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

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State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

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

| | | | Rele | ease Notifi | catio | n and C | orrective A | ction | | | |
|--|---|--|---|--|--|--|--|--|---|--|--|
| | | | | | | 0 | PERATOR | 🗌 Init | tial Report 🛛 Final Report | | |
| Name of Co | mpany: B | P | | | | Contact: St | eve Moskal | | | | |
| Address: 20 Equility Nor | 0 Energy | Court, Farm | Ington, N | M 87401 | | Telephone No.: 505-326-9497 | | | | | |
| Facility Ival | ne. Ganeg | os Canyon C | JIII 190E | | | Facility Ty | be. Ivaturai gas v | ven | | | |
| Surface Ow | ner: Fee | | | Mineral | Owner: | Fee | | API No | . 3004524254 | | |
| | | | | LOC | ATIO | N OF RE | LEASE | | | | |
| Unit Letter | Section | Township | Range | Feet from the | North | /South Line | Feet from the | East/West Line | County: San Juan | | |
| D | D 19 28N 12W 950 Non | | | | | | 950 | West | | | |
| | | Latitu | de_ <u>36.</u> | <u>55237°</u> | | _ Longitude | <u>-108.15838</u> ° | | | | |
| | | | | NAT | FURE | OF REL | EASE | | | | |
| Type of Relea | ase: produc | ed water | POT | | | Volume of | Release: 44.1 bb | Deta and | Recovered: none | | |
| Source of Rea | lease: ralle | d sidewall of | BUI | | | Beginning | March 9, 2016 | 2916 2:30 | PM | | |
| Was Immedia | ate Notice (| Given? | _ | | | If YES, To | Whom? | UIL C(| INS. DIV DIG | | |
| | | | Yes L | No 🖾 Not R | equired | Vanessa F | ields | | DIST. 3 | | |
| By Whom? S | Steve Mosk | al | - | | | Date and H | Hour: 6/2/2016 @ | 9:05 AM SF | P 30 2015 | | |
| was a water | course Read | ched? | Yes 🛛 | No | | IT YES, VO | blume Impacting t | he watercourse. | 0 2010 | | |
| If a Watercou | rse was Im | pacted, Descr | ibe Fully.* | | | | | | | | |
| | | | | | | | | | | | |
| Describe Cau ground surfac discovery we | se of Proble e. The well re discharge | em and Reme Il had been wo ed from the ta | dial Action orked-over nk. | n Taken.* Interna and placed back | al corros on line | on March 9 th , | grade tank resulted 2016. BP assume | d in the release of j ed all fluids collect | oroduced water; above the ed from this date to the date of | | |
| Describe Are shredding as lateral extents achievable. A used for back | a Affected a detailed in s of the exc pproximate fill materia | and Cleanup A the approved a avation were on ely 450 gallon I. BP requests | Action Tak remediatio determined s of hydro s no furthe | ten.* The fluid w n plan. Approxim d. The base of th gen peroxide solu- r action at the loss | as remo nately 9 e excava ution wa cation. | ved from the 00 cubic yard ation encount as applied. Tr | tank. BP proposed s of soil was proce rred competent sau eated soils were b | d to remediate imp essed and treated w ndstone where reas elow the site specif | acted soils through soil ith hydrogen peroxide. The onable excavation was not fic closure standard and were | | |
| I hereby certi regulations al public health should their o or the environ federal, state, | fy that the i l operators or the envir operations h iment. In a or local law | information gi are required to ronment. The ave failed to a ddition, NMC ws and/or regu | ven above o report an acceptance adequately OCD accept alations. | is true and comp ad/or file certain to be of a C-141 rep investigate and to tance of a C-141 | olete to t release r ort by th remediat report o | the best of my notifications a ne NMOCD m te contamination to the contamination of the second does not relieved. | knowledge and un and perform correct arked as "Final Ro on that pose a three the operator of r | nderstand that purs tive actions for rele eport" does not reli eat to ground water responsibility for co | uant to NMOCD rules and eases which may endanger eve the operator of liability , surface water, human health ompliance with any other | | |
| Signature: | Marsh | the | | | | | OIL CONS | SERVATION | DIVISION | | |
| Printed Name | : Steve Mo | skal | | | | Approved by | Environmental Sp | pecialist: | Film | | |
| Title: Field E | nvironment | al Coordinato | r | | | Approval Da | ne: 10/19/1 | 6 Expiration | ate. | | |
| E-mail Addre | ss: steven.r | noskal@bp.co | om | | | Conditions of | f Approval: | | Attached | | |
| Date: Septen | ber 30, 20 | 16 | Pho | ne: 505-326-949 | 7 | | - | | | | |
| Attach Addit | ional Shee | ets If Necess | ary 7 | HUVF 16 | 154 | 358 | 24 | | | | |



BP America GCU 196E (D) Sec 19 – T28N – R12W San Juan County, New Mexico API: 30-045-24254

Summary Record of Impact Remediation

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<u>June 7, 2016</u> Impacts discovered during closure of a 95 barrel below grade tank (BGT). Composite sample of soils immediately below tank (5' below surface grade) tested total petroleum hydrocarbons (TPH) by U.S. EPA Method 8015 at 7,971 mg/Kg. Integrity of the BGT was found to be compromised with corrosion holes at the base of the tank and this was likely a source of the discovered impacts. It could not be determined if historical impacts may also have contributed impacts.

The site NMOCD closure standard was determined at 100 ppm TPH based on:

Horizontal Distance to Dry Wash < 200 feet (20 points) Nearest Water Well > 1,000 feet (0 points) Depth to Groundwater > 100 feet (0 points)

<u>August 23, 2016</u> A site remediation plan was approved by NMOCD with concurrence from the private surface owner. The plan addressed lateral excavation of impacts until the site closure standards had been confirmed by laboratory testing, and vertical excavation until: (1) meeting site closure standards, or (2) excavation refusal due to dense sandstone. If refusal was encountered, the base of the excavation would be sprayed with hydrogen peroxide to mitigate residual impacts.

NMOCD and the private surface owner approved on-site shredding of excavated soils and treatment with hydrogen peroxide to chemically degrade hydrocarbons. Following treatment, soils would be laboratory tested to confirm residual impacts did not exceed 100 ppm TPH. Following successful treatment, the soils would then be placed back into the remedial excavation.

August 31, 2016 Begin site remediation via excavation of impacts with an excavator.

<u>September 1, 2016</u> Conduct initial closure sampling of excavation sidewalls and base, with NMOCD witnessing. Excavation size approximately 45' x 30' x 13' average depth.

<u>September 2, 2016</u> Receive rush lab results from initial sample event. North and east sidewalls test below site closure standards for all constituents. Base, south sidewall and west sidewall test above site closure standard for TPH only.

| Sample ID | Date/Time | TPH 8015B (GRO+DRO+MRO) (mg/Kg) | Total BTEX 8021 (mg/Kg) | Chloride (mg/Kg) | Comments |
|------------------------------|------------------|---------------------------------------|-------------------------------|---------------------|----------------------|
| Base 5-pt Composite | 9/1/2016 @ 11:45 | 590 | ND | 310 | Exceeds TPH standard |
| South Wall 5-pt Composite | 9/1/2016 @ 11:52 | 880 | ND | 220 | Exceeds TPH standard |
| West Wall 5-pt Composite | 9/1/2016 @ 11:57 | 147 | 11 | 270 | Exceeds TPH standard |
| East Wall 5-pt Composite | 9/1/2016 @ 12:02 | ND | ND | 210 | Passes standard |
| North Wall 5-pt Composite | 9/1/2016 @ 12:08 | ND | ND | ND | Passes standard |
| NMOCD Closure Standard | | 100 | 50 | 500 | |

Closure Sampling Test Results - September 1, 2016

<u>September 6, 2016</u> Conduct additional remedial excavation on south and west sidewalls. Conduct second round of closure sampling with NMOCD present. Excavation size approximately 45' x 44' x 14' average depth. Additionally, begin on-site soil shredding/hydrogen peroxide treatment on impacted soils.

<u>September 7, 2016</u> Receive rush lab results from initial sample event. West and south sidewalls test below site closure standards for all constituents.

| Samula ID | Deta/Time | TPH 8015B | Total BTEX | Chloride | Commente | |
|----------------|------------------|--------------------------|------------|----------|-----------------|--|
| Sample ID | Date/Time | (GRO+DRO+MRO) (mg/Kg) | (mg/Kg) | (mg/Kg) | Comments | |
| Extended West | | | | | | |
| Wall 5-pt | 9/6/2016 @ 14:13 | ND | ND | ND | Passes standard | |
| Composite | | | | | | |
| Extended South | | | | | | |
| Wall 5-pt | 9/6/2016 @ 14:17 | ND | ND | 55 | Passes standard | |
| Composite | | | | | | |
| NMOCD | | | _ | | | |
| Closure | | 100 | 50 | 500 | | |
| Standard | | | | | | |

Closure Sampling Test Results - September 6, 2016

<u>September 9, 2016</u> Shredded soils placed into 8 x 100 cubic yard (CY) piles and 1 x 97 CY pile (897 CY total) Conduct sampling of each pile with 5-point composites. NMOCD on site to observe sampling.

September 12, 2016 Receive rush lab results on treatment pile sampling. Piles No's 1-6 and No. 9 pass lab testing. Piles 7 and 8 fail.

<u>September 13, 2016</u> Re-shred piles 7 and 8. Apply hydrogen peroxide treatment to base of open excavation and begin backfill with clean shredded soils.

September 14, 2016 Sample piles 7 and 8 with NMOCD on site to observe.

September 15, 2016 Receive rush lab results from pile sampling. Both piles 7 and 8 pass.

Treated Soil Pile Test Results September 9, 2016

| Pile ID | Volume | Field | Stain | Odor | BTEX | TPH | TPH | TPH | TPH |
|---------|--------|-------|-------|-------|---------|---------|---------|---------|---------|
| | (CY) | OVM | | | (mg/Kg) | GRO | DRO | MRO | Total |
| | | (ppm) | | | | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) |
| TSP-1 | 100 | 18.9 | No | No | ND | ND | 51 | ND | 51 |
| TSP-2 | 100 | 14.4 | No | No | ND | ND | 49 | ND | 49 |
| TSP-3 | 100 | 14.6 | No | No | ND | ND | 40 | ND | 40 |
| TSP-4 | 100 | 10.1 | No | No | ND | ND | 28 | ND | 28 |
| TSP-5 | 100 | 19.2 | No | No | ND | ND | 32 | ND | 32 |
| TSP-6 | 100 | 18.3 | No | No | ND | ND | 43 | ND | 43 |
| TSP-7 | 100 | 64.4 | No | Minor | ND | ND | 220 | 120 | 340 |
| TSP-8 | 100 | 34.2 | No | No | ND | ND | 150 | 100 | 250 |
| TSP-9 | 97 | 35.2 | No | No | ND | ND | 49 | ND | 49 |

September 13, 2016

| Pile ID | Volume (CY) | Field OVM (ppm) | Stain | Odor | BTEX (mg/Kg) | TPH GRO (mg/Kg) | TPH DRO (mg/Kg) | TPH MRO (mg/Kg) | TPH Total (mg/Kg) |
|---------|----------------|-----------------------|-------|---------|-----------------|-----------------------|-----------------------|-----------------------|-------------------------|
| TSP-7 | 100 | 32.2 | No | V Minor | | | | | |
| TSP-8 | 100 | 23.9 | No | No | | | | | |

Note: Piles TSP-7 and TSP-8 re-shreded following review of these field test results

September 14, 2016

| Pile ID | Volume | Field | Stain | Odor | BTEX | TPH | TPH | TPH | TPH |
|---------|--------|-------|-------|------|---------|---------|---------|---------|---------|
| | (CY) | OVM | | | (mg/Kg) | GRO | DRO | MRO | Total |
| | | (ppm) | | | | (mg/Kg) | (mg/Kg) | (mg/Kg) | (mg/Kg) |
| TSP-7R | 100 | 23.5 | No | No | NA | ND | 59 | ND | 59 |
| TSP-8R | 100 | 23.2 | No | No | NA | ND | 46 | ND | 46 |

Note: BTEX not tested per approval of NMOCD based on prior test results of ND on all TSP's

September 16, 2016 Complete backfilling operations with clean shredded soils.





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

September 06, 2016

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

RE: GCU 196E

OrderNo.: 1609068

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 6 sample(s) on 9/2/2016 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 <u>www.hallenvironmental.com</u> 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

| Analytical Report | |
|-------------------|--|
| Lab Order 1609068 | |

Date Reported: 9/6/2016

Hall Environmental Analysis Laboratory, Inc.

| EPA MET | HOD 300.0: ANIONS | | | | | | Analy | st: LGT | | |
|----------|-------------------|----------------------------------|--|------|--------------------|----|---------------|---------|--|--|
| Analyses | | Result | PQL | Qual | Units | DF | Date Analyzed | Batch | | |
| Lab ID: | 1609068-001 | Matrix: | x: SOIL Received Date: 9/2/2016 7:05:00 AM | | | | | | | |
| Project: | GCU 196E | | | | 1/2016 11:45:00 AM | | | | | |
| CLIENT: | Blagg Engineering | Client Sample ID: Base 5-pt Comp | | | | | | | | |

| Chloride | 310 | 30 | mg/Kg | 20 | 9/2/2016 10:53:58 AM | 27331 |
|----------------------------------|---------|----------|-------|----|----------------------|-------|
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANIC | s | | | Analyst | TOM |
| Diesel Range Organics (DRO) | 440 | 9.7 | mg/Kg | 1 | 9/2/2016 10:04:37 AM | 27322 |
| Motor Oil Range Organics (MRO) | 150 | 49 | mg/Kg | 1 | 9/2/2016 10:04:37 AM | 27322 |
| Surr: DNOP | 110 | 70-130 | %Rec | 1 | 9/2/2016 10:04:37 AM | 27322 |
| EPA METHOD 8015D: GASOLINE RANGE | E | | | | Analyst | NSB |
| Gasoline Range Organics (GRO) | ND | 21 | mg/Kg | 5 | 9/2/2016 10:10:03 AM | 27312 |
| Surr: BFB | 98.2 | 68.3-144 | %Rec | 5 | 9/2/2016 10:10:03 AM | 27312 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | NSB |
| Benzene | ND | 0.11 | mg/Kg | 5 | 9/2/2016 10:10:03 AM | 27312 |
| Toluene | ND | 0.21 | mg/Kg | 5 | 9/2/2016 10:10:03 AM | 27312 |
| Ethylbenzene | ND | 0.21 | mg/Kg | 5 | 9/2/2016 10:10:03 AM | 27312 |
| Xylenes, Total | ND | 0.42 | mg/Kg | 5 | 9/2/2016 10:10:03 AM | 27312 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | %Rec | 5 | 9/2/2016 10:10:03 AM | 27312 |

| Qualifiers: | | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | Е | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 1 of 10 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

| Analytical Report | |
|-------------------|--|
| Lab Order 1609068 | |

Date Reported: 9/6/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering Client Sample ID: South Wall 5-pt Comp Project: GCU 196E Collection Date: 9/1/2016 11:52:00 AM Lab ID: 1609068-002 Matrix: SOIL Received Date: 9/2/2016 7:05:00 AM Analyses Result PQL Qual Units DF Date Analyzed Batch EPA METHOD 300.0: ANIONS Analyses Analyses Analyses Analyses

| EPA METHOD 300.0: ANIONS | | | | | Analyst: | LGT |
|------------------------------------|--------|----------|-------|----|----------------------|-------|
| Chloride | 220 | 30 | mg/Kg | 20 | 9/2/2016 11:06:23 AM | 27331 |
| EPA METHOD 8015M/D: DIESEL RANGE O | RGANIC | S | | | Analyst: | TOM |
| Diesel Range Organics (DRO) | 620 | 10 | mg/Kg | 1 | 9/2/2016 10:26:30 AM | 27322 |
| Motor Oil Range Organics (MRO) | 260 | 50 | mg/Kg | 1 | 9/2/2016 10:26:30 AM | 27322 |
| Surr: DNOP | 114 | 70-130 | %Rec | 1 | 9/2/2016 10:26:30 AM | 27322 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | Analyst: | NSB |
| Gasoline Range Organics (GRO) | ND | 4.1 | mg/Kg | 1 | 9/2/2016 10:33:26 AM | 27312 |
| Surr: BFB | 101 | 68.3-144 | %Rec | 1 | 9/2/2016 10:33:26 AM | 27312 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | NSB |
| Benzene | ND | 0.020 | mg/Kg | 1 | 9/2/2016 10:33:26 AM | 27312 |
| Toluene | ND | 0.041 | mg/Kg | 1 | 9/2/2016 10:33:26 AM | 27312 |
| Ethylbenzene | ND | 0.041 | mg/Kg | 1 | 9/2/2016 10:33:26 AM | 27312 |
| Xylenes, Total | ND | 0.081 | mg/Kg | 1 | 9/2/2016 10:33:26 AM | 27312 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | %Rec | 1 | 9/2/2016 10:33:26 AM | 27312 |
| | | | | | | |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. |
|-------------|----|--|
| | D | Sample Diluted Due to Matrix |
| | Н | Holding times for preparation or analysis exceeded |
| | ND | Not Detected at the Reporting Limit |
| | R | RPD outside accepted recovery limits |

- 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 Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

| | | | | | Analytical Report | |
|---------------------------------|-----------|-----------|-------------|-----------|--------------------------|-------|
| | | | | | Lab Order 1609068 | |
| Hall Environmental Analysi | s Labora | tory, Inc | • | | Date Reported: 9/6/201 | 6 |
| CLIENT: Blagg Engineering | | | Client Samp | le ID: W | est Wall 5-pt Comp | |
| Project: GCU 196E | | | Collection | Date: 9/1 | /2016 11:57:00 AM | |
| Lab ID: 1609068-003 | Matrix: | SOIL | Received | Date: 9/2 | 2/2016 7:05:00 AM | |
| Analyses | Result | PQL Q | ual Units | DF | Date Analyzed | Batch |
| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | 270 | 30 | mg/Kg | 20 | 9/2/2016 11:18:47 AM | 27331 |
| EPA METHOD 8015M/D: DIESEL RANG | E ORGANIC | S | | | Analyst | TOM |
| Diesel Range Organics (DRO) | 92 | 9.8 | mg/Kg | 1 | 9/2/2016 10:48:53 AM | 27322 |
| Motor Oil Range Organics (MRO) | 55 | 49 | mg/Kg | 1 | 9/2/2016 10:48:53 AM | 27322 |
| Surr: DNOP | 103 | 70-130 | %Rec | 1 | 9/2/2016 10:48:53 AM | 27322 |
| EPA METHOD 8015D: GASOLINE RANG | GE | | | | Analyst | NSB |
| Gasoline Range Organics (GRO) | ND | 4.3 | mg/Kg | 1 | 9/2/2016 10:56:55 AM | 27312 |
| Surr: BFB | 91.5 | 68.3-144 | %Rec | 1 | 9/2/2016 10:56:55 AM | 27312 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst | NSB |
| Benzene | ND | 0.021 | mg/Kg | 1 | 9/2/2016 10:56:55 AM | 27312 |
| Toluene | ND | 0.043 | mg/Kg | 1 | 9/2/2016 10:56:55 AM | 27312 |
| Ethylbenzene | ND | 0.043 | mg/Kg | 1 | 9/2/2016 10:56:55 AM | 27312 |

0.085

80-120

mg/Kg

%Rec

1

1

9/2/2016 10:56:55 AM

9/2/2016 10:56:55 AM 27312

27312

ND

106

4

Xylenes, Total

Surr: 4-Bromofluorobenzene

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| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | В | 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 Page 3 of 10 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

| Analytic | al Report |
|----------|-----------|
|----------|-----------|

Date Reported: 9/6/2016

Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg Engineering Client Sample ID: East Wall 5-pt Comp Project: GCU 196E Collection Date: 9/1/2016 12:02:00 PM Lab ID: 1609068-004 Received Date: 9/2/2016 7:05:00 AM Matrix: SOIL Anal Links DE Data Anala a.d BOT . -

| Analyses | Result | PQL Qu | al Units | DF | Date Analyzed | Batch |
|--------------------------------|------------|----------|----------|----|----------------------|-------|
| EPA METHOD 300.0: ANIONS | | | | | Analys | t LGT |
| Chloride | 210 | 30 | mg/Kg | 20 | 9/2/2016 11:31:12 AM | 27331 |
| EPA METHOD 8015M/D: DIESEL RAN | GE ORGANIC | S | | | Analyst | TOM |
| Diesel Range Organics (DRO) | ND | 9.5 | mg/Kg | 1 | 9/2/2016 12:17:39 PM | 27322 |
| Motor Oil Range Organics (MRO) | ND | 48 | mg/Kg | 1 | 9/2/2016 12:17:39 PM | 27322 |
| Surr: DNOP | 105 | 70-130 | %Rec | 1 | 9/2/2016 12:17:39 PM | 27322 |
| EPA METHOD 8015D: GASOLINE RAN | GE | | | | Analyst | : NSB |
| Gasoline Range Organics (GRO) | ND | 4.3 | mg/Kg | 1 | 9/2/2016 11:20:27 AM | 27312 |
| Surr: BFB | 88.1 | 68.3-144 | %Rec | 1 | 9/2/2016 11:20:27 AM | 27312 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst | NSB |
| Benzene | ND | 0.021 | mg/Kg | 1 | 9/2/2016 11:20:27 AM | 27312 |
| Toluene | ND | 0.043 | mg/Kg | 1 | 9/2/2016 11:20:27 AM | 27312 |
| Ethylbenzene | ND | 0.043 | mg/Kg | 1 | 9/2/2016 11:20:27 AM | 27312 |
| Xylenes, Total | ND | 0.086 | mg/Kg | 1 | 9/2/2016 11:20:27 AM | 27312 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | %Rec | 1 | 9/2/2016 11:20:27 AM | 27312 |
| | | | | | | |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 4 of 10 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

| Analytical Kepo | ort |
|-----------------|-----|
|-----------------|-----|

Date Reported: 9/6/2016

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT:
 Blagg Engineering
 Client Sample ID: North Wall 5-pt Comp

 Project:
 GCU 196E
 Collection Date: 9/1/2016 12:08:00 PM

 Lab ID:
 1609068-005
 Matrix: SOIL
 Received Date: 9/2/2016 7:05:00 AM

 Analyses
 Result
 PQL Qual Units
 DF Date Analyzed
 Batch

| | | | | | | the second se |
|------------------------------------|--------|----------|-------|----|----------------------|---|
| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | ND | 30 | mg/Kg | 20 | 9/2/2016 11:43:36 AM | 27331 |
| EPA METHOD 8015M/D: DIESEL RANGE O | RGANIC | S | | | Analyst: | TOM |
| Diesel Range Organics (DRO) | ND | 9.2 | mg/Kg | 1 | 9/2/2016 12:39:54 PM | 27322 |
| Motor Oil Range Organics (MRO) | ND | 46 | mg/Kg | 1 | 9/2/2016 12:39:54 PM | 27322 |
| Surr: DNOP | 97.1 | 70-130 | %Rec | 1 | 9/2/2016 12:39:54 PM | 27322 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | Analyst: | NSB |
| Gasoline Range Organics (GRO) | ND | 4.1 | mg/Kg | 1 | 9/2/2016 11:43:56 AM | 27312 |
| Surr: BFB | 85.3 | 68.3-144 | %Rec | 1 | 9/2/2016 11:43:56 AM | 27312 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | NSB |
| Benzene | ND | 0.020 | mg/Kg | 1 | 9/2/2016 11:43:56 AM | 27312 |
| Toluene | ND | 0.041 | mg/Kg | 1 | 9/2/2016 11:43:56 AM | 27312 |
| Ethylbenzene | ND | 0.041 | mg/Kg | 1 | 9/2/2016 11:43:56 AM | 27312 |
| Xylenes, Total | ND | 0.081 | mg/Kg | 1 | 9/2/2016 11:43:56 AM | 27312 |
| Surr: 4-Bromofluorobenzene | 101 | 80-120 | %Rec | 1 | 9/2/2016 11:43:56 AM | 27312 |
| | | | | | | |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 5 of 10 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | W | Sample container temperature is out of limit as specified |
| | | | | |

| Analytical | Report |
|------------|--------|
|------------|--------|

Date Reported: 9/6/2016

9/2/2016 12:07:26 PM 27312

Hall Environmental Analysis Laboratory, Inc.

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Surr: BFB

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| CLIENT: | Blagg Engineering | | | Client Sampl | e ID: Sp | oils Pile 10-pt | |
|-----------|-----------------------|-----------------------|--------|--------------|---------------------------|----------------------|--------|
| Lab ID: | 1609068-006 | Matrix: SOIL Received | | | Date: 9/2/2016 7:05:00 AM | | |
| Analyses | | Result | PQL Qu | al Units | DF | Date Analyzed | Batch |
| EPA MET | HOD 8015M/D: DIESEL R | ANGE ORGANICS | | | | Analys | t: TOM |
| Diesel R | ange Organics (DRO) | 290 | 9.8 | mg/Kg | 1 | 9/2/2016 10:06:19 AM | 27322 |
| Motor Oil | Range Organics (MRO) | 74 | 49 | mg/Kg | 1 | 9/2/2016 10:06:19 AM | 27322 |
| Surr: D | DNOP | 85.5 | 70-130 | %Rec | 1 | 9/2/2016 10:06:19 AM | 27322 |
| EPA MET | HOD 8015D: GASOLINE F | ANGE | | | | Analys | t: NSB |
| Gasoline | Range Organics (GRO) | ND | 17 | mg/Kg | 5 | 9/2/2016 12:07:26 PM | 27312 |

68.3-144

%Rec

5

105

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | в | 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 Page 6 of 10 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

WO#: 1609068

06-Sep-16

| Hall Environmenta | al Analys | sis Labora | tory, Inc. |
|-------------------|-----------|------------|------------|
|-------------------|-----------|------------|------------|

| Client: | Blagg Engineering |
|-----------------|-------------------|
| Project: | GCU 196E |
| | a contract three |

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| Sample ID MB-27331 | SampType: MBLK | TestCode: EPA Method | 300.0: Anions | |
|--|---|---|---|---------------|
| Client ID: PBS | Batch ID: 27331 | RunNo: 36994 | | |
| Prep Date: 9/2/2016 | Analysis Date: 9/2/2016 | SeqNo: 1146344 | Units: mg/Kg | |
| Analyte | Result PQL SPK value | SPK Ref Val %REC LowLimit | HighLimit %RPD | RPDLimit Qual |
| Chloride | ND 1.5 | | | |
| | | And the second se | | |
| Sample ID LCS-27331 | SampType: LCS | TestCode: EPA Method | 300.0: Anions | |
| Sample ID LCS-27331 Client ID: LCSS | SampType: LCS Batch ID: 27331 | TestCode: EPA Method RunNo: 36994 | 300.0: Anions | |
| Sample ID LCS-27331 Client ID: LCSS Prep Date: 9/2/2016 | SampType: LCS Batch ID: 27331 Analysis Date: 9/2/2016 | TestCode: EPA Method RunNo: 36994 SeqNo: 1146345 | 300.0: Anions Units: mg/Kg | |
| Sample ID LCS-27331 Client ID: LCSS Prep Date: 9/2/2016 Analyte | SampType: LCS Batch ID: 27331 Analysis Date: 9/2/2016 Result PQL SPK value | TestCode: EPA Method RunNo: 36994 SeqNo: 1146345 SPK Ref Val %REC LowLimit | 300.0: Anions Units: mg/Kg HighLimit %RPD | RPDLimit Qual |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- 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

Page 7 of 10

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 196E

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| | | | | | | | | | | the second s |
|---|---|---|--|---|---|---|--|--------------------------|------------------------|--|
| Sample ID LCS-27322 | Samp | Type: LC | s | TestCode: EPA Method 8015M/D: Diesel Range Organics | | | | | e Organics | |
| Client ID: LCSS | Batc | h ID: 27 | 322 | F | RunNo: 3 | 6957 | | | | |
| Prep Date: 9/2/2016 | Analysis [| Date: 9/ | 2/2016 | S | SeqNo: 1 | 145248 | Units: mg/H | (g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 46 | 10 | 50.00 | 0 | 91.6 | 62.6 | 124 | | | |
| | | | | | | 70 | 100 | | | |
| Surr: DNOP | 4.6 | | 5.000 | | 92.7 | 70 | 130 | | | |
| Surr: DNOP Sample ID MB-27322 | 4.6 Samp | Гуре: МЕ | 5.000 BLK | Tes | 92.7 tCode: El | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Surr: DNOP Sample ID MB-27322 Client ID: PBS | 4.6 SampT Batc | Type: ME h ID: 27 | 5.000 BLK 322 | Tes | 92.7 tCode: El RunNo: 3 | PA Method 6957 | 8015M/D: Di | esel Range | e Organics | |
| Surr: DNOP Sample ID MB-27322 Client ID: PBS Prep Date: 9/2/2016 | 4.6 Samp Batc Analysis [| Type: ME h ID: 27 Date: 9/ | 5.000 BLK 322 2/2016 | Tes F | 92.7 tCode: El RunNo: 3 SeqNo: 1 | PA Method 6957 145249 | 8015M/D: Di Units: mg/K | esel Range | e Organics | |
| Surr: DNOP Sample ID MB-27322 Client ID: PBS Prep Date: 9/2/2016 Analyte | 4.6 Samp Batc Analysis I Result | Type: ME h ID: 27 Date: 9/ PQL | 5.000 BLK 322 2/2016 SPK value | Tes F S SPK Ref Val | 92.7 tCode: El RunNo: 3 SeqNo: 1 %REC | PA Method 6957 145249 LowLimit | 8015M/D: Die Units: mg/K HighLimit | esel Rango Kg %RPD | e Organics | Qual |
| Surr: DNOP Sample ID MB-27322 Client ID: PBS Prep Date: 9/2/2016 Analyte Diesel Range Organics (DRO) | 4.6 Samp Batc Analysis [Result ND | Type: ME h ID: 27 Date: 9/ PQL 10 | 5.000 BLK 322 2/2016 SPK value | Tes F S SPK Ref Val | 92.7 tCode: El RunNo: 3 SeqNo: 1 %REC | PA Method 6957 145249 LowLimit | 8015M/D: Dia Units: mg/K HighLimit | esel Rang Kg %RPD | e Organics RPDLimit | Qual |
| Surr: DNOP Sample ID MB-27322 Client ID: PBS Prep Date: 9/2/2016 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) | 4.6 Samp Batc Analysis I Result ND ND | Type: ME h ID: 27 Date: 9/ PQL 10 50 | 5.000 BLK 322 2/2016 SPK value | Tes F S SPK Ref Val | 92.7 tCode: El RunNo: 3 SeqNo: 1 %REC | PA Method 6957 145249 LowLimit | 8015M/D: Die Units: mg/K HighLimit | esel Rango (g %RPD | e Organics RPDLimit | Qual |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- 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

Page 8 of 10

WO#: 1609068

06-Sep-16

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609068

06-Sep-16

Client: Blagg Engineering Project: GCU 196E Sample ID MB-27312 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: PBS Batch ID: 27312 RunNo: 36969 Prep Date: 9/1/2016 Analysis Date: 9/2/2016 SeqNo: 1146035 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 860 1000 85.7 68.3 144 Sample ID LCS-27312 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 27312 RunNo: 36969 Prep Date: 9/1/2016 Analysis Date: 9/2/2016 SeqNo: 1146036 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Gasoline Range Organics (GRO) 25 5.0 25.00 0 101 80 120 Surr: BFB 940 1000 94.3 68.3 144

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
- R RPD outside accepted recovery limits
- 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

Page 9 of 10

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 196E

| | | | | | | | | | | and the second se |
|----------------------------|------------|------------------------------------|-----------|-------------|--------------|-----------|-------------|-------|----------|---|
| Sample ID MB-27312 | Samp | SampType: MBLK TestCode: EPA Metho | | | | | 8021B: Vola | tiles | | |
| Client ID: PBS | Batc | h ID: 27 | 312 | F | RunNo: 36969 | | | | | |
| Prep Date: 9/1/2016 | Analysis [| Date: 9/ | 2/2016 | 5 | SeqNo: 1 | 146076 | Units: mg/k | Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | ND | 0.025 | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 103 | 80 | 120 | | | |
| Sample ID LCS-27312 | Samp | Type: LC | s | Tes | tCode: E | PA Method | 8021B: Vola | tiles | | |
| Client ID: LCSS | Batc | h ID: 27 | 312 | F | RunNo: 3 | 6969 | | | | |
| Prep Date: 9/1/2016 | Analysis [| Date: 9/ | 2/2016 | 5 | SeqNo: 1 | 146077 | Units: mg/k | ٢g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.0 | 0.025 | 1.000 | 0 | 101 | 75.3 | 123 | | | |
| Toluene | 0.97 | 0.050 | 1.000 | 0 | 97.3 | 80 | 124 | | | |
| Ethylbenzene | 0.97 | 0.050 | 1.000 | 0 | 97.3 | 82.8 | 121 | | | |
| Xylenes, Total | 2.9 | 0.10 | 3.000 | 0 | 96.2 | 83.9 | 122 | | | |
| Surr: 4-Bromofluorobenzene | 11 | | 1 000 | | 106 | 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
- R RPD outside accepted recovery limits
- 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

1609068

WO#:

06-Sep-16

Page 10 of 10

| HALL Hall Environme ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-345-3 Website: ww | ntal Analysis Laborat 4901 Hawkins Albuquerque, NM 87 3975 FAX: 505-345-4 w.hallenvironmental.c | tory NE 109 Sam 107 com | ple Log-In Check List |
|--|---|--|-----------------------|
| Client Name: BLAGG Work Order Num | ber: 1609068 | | RoptNo: 1 |
| Received by/date: AS 09/02/16 | | | |
| Logged By: Anne Thorne 9/2/2016 7:05:00 A | M | ame Am | - |
| Completed By: Anne Thorne 9/2/2016 | | anne Am | |
| Reviewed By: TO \$102/16 | | | 100 |
| Chain of Custody | | | |
| 1. Custody seals intact on sample bottles? | Yes 🗌 | No 🗌 | Not Present |
| 2. Is Chain of Custody complete? | Yes 🗹 | No 🗌 | Not Present |
| 3. How was the sample delivered? | Courier | | |
| Log In | | | |
| 4. Was an attempt made to cool the samples? | Yes 🗹 | No 🗌 | |
| 5. Were all samples received at a temperature of >0° C to 6.0°C | Yes 🗹 | No 🗌 | NA |
| 6. Sample(s) in proper container(s)? | Yes 🗹 | No 🗌 | |
| 7. Sufficient sample volume for indicated test(s)? | Yes 🗹 | No 🗆 | |
| 8. Are samples (except VOA and ONG) property preserved? | Yes 🗹 | No 🗌 | |
| 9. Was preservative added to bottles? | Yes | No 🗹 | NA 🗆 |
| 10.VOA vials have zero headspace? | Yes 🗌 | No 🗌 | No VOA Vials |
| 11. Were any sample containers received broken? | Yes | No 🗹 | # of suspensed |
| 12. Does paperwork match bottle labels? | Yes 🗹 | No 🗆 | for pH: |
| 13. Are matrices correctly identified on Chain of Custody? | Yes 🔽 | No 🗆 | Adjusted? |
| 14. Is it clear what analyses were requested? | Yes 🗹 | No 🗆 | |
| 15. Were all holding times able to be met? (If no, notify customer for authorization.) | Yes 🗹 | No 🗆 | Checked by: |
| Special Handling (if applicable) | | | |
| 16. Was client notified of all discrepancies with this order? | Yes | No 🗌 | NA 🗹 |
| Person Notified: Date | e Frankrik - P | Phone Eax | In Person |

17. Additional remarks:

Regarding: Client Instructions:

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| 18. | Cooler Inform | nation | | | | | 1 |
|-----|---------------|---------|-----------|-------------|---------|-----------|-----------|
| | Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
| 1 | 1 | 1.5 | Good | Yes | | | 1 |

| Chain-of-Custody Record | | | Turn-Around | Time: | ASAF | DAK | | | | H | A | LL | EI | NV | IF | 20 | N | 1E | ΝТ | AL | | |
|-------------------------|------------------------|------------|---------------------------------------|--|----------------------|---|------------------------------------|---------------------------|-----------|-----------|------------|------------|------------|-----------|-------------------|-------------|-------------|------------|---------|----|----|-------------|
| lient: | <u>BP A</u> | MERIC | A | □ Standard | Rush | SAME | DAY | | | | A | N | AL | YS | SIS | 5 L | AE | 30 | R/ | TC | DR | Y |
| | BLAG | 6 EN | GINEERING INC. | Project Name | | | | www.hallenvironmental.com | | | | | | | | | | | | | | |
| ailing | Address | ; | | GCU MGE | | 4901 Hawkins NE - Albuquerque, NM 87109 | | | | | | | | | | | | | | | | |
| | | | | Project #: | | | Tel. 505-345-3975 Fax 505-345-4107 | | | | | | | | | | | | | | | |
| hone | # 1505 | 5) 376 | 2-1183 | | | | | | | | | | A | naly | sis | Req | uest | | | | | |
| mail o | Fax#: | / | | Project Mana | ger: | 4 | | | ly) | Ô | | | | | (4) | | | | | | | |
| A/QC Package: | | | J. | BLAGG | | × | (8021 | as on | O / MF | | | (SM | | 04,SC | PCB's | | | | | | | |
| ccredi | creditation | | | Sampler: J | - BLALL | | | | H (| B | _ | - | IS O | | 0 ₂ ,F | 082 | | | | | | |
| NEL | AP | □ Othe | PT | On Ice: | X Yessan | E No | | A | 11 + | ò | 18.1 | 04.1 | 827 | | 3,N | \$ / 8(| | A | | | | or N |
| EDD | (Type) | | · · · · · · · · · · · · · · · · · · · | Sample Tem | perature - | 15 | | | BE | Ð | d 4 | 2 pc | 20 | alals | N, | ides | F | 8 | w | | | E |
| Date | Time | Matrix | Sample Request ID | Acceluz// Container Type and # McoHKcf | Preservative Type | HEA | L No 1/8 | BTEX + MI | BTEX + MT | TPH 8015B | TPH (Metho | EDB (Metho | PAH's (831 | RCRA 8 Me | Anions (F,C | 8081 Pestic | 8260B (VO/ | 8270 (Semi | CHEREID | | | Air Bubbles |
| 2016 | 1145 | SOIL | BASE 5-pt comp | 402×1 | COOL | | -001 | X | | X | | | | | | | | | X | | | |
| ĸ | 1152 | tı, | South Wall 5-pt loup | 1¢ | ų | | 782 | X | | х | | | | | | | | | × | | | |
| ų | 1157 | 1(| West Wall 5-pt canp | и | u | | 703 | × | | x | | | | | | | | | X | | | |
| ĸ | 1202 | 1C | EAST Wall 5-DE OUD | и | 4 | | -204 | X | | x | | | | | | | | - | X | | + | |
| 1(| 1208 | ų | NODEN 10011 5-DE COMO | st | լւ | | 715 | X | | × | | | | | | | | | X | | + | |
| 4 | 1302 | ų | SPOILS PILE 10- PE | 10 | 11 | | 106 | | | X | | | | | | | | | | | | |
| | | | | | | | | - | | | _ | _ | | | | | _ | | | 4 | + | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | * | | | | | | | | | | | | 1 | | | |
| ate: Lollo ate: | Time: 1450 Time: | Relinquish | ed by: 1 Blogg ed by: | Received by: Received by: | Walter | Pate 9/1/16 Date | Time 1450 Time | Rer | nark | s: E | Sic | BP | r: : | Sti VH | eve X0 | M | osik. VR | AL | | 2 | | |
| 414 | 1815 | Mm | Hut | VUh | uhi | 9/2/14 | 0705 | | | | | | | | | * | | | | | | |

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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

September 08, 2016

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

RE: GCU 196E

OrderNo.: 1609193

The minhouse

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/7/2016 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 <u>www.hallenvironmental.com</u> 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

| Analy | vtical | Re | port |
|-------|--------|----|------|
| | | | |

Date Reported: 9/8/2016

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT: Blagg Engineering
 Client Sample ID: Extended W Wall 5-pt Comp

 Project:
 GCU 196E
 Collection Date: 9/6/2016 2:13:00 PM

 Lab ID:
 1609193-001
 Matrix: SOIL
 Received Date: 9/7/2016 7:10:00 AM

 Applyage
 POL<Oral Units</td>
 DE Date Applyage
 Patch

| Analyses | Result | PQL Qui | al Units | DF | Date Analyzed | Batch |
|----------------------------------|---------|----------|----------|----|----------------------|-------|
| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | ND | 30 | mg/Kg | 20 | 9/7/2016 10:54:22 AM | 27379 |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANIC | s | | | Analyst: | том |
| Diesel Range Organics (DRO) | ND | 9.5 | mg/Kg | 1 | 9/7/2016 10:14:11 AM | 27368 |
| Motor Oil Range Organics (MRO) | ND | 47 | mg/Kg | 1 | 9/7/2016 10:14:11 AM | 27368 |
| Surr: DNOP | 113 | 70-130 | %Rec | 1. | 9/7/2016 10:14:11 AM | 27368 |
| EPA METHOD 8015D: GASOLINE RANGE | E | | | | Analyst: | RAA |
| Gasoline Range Organics (GRO) | ND | 4.4 | mg/Kg | 1 | 9/7/2016 11:07:09 AM | 27356 |
| Surr: BFB | 87.0 | 68.3-144 | %Rec | 1 | 9/7/2016 11:07:09 AM | 27356 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | RAA |
| Benzene | ND | 0.022 | mg/Kg | 1 | 9/7/2016 11:07:09 AM | 27356 |
| Toluene | ND | 0.044 | mg/Kg | 1 | 9/7/2016 11:07:09 AM | 27356 |
| Ethylbenzene | ND | 0.044 | mg/Kg | 1 | 9/7/2016 11:07:09 AM | 27356 |
| Xylenes, Total | ND | 0.088 | mg/Kg | 1 | 9/7/2016 11:07:09 AM | 27356 |
| Surr: 4-Bromofluorobenzene | 104 | 80-120 | %Rec | 1 | 9/7/2016 11:07:09 AM | 27356 |
| | | | | | | |

| | | The second s | | | |
|-------------|----|--|----|--|--------------|
| Qualifiers: | | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method B | llank |
| | D | Sample Diluted Due to Matrix | Ē | Value above quantitation range | |
| | Н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | Page 1 of 6 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range | Tage TOTO |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit | as specified |
| | | | | | |

| Analytical | Report | |
|------------|--------|--|
| | | |

Date Reported: 9/8/2016

9/7/2016 10:35:49 AM

9/7/2016 11:30:36 AM

27368

27356

27356

27356

27356

27356

27356

27356

Analyst: RAA

Analyst: RAA

1

1

1

1

1

1

1

1

%Rec

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

Hall Environmental Analysis Laboratory, Inc.

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

EPA METHOD 8015D: GASOLINE RANGE

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

| CLIENT: | Blagg Engineering | | | Client Sampl | e ID: Ex | tended S Wall 5-pt Co | mp |
|-----------------|------------------------|-----------------|---------|---------------------|-----------|-----------------------|-------|
| Project: | GCU 196E | | | Collection I | Date: 9/6 | /2016 2:17:00 PM | |
| Lab ID: | 1609193-002 | Matrix: S | OIL | Received 1 | Date: 9/7 | /2016 7:10:00 AM | |
| Analyses | | Result | PQL Qua | l Units | DF | Date Analyzed | Batch |
| EPA MET | HOD 300.0: ANIONS | 14 (14) | | | | Analyst | LGT |
| Chloride | | <mark>55</mark> | 30 | mg/Kg | 20 | 9/7/2016 11:06:46 AM | 27379 |
| EPA MET | HOD 8015M/D: DIESEL RA | NGE ORGANICS | | | | Analyst | TOM |
| Diesel Ra | ange Organics (DRO) | ND | 9.9 | mg/Kg | 1 | 9/7/2016 10:35:49 AM | 27368 |
| Motor Oil | Range Organics (MRO) | ND | 49 | mg/Kg | 1 | 9/7/2016 10:35:49 AM | 27368 |

70-130

68.3-144

0.019

0.038

0.038

0.076

80-120

3.8

113

ND

84.9

ND

ND

ND

ND

99.4

| | | | | | _ |
|-------------|-------------------|--|------------------------|---|---|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method Blank | |
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range | |
| | Н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 2 of | 6 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range | U |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | % Recovery outside of range due to dilution or matrix | W | Sample container temperature is out of limit as specified | |
| | H ND R S | Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit RPD outside accepted recovery limits % Recovery outside of range due to dilution or matrix | E J P RL W | Value above quantitation range Analyte detected below quantitation limits Sample pH Not In Range Reporting Detection Limit Sample container temperature is out of limit as specifie | f |

WO#: 1609193 08-Sep-16

| H | all | Envi | ironmental | Analysis | La | oora | tory, | Inc. |
|---|-----|------|------------|----------|----|------|-------|------|
|---|-----|------|------------|----------|----|------|-------|------|

Client: Blagg Engineering Project: GCU 196E

1

| Sample ID MB-27379 | SampType: MBLK | TestCode: EPA Method | 300.0: Anions | |
|---------------------|-------------------------|---------------------------|----------------|---------------|
| Client ID: PBS | Batch ID: 27379 | RunNo: 37058 | | |
| Prep Date: 9/7/2016 | Analysis Date: 9/7/2016 | SeqNo: 1148828 | Units: mg/Kg | |
| Analyte | Result PQL SPK value | SPK Ref Val %REC LowLimit | HighLimit %RPD | RPDLimit Qual |
| Chloride | ND 1.5 | | | |
| Sample ID LCS-27379 | SampType: LCS | TestCode: EPA Method | 300.0: Anions | |
| Client ID: LCSS | Batch ID: 27379 | RunNo: 37058 | | |
| Prep Date: 9/7/2016 | Analysis Date: 9/7/2016 | SeqNo: 1148829 | Units: mg/Kg | |
| Analyte | Result PQL SPK value | SPK Ref Val %REC LowLimit | HighLimit %RPD | RPDLimit Qual |
| Chloride | 14 1.5 15.00 | 0 95.1 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
- R RPD outside accepted recovery limits
- 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

Page 3 of 6

WO#: 1609193

08-Sep-16

| Client: | Blagg E | ngineering | | | | | | | | |
|-----------------|-------------------|----------------|-----------|-------------|--------------|----------------|------------------|------------|------------------|------|
| Project: | GCU 19 | 6E | | | | | | | | |
| Sample ID | LCS-27368 | SampType: L | CS | Tes | tCode: E | PA Method | 8015M/D: Di | esel Rano | e Organics | |
| Client ID: | LCSS | Batch ID: 2 | 7368 | F | RunNo: 3 | 7024 | | overnang | e erganiee | |
| Prep Date: | 9/7/2016 | Analysis Date: | 9/7/2016 | 5 | SegNo: 1 | 147691 | Units: ma/k | (q | | |
| Analyte | | Result POI | SPK value | SPK Ref Val | %REC | I owl imit | Highl imit | %RPD | RPDI imit | Qual |
| Diesel Range | Organics (DRO) | 44 1 | 0 50.00 | 0 | 88.9 | 62.6 | 124 | ANT D | TO DENIN | quui |
| Surr: DNOP | | 5.0 | 5.000 | | 100 | 70 | 130 | | | |
| Sample ID | MB-27368 | SampType: N | BLK | Tes | tCode: E | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: | PBS | Batch ID: 2 | 7368 | F | RunNo: 3 | 7024 | | | | |
| Prep Date: | 9/7/2016 | Analysis Date: | 9/7/2016 | 5 | SeqNo: 1 | 147692 | Units: mg/K | g | | |
| Analyte | | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range | Organics (DRO) | ND 10 | 0 | | | | | | | |
| Motor Oil Rang | ge Organics (MRO) | ND 50 | 0 | | 1000 | | 100.00 | | | |
| Surr: DNOP | | 11 | 10.00 | | 113 | 70 | 130 | | - | |
| Sample ID | LCS-27347 | SampType: L | CS | Tes | tCode: E | PA Method | 8015M/D: Die | esel Rang | e Organics | |
| Client ID: | LCSS | Batch ID: 2 | 7347 | F | RunNo: 3 | 7025 | | | | |
| Prep Date: | 9/6/2016 | Analysis Date: | 9/7/2016 | 5 | SeqNo: 1 | 147694 | Units: %Re | C | | |
| Analyte | | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Sur: DNOP | | 4.7 | 5.000 | | 94.1 | 70 | 130 | | | |
| Sample ID | MB-27347 | SampType: N | IBLK | Tes | tCode: E | PA Method | 8015M/D: Die | esel Range | e Organics | |
| Client ID: | PBS | Batch ID: 2 | 7347 | F | RunNo: 3 | 7025 | | | | |
| Prep Date: | 9/6/2016 | Analysis Date: | 9/7/2016 | s | SeqNo: 1 | 147695 | Units: %Ree | 6 | | |
| Analyte | | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | | 8.7 | 10.00 | | 87.2 | 70 | 130 | | | |
| Sample ID | LCS-27351 | SampType: 1 | cs | Tes | tCode: El | PA Method | 8015M/D: Die | sel Range | Organics | |
| Client ID: | 1055 | Batch ID: 2 | 7351 | 100 | unNo: 3 | 7025 | 00101110.01 | Ser Range | organica | |
| Pren Date: | 9/6/2016 | Analysis Date: | 7/7/2016 | | SeaNo: 1 | 148382 | Units: %Red | | | |
| Angel de | 01012010 | Desult DOI | ODV | ODK D-OV- | N DEO | L mud lenth | Lillahl lash | **** | ODDI Imili | 0 |
| Sur: DNOP | | 4.4 | 5.000 | SPK Ker val | %REC 88.3 | LOWLIMIT 70 | HighLimit 130 | %RPD | RPDLIMIt | Quai |
| | | | | _ | | | | i. | | |
| Sample ID | MB-27351 | SampType: M | BLK | Tes | tCode: El | PA Method | 8015M/D: Die | esel Range | Organics | |
| Client ID: | PBS | Batch ID: 2 | 7351 | F | unNo: 3 | 7025 | | | | |
| Prep Date: | 9/6/2016 | Analysis Date: | 9/7/2016 | s | seqNo: 1 | 148383 | Units: %Red | 3 | | |
| Analyte | | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | | 8.3 | 10.00 | | 82.7 | 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

R RPD outside accepted recovery limits

- 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

Page 4 of 6

Hall Environmental Analysis Laboratory, Inc.

Client: **Blagg Engineering Project:** GCU 196E

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| and the second se | | | | | | | | | | | | | |
|---|--|--|----------------------------|-------------------------|---|---|---|--------------------------|---------------|------|--|--|--|
| Sample ID LCS-27356 | Samp | Type: LC | s | Tes | tCode: E | PA Method | 8015D: Gaso | line Rang | e | | | | |
| Client ID: LCSS | Batc | h ID: 27 | 356 | F | RunNo: 37033 | | | | | | | | |
| Prep Date: 9/6/2016 | rep Date: 9/6/2016 Analysis Date: 9/7/2016 SeqNo: 1148297 Units: | | | | | | Units: mg/H | (g | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | | | |
| Gasoline Range Organics (GRO) | 20 | 5.0 | 25.00 | 0 | 81.5 | 80 | 120 | | | | | | |
| Sur: BEB | 950 | | 1000 | | 05 1 | 60.2 | 144 | | | | | | |
| | 900 | | 1000 | 1 | 95.1 | 00.3 | 144 | | | | | | |
| Sample ID MB-27356 | Samp | Type: ME | BLK | Tes | tCode: El | PA Method | 8015D: Gase | oline Rang | e | _ | | | |
| Sample ID MB-27356 Client ID: PBS | Samp | Type: ME h ID: 27 | 356 | Tes | tCode: El RunNo: 3 | PA Method | 8015D: Gase | oline Rang | e | | | | |
| Sample ID MB-27356 Client ID: PBS Prep Date: 9/6/2016 | Samp Batc Analysis [| Type: ME h ID: 27 Date: 9/ | 356 7/2016 | Tes F | tCode: El RunNo: 3 SeqNo: 1 | PA Method 7033 148299 | 8015D: Gaso Units: mg/H | oline Rang | e | | | | |
| Sample ID MB-27356 Client ID: PBS Prep Date: 9/6/2016 Analyte | Samp Batc Analysis D Result | Type: ME h ID: 27 Date: 9/ PQL | 356 7/2016 SPK value | Tes F SPK Ref Val | tCode: El RunNo: 3 SeqNo: 1 %REC | PA Method 7033 148299 LowLimit | 8015D: Gaso Units: mg/H HighLimit | oline Rang Kg %RPD | e RPDLimit | Qual | | | |
| Sample ID MB-27356 Client ID: PBS Prep Date: 9/6/2016 Analyte Gasoline Range Organics (GRO) | Samp Batc Analysis I Result ND | Type: ME h ID: 27 Date: 9/ PQL 5.0 | 356 7/2016 SPK value | Tes F SPK Ref Val | tCode: El RunNo: 3 SeqNo: 1 %REC | PA Method 7033 148299 LowLimit | 8015D: Gasc Units: mg/K HighLimit | fine Rang (g %RPD | e RPDLimit | Qual | | | |

Qualifiers:

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

Page 5 of 6

WO#: 1609193

08-Sep-16

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering Project: GCU 196E

| | | _ | | | | | | | | | | | |
|----------------------------|------------|----------|-----------|--------------|----------|-----------|--------------|-------|----------|------|--|--|--|
| Sample ID LCS-27356 | Samp | ype: LC | s | Tes | tCode: E | PA Method | 8021B: Vola | tiles | | | | | |
| Client ID: LCSS | Batc | h ID: 27 | 356 | F | RunNo: 3 | 7033 | | | | | | | |
| Prep Date: 9/6/2016 | Analysis [| Date: 9/ | 7/2016 | 5 | SeqNo: 1 | 148359 | Units: mg/Kg | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | | | |
| Benzene | 0.79 | 0.025 | 1.000 | 0 | 79.4 | 75.3 | 123 | | | | | | |
| Toluene | 0.91 | 0.050 | 1.000 | 0 | 90.7 | 80 | 124 | | | | | | |
| Ethylbenzene | 0.98 | 0.050 | 1.000 | 0 | 98.1 | 82.8 | 121 | | | | | | |
| Xylenes, Total | 2.9 | 0.10 | 3.000 | 0 | 98.0 | 83.9 | 122 | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 111 | 80 | 120 | | | | | | |
| Sample ID MB-27356 | Samp | ype: ME | BLK | Tes | tCode: E | PA Method | 8021B: Vola | tiles | | | | | |
| Client ID: PBS | Batc | D: -27 | 356 | RunNo: 37033 | | | | | | | | | |
| Prep Date: 9/6/2016 | Analysis D |)ate: 9/ | 7/2016 | s | SeqNo: 1 | 148360 | Units: mg/H | ٢g | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | | | |
| Benzene | ND | 0.025 | | | | | | | | | | | |
| Toluene | ND | 0.050 | | | | | | | | | | | |
| Ethylbenzene | ND | 0.050 | | | | | | | | | | | |
| Xylenes, Total | ND 0.10 | | | | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 105 | 80 | 120 | | | | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- 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
- Р Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

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WO#: 1609193 08-Sep-16

| HALL Hall Environ ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-34 Website: | nmental Analysis Labora 4901 Hawkins Albuquerque, NM 87 45-3975 FAX: 505-345-4 www.hallenvironmental. | tory NE 109 Sam 107 com | ple Log-In C | heck List |
|---|---|--|---|---------------------|
| Client Name: BLAGG Work Order N | lumber: 1609193 | 1998 I E A | RcptNo: | 1 |
| Received by/date: AT 09/01/16 | | *. | | |
| Logged By: Anne Thorne 9/7/2016 7:10:0 | 0 AM | ame Im | - | |
| Completed By: Anne Thorne 9/7/2016 | 1200 | anne Am | ~ | |
| Reviewed By: IU 9/07/16 | | | | |
| Chain of Custody | 518.0 5 | | | |
| 1. Custody seals intact on sample bottles? | Yes | No 🗌 | Not Present 🗹 | |
| 2. Is Chain of Custody complete? | Yes 🔽 | No 🗌 | Not Present | |
| 3. How was the sample delivered? | Courier | | | |
| Log In | | | | |
| 4. Was an attempt made to cool the samples? | Yes 🗸 | No 🗌 | | |
| | | | | |
| 5. Were all samples received at a temperature of $>0^\circ$ C to 6.0 $^\circ$ | C Yes 🗹 | ' <u>N</u> o 🗆 | · NA 🗆 | |
| 6. Sample(s) in proper container(s)? | · Yes 🔽 | No 🗌 | | |
| 7. Sufficient sample volume for indicated test(s)? | Yes 🖌 | No 🗌 | | |
| 8. Are samples (except VOA and ONG) properly preserved? | Yes 🗹 | No 🗌 | | |
| 9. Was preservative added to bottles? | Yes | No 🗹 | NA 🗌 | |
| 10.VOA vials have zero headspace? | Yes | No 🗆 | No VOA Vials 🗹 | |
| 11. Were any sample containers received broken? | Yes | No 🔽 | | |
| 12. Does paperwork match bottle labels? | Yes 🗹 | No 🗌 | # of preserved bottles checked for pH: | r >12 unless noted |
| (Note discrepancies on chain of custody) | Ves | No 🗌 | Adjusted? | 1 - 12 unless noted |
| 14. Is it clear what analyses were requested? | Yes V | | | 5 C P |
| 15. Were all holding times able to be met? (If no, notify customer for authorization.) | Yes 🗹 | No 🗌 | Checked by: | |
| Special Handling (if applicable) | • | | | |
| 16. Was client notified of all discrepancies with this order? | Yes | No 🗌 | NA | |
| Person Notified: | Date | | and a second and a s | |

| Person Notified: | | I D | ate | · • | | | |
|----------------------|--|-----|-------|-----------|---------|-----|-----------|
| By Whom: | | . v | ia: 🗌 | eMail | Phone [| Fax | In Person |
| Regarding: | en in delay whet all as a hermalistic back to be any says in | | | ** • **** | | • • | ····· |
| Client Instructions: | | | | | | | |

17. Additional remarks:

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18. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| | 1.5 | Good | Yes | i i | | |

Page 1 of 1

| C ient: | BPA | of-Ci | istody Record | Turn-Around | Time: | ASAP SAME DAY | | | | H A | | LL AL | El YS | NV 515 | VIF 5 L | 20 .AE | N/ 30 | ٩E R/ | NT | AL DR | - Y |
|------------------------------|--------------------------------|------------|----------------------------------|---------------------------------------|----------------------|--|--|-------------|--------------|----------------|-----------------------|------------------|--------------|----------------|----------------|-------------|---------------|----------|----|----------|----------------|
| ailing | Address | Engine | eving INC. | - | | | | 40 | | | www | w.hal | lenv | riron | ment | tal.co | m | 1400 | | | |
| | #. SAC | - 370 | - 1197 | Project #: | W 196E | E | Tel. 505-345-3975 Fax 505-345-4107 Analysis Request | | | | | | | | | | | | | | |
| nail o | r Fax#: | -00 | | Project Mana | ger: | | | ly) | (0) | | | | | (†) | | | | | | | |
| VQC I | Package: Idard | | Level 4 (Full Validation) | J. | BLA66 | | s (8021 | (Gas on | RO / MR | | | SIMS) | | PO4,SC | PCB's | | | | | | |
| credi | itation AP | □ Othe | er | Sampler: e On ice: | I. BLALL | C No | | HdT + | RO / DI | 118.1) | 504.1) | r 8270 S | S | 03,NO2 | s / 8082 | | (AC | | | | or N) |
| EDD Date | Time | Matrix | Sample Request ID | Sample Tem Container Type and # | Preservative Type | HEAL NO: | BTEX + MITHE | BTEX + MTBE | TPH 8015B (G | TPH (Method 4 | EDB (Method 5 | PAH's (8310 oi | RCRA 8 Metal | Anions (F,CI,N | 8081 Pesticide | 8260B (VOA) | 8270 (Semi-VC | CHLURIDE | | | Air Bubbles (Y |
| hoil | 1413 | SOIL | Extended West wall 5-pt comp. | 402 201 | Carl | 701 | X | | x | | | | | | | | | × | | | |
| u | 1417 | '' | Extended Soth Wall 5-pt carp. | N | N | 202 | × | | × | | | | | | | | | × | | _ | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | - THERE D | * | | | | | | | | | | | | | | | | | | |
| ite: 2015 ite: 2/10 | Time: 1821 Time: 1901 | Relinquist | ed by: Hed by: Hout | Received by: | Jack Pani | Date Time 16/10 1821 Date Time 09/07/16 09/07/16 | Re | mark | s: | Bill | l le n texe VII | 3P \$*:): | St VH | eve (X0: | NE | vr. | M | | | | |

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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

September 13, 2016

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

OrderNo.: 1609493

Dear Jeff Blagg:

RE: GCU 196E

Hall Environmental Analysis Laboratory received 9 sample(s) on 9/10/2016 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 <u>www.hallenvironmental.com</u> 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1609493

Date Reported: 9/13/2016

Analyst: RAA

Analyst: RAA

9/12/2016 11:17:32 AM 27409

Hall Environmental Analysis Laboratory, Inc.

EPA METHOD 8015D: GASOLINE RANGE

Gasoline Range Organics (GRO)

Surr: 4-Bromofluorobenzene

EPA METHOD 8021B: VOLATILES

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

| CLIENT: | Blagg Engineering | Client Sample ID: TSP-1 | | | | | | | |
|-----------------|------------------------|-------------------------|--------------------------------------|------|----------|-----------|-----------------------|-------|--|
| Project: | GCU 196E | | Collection Date: 9/9/2016 2:24:00 PM | | | | | | |
| Lab ID: | 1609493-001 | Matrix: | MEOH (S | OIL) | Received | Date: 9/1 | 0/2016 9:00:00 AM | | |
| Analyses | | Result | PQL | Qual | Units | DF | Date Analyzed | Batch | |
| | HOD 300.0: ANIONS | | | | | | Analyst | LGT | |
| Chloride | | 81 | 30 | | mg/Kg | 20 | 9/12/2016 11:07:57 AM | 27452 | |
| EPA MET | HOD 8015M/D: DIESEL R/ | ANGE ORGANIC | S | | | | Analyst | TOM | |
| Diesel Ra | ange Organics (DRO) | 51 | 10 | | mg/Kg | 1 | 9/12/2016 11:34:16 AM | 27432 | |
| Motor Oil | Range Organics (MRO) | ND | 50 | | mg/Kg | 1 | 9/12/2016 11:34:16 AM | 27432 | |
| Surr: D | NOP | 103 | 70-130 | | %Rec | 1 | 9/12/2016 11:34:16 AM | 27432 | |

3.8

68.3-144

0.019

0.038

0.038

0.076

80-120

ND

100

ND

ND

ND

ND

112

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

1

1

1

1

1

| Qualifiers: | | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 1 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

Analytical Report Lab Order 1609493

Date Reported: 9/13/2016

Hall Environmental Analysis Laboratory, Inc.

| | | 5 | M. Contraction of the local distance of the | | | | | | |
|-------------------|--------------------------|-------------------------|---|------------|-----------|-----------------------|-------|--|--|
| CLIENT: | Blagg Engineering | Client Sample ID: TSP-2 | | | | | | | |
| Project: GCU 196E | | | | Collection | Date: 9/9 | 9/2016 2:27:00 PM | | | |
| Lab ID: | 1609493-002 | Matrix: N | MEOH (SOIL) | Received | Date: 9/1 | 10/2016 9:00:00 AM | | | |
| Analyses | | Result | PQL Qual | Units | DF | Date Analyzed | Batch | | |
| | HOD 300.0: ANIONS | | | | | Analyst | LGT | | |
| Chloride | | 80 | 30 | mg/Kg | 20 | 9/12/2016 11:20:22 AM | 27452 | | |
| EPA MET | HOD 8015M/D: DIESEL RANG | GE ORGANICS | | | | Analyst: | том | | |
| Diesel Ra | ange Organics (DRO) | 49 | 9.6 | mg/Kg | 1 | 9/12/2016 11:56:06 AM | 27432 | | |

| Motor Oil Range Organics (MRO) | ND | 48 | mg/Kg | 1 | 9/12/2016 11:56:06 AM | 27432 |
|----------------------------------|------|----------|-------|---|-----------------------|-------|
| Surr: DNOP | 106 | 70-130 | %Rec | 1 | 9/12/2016 11:56:06 AM | 27432 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | Analyst: | RAA |
| Gasoline Range Organics (GRO) | ND | 3.8 | mg/Kg | 1 | 9/12/2016 11:41:01 AM | 27409 |
| Surr: BFB | 99.3 | 68.3-144 | %Rec | 1 | 9/12/2016 11:41:01 AM | 27409 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | RAA |
| Benzene | ND | 0.019 | mg/Kg | 1 | 9/12/2016 11:41:01 AM | 27409 |
| Toluene | ND | 0.038 | mg/Kg | 1 | 9/12/2016 11:41:01 AM | 27409 |
| Ethylbenzene | ND | 0.038 | mg/Kg | 1 | 9/12/2016 11:41:01 AM | 27409 |
| Xylenes, Total | ND | 0.076 | mg/Kg | 1 | 9/12/2016 11:41:01 AM | 27409 |
| Surr: 4-Bromofluorobenzene | 109 | 80-120 | %Rec | 1 | 9/12/2016 11:41:01 AM | 27409 |

| Qualifiers: | | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 2 of 13 |
| | ND | Not Detected at the Reporting Limit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

| Analytical Report |
|--------------------------|
| Lab Order 1609493 |
| Date Reported: 9/13/2016 |

Analyst: LGT

Analyst: TOM

Analyst: RAA

Analyst: RAA

9/12/2016 11:32:47 AM 27452

9/12/2016 12:17:58 PM 27432

9/12/2016 12:17:58 PM 27432

9/12/2016 12:17:58 PM 27432

9/12/2016 12:04:30 PM 27409

Hall Environmental Analysis Laboratory, Inc.

EPA METHOD 8015M/D: DIESEL RANGE ORGANICS

EPA METHOD 300.0: ANIONS

Diesel Range Organics (DRO)

Motor Oil Range Organics (MRO)

Gasoline Range Organics (GRO)

Surr: 4-Bromofluorobenzene

EPA METHOD 8021B: VOLATILES

EPA METHOD 8015D: GASOLINE RANGE

Chloride

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

| Analyses | | Result | PQL | Qual | Units | DF Date Analyzed | Batch | |
|-----------------|-------------------|-------------------------|----------|------|------------|----------------------------|-------|--|
| Lab ID: | 1609493-003 | Matrix: | MEOH (SC | DIL) | Received | Date: 9/10/2016 9:00:00 AM | [| |
| Project: | GCU 196E | | | | Collection | Date: 9/9/2016 2:30:00 PM | | |
| CLIENT: | Blagg Engineering | Client Sample ID: TSP-3 | | | | | | |

30

9.4

47

3.5

70-130

68.3-144

0.018

0.035

0.035

0.070

80-120

mg/Kg

mg/Kg

mg/Kg

%Rec

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

20

1

1

1

1

1

1

1

1

1

1

78

40

ND

107

ND

99.3

ND

ND

ND

ND

110

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 3 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

| Anab | vtical | Re | port |
|------|----------|----|------|
| | I LI CAL | | 0010 |

Date Reported: 9/13/2016

Hall Environmental Analysis Laboratory, Inc.

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| Analyses | | Result | POL Qual | Units | DF Date Analyzed | | |
|----------|-------------------|-------------------------|-------------|------------|----------------------------|--|--|
| Lab ID: | 1609493-004 | Matrix: | MEOH (SOIL) | Received | Date: 9/10/2016 9:00:00 AM | | |
| Project: | GCU 196E | | | Collection | Date: 9/9/2016 2:57:00 PM | | |
| CLIENT: | Blagg Engineering | Client Sample ID: TSP-4 | | | | | |

| Analyses | Result | PQL Qu | al Units | DF | Date Analyzed | Batch |
|---------------------------------|-----------|----------|----------|----|-----------------------|-------|
| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | 79 | 30 | mg/Kg | 20 | 9/12/2016 11:45:11 AM | 27452 |
| EPA METHOD 8015M/D: DIESEL RANG | E ORGANIC | s | | | Analyst | TOM |
| Diesel Range Organics (DRO) | 28 | 9.9 | mg/Kg | 1 | 9/12/2016 12:39:35 PM | 27432 |
| Motor Oil Range Organics (MRO) | ND | 49 | mg/Kg | 1 | 9/12/2016 12:39:35 PM | 27432 |
| Surr: DNOP | 108 | 70-130 | %Rec | 1 | 9/12/2016 12:39:35 PM | 27432 |
| EPA METHOD 8015D: GASOLINE RAN | GE | | | | Analyst: | RAA |
| Gasoline Range Organics (GRO) | ND | 4.1 | mg/Kg | 1 | 9/12/2016 12:28:10 PM | 27409 |
| Surr: BFB | 96.4 | 68.3-144 | %Rec | 1 | 9/12/2016 12:28:10 PM | 27409 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | RAA |
| Benzene | ND | 0.021 | mg/Kg | 1 | 9/12/2016 12:28:10 PM | 27409 |
| Toluene | ND | 0.041 | mg/Kg | 1 | 9/12/2016 12:28:10 PM | 27409 |
| Ethylbenzene | ND | 0.041 | mg/Kg | 1 | 9/12/2016 12:28:10 PM | 27409 |
| Xylenes, Total | ND | 0.083 | mg/Kg | 1 | 9/12/2016 12:28:10 PM | 27409 |
| Surr: 4-Bromofluorobenzene | 111 | 80-120 | %Rec | 1 | 9/12/2016 12:28:10 PM | 27409 |

| Qualifiers: | | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 4 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | W | Sample container temperature is out of limit as specified |
| | | | | |

| Analytical | Report |
|------------|--------|
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Date Reported: 9/13/2016

Hall Environmental Analysis Laboratory, Inc.

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CLIENT: Blagg EngineeringClient Sample ID: TSP-5Project:GCU 196ELab ID:1609493-005Matrix: MEOH (SOIL)Received Date: 9/10/2016 9:00:00 AM

| Analyses | Result | PQL Qu | al Units | DF | Date Analyzed | Batch |
|---------------------------------|------------|----------|----------|----|-----------------------|-------|
| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | 77 | 30 | mg/Kg | 20 | 9/12/2016 11:57:35 AM | 27452 |
| EPA METHOD 8015M/D: DIESEL RANG | GE ORGANIC | s | | | Analyst | TOM |
| Diesel Range Organics (DRO) | 32 | 9.6 | mg/Kg | 1 | 9/12/2016 12:42:06 PM | 27432 |
| Motor Oil Range Organics (MRO) | ND | 48 | mg/Kg | 1 | 9/12/2016 12:42:06 PM | 27432 |
| Surr: DNOP | 95.0 | 70-130 | %Rec | 1 | 9/12/2016 12:42:06 PM | 27432 |
| EPA METHOD 8015D: GASOLINE RAN | GE | | | | Analyst | RAA |
| Gasoline Range Organics (GRO) | ND | 3.7 | mg/Kg | 1 | 9/12/2016 12:51:46 PM | 27409 |
| Surr: BFB | 94.6 | 68.3-144 | %Rec | 1 | 9/12/2016 12:51:46 PM | 27409 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst | RAA |
| Benzene | ND | 0.018 | mg/Kg | 1 | 9/12/2016 12:51:46 PM | 27409 |
| Toluene | ND | 0.037 | mg/Kg | 1 | 9/12/2016 12:51:46 PM | 27409 |
| Ethylbenzene | ND | 0.037 | mg/Kg | 1 | 9/12/2016 12:51:46 PM | 27409 |
| Xylenes, Total | ND | 0.074 | mg/Kg | 1 | 9/12/2016 12:51:46 PM | 27409 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | %Rec | 1 | 9/12/2016 12:51:46 PM | 27409 |

| Qualifiers: | • | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 5 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | W | Sample container temperature is out of limit as specified |
| | | | | |

Analytical Report

Lab Order 1609493

Date Reported: 9/13/2016

Hall Environmental Analysis Laboratory, Inc.

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Xylenes, Total

Surr: 4-Bromofluorobenzene

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| CLIENT: | Blagg Engineering | | (| lient Samp | le ID: TS | P-6 | |
|-----------------|-------------------------|-------------|-------------|------------|-----------|-----------------------|-------|
| Project: | GCU 196E | | | Collection | Date: 9/9 | /2016 2:51:00 PM | |
| Lab ID: | 1609493-006 | Matrix: | MEOH (SOIL) | Received | Date: 9/1 | 0/2016 9:00:00 AM | |
| Analyses | | Result | PQL Qual | Units | DF | Date Analyzed | Batch |
| EPA MET | HOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | | 61 | 30 | mg/Kg | 20 | 9/12/2016 12:10:00 PM | 27452 |
| EPA MET | HOD 8015M/D: DIESEL RAI | NGE ORGANIC | s | | | Analyst | TOM |
| Diesel Ra | ange Organics (DRO) | 43 | 9.9 | mg/Kg | 1 | 9/12/2016 1:09:54 PM | 27432 |
| Motor Oil | Range Organics (MRO) | ND | 50 | mg/Kg | 1 | 9/12/2016 1:09:54 PM | 27432 |
| Surr: D | ONOP | 92.3 | 70-130 | %Rec | 1 | 9/12/2016 1:09:54 PM | 27432 |
| EPA MET | HOD 8015D: GASOLINE RA | NGE | | | | Analyst: | RAA |
| Gasoline | Range Organics (GRO) | ND | 3.9 | mg/Kg | 1 | 9/12/2016 1:15:25 PM | 27409 |
| Surr: E | BFB | 99.9 | 68.3-144 | %Rec | 1 | 9/12/2016 1:15:25 PM | 27409 |
| EPA MET | HOD 8021B: VOLATILES | | | | | Analyst: | RAA |
| Benzene | | ND | 0.019 | mg/Kg | 1 | 9/12/2016 1:15:25 PM | 27409 |
| Toluene | | ND | 0.039 | mg/Kg | 1 | 9/12/2016 1:15:25 PM | 27409 |
| Ethylben | zene | ND | 0.039 | mg/Kg | 1 | 9/12/2016 1:15:25 PM | 27409 |

0.078

80-120

mg/Kg

%Rec

1

1

9/12/2016 1:15:25 PM

9/12/2016 1:15:25 PM 27409

27409

ND

110

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 6 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

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|------|--------|----|------|
| лпаг | vucai | ne | DOLL |

Date Reported: 9/13/2016

Hall Environmental Analysis Laboratory, Inc.

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 CLIENT: Blagg Engineering
 Client Sample ID: TSP-7

 Project:
 GCU 196E
 Collection Date: 9/9/2016 3:09:00 PM

 Lab ID:
 1609493-007
 Matrix: MEOH (SOIL)
 Received Date: 9/10/2016 9:00:00 AM

 Analyzee
 Poul Units
 DE Date Analyzed

| Analyses | Result | PQL Qua | l Units | DF | Date Analyzed | Batch |
|----------------------------------|---------|----------|---------|----|-----------------------|-------|
| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | 140 | 30 | mg/Kg | 20 | 9/12/2016 12:22:24 PM | 27452 |
| EPA METHOD 8015M/D: DIESEL RANGE | ORGANIC | s | | | Analyst: | TOM |
| Diesel Range Organics (DRO) | 220 | 9.7 | mg/Kg | 1 | 9/12/2016 1:37:43 PM | 27432 |
| Motor Oil Range Organics (MRO) | 120 | 49 | mg/Kg | 1 | 9/12/2016 1:37:43 PM | 27432 |
| Surr: DNOP | 98.3 | 70-130 | %Rec | 1 | 9/12/2016 1:37:43 PM | 27432 |
| EPA METHOD 8015D: GASOLINE RANG | E | | | | Analyst: | RAA |
| Gasoline Range Organics (GRO) | ND | 4.0 | mg/Kg | 1 | 9/12/2016 1:38:53 PM | 27409 |
| Surr: BFB | 106 | 68.3-144 | %Rec | 1 | 9/12/2016 1:38:53 PM | 27409 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | RAA |
| Benzene | ND | 0.020 | mg/Kg | 1 | 9/12/2016 1:38:53 PM | 27409 |
| Toluene | ND | 0.040 | mg/Kg | 1 | 9/12/2016 1:38:53 PM | 27409 |
| Ethylbenzene | ND | 0.040 | mg/Kg | 1 | 9/12/2016 1:38:53 PM | 27409 |
| Xylenes, Total | ND | 0.079 | mg/Kg | 1 | 9/12/2016 1:38:53 PM | 27409 |
| Surr: 4-Bromofluorobenzene | 112 | 80-120 | %Rec | 1 | 9/12/2016 1:38:53 PM | 27409 |

| the second se | the second se | | | |
|---|---|---|----|---|
| Qualifiers: | | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 7 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit as specified |
| | | | | |

| Analytical | Report |
|------------|--------|
| | |

Date Reported: 9/13/2016

9/12/2016 2:06:05 PM

9/12/2016 2:06:05 PM

9/12/2016 2:06:05 PM

9/12/2016 2:02:28 PM 27409

27432

27432

27432

27409

27409

27409

27409

27409

27409

Analyst: RAA

Analyst: RAA

Hall Environmental Analysis Laboratory, Inc.

Diesel Range Organics (DRO)

Surr: DNOP

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Motor Oil Range Organics (MRO)

Gasoline Range Organics (GRO)

Surr: 4-Bromofluorobenzene

EPA METHOD 8021B: VOLATILES

EPA METHOD 8015D: GASOLINE RANGE

| CLIENT: | Blagg Engineering | client Sample ID: TSP-8 | | | | | |
|---|-------------------|---|----------|-------|--------------------|----------------------|-------|
| Project: | GCU 196E | Collection Date: 9/9/2016 3:12:00 PM | | | | | |
| Lab ID: | 1609493-008 | Matrix: MEOH (SOIL) Received Date: 9/10/2016 9:00:00 AM | | | 10/2016 9:00:00 AM | | |
| Analyses | | Result | PQL Qual | Units | DF | Date Analyzed | Batch |
| EPA MET | HOD 300.0: ANIONS | | | | | Analyst | LGT |
| Chloride | | 120 | 30 | mg/Kg | 20 | 9/12/2016 1:12:03 PM | 27452 |
| EPA METHOD 8015M/D: DIESEL RANGE ORGANICS | | | | | Analyst | TOM | |

9.5

48

3.8

70-130

68.3-144

0.019

0.038

0.038

0.075

80-120

mg/Kg

mg/Kg

%Rec

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

1

1

1

1

1

1

1

1

150

100

99.7

ND

107

ND

ND

ND

ND

113

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | Е | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 8 of 13 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | % Recovery outside of range due to dilution or matrix | W | Sample container temperature is out of limit as specified |
| | | | | |

| Analy | tical | Re | port |
|-------|-------|----|------|
| | | | |

| Lab | Order | 1609493 |
|-----|-------|---------|
| | | **** |

Date Reported: 9/13/2016

Hall Environmental Analysis Laboratory, Inc.

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| | Result | PQL Qual | Units | DF Date Analyzed | Batch | | |
|-------------------|--|--|---|--|--|--|--|
| 1609493-009 | Matrix: | MEOH (SOIL) | Received | Date: 9/10/2016 9:00:00 AM | | | |
| GCU 196E | | | Collection | Date: 9/9/2016 3:15:00 PM | | | |
| Blagg Engineering | Client Sample ID: TSP-9 | | | | | | |
| | Blagg Engineering GCU 196E 1609493-009 | Blagg Engineering GCU 196E 1609493-009 Matrix: Result | Blagg Engineering C GCU 196E 1609493-009 Matrix: MEOH (SOIL) Result PQL Qual | Blagg Engineering Client Samp GCU 196E Collection 1609493-009 Matrix: MEOH (SOIL) Received | Blagg Engineering Client Sample ID: TSP-9 GCU 196E Collection Date: 9/9/2016 3:15:00 PM 1609493-009 Matrix: MEOH (SOIL) Received Date: 9/10/2016 9:00:00 AM Result PQL Qual Units DF Date Analyzed | | |

| EPA METHOD 300.0: ANIONS | | | | | Analyst | LGT |
|------------------------------------|--------|----------|-------|----|----------------------|-------|
| Chloride | 94 | 30 | mg/Kg | 20 | 9/12/2016 1:49:17 PM | 27452 |
| EPA METHOD 8015M/D: DIESEL RANGE O | RGANIC | S | | | Analyst: | TOM |
| Diesel Range Organics (DRO) | 49 | 9.9 | mg/Kg | 1 | 9/12/2016 1:01:17 PM | 27432 |
| Motor Oil Range Organics (MRO) | ND | 50 | mg/Kg | 1 | 9/12/2016 1:01:17 PM | 27432 |
| Surr: DNOP | 113 | 70-130 | %Rec | 1 | 9/12/2016 1:01:17 PM | 27432 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | Analyst: | RAA |
| Gasoline Range Organics (GRO) | ND | 3.6 | mg/Kg | 1 | 9/12/2016 2:25:56 PM | 27409 |
| Surr: BFB | 106 | 68.3-144 | %Rec | 1 | 9/12/2016 2:25:56 PM | 27409 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: | RAA |
| Benzene | ND | 0.018 | mg/Kg | 1 | 9/12/2016 2:25:56 PM | 27409 |
| Toluene | ND | 0.036 | mg/Kg | 1 | 9/12/2016 2:25:56 PM | 27409 |
| Ethylbenzene | ND | 0.036 | mg/Kg | 1 | 9/12/2016 2:25:56 PM | 27409 |
| Xylenes, Total | ND | 0.071 | mg/Kg | 1 | 9/12/2016 2:25:56 PM | 27409 |
| Surr: 4-Bromofluorobenzene | 110 | 80-120 | %Rec | 1 | 9/12/2016 2:25:56 PM | 27409 |

| Qualifiers: | | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method Blank |
|-------------|----|---|----|---|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits Page 0 of 12 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | 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.

Client: Blagg Engineering Project: GCU 196E

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| Sample ID MB-27452 Client ID: PBS | SampType: MBLK Batch ID: 27452 | TestCode: EPA Method RunNo: 37147 | 300.0: Anions | |
|---|--|---|--|-----------|
| Prep Date: 9/12/2016 | Analysis Date: 9/12/2016 | SeqNo: 1151980 | Units: mg/Kg | |
| Analyte | Result PQL SPK value | SPK Ref Val %REC LowLimit | HighLimit %RPD RPDL | imit Qual |
| Chloride | ND 1.5 | | | |
| | | | | |
| Sample ID LCS-27452 | SampType: LCS | TestCode: EPA Method | 300.0: Anions | |
| Sample ID LCS-27452 Client ID: LCSS | SampType: LCS Batch ID: 27452 | TestCode: EPA Method RunNo: 37147 | 300.0: Anions | |
| Sample ID LCS-27452 Client ID: LCSS Prep Date: 9/12/2016 | SampType: LCS Batch ID: 27452 Analysis Date: 9/12/2016 | TestCode: EPA Method RunNo: 37147 SeqNo: 1151981 | 300.0: Anions Units: mg/Kg | |
| Sample ID LCS-27452 Client ID: LCSS Prep Date: 9/12/2016 Analyte | SampType: LCS Batch ID: 27452 Analysis Date: 9/12/2016 Result PQL SPK value | TestCode: EPA Method RunNo: 37147 SeqNo: 1151981 SPK Ref Val %REC LowLimit | 300.0: Anions Units: mg/Kg HighLimit %RPD RPDL | imit Qual |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- 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

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WO#: 1609493

13-Sep-16

Hall Environmental Analysis Laboratory, Inc.

Client: D1

| Client: | Blagg Engineering |
|----------|-------------------|
| Project: | GCU 196E |

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|--------------------------------|-----------------|-----------|-------------|-----------|-----------|--------------|---------------------|------------|------|
| Sample ID LCS-27432 | SampType: L | CS | Tes | tCode: EF | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: LCSS | Batch ID: 2 | 7432 | F | RunNo: 3 | 7115 | | | | |
| Prep Date: 9/12/2016 | Analysis Date: | 9/12/2016 | 5 | SeqNo: 1 | 150825 | Units: mg/h | (g | | |
| Analyte | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 49 10 | 50.00 | 0 | 97.8 | 62.6 | 124 | | | |
| Surr: DNOP | 5.3 | 5.000 | | 106 | 70 | 130 | | | |
| Sample ID MB-27432 | SampType: N | IBLK | Tes | tCode: EF | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: PBS | Batch ID: 2 | 7432 | F | RunNo: 37 | 7115 | | | | |
| Prep Date: 9/12/2016 | Analysis Date: | 9/12/2016 | s | SeqNo: 11 | 150826 | Units: mg/H | (g | | |
| Analyte | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND 10 |) | | | | | | | |
| Notor Oil Range Organics (MRO) | ND 50 |) | | | | | | | |
| Surr: DNOP | 10 | 10.00 | | 101 | 70 | 130 | | | |
| Sample ID 1609493-001A | MS SampType: N | IS | Tes | tCode: EF | A Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: TSP-1 | Batch ID: 2 | 7432 | F | RunNo: 37 | 7115 | | | | |
| Prep Date: 9/12/2016 | Analysis Date: | 9/12/2016 | 5 | SeqNo: 11 | 151156 | Units: mg/K | (g | | |
| Analyte | Result PQL | SPK value | SPK Ref Val | %RÉC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| iesel Range Organics (DRO) | 91 9.8 | 49.07 | 51.14 | 80.8 | 33.9 | 141 | | | |
| Surr: DNOP | 4.8 | 4.907 | | 98.5 | 70 | 130 | | | |
| Sample ID 1609493-001A | MSD SampType: M | ISD | Tes | tCode: EF | A Method | 8015M/D: Die | esel Rang | e Organics | |
| Client ID: TSP-1 | Batch ID: 2 | 7432 | R | RunNo: 37 | 7115 | | | | |
| Prep Date: 9/12/2016 | Analysis Date: | 0/12/2016 | s | SeqNo: 11 | 151157 | Units: mg/K | g | | |
| Analyte | Result PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| liesel Range Organics (DRO) | 95 9.7 | 48.36 | 51.14 | 90.0 | 33.9 | 141 | 4.17 | 20 | |
| Surr: DNOP | 5.0 | 4.836 | | 104 | 70 | 130 | 0 | 0 | |

Qualifiers:

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

1609493

WO#:

Page 11 of 13

13-Sep-16

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609493

13-Sep-16

| Client: Project: | Blagg En GCU 196 | gineering E | | | | | | | | | |
|---------------------|---|----------------|----------|------------------|-------------|-----------|-----------|-------------|-----------|----------|------|
| Sample ID | ample ID LCS-27409 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range | | | | | | | | | | |
| Client ID: | LCSS | Batch | n ID: 27 | 409 RunNo: 37124 | | | | | | | |
| Prep Date: | 9/9/2016 | Analysis D |)ate: 9/ | 12/2016 | S | SeqNo: 1 | 152184 | Units: mg/H | (g | | |
| Analyte | | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range | e Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 101 | 80 | 120 | | | |
| Surr: BFB | 14 25 N.S. | 970 | | 1000 | | 97.3 | 68.3 | 144 | | | |
| Sample ID | MB-27409 | SampT | ype: MI | BLK | Tes | tCode: El | PA Method | 8015D: Gaso | line Rang | e | |
| Client ID: | PBS | Batch | D: 27 | 409 | F | RunNo: 3 | 7124 | | | | |
| Prep Date: | 9/9/2016 | Analysis D | ate: 9/ | 12/2016 | S | eqNo: 1 | 152185 | Units: mg/H | g | | |
| Analyte | | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range | e Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | | 890 | | 1000 | | 89.1 | 68.3 | 144 | | | |

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
- R RPD outside accepted recovery limits
- 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

Page 12 of 13

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering

Project: GCU 196E

| Sample ID LCS-27409 | Samp | Type: LC | s | Tes | tCode: E | PA Method | 8021B: Vola | tiles | | |
|----------------------------|------------|----------|-----------|-------------|-----------|-----------|-------------|-------|----------|------|
| Client ID: LCSS | Batc | h ID: 27 | 409 | F | RunNo: 3 | 7124 | | | | |
| Prep Date: 9/9/2016 | Analysis D | Date: 9/ | 12/2016 | 5 | SeqNo: 1 | 152197 | Units: mg/l | Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.86 | 0.025 | 1.000 | 0 | 85.8 | 75.3 | 123 | | | |
| Toluene | 0.96 | 0.050 | 1.000 | 0 | 95.8 | 80 | 124 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 103 | 82.8 | 121 | | | |
| Xylenes, Total | 3.1 | 0.10 | 3.000 | 0 | 103 | 83.9 | 122 | | | |
| Surr: 4-Bromofluorobenzene | 1.2 | | 1.000 | | 119 | 80 | 120 | | | |
| Sample ID MB-27409 | Samp1 | Гуре: МЕ | BLK | Tes | tCode: El | PA Method | 8021B: Vola | tiles | | |
| Client ID: PBS | Batcl | h ID: 27 | 409 | F | aunNo: 3 | 7124 | | | | |
| Prep Date: 9/9/2016 | Analysis D | Date: 9/ | 12/2016 | 5 | SeqNo: 1 | 152198 | Units: mg/l | ٨g | | |
| 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 | 11 | | 1.000 | | 112 | 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
- R RPD outside accepted recovery limits
- 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

WO#: 1609493 13-Sep-16

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ENVIRONNIENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 305-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

| Client Name: BLAGG | Work Order Number: | 1609493 | * | ReptNo: 1 | |
|---|---|-----------|-----------|--|----------|
| Received by/date: AQ | 09/10/10 | | | | |
| Logged By: Ashley Gallegos | 9/10/2016 9:00:00 AM | | SAG | | |
| Completed By: Ashley Gallegos | 9/12/2016 7:46:17 AM | • | A | | |
| Reviewed By: Hr. 09/12/16 | | | U | | 1 |
| Chain of Custody | | ÷ , | | | |
| 4. Custody seals intact on sample bottles? | | Ves [" | No | Not Present | |
| 2 Is Chain of Custody complete? | and the state of the | Yes | No []] | Not Present | |
| 2. How was the sample delivered? | in ny ¹ ana 1 | Courier | * | in print a subscreen in a | |
| 3. How was the sample delivered? | · · · · · · · · · · · · · · · · · · · | SCHOOLEL. | - | | |
| Log In | | | | | |
| 4. Was an attempt made to cool the sample | es? | Yes | No | NA [] | |
| | | | | | 1 |
| 5. Were all samples received at a temperat | ure of >0° C to 6.0°C | Yes | No [] | NA LI | |
| | | 100 | | | |
| 6. Sample(s) in proper container(s)? | | Yes Me | No L.J | | |
| 7 Sufficient sample volume for indicated te | st/s)? | Yes W | No [] | | ~~ |
| 8 Are samples (excent VOA and ONG) pro | nerty preserved? | Yes M | No 🗔 | | ·. · · · |
| Q Was preservative added to hottles? | hein hieseneen | Yes T | No 🐼 | NA L. | 4 |
| 3. Was preservative added to bottles r | | | | | • |
| 10.VOA vials have zero headspace? | | Yes [.] | No [] | No VOA Vials | |
| 11. Were any sample containers received br | röken? | Yes | No 🛃 | d of summerical is | · · · |
| | 14 IV 1 | 1.14 × 1 | | # of preserved bottles checked | |
| 12. Does paperwork match bottle labels? | | Yes | No [] | for pH: | a noted) |
| (Note discrepancies on chain of custody) | | 1.1 | · · · · · | Adjusted? | s noted) |
| 13. Are matrices correctly identified on Chair | n of Custody? | Yes M | | | 1.1 |
| 14, is it clear what analyses were requested? | 1. | Yes | | Checked by | 1 5 |
| 15. Were all holding times able to be met? (If no, notify customer for authorization.) | | Yes M | No L. | Checked by. | |
| | | 1 L | | | |

Special Handling (if applicable)

| 16. Was a | client notified of all | discrepancies | with this o | rebro | • | <i>.</i> | 1 | Yes [|] | N | io [_] | N | A | |
|-----------|------------------------|--|-------------------------|---------------------|----------|-------------|---------------|----------------|------------|---------------------------|------------------------|--|----------|--|
| t | Person Notified: | [| | ****** | | Date | 1 minut | FVD 1995 RM.1. | - | er sjanans and the | MARCALINA | | | |
| | By Whom: | and the second s | ntermiens att die seine | 78 (48) (MIL) | ÷. | Via; | | eMail | () | Phone | Fax | In Person | | |
| | Regarding: | Paulo Action Designed | | A47901966-0-0-0-00 | 14/144 0 | the address | gger Huden, A | 440,000,000 | Lagerr 40 | eys sain he stands of the | ABH A SEA MINES | | dan per | |
| 1 | Client Instructions: | 1 | e d al Brancia da Mara | aunania anyou se an | NESTORY | 3824-38-8-A | HILTPE (2828 | ********** | | ********* | under Fix or Helikolik | , and the second se | www.ekts | |

17. Additional remarks:

| 18. | Cooler Informatio | on |
|-----|-------------------|----|
| | 1 | |

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-------------|
| 1 | 1.1 | Good | Yes | | 1 | 4 · · · · · |

| С | hain | of-Cu | stody Record | Turn-Around | Time: | ASAP. | | | | H | | | F | NV | ТЕ | 20 | | ИF | NT | - 41 | |
|---------------|------------------------------|--------------|---|-------------------------|----------------------|----------------------------------|----------------------|----------|-------------|--------------|----------|-----------|----------|-----------|----------|----------|-----------|--------|-----------|------|------------|
| ient: | BPA | MERICA | 4 | □ Standard | Rush | SHULLEN | | | H | | N | | Y | STS | S L | AE | 30 | R/ | TC | OR | Y |
| 1 | SI AG | ENGL | EERING INC. | Project Name | | , | | | | | www | v.hal | lenv | iron | nent | tal.co | m | - | | | |
| ailing | Address | : | | 60 | U 1965 | 2 | | 49 | 01 H | awki | ns N | IE - | Alb | uau | erau | e. NI | M 87 | 109 | | | |
| | | | | Project #: | | | 1 | Te | al. 50 | 5-34 | 5-39 | 975 | F | ax | 505- | 345- | 410 | 7 | | | |
| none # | #: (50 | 5) 32 | 0-1183 | 1 | | 2 | | | | | | A | naly | sis | Req | uest | t | | | | |
| nail o | r Fax#: | - | | Project Mana | ger: | | - | nly) | (0) | | | | | 04) | | | | | | | |
| VQC I Stan | ^p ackage: dard | | Level 4 (Full Validation) | J-E | 3LAG6 | | fs (802 ⁻ | (Gas o | RO / MI | | | SIMS) | | ,PO4,S | 2 PCB's | | | | | | |
| credi | tation | | | Sampler: J | - BLAGG | | | H | D I | , | (1. | 20 | | N03 | 808 | | | | | | Î |
| NEL | AP | □ Othe | ۲ <u></u> | On Ice | Y Yes | | H | Ŧ | R N | 418 | 504 | r 82 | S | 03. | es / | | (YO | | | | or |
| EDD | (Type) | 1 | 1 | Sample Tem | perature | | 围 | TB | BB (C | bot | pou | 310 | Meta | C, | ticid | (YO | NIm | N | | | O Se |
| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX + B | BTEX + N | TPH 8015 | TPH (Met | EDB (Met | PAH's (8: | RCRA 8 1 | Anions (F | 8081 Pes | 8260B (V | 8270 (Sei | CHURI | | | Air Bubble |
| Lou | 1424 | SOIL | TSP-1 | 402×1 | COOL | -001 | × | | × | | | | | | | | | × | | | |
| t. | 1427 | 11 | TSP-2 | 11 | 21 | -002 | × | | × | | | | | | | | | x | | | |
| L. | 1430 | 11 | TSP-3 | 4 | IC. | -1003 | x | | × | | | | | | | | | × | | | |
| ł | 1457 | u | T3P-4 | ц | a(| -004 | × | | × | | | | | | | | | × | | | |
| 1 | 1454 | ų | TSP-5 | u | u | -005 | x | | × | | | | | | | | | × | | | |
| i | 1451 | ц | TSP-6 | u | ĸ | -000 | x | | × | | | | | | | | | × | | | |
| (| 1509 | K | T3P-7 | 4 | 4 | -007 | × | | x | | | | | | | | | × | \square | | |
| 1 | 1512 | ц | TSP-B | 4 | и | -008 | × | | x | | | | | | | | | × | | | |
| (| 1515 | и | T3P-9 | Ą | u | -009 | X | | × | | | | | | | | | x | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | _ | | - | | | | | _ |
| - | | Dellessiat | | Deschund hun | | Data Time | | | | | | | | | | | | | | | |
| ate: | Time: | Relinquisr | R(mag | Received by: | | | Rer | nark | S: | Bi | LL | B | 5 | TELE | N | NXK | AL | | | | |
| ate: | Time: | Relipquist | ed by: | Received by: | he wa | Date Time | | | | 00/ | VIL | | VHT | vo | 1 | 10 | ~ ~ | | | | |
| al. | IGUI | Ch | Ti libate | XT- | | alialus nar | 0 | | | | | | | ~0 | NE | | si't | | | | |
| - 410 | f necessary | samples suit | mitted to Hall Environmental may be sub | contracted to other a | ccredited laboratori | es. This serves as notice of thi | s possi | bility. | Any s | ib-con | tracte | d data | will b | e clea | ton vit | ated o | n the a | malvii | cal repo | ert. | |
| | C | | | | () | | | | | | | | | | | | | | | | |

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

September 16, 2016

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

RE: GCU 196E

OrderNo.: 1609790

Dear Jeff Blagg:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/15/2016 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 <u>www.hallenvironmental.com</u> 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 qualifers 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,

and

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

| Analy | tical | Re | nort |
|-----------------|-------|-----|------|
| C.B.B.B.B.B.B.Y | | 110 | port |

Date Reported: 9/16/2016

9/15/2016 10:53:17 AM 27505

Hall Environmental Analysis Laboratory, Inc.

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Surr: BFB

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| CLIENT: | Blagg Engineering | | | Client Samp | e ID: TS | SP-7R | |
|-----------------|------------------------|--------------|-------------|-------------|-----------|-----------------------|--------|
| Project: | GCU 196E | | | Collection | Date: 9/1 | 14/2016 1:55:00 PM | |
| Lab ID: | 1609790-001 | Matrix: | MEOH (SOIL) | Received | Date: 9/1 | 15/2016 7:25:00 AM | |
| Analyses | | Result | PQL Qu | al Units | DF | Date Analyzed | Batch |
| EPA MET | HOD 8015M/D: DIESEL R/ | ANGE ORGANIC | s | | | Analys | t: TOM |
| Diesel Ra | ange Organics (DRO) | 59 | 9.9 | mg/Kg | 1 | 9/15/2016 10:11:17 AM | 27516 |
| Motor Oil | Range Organics (MRO) | ND | 50 | mg/Kg | 1 | 9/15/2016 10:11:17 AM | 27516 |
| Surr: D | DNOP | 104 | 70-130 | %Rec | 1 | 9/15/2016 10:11:17 AM | 27516 |
| EPA MET | HOD 8015D: GASOLINE R | ANGE | | | | Analys | RAA |
| Gasoline | Range Organics (GRO) | ND | 3.6 | mg/Kg | 1 | 9/15/2016 10:53:17 AM | 27505 |

68.3-144

%Rec

1

91.1

| Qualifiers: | | Value exceeds Maximum Contaminant Level. | В | Analyte detected in the associated Method Bl | ank |
|-------------|----|---|----|--|--------------|
| | D | Sample Diluted Due to Matrix | E | Value above quantitation range | |
| | Н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | Page 1 of 4 |
| | ND | Not Detected at the Reporting Limit | Р | Sample pH Not In Range | age 1 01 4 |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | % Recovery outside of range due to dilution or matrix | w | Sample container temperature is out of limit a | as specified |
| | | | | | |

| Analytical | Report |
|------------|--------|
|------------|--------|

Date Reported: 9/16/2016

Hall Environmental Analysis Laboratory, Inc.

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| CLIENT: | Blagg Engineering | | 1981 | Client Sampl | e ID: TS | P-8R | |
|-----------|-----------------------|--------------|-------------|--------------|-----------|-----------------------|-------|
| Project: | GCU 196E | | | Collection | Date: 9/1 | 4/2016 1:58:00 PM | |
| Lab ID: | 1609790-002 | Matrix: | MEOH (SOIL) |) Received | Date: 9/1 | 5/2016 7:25:00 AM | |
| Analyses | | Result | PQL Qu | al Units | DF | Date Analyzed | Batch |
| EPA MET | HOD 8015M/D: DIESEL R | ANGE ORGANIC | s | | | Analyst | TOM |
| Diesel Ra | ange Organics (DRO) | 46 | 9.5 | mg/Kg | 1 | 9/15/2016 10:33:04 AM | 27516 |
| Motor Oil | Range Organics (MRO) | ND | 47 | mg/Kg | 1 | 9/15/2016 10:33:04 AM | 27516 |
| Surr: D | ONOP | 102 | 70-130 | %Rec | 1 | 9/15/2016 10:33:04 AM | 27516 |
| EPA MET | HOD 8015D: GASOLINE F | ANGE | | | | Analyst | RAA |
| Gasoline | Range Organics (GRO) | ND | 3.2 | mg/Kg | 1 | 9/15/2016 11:16:47 AM | 27505 |
| Surr: E | BFB | 85.9 | 68.3-144 | %Rec | 1 | 9/15/2016 11:16:47 AM | 27505 |

| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | в | Analyte detected in the associated Method 1 | Blank |
|---|-------------------------------------|---|------------------------|--|----------------|
| | D | Sample Diluted Due to Matrix | Е | Value above quantitation range | |
| | н | Holding times for preparation or analysis exceeded | J | Analyte detected below quantitation limits | Page 2 of 4 |
| Qualifiers: * Value D Samp H Holdi ND Not I R RPD S % Re | Not Detected at the Reporting Limit | Р | Sample pH Not In Range | 1 age 2 01 4 | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | % Recovery outside of range due to dilution or matrix | W | Sample container temperature is out of limit | t as specified |

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering

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Project: GCU 196E Sample ID LCS-27516 SampType: LCS

| Sample ID LCS-27516 | SampT | Type: LC | s | Tes | tCode: E | PA Method | 8015M/D: Di | esel Rang | e Organics | |
|--------------------------------|------------|----------|-----------|-------------|-----------|-----------|-------------|-----------|------------|------|
| Client ID: LCSS | Batcl | h ID: 27 | 516 | F | RunNo: 3 | 7208 | | | | |
| Prep Date: 9/15/2016 | Analysis D | Date: 9 | /15/2016 | 5 | SeqNo: 1 | 154867 | Units: mg/H | Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 46 | 10 | 50.00 | 0 | 91.3 | 62.6 | 124 | | | |
| Surr: DNOP | 4.6 | | 5.000 | | 92.1 | 70 | 130 | | | |
| Sample ID MB-27516 | SampT | Type: MI | BLK | Tes | tCode: E | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: PBS | Batch | h ID: 27 | 516 | F | RunNo: 3 | 7208 | | | | |
| Prep Date: 9/15/2016 | Analysis D | Date: 9/ | 15/2016 | 5 | SeqNo: 1 | 154868 | Units: mg/k | ۲g | | |
| 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 | | 95.6 | 70 | 130 | | | _ |
| Sample ID 1609790-001AMS | SampT | ype: M | s | Tes | tCode: E | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: TSP-7R | Batch | h ID: 27 | 516 | F | RunNo: 3 | 7208 | | | | |
| Prep Date: 9/15/2016 | Analysis D |)ate: 9/ | /15/2016 | 5 | SeqNo: 1 | 154970 | Units: mg/h | ٢g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 100 | 9.8 | 49.16 | 59.42 | 88.5 | 33.9 | 141 | | | |
| Surr: DNOP | 5.2 | | 4.916 | | 106 | 70 | 130 | | | |
| Sample ID 1609790-001AMS | D SampT | ype: MS | SD | Tes | tCode: El | PA Method | 8015M/D: Di | esel Rang | e Organics | |
| Client ID: TSP-7R | Batch | h ID: 27 | 516 | F | RunNo: 3 | 7208 | | | | |
| Prep Date: 9/15/2016 | Analysis D |)ate: 9/ | 15/2016 | 5 | SeqNo: 1 | 154971 | Units: mg/k | ٢g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 100 | 9.4 | 47.21 | 59.42 | 91.2 | 33.9 | 141 | 0.461 | 20 | |
| Surr: DNOP | 5.0 | | 4.721 | | 107 | 70 | 130 | 0 | 0 | |

Qualifiers:

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

WO#: 1609790

16-Sep-16

Page 3 of 4

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

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WO#: 1609790

Page 4 of 4

16-Sep-16

| Client: Blagg Project: GCU | Engineering 96E | | | | | | | | | |
|-------------------------------|--------------------|---------|-----------|----------------|-----------|-----------|-------------|------------|----------|------|
| Sample ID MB-27505 | SampT | pe: MI | BLK | Tes | tCode: E | PA Method | 8015D: Gase | oline Rang | e | |
| Client ID: PBS | Batch | ID: 27 | 505 | F | RunNo: 3 | 7219 | | | | |
| Prep Date: 9/14/2016 | Analysis Da | ate: 9/ | 15/2016 | 5 | SeqNo: 1 | 155555 | Units: mg/h | (g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | ND | 5.0 | | | | | | | | |
| Surr: BFB | 800 | | 1000 | | 79.7 | 68.3 | 144 | | | |
| Sample ID LCS-27505 | SampTy | pe: LC | s | Tes | tCode: El | PA Method | 8015D: Gase | line Rang | e | |
| Client ID: LCSS | Batch | ID: 27 | 505 | F | RunNo: 3 | 7219 | | | | |
| Prep Date: 9/14/2016 | Analysis Da | ate: 9/ | 15/2016 | SeqNo: 1155556 | | | Units: mg/H | (g | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 5.0 | 25.00 | 0 | 96.7 | 80 | 120 | | | |
| Surr: BFB | 860 | | 1000 | | 86.2 | 68.3 | 144 | | | |

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
- R RPD outside accepted recovery limits
- 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 Hall Environmental ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-345- Website: ww | ental Analysis Laboratory 4901 Hawkins NE Albuguergue, NM 87109 -3975 FAX: 505-345-4107 ww.hallenvironmental.com | Sam | ple Log-In Ch | eck List |
|---|--|---------|-----------------------------------|-------------------|
| Client Name: BLAGG Work Order Nur | mber: 1609790 | | RcptNo: | |
| Received by/date: 09/15/ Logged By: Ashley Gallegos 9/15/2016 7:25:00 Completed By: Ashley Gallegos 9/15/2016 8:25:17 Reviewed By: C 09/15/16 09/15/16 | AM S | H H | | |
| Chain of Custody | | | | |
| 1. Custody seals intact on sample bottles? | Yes 🗔 | No 🗆 | Not Present | |
| 2. Is Chain of Custody complete? | Yes 🗹 | No 🗆 | Not Present | |
| 3. How was the sample delivered? | Courier | | | |
| Log In | | | | |
| 4. Was an attempt made to cool the samples? | Yes 🗹 | No 🗌 | NA 🗆 | |
| 5. Were all samples received at a temperature of >0° C to 6.0°C | Yes 🗹 | No 🗌 | | |
| 6. Sample(s) in proper container(s)? | Yes 🗹 | No 🗌 | | |
| 7. Sufficient sample volume for indicated test(s)? | Yes 🗹 | No 🗆 | | |
| 8. Are samples (except VOA and ONG) properly preserved? | Yes 🗹 | No 🗆 | | |
| 9. Was preservative added to bottles? | Yes 🗌 | No 🗹 | NA 🗌 | |
| 10.VOA vials have zero headspace? | Yes | No 🗆 | No VOA Vials | |
| 11. Were any sample containers received broken? | Yes | No 🗹 | # of preserved bottles checked | |
| 12. Does paperwork match bottle labels? (Note discrepancies on chain of custody) | Yes 🗹 | No 🗆 | for pH: (<2 or | >12 unless noted) |
| 13. Are matrices correctly identified on Chain of Custody? | Yes 🗹 | No 🗆 | Adjusted? | |
| 14. Is it clear what analyses were requested? | Yes 🗹 | No 🗆 | | |
| 15. Were all holding times able to be met? (If no, notify customer for authorization.) | Yes 🗹 | No 🗆 | Checked by: | |
| Special Handling (if applicable) | Yes | No 🗆 | NA 🗹 | |
| Person Notified: Da By Whom: Vi Regarding: Client Instructions: | ate a: eMail Phone | e 🗌 Fax | In Person | |
| 17. Additional remarks: | | | | |
| 18. Cooler Information | | | | |
| Cooler No Temp C Condition Seal Intact Seal No | Seal Date Sig | ned By | | |
| 1 1.1 Good Yes | | | . I | 4 A |
| Page 1 of 1 | | | | ar y |

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| nt: | BP A | MERICA | UEERWG JUC. | Turn-Around Time: ASAP SAME DAK Project Name: | | | | HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com | | | | | | | | | | | | , | |
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| | | | U-system in the second s | Project #: | | | | Te | el. 50 | 5-34 | 5-39 | 975 | F | ax | 505- | 345 | 410 | 7 | | | |
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| all o | r Fax#; | | | Project Mana | iger: | | = | (Klu | R0 | | | | | 04) | (0) | | | | | | |
| Stan | Package: dard | | Level 4 (Full Validation) | J | BLAGE | | 's (802 | (Gas o | RO / M | | | (SMIS) | | PO4,S | 2 PCB's | | | | | | |
| NEL | tation AP | Othe | r | Sampler: J On Ice: | BLAGG | D No | + TMB | HdT + | SO / DI | 18.1) | 04.1) | 8270 | | 03,NO2 | \$ / 8082 | | (A) | | | | or N) |
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| ate | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL NO. | BTEX + MT | BTEX + MT | TPH 8015B | TPH (Metho | EDB (Metho | PAH's (831 | RCRA 8 Me | Anions (F,C | 8081 Pestic | 8260B (VO | 8270 (Semi | | | | Air Bubbles |
| 016 | 1355 | SOIL | TSP-7R | 407×1 | COOL | -001 | | | × | | | | | | | | | | | | F |
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| e: // ///// | | Relinquish | ed by: Blagg ed by: | Received by: | thelip | Date Time U <u>x 9/14/14 (1140</u> Date Time | Rer | nark | S: | Bill | L E | SP F: | SI | EVE | E J | Masi | KAL | | | | |
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