

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

**Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application**

- Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
 Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
 Modification to an existing permit
 Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: BP AMERICA PRODUCTION COMPANY OGRID #: 778
Address: 380 North Airport Road, Durango, CO 81303
Facility or well name: RIDDLE COM 008
API Number: 3004524803 OCD Permit Number: _____
U/L or Qtr/Qtr I Section 18.0 Township 30.0N Range 09W County: San Juan County
Center of Proposed Design: Latitude 36.80907 Longitude -107.81510 NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

2.
 Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: Drilling Workover
 Permanent Emergency Cavitation P&A
 Lined Unlined Liner type: Thickness _____ mil LLDPE HDPE PVC Other _____
 String-Reinforced
Liner Seams: Welded Factory Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

NMOCD
JAN 25 2019
DISTRICT III

3.
 Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
 Drying Pad Above Ground Steel Tanks Haul-off Bins Other _____
 Lined Unlined Liner type: Thickness _____ mil LLDPE HDPE PVC Other _____
Liner Seams: Welded Factory Other _____

4.
 Below-grade tank: Subsection I of 19.15.17.11 NMAC **Tank ID:** A
Volume: 21.0 bbl Type of fluid: Produced Water
Tank Construction material: Steel
 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
 Visible sidewalls and liner Visible sidewalls only Other SINGLE WALLED DOUBLE BOTTOMED
Liner type: Thickness _____ mil HDPE PVC Other _____

5.
 Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

19.

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

20.

OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)

OCD Representative Signature: _____ Approval Date: 1/31/2019

Title: Environmental Specialist OCD Permit Number: _____

21.

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

Closure Completion Date: 12/03/2018

22.

Closure Method:

Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)
 If different from approved plan, please explain.

23.

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?

Yes (If yes, please demonstrate compliance to the items below) No

Required for impacted areas which will not be used for future service and operations:

- Site Reclamation (Photo Documentation)
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique

24.

Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.

- Proof of Closure Notice (surface owner and division)
- Proof of Deed Notice (required for on-site closure)
- Plot Plan (for on-site closures and temporary pits)
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (required for on-site closure)
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude 36.80907 Longitude -107.81510 NAD: 1927 1983

25.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Steve Moskal Title: Field Environmental Coordinator

Signature: _____ Date: 1/24/2019

e-mail address: steven.moskal@bpx.com Telephone: 505-330-9179

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

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State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party BP America Production Company	OGRID 778
Contact Name Steve Moskal	Contact Telephone (505) 330-9179
Contact email Steven.Moskal@bpx.com	Incident # <i>(assigned by OCD)</i>
Contact mailing address 380 North Airport Road, Durango, CO 81303	

Location of Release Source

Latitude 36.80907 Longitude -107.81510
(NAD 83 in decimal degrees to 5 decimal places)

Site Name RIDDLE COM 008	Site Type Natural Gas Well
Date Release Discovered	API# <i>(if applicable)</i> 30-045-24803

Unit Letter	Section	Township	Range	County
I	18	30N	09W	San Juan

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

Nature and Volume of Release

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

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

Cause of Release **TPH, BTEX, & chloride all below below-grade tank (BGT) permit closure standards.**

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
---	--

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Not required.

Initial Response

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

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
--

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature: _____ Date: _____

email: Steven.Moskal@bpx.com Telephone: (505) 330-9179

OCD Only

Received by: _____ Date: _____

BP AMERICA PRODUCTION COMPANY
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

Riddle Com # 8 – Tank ID: A

API #: 3004524803

Unit Letter I, Section 18, T30N, R09W

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BP America Production Company (BP) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BP shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofit with a BGT that complies with the BP NMOCD approved BGT design attached to the BP Design and Construction Plan. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not previously retrofitted to comply with the BP NMOCD approved BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

General Closure Plan

1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.

Notice is attached.

2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.

Notice was provided and documented in the attached email.

3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:

- a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
- b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
- c. Basin Disposal, Permit NM-01-0005 (Liquids)
- d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
- e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
- f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
- g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
- h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
- i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

All liquids and/or sludge within the BGT were removed and sent to one of the above NMOCD approved facilities for disposal.

4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.

The BGT was transported for recycling.

5. BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.

All equipment associated with the BGT has been removed.

6. BP shall test the soils beneath the BGT to determine whether a release has occurred. BP shall collect at a minimum: a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows;

Constituents	Testing Method	Release Verification (mg/Kg)	Sample Results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	<0.018
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	<0.070
TPH	US EPA Method SW-846 418.1	100	<49
Chlorides	US EPA Method 300.0 or 4500B	250 or background	<30

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

Soil beneath the BGT was sampled for TPH, BTEX, and chloride. All test parameters were below the stated limits. A field and laboratory reports are attached.

7. BP shall notify the division District III office of its results on form C-141.
- C-141 is attached.**
8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.

Sampling results reveal no evidence of a release has occurred.

9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area.

Sampling results reveal no evidence of a release has occurred. Area was backfilled with clean, earthen material and is within the active well pad.

10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.

The BGT area has been backfilled and will be reclaimed once the well has been plugged & abandoned.

11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil cover will be constructed to the site's existing grade and all practicable efforts will be made to prevent ponding of water and erosion of the cover material.
The BGT area has been backfilled and will be reclaimed once the well has been plugged & abandoned.
12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
The BGT area has been backfilled and will be reclaimed once the well has been plugged & abandoned.
13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.
The BGT area has been backfilled and will be reclaimed once the well has been plugged & abandoned.
14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves re-vegetation.
BP will notify NMOCD when re-vegetation is successfully completed.
15. Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
 - a. proof of closure notification (surface owner and NMOCD)
 - b. sampling analytical reports; information required by 19.15.17 NMAC;
 - c. disposal facility name and permit number
 - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
 - e. site reclamation, photo documentation.**Closure report on C-144 form is included & contains a photo of the reclamation completion.**
16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.
Certification section of C-144 has been completed.

BP Pit Close Notification – RIDDLE COM 008

- **Farrah Buckley** <Farrah.Buckley@bpx.com>
To:Smith, Cory, EMNRD,Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)
Cc:jeffcblagg@aol.com, blagg_njv@yahoo.com, Steven Moskal, Roland Mora

November 21, 2018 at 9:07 AM

BP America Production Company
380 Airport Rd
Durango, CO 81303
Phone: (970) 247 6800

SENT VIA E-MAIL TO: CORY.SMITH@STATE.NM.US; VANESSA.FIELDS@STATE.NM.US

November 21, 2018

New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: Notice of Proposed Below-Grade Tank (BGT) Closure

RIDDLE COM 008
API 30-045-24803
(I) Section 18– T30N – R9W
San Juan County, New Mexico

Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 21bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around November 28, 2018.

Should you have any questions, please feel free to contact BP.

Sincerely,

Steve Moskal
BP Lower 48 – San Juan
Field Environmental Coordinator
Phone: (505) 330-9179

Farrah Buckley

BGT Project Support
970-946-9199 -cell

This email and any attachments are intended only for the addressee(s) listed above and may contain confidential, proprietary, and/or privileged information. If you are not an intended recipient, please immediately advise the sender by return email, delete this email and any attachments, and destroy any copies of same. Any unauthorized review, use, copying disclosure or distribution of this email and any attachments is prohibited.



BP America Production Company
380 Airport Rd
Durango, CO 81303
Phone: (970) 247 6800

November 21, 2018

Bureau of Land Management
Whitney Thomas
6251 College Suite A
Farmington, NM 87402

VIA EMAIL

Re: Notification of plans to close/remove a below grade tank
Well Name: RIDDLE COM 008
API# - 3004524803

Dear Mrs. Thomas,

As part of the NM "Pit Rule": 19.15.17.13 Closure Requirements, Paragraph J. BP America Production Company (BP) is required to notify the surface owner of BP's plans to close/remove a below grade tank. BP wishes to inform you of our plans to close/remove the below grade tank on its well pad located on your surface. BP plans to commence this work on or about November 28, 2018. If there aren't any unforeseen problems, the work should be completed within 10 working days.

As a point of clarification, BP will be closing the below grade tank and either operating without one or replacing it with an above ground tank, the well site will continue to operate.

If witnessing of the tank removal is required please contact me for a specific time (505)-330-9179.

Sincerely,

Steve Moskal
BP Lower 48 – San Juan
Field Environmental Coordinator

CLIENT: **BP** **BLAGG ENGINEERING, INC.**
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199 API #: **3004524803**
TANK ID (if applicable): **A**

FIELD REPORT: (circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:
PAGE #: **1** of **1**

SITE INFORMATION: SITE NAME: **RIDDLE COM # 8**
QUAD/UNIT: **I** SEC: **18** TWP: **30N** RNG: **9W** PM: **NM** CNTY: **SJ** ST: **NM**
DATE STARTED: **11/29/18**
DATE FINISHED: _____
1/4 -1/4/FOOTAGE: **1,630'S / 790'E** **NE/SE** LEASE TYPE: FEDERAL / STATE / FEE / INDIAN
LEASE #: **SF080244** PROD. FORMATION: **DK** CONTRACTOR: **BP - J. GONZALES** ENVIRONMENTAL SPECIALIST(S): **NJV**

REFERENCE POINT: WELL HEAD (W.H.) GPS COORD.: **36.80899 X 107.81515** GL ELEV.: **6,223'**
1) **21 BGT (SW/DB)** GPS COORD.: **36.80907 X 107.81510** DISTANCE/BEARING FROM W.H.: **38', N26.5E**
2) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____
3) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____
4) _____ GPS COORD.: _____ DISTANCE/BEARING FROM W.H.: _____

SAMPLING DATA: CHAIN OF CUSTODY RECORD(S) # OR LAB USED: **HALL** OVM READING (ppm) **NA**
1) SAMPLE ID: **5PC - TB @ 5' (21)** SAMPLE DATE: **11/29/18** SAMPLE TIME: **1105** LAB ANALYSIS: **8015B/8021B/300.0 (CI)**
2) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____
3) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____
4) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____
5) SAMPLE ID: _____ SAMPLE DATE: _____ SAMPLE TIME: _____ LAB ANALYSIS: _____

SOIL DESCRIPTION: SOIL TYPE: SAND / SILTY SAND / SILT / SILTY CLAY / CLAY / GRAVEL OTHER **BEDROCK (SANDSTONE)**
SOIL COLOR: **DARK YELLOWISH BROWN** PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC
COHESION (ALL OTHERS): NON COHESIVE / SLIGHTLY COHESIVE / COHESIVE HIGHLY COHESIVE DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD
CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE VERY DENSE HC ODOR DETECTED: YES NO EXPLANATION - _____
MOISTURE: DRY SLIGHTLY MOIST MOIST / WET / SATURATED / SUPER SATURATED
SAMPLE TYPE: GRAB COMPOSITE # OF PTS. **5** ANY AREAS DISPLAYING WETNESS: YES NO EXPLANATION - _____
DISCOLORATION/STAINING OBSERVED: YES NO EXPLANATION - _____

SITE OBSERVATIONS: LOST INTEGRITY OF EQUIPMENT: YES NO EXPLANATION - _____
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES NO EXPLANATION: _____
EQUIPMENT SET OVER RECLAIMED AREA: YES NO EXPLANATION - _____
OTHER: **NMOC D OR BLM REPS. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING. BGT INSTALLED BY EXCAVATING INTO BEDROCK (sampled).**

EXCAVATION DIMENSION ESTIMATION: **NA** ft. X **NA** ft. X **NA** ft. EXCAVATION ESTIMATION (Cubic Yards): **NA**
DEPTH TO GROUNDWATER: **> 100'** NEAREST WATER SOURCE: **> 1,000'** NEAREST SURFACE WATER: **> 1,000'** NMOC D TPH CLOSURE STD: **2,500** ppm

SITE SKETCH BGT Located: off on site PLOT PLAN circle: attached

OVM CALIB. READ. = **NA** ppm RF=1.00
OVM CALIB. GAS = **NA** ppm
TIME: **NA** am/pm DATE: **NA**

MISCELL. NOTES
SIO #: **190040005402**
REF #:
VID: **VHIXONEV11**
PJ #:
Permit date(s): **06/14/10**
OCD Appr. date(s): **03/02/17**
Tank ID: **A** OVM = Organic Vapor Meter ppm = parts per million
A BGT Sidewalls Visible: Y N
BGT Sidewalls Visible: Y / N
BGT Sidewalls Visible: Y / N
Magnetic declination: **10° E**

NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATION DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD; T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELOW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA - NOT APPLICABLE OR NOT AVAILABLE; SW - SINGLE WALL; DW - DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM.

NOTES: **GOOGLE EARTH IMAGERY DATE: 10/5/2016.** ONSITE: **11/29/18**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 5 (21)

Project: Riddle Com 8

Collection Date: 11/29/2018 11:05:00 AM

Lab ID: 1811E74-001

Matrix: MEOH (SOIL)

Received Date: 11/30/2018 8:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	11/30/2018 10:11:11 AM	41815
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/30/2018 11:45:00 AM	41813
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/30/2018 11:45:00 AM	41813
Surr: DNOP	99.3	50.6-138		%Rec	1	11/30/2018 11:45:00 AM	41813
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	11/30/2018 9:35:28 AM	G55986
Surr: BFB	91.1	73.8-119		%Rec	1	11/30/2018 9:35:28 AM	G55986
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	11/30/2018 9:35:28 AM	B55986
Toluene	ND	0.035		mg/Kg	1	11/30/2018 9:35:28 AM	B55986
Ethylbenzene	ND	0.035		mg/Kg	1	11/30/2018 9:35:28 AM	B55986
Xylenes, Total	ND	0.070		mg/Kg	1	11/30/2018 9:35:28 AM	B55986
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	1	11/30/2018 9:35:28 AM	B55986

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

Qualifiers:	<ul style="list-style-type: none"> * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit PQL Practical Quantitative Limit S % Recovery outside of range due to dilution or matrix 	<ul style="list-style-type: none"> 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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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1811E74

03-Dec-18

Client: Blagg Engineering

Project: Riddle Com 8

Sample ID	MB-41815	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	41815	RunNo:	55980					
Prep Date:	11/30/2018	Analysis Date:	11/30/2018	SeqNo:	1869800	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-41815	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	41815	RunNo:	55980					
Prep Date:	11/30/2018	Analysis Date:	11/30/2018	SeqNo:	1869801	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1811E74

03-Dec-18

Client: Blagg Engineering

Project: Riddle Com 8

Sample ID	LCS-41813	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	41813	RunNo:	55920					
Prep Date:	11/30/2018	Analysis Date:	11/30/2018	SeqNo:	1869076	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	70	130			
Surr: DNOP	4.6		5.000		91.2	50.6	138			

Sample ID	MB-41813	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	41813	RunNo:	55920					
Prep Date:	11/30/2018	Analysis Date:	11/30/2018	SeqNo:	1869077	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		99.5	50.6	138			

Sample ID	1811E74-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	5PC-TB @ 5 (21)	Batch ID:	41813	RunNo:	55975					
Prep Date:	11/30/2018	Analysis Date:	11/30/2018	SeqNo:	1870024	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.6	47.85	0	89.0	53.5	126			
Surr: DNOP	4.6		4.785		95.8	50.6	138			

Sample ID	1811E74-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	5PC-TB @ 5 (21)	Batch ID:	41813	RunNo:	55975					
Prep Date:	11/30/2018	Analysis Date:	11/30/2018	SeqNo:	1870025	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.8	48.83	0	86.9	53.5	126	0.397	21.7	
Surr: DNOP	4.6		4.883		94.8	50.6	138	0	0	

Qualifiers:

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- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 1811E74
 03-Dec-18

Client: Blagg Engineering
Project: Riddle Com 8

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G55986		RunNo: 55986							
Prep Date:	Analysis Date: 11/30/2018		SeqNo: 1869560				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.1	73.8	119			

Sample ID 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G55986		RunNo: 55986							
Prep Date:	Analysis Date: 11/30/2018		SeqNo: 1869561				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	80.1	123			
Surr: BFB	1000		1000		105	73.8	119			

Sample ID 1811E74-001AMS	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: 5PC-TB @ 5 (21)	Batch ID: G55986		RunNo: 55986							
Prep Date:	Analysis Date: 11/30/2018		SeqNo: 1869562				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.5	17.56	0	107	77.8	128			
Surr: BFB	760		702.2		108	73.8	119			

Sample ID 1811E74-001AMSD	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: 5PC-TB @ 5 (21)	Batch ID: G55986		RunNo: 55986							
Prep Date:	Analysis Date: 11/30/2018		SeqNo: 1869563				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.5	17.56	0	103	77.8	128	3.69	20	
Surr: BFB	740		702.2		106	73.8	119	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1811E74
03-Dec-18

Client: Blagg Engineering
Project: Riddle Com 8

Sample ID RB	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: B55986		RunNo: 55986							
Prep Date:	Analysis Date: 11/30/2018		SeqNo: 1869582		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	80	120			

Sample ID 100NG BTEX LCS	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: B55986		RunNo: 55986							
Prep Date:	Analysis Date: 11/30/2018		SeqNo: 1869583		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.4	80	120			
Toluene	0.92	0.050	1.000	0	92.3	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.1	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.6	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
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Hall Environmental Analysis Laboratory
 4901 Hawkins NE
 Albuquerque, NM 87109
 TEL: 505-345-3975 FAX: 505-345-4107
 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1811E74**

RcptNo: **1**

Received By: **Erin Melendrez** 11/30/2018 8:25:00 AM

EM

Completed By: **Isaiah Ortiz** 11/30/2018 8:44:36 AM

IO

Reviewed By: *IO* 11/30/18

LB: AT 11/29/18

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

