewed By: **ENM** 2/19/18

AG
Anne Thorne

Chain of Custody

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

Log In

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

of preserved bottles checked for pH: _____ (<2 or >12 unless noted) Adjusted? _____ Checked by: _____
--

Special Handling (if applicable)

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

Person Notified: _____	Date: _____
By Whom: _____	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding: _____	
Client Instructions: _____	

16. Additional remarks:

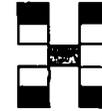
Cooler Information

Cooler No.	Temp °C	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	4.3	Good	Yes			

Chain-of-Custody Record

Client: BENSON - MONTIN - GREER
BLABB ENGINEERING INC
 Mailing Address:
 Phone #: (505) 320-1193
 email or Fax#:
 QA/QC Package:
 Standard Level 4 (Full Validation)
 Accreditation
 NELAP Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush SAME DAY
 Project Name:
HOMESTEAD RANCH #2
 Project #:
 Project Manager:
JEFF BLABB
 Sampler: JEFF BLABB
 On Ice: Yes No
 Sample Temperature: 42.0 C = 108 F



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 (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)	CHLORINE	Air Bubbles (Y or N)	
<u>2/16/2018</u>	<u>1040</u>	<u>SOIL</u>	<u>TSP-25</u>	<u>4oz x1</u>	<u>COOL</u>	<u>1002973</u>	<u>X</u>	<u>X</u>										<u>X</u>		
	<u>1050</u>		<u>TSP-26</u>																	
	<u>1100</u>		<u>TSP-27</u>																	

Date: 2/16/2018 Time: 16:11 Relinquished by: Jeff Blabb
 Received by: Christine Ward Date: 2/16/2018 Time: 16:41
 Date: 2/17/18 Time: 1829 Relinquished by: Christine Ward
 Received by: [Signature] Date: 02/17/19 Time: 1000

Remarks: Bill BMG
CONTACT: ZACH STRADING
Samples treated with H₂O₂

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.

Appendix D
Vadose Zone
Analytical Data Reports



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

March 21, 2018

Jeff Blagg

Blagg Engineering

P. O. Box 87

Bloomfield, NM 87413

TEL: (505) 632-1199

FAX (505) 632-3903

RE: Homestead Ranch 2

OrderNo.: 1803566

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/9/2018 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1803566

Date Reported: 3/21/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: Zone 1

Project: Homestead Ranch 2

Collection Date: 3/9/2018 10:20:00 AM

Lab ID: 1803566-001

Matrix: SOIL

Received Date: 3/9/2018 1:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	3/18/2018 2:41:00 PM	37083
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/13/2018 8:01:16 PM	36966
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/13/2018 8:01:16 PM	36966
Surr: DNOP	108	70-130		%Rec	1	3/13/2018 8:01:16 PM	36966
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2018 1:58:47 PM	36964
Surr: BFB	98.0	15-316		%Rec	1	3/13/2018 1:58:47 PM	36964
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/13/2018 1:58:47 PM	36964
Toluene	ND	0.047		mg/Kg	1	3/13/2018 1:58:47 PM	36964
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2018 1:58:47 PM	36964
Xylenes, Total	ND	0.093		mg/Kg	1	3/13/2018 1:58:47 PM	36964
Surr: 4-Bromofluorobenzene	93.4	80-120		%Rec	1	3/13/2018 1:58:47 PM	36964

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

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

Analytical Report
 Lab Order 1803566
 Date Reported: 3/21/2018

CLIENT: Blagg Engineering
Project: Homestead Ranch 2
Lab ID: 1803566-002

Matrix: SOIL

Client Sample ID: Zone 2
Collection Date: 3/9/2018 10:27:00 AM
Received Date: 3/9/2018 1:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	3/18/2018 2:53:24 PM	37083
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/13/2018 8:25:35 PM	36966
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/13/2018 8:25:35 PM	36966
Surr: DNOP	113	70-130		%Rec	1	3/13/2018 8:25:35 PM	36966
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2018 2:21:58 PM	36964
Surr: BFB	97.0	15-316		%Rec	1	3/13/2018 2:21:58 PM	36964
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/13/2018 2:21:58 PM	36964
Toluene	ND	0.047		mg/Kg	1	3/13/2018 2:21:58 PM	36964
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2018 2:21:58 PM	36964
Xylenes, Total	ND	0.094		mg/Kg	1	3/13/2018 2:21:58 PM	36964
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	3/13/2018 2:21:58 PM	36964

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

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

Analytical Report
 Lab Order 1803566
 Date Reported: 3/21/2018

CLIENT: Blagg Engineering **Client Sample ID:** Zone 3
Project: Homestead Ranch 2 **Collection Date:** 3/9/2018 10:34:00 AM
Lab ID: 1803566-003 **Matrix:** SOIL **Received Date:** 3/9/2018 1:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	3/18/2018 3:05:48 PM	37083
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/13/2018 8:49:57 PM	36966
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	3/13/2018 8:49:57 PM	36966
Surr: DNOP	110	70-130		%Rec	1	3/13/2018 8:49:57 PM	36966
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/13/2018 2:45:11 PM	36964
Surr: BFB	97.2	15-316		%Rec	1	3/13/2018 2:45:11 PM	36964
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2018 2:45:11 PM	36964
Toluene	ND	0.049		mg/Kg	1	3/13/2018 2:45:11 PM	36964
Ethylbenzene	ND	0.049		mg/Kg	1	3/13/2018 2:45:11 PM	36964
Xylenes, Total	ND	0.098		mg/Kg	1	3/13/2018 2:45:11 PM	36964
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	3/13/2018 2:45:11 PM	36964

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

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

Analytical Report
 Lab Order 1803566
 Date Reported: 3/21/2018

CLIENT: Blagg Engineering **Client Sample ID:** Zone 4
Project: Homestead Ranch 2 **Collection Date:** 3/9/2018 10:40:00 AM
Lab ID: 1803566-004 **Matrix:** SOIL **Received Date:** 3/9/2018 1:50:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	30		mg/Kg	20	3/18/2018 3:43:01 PM	37083
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/13/2018 9:14:18 PM	36966
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/13/2018 9:14:18 PM	36966
Surr: DNOP	108	70-130		%Rec	1	3/13/2018 9:14:18 PM	36966
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/13/2018 6:15:19 PM	36964
Surr: BFB	95.6	15-316		%Rec	1	3/13/2018 6:15:19 PM	36964
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/13/2018 6:15:19 PM	36964
Toluene	ND	0.049		mg/Kg	1	3/13/2018 6:15:19 PM	36964
Ethylbenzene	ND	0.049		mg/Kg	1	3/13/2018 6:15:19 PM	36964
Xylenes, Total	ND	0.097		mg/Kg	1	3/13/2018 6:15:19 PM	36964
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	3/13/2018 6:15:19 PM	36964

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting 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#: 1803566
 21-Mar-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	LCS-36966	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	36966	RunNo:	49733					
Prep Date:	3/12/2018	Analysis Date:	3/13/2018	SeqNo:	1609104	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	70	130			
Surr: DNOP	5.3		5.000		107	70	130			

Sample ID	MB-36966	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	36966	RunNo:	49733					
Prep Date:	3/12/2018	Analysis Date:	3/13/2018	SeqNo:	1609105	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		105	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1803566

21-Mar-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID	MB-36964	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	36964	RunNo:	49750					
Prep Date:	3/12/2018	Analysis Date:	3/13/2018	SeqNo:	1609795	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	930		1000		92.8	15	316			

Sample ID	LCS-36964	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	36964	RunNo:	49750					
Prep Date:	3/12/2018	Analysis Date:	3/13/2018	SeqNo:	1609796	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	75.9	131			
Surr: BFB	1000		1000		104	15	316			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1803566
 21-Mar-18

Client: Blagg Engineering
Project: Homestead Ranch 2

Sample ID MB-36964	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 36964		RunNo: 49750							
Prep Date: 3/12/2018	Analysis Date: 3/13/2018		SeqNo: 1609836		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.8	80	120			

Sample ID LCS-36964	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 36964		RunNo: 49750							
Prep Date: 3/12/2018	Analysis Date: 3/13/2018		SeqNo: 1609837		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	105	77.3	128			
Toluene	1.0	0.050	1.000	0	104	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	103	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	105	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.3	80	120			

Qualifiers:

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



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: **1803566**

RcptNo: **1**

Received By: **Isalah Ortiz** 3/9/2018 1:50:00 PM *IO*

Completed By: **Isalah Ortiz** 3/9/2018 2:11:43 PM *IO*

Reviewed By: *[Signature]* 03/09/18
LB:ENM

Chain of Custody

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

Log In

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

Special Handling (if applicable)

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

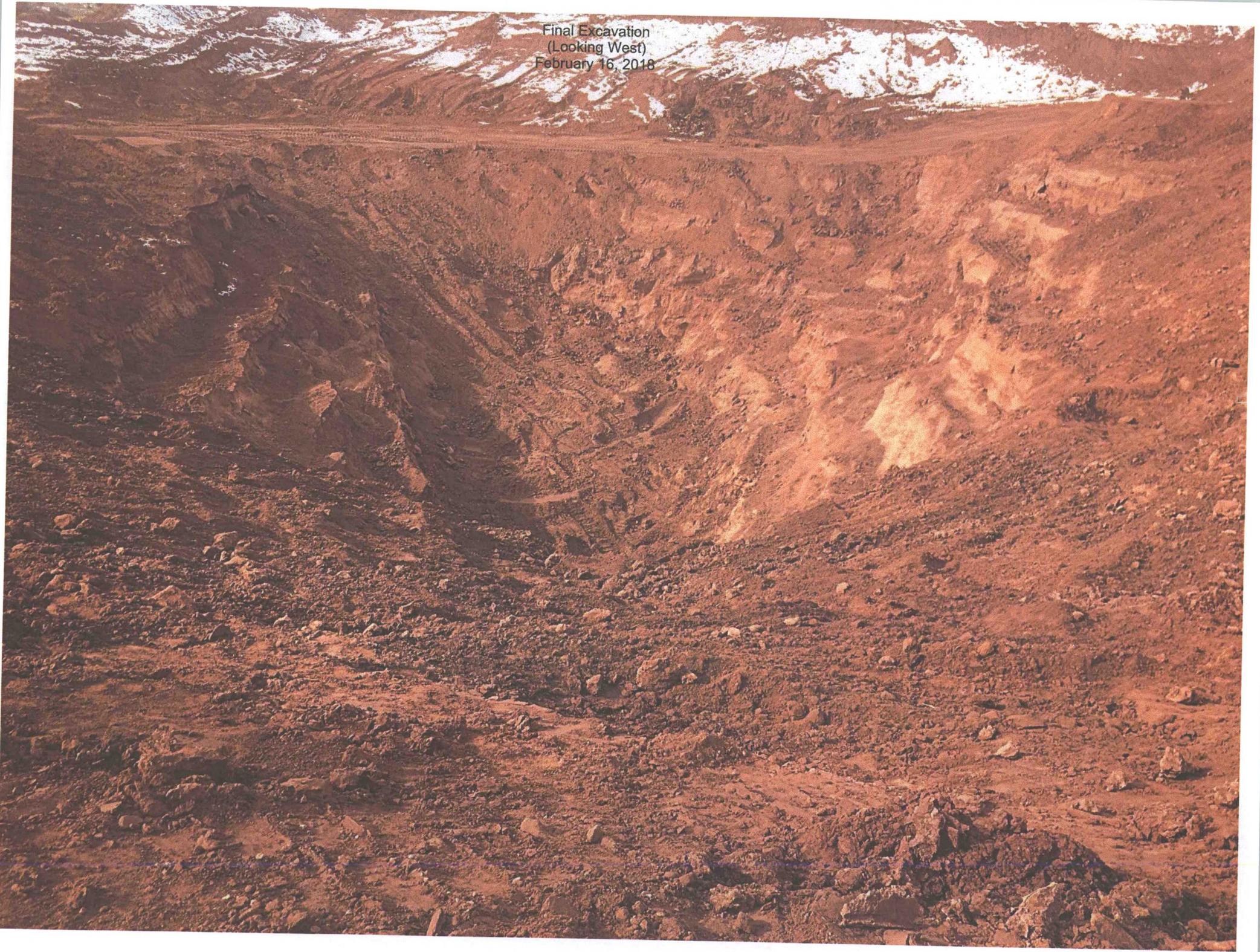
Person Notified: _____ Date: _____
 By Whom: _____ Via: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.9	Good	Not Present			

Final Excavation
(Looking West)
February 16, 2018



Final Excavation
(Looking East)
February 16, 2018

