District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-144 Revised June 6, 2013 For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office. For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.
	Pit, Below-Grade Tank, or	
10 3 4	native Method Permit or Closure I	Plan Application OIL CONS. DIV DIST. 3
Type of action: $\Box$ Below g	ade tank registration f a pit or proposed alternative method	OIL CONS. DIV BIO
$75-31205$ $\boxtimes$ Closure of	of a pit, below-grade tank, or proposed alternati	ive method NOV <b>1 3</b> 2014
	tion to an existing permit/or registration blan only submitted for an existing permitted or	r non-permitted pit, below-grade tank,
or proposed alternative method	1	
	application (Form C-144) per individual pit, below-	
Please be advised that approval of this request does not re environment. Nor does approval relieve the operator of i	ts responsibility to comply with any other applicable go	n pollution of surface water, ground water or the overnmental authority's rules, regulations or ordinances.
Deperator: BP America Production Company	OGRID #:7	778
Address: _200 Energy Court, Farmington, N	NM 87401	
Facility or well name:Ulibarri Gas Com 3M	1	
API Number:3004531203	OCD Permit Number:	
U/L or Qtr/QtrP Section35		
Center of Proposed Design: Latitude36.764	18 Longitude107.74512	NAD: □1927 ⊠ 1983 Surface
Owner: 🔲 Federal 🗋 State 🔀 Private 🗍 Tribal Tr	ust or Indian Allotment	
2.		
<u><b>Pit:</b></u> Subsection F, G or J of 19.15.17.11 NMA	С	
Temporary: Drilling Workover		
Permanent Emergency Cavitation P&	-	
String-Reinforced		
Liner Seams: Welded Factory Other	Volume: bbl	Dimensions: L x W x D
3.		
Below-grade tank: Subsection I of 19.15.17.11	INMAC Tank A	
Volume:95.0bbl Type o	f fluid:Produced water	
Tank Construction material:Steel		
Secondary containment with leak detection	Visible sidewalls, liner, 6-inch lift and automatic ov	rerflow shut-off
□ Visible sidewalls and liner □ Visible sidewall	· — –	,
Liner type: Thicknessmil [	HDPE PVC Other	
4.		

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

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Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)

Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)

Four foot height, four strands of barbed wire evenly spaced between one and four feet

Alternate. Please specify\_

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6.

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)

Screen Netting Other

Monthly inspections (If netting or screening is not physically feasible)

Signs: Subsection C of 19.15.17.11 NMAC

12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

Signed in compliance with 19.15.16.8 NMAC

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

- □ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
- Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting	
<u>Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.</u> - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
<ul> <li>Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	🗌 Yes 🗌 No
<ul> <li>Within the area overlying a subsurface mine. (Does not apply to below grade tanks)</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	🗋 Yes 🗌 No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	🗋 Yes 🗌 No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	🗋 Yes 🗌 No
Below Grade Tanks	
<ul> <li>Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗋 Yes 🗌 No
<ul> <li>Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
<ul> <li>Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗋 Yes 🗌 No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
<ul> <li>application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	Yes No
<ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	
	Yes No
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	Yes 🗌 No
<ul> <li>Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	Yes No
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes 🗌 No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).	
- Topographic map; Visual inspection (certification) of the proposed site	Yes 🗌 No
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.	
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	🗌 Yes 🗌 No
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
<sup>10.</sup> <u>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist</u> : Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot attached.	
<ul> <li>Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> </ul>	9 NMAC
<ul> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC</li> </ul>	15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number: _	
II. Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC	
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot attached.	cuments are
<ul> <li>Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>A List of wells with approved application for permit to drill associated with the pit.</li> </ul>	
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC	.15.17.9 NMAC
<ul> <li>Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> </ul>	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

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	12.         Permagent Pits Permit Application Checklist:       Subsection B of 19.15.17.9 NMAC         Instructions:       Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the attached.         Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Climatological Factors Assessment         Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC         Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC         Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC         Quality Control/Quality Assurance Construction and Installation Plan         Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC         Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan         Emergency Response Plan         Oil Field Waste Stream Characterization         Monitoring and Inspection Plan         Erosion Control Plan         Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC	documents are
	13.         Proposed Closure:       19.15.17.13 NMAC         Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.         Type:       Drilling         Workover       Emergency         Cavitation       P&A         Permanent Pit       Below-grade Tank         Multi-well F         Alternative         Proposed Closure Method:       Waste Excavation and Removal         Waste Removal (Closed-loop systems only)         On-site Closure Method (Only for temporary pits and closed-loop systems)         In-place Burial       On-site Trench Burial         Alternative Closure Method	luid Management Pit
	<ul> <li><sup>14.</sup></li> <li><u>Waste Excavation and Removal Closure Plan Checklist</u>: (19.15.17.13 NMAC) <i>Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.</i> <ul> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)</li> <li>Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul> </li> </ul>	
	15. <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 19.15.17.10 NMAC for guidance.	
	Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
	Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ Yes □ No □ NA
	<ul> <li>Ground water is more than 100 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	□ Yes □ No □ NA
	<ul> <li>Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
	<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗋 Yes 🗌 No
	<ul> <li>Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No
	Written confirmation or verification from the municipality; Written approval obtained from the municipality	🗌 Yes 🗌 No
	Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	🗋 Yes 🗌 No
	Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	
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<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	Yes No
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	Yes 🗌 No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	
Within a 100-year floodplain.	Yes 🗌 No
- FEMA map	Yes 🗌 No
<ul> <li>16.</li> <li>On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure p by a check mark in the box, that the documents are attached.</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC</li> <li>Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17</li> <li>Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19</li> <li>Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards can: Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>	7.11 NMAC 9.15.17.11 NMAC
17.	<u> </u>
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 be	lief.
Name (Print): Title:	· · ····
Name (Print):	
Signature:       Date:         e-mail address:       Telephone:         18.       Telephone:	
Signature: Date:   e-mail address: Telephone:   Image: Closure Plan (only) OCD Conditions (see attachment)	
Signature: Date:   e-mail address: Telephone:   "OCD Approval: Permit Application (including closure plan)   OCD Representative Signature: Velty    Approval Date: 12/1	
Signature: Date:   e-mail address: Telephone:   Image: Closure Plan (only) OCD Conditions (see attachment)	
Signature: Date:   e-mail address: Telephone:   "OCD Approval: Permit Application (including closure plan)   OCD Representative Signature: Velty    Approval Date: 12/1	g the closure report.
Signature:       Date:         e-mail address:       Telephone:         18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)-       OCD Conditions (see attachment)         OCD Representative Signature:	g the closure report.

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### **Operator Closure Certification:**

\* 22.

I hereby	certify that the information and	attachments submitted with this	closure report is true	, accurate and complete to the	e best of my knowledge and
belief. I	also certify that the closure com	plies with all applicable closure	e requirements and con	nditions specified in the appre	oved closure plan.

Name (Print): \_\_\_\_\_Jeff Peace

Title: Field Environmental Coordinator\_\_\_\_\_

Signature: Joff Parel

\_\_\_\_\_ Date: \_\_\_November 13, 2014\_\_\_\_\_

e-mail address: \_\_peace.jeffrey@bp.com\_\_

\_\_\_\_\_ Telephone: \_\_\_(505) 326-9479\_\_\_\_\_

### BP AMERICA PRODUCTION COMPANY SAN JUAN BASIN, NORTHWEST NEW MEXICO

### BELOW-GRADE TANK CLOSURE PLAN

### <u>Ulibarri Gas Com 3M</u> <u>API No. 3004531203</u> <u>Unit Letter P, Section 35, T30N, R9W</u>

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 approve 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**

- 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. No notice was made due to misunderstanding of the BGT notice requirements at that time.
- 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.

No notice was made due to misunderstanding of the BGT notice requirements at that time.

- 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)
- BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids) e.
- BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids) f.
- BP Operated GCU 259 SWD, API 30-045-20006 (Liquids) g.
- BP Operated GCU 306 SWD, API 30-045-24286 (Liquids) h.
- BP Operated GCU 307 SWD, API 30-045-24248 (Liquids) i.
- j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
- BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids) k. All liquids and sludge in the BGT were removed and sent to one of the above NMOCD approved facilities for disposal.
- BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle. 4. 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 to a storage area for sale and re-use.

- BP shall remove any on-site equipment associated with a BGT unless the equipment is 5. required for well production. All equipment associated with the BGT has been removed.
  - BP shall test the soils beneath the BGT to determine whether a release has occurred.
- 6. 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	Sample
	95 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	ND
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	ND
TPH	US EPA Method SW-846 418.1	100	ND
Chlorides	US EPA Method 300.0 or 4500B	250 or background	ND

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = totalpetroleum 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 under the BGT was sampled and TPH, BTEX and chloride levels were below the stated limits. Sampling data is attached.

- BP shall notify the division District III office of its results on form C-141.
   C-141 is attached.
- 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 indicate no release 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

# The area under the BGT was backfilled with clean soil and is still within the active well area.

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 area over the BGT is covered by the raised compressor pad and is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

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 area over the BGT is covered by the raised compressor pad and is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation.

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 area over the BGT is covered by the raised compressor pad and is still within the active well area. This area will be reclaimed when the well is plugged and abandoned as part of final reclamation. 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.

BP will seed the area as part of final reclamation when the well is plugged and 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 revegetation.

### BP will notify NMOCD when re-vegetation is successful.

- 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.
- 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.

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State of New Mexico Energy Minerals and Natural Resources

> 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.

Form C-141

Revised August 8, 2011

	Fe, NM 87505	
Release Notificati	on and Corrective Action	on and a second s
	OPERATOR	🔲 Initial Report 🛛 Final Repor
Name of Company: BP	Contact: Jeff Peace	
Address: 200 Energy Court, Farmington, NM 87401	Telephone No.: 505-326-9479	
Facility Name: Ulibarri Gas Com 3M	Facility Type: Natural gas well	
Surface Owner: Private Mineral Owne	er: Private	API No. 3004531203
	ON OF RELEASE	
		t/West Line   County: San Juan
P 35 30N 9W 1,260 Sou	uth 1,210 Eas	it
Latitude36.76418	Longitude107.74512	
NATUR	E OF RELEASE	
Type of Release: none	Volume of Release: N/A	Volume Recovered: N/A
Source of Release: below grade tank – 95 bbl	Date and Hour of Occurrence:	Date and Hour of Discovery:
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🔲 No 🖾 Not Requir	ed	
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the W	atercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		
Describe Area Affected and Cleanup Action Taken.* BGT was remove backfilled and compacted and is still within the active well area.	ed and the area underneath the BGT wa	s sampled. The area under the BGT was
I hereby certify that the information given above is true and complete t regulations all operators are required to report and/or file certain releas public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remed or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	e notifications and perform corrective a the NMOCD marked as "Final Report liate contamination that pose a threat to	actions for releases which may endanger " does not relieve the operator of liability ground water, surface water, human health
	OIL CONSER	VATION DIVISION
Signature: Joff Peace		
Printed Name: Jeff Peace	Approved by Environmental Specia	list:
Title: Field Environmental Coordinator	Approval Date:	Expiration Date:
E-mail Address: peace.jeffrey@bp.com	Conditions of Approval:	Attached
Date: November 13, 2014 Phone: 505-326-9479		
Attach Additional Sheets If Necessary		
· · · · · · · · · · · · · · · · · · ·		-

	BLAGG ENGINEERING, INC.	2004524202
	P.O. BOX 87, BLOOMFIELD, NM 87413	API# 3004531203
	(505) 632-1199	TANK ID (if applicble): <b>A</b>
FIELD REPORT:	(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER:	PAGE #: <u>1</u> of <u>1</u>
SITE INFORMATION	SITE NAME: ULIBARRI GC # 3M	DATE STARTED: 09/07/12
QUAD/UNIT: P SEC: 35 TWP:	30N RNG: 9W PM: NM CNTY: SJ ST: NM	DATE FINISHED:
		ENVIRONMENTAL
	PROD. FORMATION: UK CONTRACTOR: MBF - G. CLEAVER	SPECIALIST(S): JCB
	WELL HEAD (W.H.) GPS COORD.: <u>36.76430 X 107.74481</u>	
	GPS COORD.: 36.76418 X 107.74512 DISTANCE/BE	ARING FROM W.H.: 100', S65W
		EARING FROM W.H.:
		EARING FROM W.H.:
	GPS COORD.: DISTANCE/BE	ARING FROM W.H.:
· · · · · · · · · · · · · · · · · · ·	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL	READING (ppm)
	6' SAMPLE DATE: 09/07/12 SAMPLE TIME: 1310 LAB ANALYSIS: 418.1	,
	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS	
	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	
	SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS:	
SOIL DESCRIPTION		HER AT BASE OF BGT
SOIL COLOR: <u>DARK YELLOWSH</u> COHESION (ALL OTHERS): NON COHESIVE/ SLIGHTLY		
CONSISTENCY (NON COHESIVE SOILS): LC		
MOISTURE: DRY SLIGHTLY MOIST / MOIST		ANATION
SAMPLE TYPE: GRAB (COMPOSITE) # DISCOLORATION/STAINING OBSERVED:		
DISCOLORATION/STAINING OBSERVED.		
ANY AREAS DISPLAYING WETNESS: YES / NO		
ADDITIONAL COMMENTS: <u>COLLECTED S</u>	AMPLE FROM BEDROCK - VERY HARD, COMPETENT.	
SOIL IMPACT DIMENSION ESTIMATION:		TIMATION (Cubic Yards) : NA
	EAREST WATER SOURCE: <u>&gt;1,000'</u> NEAREST SURFACE WATER: <u>&lt;1,000'</u> NMOC	CD TPH CLOSURE STD: ppm
SITE SKETCH	PLOT PLAN circle: attached OW	CALIB. READ. =
		CALIB. GAS = <b>100</b> ppm
		E <u>3:12</u> am(form) DATE: <u>09/07/12</u>
	WELL •••	MISCELL. NOTES
	<u>w</u>	vo: N16100118
	P	0#: 83213
P	BGTL	K: ZSCHWLLBGT
	B.~5'	J#: Z2-000690-C
		ermit date(s): 06/14/10
	Ta	
	X - S.P.D.	BGT Sidewalls Visible: Y / N
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATIO	N DEPRESSION; B.G. = BELOW GRADE; B = BELOW; T.H. = TEST HOLE; ~ = APPROX.; W.H. = WELL HEAD;	BGT Sidewalls Visible: Y / N
T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL		Aagnetic declination: <b>10°</b> E
TRAVEL NOTES: CALLOUT:	ONSITE: 09/07/12	

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# Hall Environmental Analysis Laboratory, Inc.

**Analytical Report** Lab Order 1209534 Date Reported: 9/26/2012

CLIENT: Blagg Engineering			Client Sample	<b>ID:</b> 95 BG	T 5-pt@6'
Project: Ulibarri GC 3M			Collection D	ate: 9/7/20	12 3:10:00 PM
Lab ID: 1209534-001	Matrix:	SOIL	Received D	ate: 9/13/2	012 10:05:00 AM
Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E ORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/19/2012 11:49:09 AM
Surr: DNOP	107	77.6-140	%REC	1	9/19/2012 11:49:09 AM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/19/2012 7:12:45 PM
Surr: BFB	99.8	84-116	%REC	1	9/19/2012 7:12:45 PM
EPA METHOD 8021B: VOLATILES					Analyst: <b>NSB</b>
Benzene	ND	0.048	mg/Kg	1	9/19/2012 7:12:45 PM
Toluene	ND	0.048	mg/Kg	1	9/19/2012 7:12:45 PM
Ethylbenzene	ND	0.048	mg/Kg	1	9/19/2012 7:12:45 PM
Xylenes, Total	ND	0.096	mg/Kg	1	9/19/2012 7:12:45 PM
Surr: 4-Bromofluorobenzene	99.7	80-120	%REC	1	9/19/2012 7:12:45 PM
EPA METHOD 300.0: ANIONS					Analyst: SRM
Chloride	ND	7.5	mg/Kg	5	9/20/2012 4:00:19 PM
EPA METHOD 418.1: TPH					Analyst: <b>JMP</b>
Petroleum Hydrocarbons, TR	ND	19	mg/Kg	1	9/21/2012

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

Е Value above quantitation range

J Analyte detected below quantitation limits

Р Sample pH greater than 2

RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits S

Client: Blagg Engineering

Project: Ulibarri GC 3M

Sample ID MB-3863 SampType: MBLK TestCode: EPA Method 300.0: Anions		
Client ID: <b>PBS</b> Batch ID: <b>3863</b> RunNo: <b>5669</b>		
Prep Date: 9/20/2012 Analysis Date: 9/20/2012 SeqNo: 162383 Units: mg/Kg		
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit	Qual
Chloride ND 1.5		
Sample ID LCS-3863 SampType: LCS TestCode: EPA Method 300.0: Anions		
Client ID: LCSS Batch ID: 3863 RunNo: 5669		
Prep Date: 9/20/2012 Analysis Date: 9/20/2012 SeqNo: 162384 Units: mg/Kg		
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit	Qual
AnalyteResultPQLSPK valueSPK Ref Val%RECLowLimitHighLimit%RPDChloride141.515.00095.590110	RPDLimit	Qual
	RPDLimit	Qual
Chloride 14 1.5 15.00 0 95.5 90 110	RPDLimit	Qual
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions	RPDLimit	Qual
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669	RPDLimit RPDLimit	Qual
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669           Prep Date:         9/20/2012         Analysis Date:         9/20/2012         SeqNo:         162386         Units: mg/Kg		
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669           Prep Date:         9/20/2012         Analysis Date:         9/20/2012         SeqNo:         162386         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD		
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669           Prep Date:         9/20/2012         Analysis Date:         9/20/2012         SeqNo:         162386         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           Chloride         19         7.5         15.00         3.555         102         64.4         117		
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669           Prep Date:         9/20/2012         Analysis Date:         9/20/2012         SeqNo:         162386         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           Chloride         19         7.5         15.00         3.555         102         64.4         117           Sample ID         1209534-001AMSD         SampType: MSD         TestCode: EPA Method 300.0: Anions		
Chloride         14         1.5         15.00         0         95.5         90         110           Sample ID         1209534-001AMS         SampType: MS         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669           Prep Date:         9/20/2012         Analysis Date:         9/20/2012         SeqNo:         162386         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           Chloride         19         7.5         15.00         3.555         102         64.4         117           Sample ID         1209534-001AMSD         SampType: MSD         TestCode: EPA Method 300.0: Anions           Client ID:         95 BGT 5-pt@6'         Batch ID:         3863         RunNo:         5669		

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Page 2 of 10

WO#: 1209534

26-Sep-12

WO#: 1209534

26-Sep-12

Client: Bla	gg Engineering			
Project: Uli	parri GC 3M		_	
Sample ID MB-3845	SampType: MBLK	TestCode: EPA Method	418.1: TPH	
Client ID: PBS	Batch ID: 3845	RunNo: 5668		
Prep Date: 9/20/2012	Analysis Date: 9/21/2012	SeqNo: 162362	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Petroleum Hydrocarbons, TR	ND 20			
Sample ID LCS-3845	SampType: LCS	TestCode: EPA Method	418.1: TPH	
Client ID: LCSS	Batch ID: 3845	RunNo: 5668		
Prep Date: 9/20/2012	Analysis Date: 9/21/2012	SeqNo: 162364	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Petroleum Hydrocarbons, TR	99 20 100.0	0 99.0 80	120	
Sample ID LCSD-3845	SampType: LCSD	TestCode: EPA Method	418.1: TPH	· · · · · · · · · · · · · · · · · · ·
Client ID: LCSS02	Batch ID: 3845	RunNo: 5668		
Prep Date: 9/20/2012	Analysis Date: 9/21/2012	SeqNo: 162368	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Petroleum Hydrocarbons, TR	98 20 100.0	0 97.6 80	120 1.40	20

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits

Client: Blagg Engineering

Project: Ulibarri GC 3M

Sample ID MB-3802	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015B: Dies	el Range (	Drganics	
Client ID: PBS	Batch	n ID: 38	02	F	RunNo: 5	617				
Prep Date: 9/18/2012	Analysis D	ate: 9/	19/2012	S	GeqNo: 1	61020	Units: <b>mg/ł</b>	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		103	77.6	140			
Sample ID LCS-3802	-3802 SampType: LCS TestCode: EPA Method 8015B: Diesel Range Organ						Drganics			
Client ID: LCSS	Batch	ID: 38	02	F	RunNo: 5	617				
Prep Date: 9/18/2012	Analysis D	ate: 9/	19/2012	5	SeqNo: 1	61021	Units: mg/k	(g		
Analyte	Result	PQL_	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	29	10	50.00	0	58.5	52.6	130			
Surr: DNOP	4.2		5.000		84.2	77.6	140			
			0.000		0 1.L	11.0			<u> </u>	
Sample ID 1209696-004AMS		ype: MS		Tes			8015B: Dies	el Range (	 Drganics	<u></u>
	SampT	ype: MS	6			PA Method		el Range (	Organics	
Sample ID 1209696-004AMS	SampT	1D: 38	5 02	F	tCode: El	PA Method 617		0	Drganics	
Sample ID 1209696-004AMS Client ID: BatchQC	S SampT Batch	1D: 38	5 02 19/2012	F	tCode: El RunNo: 5 SeqNo: 1	PA Method 617	8015B: Dies	0	Drganics RPDLimit	Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012	S SampT Batch Analysis D	i ID: 38 ate: 9/	6 02 19/2012	F S	tCode: El RunNo: 5 SeqNo: 1	PA Method 617 61229	8015B: Dies Units: mg/F	(g		Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012 Analyte	S SampT Batch Analysis D Result	ate: 9/	5 02 19/2012 SPK value	F S SPK Ref Val	tCode: El RunNo: 5 SeqNo: 1 %REC	PA Method 617 61229 LowLimit	8015B: Dies Units: mg/K HighLimit	(g		Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012 Analyte Diesel Range Organics (DRO)	S SampT Batch Analysis D Result 35 4.5	ate: 9/	5 02 19/2012 SPK value 51.28 5.128	F S SPK Ref Val 0	Code: Ef RunNo: 5 SeqNo: 1 %REC 67.7 87.3	PA Method 617 61229 LowLimit 57.2 77.6	8015B: Diese Units: mg/F HighLimit 146	(g %RPD	RPDLimit	Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012 Analyte Diesel Range Organics (DRO) Surr: DNOP	S SampT Batch Analysis D Result 35 4.5 D SampT	ate: 9/ PQL 10	5 02 19/2012 SPK value 51.28 5.128	F S SPK Ref Val 0 Test	Code: Ef RunNo: 5 SeqNo: 1 %REC 67.7 87.3	PA Method 617 61229 LowLimit 57.2 77.6 PA Method	8015B: Dies Units: mg/F HighLimit 146 140	(g %RPD	RPDLimit	Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1209696-004AMS	S SampT Batch Analysis D Result 35 4.5 D SampT	PQL 10 ype: MS	5 02 19/2012 SPK value 51.28 5.128 5D 02	F S SPK Ref Val 0 Tesi F	Code: El RunNo: 5 SeqNo: 1 %REC 67.7 87.3 tCode: El	PA Method 617 61229 LowLimit 57.2 77.6 PA Method 617	8015B: Dies Units: mg/F HighLimit 146 140	(g %RPD el Range (	RPDLimit	Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1209696-004AMS Client ID: BatchQC	S SampT Batch Analysis D Result 35 4.5 SD SampT Batch	PQL 10 ype: MS	5 02 19/2012 SPK value 51.28 5.128 5D 02 19/2012	F S SPK Ref Val 0 Tesi F	Code: El RunNo: 5 SeqNo: 10 %REC 67.7 87.3 Code: El RunNo: 5 SeqNo: 10	PA Method 617 61229 LowLimit 57.2 77.6 PA Method 617	8015B: Diese Units: mg/F HighLimit 146 140 8015B: Diese	(g %RPD el Range (	RPDLimit	Qual
Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1209696-004AMS Client ID: BatchQC Prep Date: 9/18/2012	S SampT Batch Analysis D Result 35 4.5 SD SampT Batch Analysis D	PQL 10 9/ 10 9/ 10 9/ 10 10 10 38 10 38 10 38 10 38 10 10 38 10 10 10 10 10 10 10 10 10 10 10 10 10	5 02 19/2012 SPK value 51.28 5.128 5D 02 19/2012	F S SPK Ref Val 0 Test F S	Code: El RunNo: 5 SeqNo: 10 %REC 67.7 87.3 Code: El RunNo: 5 SeqNo: 10	PA Method 617 61229 LowLimit 57.2 77.6 PA Method 617 61230	8015B: Diese Units: mg/k HighLimit 146 140 8015B: Diese Units: mg/k	(g %RPD el Range (	RPDLimit Drganics	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

WO#:

utside accepted recover

# **QC SUMMARY REPORT**

**Client:** 

WO#: 1209534

Qual

26-Sep-12

Hall Environmental	Analysis	Laboratory, Inc.
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Project: Ulibarri	GC 3M				
Sample ID MB-3808	SampT	ype: ME	3LK	Tes	tCode: El
Client ID: PBS	Batch	n ID: 38	08	F	lunNo: 5
Prep Date: 9/18/2012	Analysis D	ate: <b>9</b> /	19/2012	S	eqNo: 1
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC
Gasoline Range Organics (GRO)	ND	5.0			
Surr: BFB	1000		1000		101

Blagg Engineering

Surr: BFB	1000		1000		101	84	116			
Sample ID LCS-3808	Samp	Type: LC	s	Tes	tCode: El	PA Method	8015B: Gase	oline Rang	le	1
Client ID: LCSS	Batc	h ID: 38	08	F	RunNo: 5	622				
Prep Date: 9/18/2012	Analysis [	Date: <b>9/</b>	19/2012	5	SeqNo: 1	61697	Units: mg/ł	٨g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.8	74	117			
Surr: BFB	1000		1000		105	84	116			

RunNo: 5622 SeqNo: 161690

TestCode: EPA Method 8015B: Gasoline Range

LowLimit

Units: mg/Kg

%RPD

RPDLimit

HighLimit

Sample ID 1209534-001AMS	SampT	SampType: MS TestCode: EPA Method 8015B: Gasoline Range								
Client ID: 95 BGT 5-pt@6'	Batch	n ID: 38	08	F	lunNo: 5	622				
Prep Date: 9/18/2012	Analysis D	ate: 9/	19/2012	S	eqNo: 1	61742	Units: <b>mg/H</b>	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.44	0	93.9	70	130			
Surr: BFB	1000		977.5		105	84	116			

Sample ID 1209534-001AM	SD SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015B: Gaso	oline Rang	e	
Client ID: 95 BGT 5-pt@6'	Batch	ID: 38	08	F	RunNo: 5	622				
Prep Date: 9/18/2012	Analysis D	ate: <b>9/</b>	19/2012	S	SeqNo: 1	61743	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.41	0	99.6	70	130	5.82	22.1	
Surr: BFB	1000		976.6		104	84	116	0	0	
Sample ID MB-3832	SampT	SampType: MBLK TestCode: EPA Method 8015B: Gasoline Range								
Client ID: PBS	Batch	ID: 38	32	F	unNo: 5	667				
Prep Date: 9/19/2012	Analysis D	ate: <b>9/</b>	20/2012	S	SeqNo: 1	62327	Units: %RE	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Quai
Surr: BFB	1000		1000		100	84	116			
Sample ID LCS-3832	SampT	SampType: LCS TestCode: EPA Method 8015B: Gasoline Range								
Client ID: LCSS	Batch	ID: 38	32	F	RunNo: 5	667				

Prep Date: 9/19/2	2012 Analysis	Date: 9	/20/2012	S	SeqNo: 1	62328	Units: %RE	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		105	84	116		_	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

Value above quantitation range Ε

- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R

# QC SUMMARY REPORT

Ξ

Hall Environmental Analysis Laboratory, Inc.

WO#: 1209534

26-Sep-12

Client: Project:	Blagg Eng Ulibarri C										
Sample ID	1209791-001AMS	SampType	e: MS	\$	Tes	tCode: E	EPA Method	8015B: Gaso	line Rang	e	
Client ID:	BatchQC	Batch ID	D: <b>3832</b> RunNo: <b>5667</b>								
Prep Date:	9/19/2012	Analysis Date	: 9/3	20/2012	S	eqNo:	162330	Units: %RE	с		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		980		947.9		104	84	116			
Sample ID	1209791-001AMSE	) SampType	e: MS	D	Test	Code: E	EPA Method	8015B: Gaso	oline Rang	e	
Client ID:	BatchQC	Batch ID	: 383	32	R	unNo:	5667				· .
Prep Date:	9/19/2012	Analysis Date	: 9/2	20/2012	S	eqNo:	162331	Units: %RE	с		
Analyte		Result P	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000		962.5		104	84	116	0	0	
Sample ID	LCS-3879	SampType	: LC	s	Test	Code: E	PA Method	8015B: Gasc	line Rang	e	
Client ID:	LCSS	Batch ID	: 387	79	R	unNo:	5692				
Prep Date:	9/21/2012	Analysis Date	: 9/2	22/2012	S	eqNo:	163521	Units: %RE	с		
Analyte		Result P	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1000		1000		101	84	116			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

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<sup>.</sup> 

QC SUMMARY	<b>REPORT</b>
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Hall Environmental	Analys	is La	borat	tory, I	lnc.
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WO#: 1209534

26-Sep-12

Client: Project:	Blagg En Ulibarri (	gineering GC 3M		·							
Sample ID	MB-3808	Samp	Туре: М	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 38	808	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis [	Date: 9	/19/2012	:	SeqNo: 1	61755	Units: mg/l	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050			MILEO	LOWENING				Quui
Toluene		ND	0.050							,	
Ethylbenzene		ND	0.050								
, Xylenes, Total		ND	0.10								
•	nofluorobenzene	1.0		1.000		104	80	120			
Sample ID	LCS-3808	Samp	Type: LC	= >S	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 38	08	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis [	Date: 9	/19/2012	5	SeqNo: 1	61756	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.97	0.050	1.000	0	96.9	76.3	117			
Toluene		0.98	0.050	1.000	0	97.9	80	120			
Ethylbenzene		1.0	0.050	1.000	0	99.7	77	116			
Xylenes, Total		3.0	0.10	3.000	0	101	76.7	117			
Surr: 4-Brom	ofluorobenzene	1.1		1.000		109	80	120			
Sample ID	1209660-001AMS	Sampi	Гуре: М	8	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batc	h ID: 38	08	F	RunNo: 5	622				
Prep Date:	9/18/2012	Analysis [	Date: <b>9</b> /	19/2012	S	SeqNo: 1	61767	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.98	0.049	0.9766	0	101	67.2	113			
Toluene		1.0	0.049	0.9766	0	104	62.1	116			
Ethylbenzene		1.0	0.049	0.9766	0	107	67.9	127			
Xylenes, Total		3.1	0.098	2.930	0	107	60.6	134			
Surr: 4-Brom	ofluorobenzene	1.1		0.9766		109	80	120			
Sample ID	1209660-001AMSD	Sampī	ype: <b>M</b> S	SD	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	BatchQC	Batch	n ID: 38	08	F	lunNo: 5	622				
Prep Date:	9/18/2012	Analysis E	)ate: 9/	19/2012	S	eqNo: 1	61768	Units: mg/K	g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.92	0.049	0.9766	0	93.9	67.2	113	6.79	14.3	
Toluene		0.93	0.049	0.9766	0	95.1	62.1	116	8.86	15.9	
Ethylbenzene		0.97	0.049	0.9766	0	99.4	67.9	127	7.24	14.4	
Xylenes, Total		2.9	0.098	2.930	0	98.7	60.6	134	8.46	12.6	
Surr: 4-Brom	ofluorobenzene	1.1		0.9766		108	80	120	0	0	

#### Qualifiers:

Value exceeds Maximum Contaminant Level. \*

E Value above quantitation range

J Analyte detected below quantitation limits

Sample pH greater than 2 Р

- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
  - RPD outside accepted recovery limits R

Client: Project:	Blagg En Ulibarri (	e ê							
Sample ID		SampType		Test	Code: EPA Metho	1 8021B: Volatile			····
Client ID:		Batch ID			unNo: 5667	volatile	.5		
	9/19/2012	Analysis Date			Units: %REC				
	0,10,2012	-			eqNo: 162351				0.1
Analyte Surr: 4-Brom	ofluorobenzene	Result F	PQL SPK value 1.000	SPK Ref Val	%REC LowLimit 104 80		%RPD	RPDLimit	Qual
								:	
Sample ID		SampType			Code: EPA Method	i 8021B: Volatile	5		
Client ID:		Batch ID			inNo: <b>5667</b>				
Prep Date:	9/19/2012	Analysis Date	9/20/2012	Se	eqNo: <b>162352</b>	Units: %REC			
Analyte				SPK Ref Val	%REC LowLimit	<u>~</u>	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	1.1	1.000		107 80	120			
Sample ID	1209794-001AMS	SampType	: MS	TestC	Code: EPA Method	8021B: Volatile	s		
Client ID:	BatchQC	Batch ID	3832	Ru	inNo: <b>5667</b>				
Prep Date:	9/19/2012	Analysis Date	9/21/2012	Se	eqNo: 162360	Units: %REC			
Analyte		Result P	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	1.0	0.9434		109 80	120			
Sample ID	1209794-001AMSE	) SampType	: MSD	TestC	Code: EPA Method	8021B: Volatile	۹		· · · · · · · · · · · · · · · · · · ·
Client ID:		Batch ID			inNo: 5667	OULID. Volutile	5		
	9/19/2012	Analysis Date			eqNo: 162363	Units: %REC			
				SPK Ref Val	•				0
Analyte Surr: 4-Brom	ofluorobenzene	Result P	QL SPK value 0.9653	SPK Rei Val	%REC LowLimit 110 80	HighLimit 9 120	%RPD 0	RPDLimit 0	Qual
									- <u>-</u>
Sample ID		SampType			Code: EPA Method	8021B: Volatile	S		
Client ID:		Batch ID			nNo: <b>5692</b>				
Prep Date:	9/21/2012	Analysis Date	9/22/2012	Se	qNo: <b>163543</b>	Units: %REC			
Analyte		Result P	QL SPK value	SPK Ref Val		ő	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	1.0	1.000		99.9 80	120			
Sample ID	LCS-3879	SampType	: LCS	TestC	Code: EPA Method	8021B: Volatile	s		
Client 1D:	LCSS	Batch ID	: 3879	Ru	nNo: 5692				
Prep Date:	9/21/2012	Analysis Date	9/22/2012	Se	qNo: 163544	Units: %REC			
Analyte		Result P	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ofluorobenzene	1.0	1.000		104 80	120			
Sample ID	1209344-002AMS	SampType	: MS	TestC	Code: EPA Method	8021B: Volatile	s		
	BatchQC	Batch ID		Ru	nNo: <b>5692</b>				
Prep Date:		Analysis Date			qNo: 163546	Units: %REC			
•		-					%RPD	RPDLimit	Qual
Analyte Surr: 4-Brom	ofluorobenzene	Result P 1.1	QL SPK value 0.9901	SPK Ref Val	%REC LowLimit 107 80	HighLimit 9 120			Qual

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH greater than 2

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit Page 8 d

R RPD outside accepted recovery limits

ND

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WO#: 1209534

26-Sep-12

1209534 WO#:

26-Sep-12

**Client:** Blagg Engineering **Project:** Ulibarri GC 3M

Sample ID	1209344-002AMSD	SampTy	pe: M	SD	Tes	tCode: Ei	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch I	D: 38	379	F	RunNo: 5	692				
Prep Date:	9/21/2012	Analysis Dat	te: 9	/22/2012	S	SeqNo: 1	63547	Units: %RE	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	1.0		0.9901		104	80	120	0	0	
Sample ID	1209794-040AMS	SampTyp	be: M	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch I	D: 38	60	F	anNo: 5	692				
Prep Date:	9/20/2012	Analysis Dat	te: 9	/22/2012	S	SeqNo: 1	63556	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	10		9.852		101	80	120			
Sample ID	1209794-040AMSD	SampTyp	be: M	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	BatchQC	Batch I	D: 38	60	F	lunNo: 5	692				
Prep Date:	9/20/2012	Analysis Dat	te: 9/	/22/2012	S	eqNo: 1	63557	Units: %RE	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	9.9		9.872		99.9	80	120	0	0	

#### Qualifiers:

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- Value above quantitation range Е
- Analyte detected below quantitation limits J
- Р Sample pH greater than 2

- В Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R

### QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Blagg Engineering

ł,

Project: Ulibarri GC 3M

Sample ID mb-3808	SampT	уре: МІ	BLK	Test	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBS	Batch	n ID: 38	08	R	tunNo: 5	671				
Prep Date: 9/18/2012	Analysis D	ate: 9/	20/2012	S	eqNo: 1	62464	Units: %RE	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.39		0.5000		78.4	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		83.2	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.1	70	130			
Surr: Toluene-d8	0.36		0.5000		72.8	70	130			
Sample ID Ics-3808	SampT	ype: LC	s	Test	Code: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSS	Batch	n ID: 38	08	R	unNo: 5	671				
Prep Date: 9/18/2012	Analysis D	ate: 9/	20/2012	S	eqNo: 1	62465	Units: %RE	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.8	70	130			
Surr: 4-Bromofluorobenzene	0.41		0.5000		82.5	70	130			
Sull, 4-Diomondorobenzene	0.47		0.5000		94.7	70	130			
Surr: Dibromofluoromethane	0.47		010000							
	0.47		0.5000		72.3	70	130			
Surr: Dibromofluoromethane	0.36	ype: Ms	0.5000	Test			130 8260B: VOL		<u> </u>	
Surr: Dibromofluoromethane Surr: Toluene-d8	0.36 SampT	ype: <b>M</b> 1D: <b>38</b>	0.5000 <b>5</b>			PA Method		ATILES		
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams	0.36 SampT	n ID: 38	0.5000 S 08	R	Code: El	PA Method 571				
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC	0.36 SampT Batch	n ID: 38	0.5000 5 08 (20/2012	R	Code: El unNo: 5 eqNo: 1	PA Method 571	8260B: VOL/		RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012	0.36 SampT Batch Analysis D	n ID: 38 Pate: 9/	0.5000 5 08 (20/2012	R S	Code: El unNo: 5 eqNo: 1	PA Method 571 52466	8260B: VOL	C	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte	0.36 SampT Batch Analysis D Result	n ID: 38 Pate: 9/	0.5000 5 08 220/2012 SPK value	R S	Code: El JunNo: 5 JunNo: 1 Magno: 1 %REC	PA Method 571 52466 LowLimit	8260B: VOL/ Units: %RE HighLimit	C	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4	0.36 SampT Batch Analysis D Result 0.40	n ID: 38 Pate: 9/	0.5000 6 08 20/2012 SPK value 0.4892	R S	Code: El unNo: 5 eqNo: 1 %REC 82.6	PA Method 571 52466 LowLimit 70	8260B: VOL/ Units: %RE HighLimit 130	C	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene	0.36 SampT Batch Analysis D Result 0.40 0.42	n ID: 38 Pate: 9/	0.5000 5 08 20/2012 SPK value 0.4892 0.4892	R S	Code: El unNo: 50 eqNo: 10 %REC 82.6 85.2	PA Method 571 52466 LowLimit 70 70	8260B: VOL/ Units: %RE HighLimit 130 130	C	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID <b>1209696-001ams</b> Client ID: <b>BatchQC</b> Prep Date: <b>9/18/2012</b> Analyte Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35	n ID: 38 Pate: 9/	0.5000 6 7 7 7 7 7 7 7 7 7 7 7 7 7	R S SPK Ref Val	Code: El unNo: 50 eqNo: 10 %REC 82.6 85.2 73.3 72.2	PA Method 571 52466 LowLimit 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130	C %RPD	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID <b>1209696-001ams</b> Client ID: <b>BatchQC</b> Prep Date: <b>9/18/2012</b> Analyte Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane Surr: Toluene-d8	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35 d SampT	PQL	0.5000 6 08 20/2012 SPK value 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892	R S SPK Ref Val Test	Code: El unNo: 50 eqNo: 10 %REC 82.6 85.2 73.3 72.2	PA Method 571 52466 LowLimit 70 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130 130	C %RPD	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35 d SampT	ype: <b>M</b> S	0.5000 6 08 20/2012 SPK value 0.4892 0.4	R S SPK Ref Val Test R	Code: El JunNo: 5 MeqNo: 1 %REC 82.6 85.2 73.3 72.2 Code: Ef	PA Method 571 52466 LowLimit 70 70 70 70 70 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130 130	C %RPD ATILES	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35 d SampT Batch	ype: MS ate: 9/ PQL ype: MS ate: 9/	0.5000 6 08 20/2012 SPK value 0.4892 0.4	R S SPK Ref Val Test R	Code: El JunNo: 5 JunNo: 1 %REC 82.6 85.2 73.3 72.2 Code: El unNo: 5 eqNo: 1	PA Method 571 52466 LowLimit 70 70 70 70 70 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130 130 8260B: VOL/	C %RPD ATILES	RPDLimit	Qual
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4 Surr: 2-Dichloroethane-d4 Surr: 2-Dichloroethane Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35 d SampT Batch Analysis D	ype: MS ate: 9/ PQL ype: MS ate: 9/	0.5000 08 20/2012 SPK value 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892 SD 08 20/2012 SPK value 0.4892	R S SPK Ref Val Test R S	Code: El unNo: 5 eqNo: 1 %REC 82.6 85.2 73.3 72.2 Code: El unNo: 5 eqNo: 1 %REC 82.9	PA Method 571 52466 LowLimit 70 70 70 70 70 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130 130 8260B: VOL/ Units: %RE HighLimit 130	C %RPD ATILES C %RPD 0	RPDLimit 0	
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4 Surr: 2-Dichloroethane-d4 Surr: 2-Dichloroethane Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35 d SampT Batch Analysis D Result	ype: MS ate: 9/ PQL ype: MS ate: 9/	0.5000 08 20/2012 SPK value 0.4892 0.8892 0.895	R S SPK Ref Val Test R S	Code: El JunNo: 5 JunNo: 1 %REC 82.6 85.2 73.3 72.2 Code: El unNo: 5 eqNo: 1 %REC	PA Method 571 52466 LowLimit 70 70 70 70 70 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130 130 8260B: VOL/ Units: %RE HighLimit	C %RPD ATILES C %RPD 0 0	RPDLimit 0 0	
Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene Surr: Dibromofluoromethane Surr: Toluene-d8 Sample ID 1209696-001ams Client ID: BatchQC Prep Date: 9/18/2012 Analyte Surr: 1,2-Dichloroethane-d4	0.36 SampT Batch Analysis D Result 0.40 0.42 0.36 0.35 d SampT Batch Analysis D Result 0.41	ype: MS ate: 9/ PQL ype: MS ate: 9/	0.5000 08 20/2012 SPK value 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892 0.4892 SD 08 20/2012 SPK value 0.4892	R S SPK Ref Val Test R S	Code: El unNo: 5 eqNo: 1 %REC 82.6 85.2 73.3 72.2 Code: El unNo: 5 eqNo: 1 %REC 82.9	PA Method 571 52466 LowLimit 70 70 70 70 70 70 70 70 70 70	8260B: VOL/ Units: %RE HighLimit 130 130 130 130 8260B: VOL/ Units: %RE HighLimit 130	C %RPD ATILES C %RPD 0	RPDLimit 0	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

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WO#: 1209534

26-Sep-12

	HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental A Albuq TEL: 505-345-3975 F Website: www.halle	4901 uerque TAX: 5(	Hawk 2, NM 25-34	ans ) ( 871 (5-41	NE 105 107	Sample Log-In Check List
	ent Name: BLAGG ceived by/date:	12 12 We	ork Ore	der N	luml	ber:	1209534
Log	ged By: Ashley Gallegos) 9/13	3/2012 10:05:00 AM	,			Æ	F
	viewed By: Ashley Gallegos 9/13	3/20/12 12:59:26 PM				Æ	F
Cha	ain of Custody						······································
1.	Were seals intact?		Yes		No		Not Present
2.	Is Chain of Custody complete?		Yes		No		Not Present
З.	How was the sample delivered?		<u>Couri</u>	er			
Log	n In						
	Coolers are present? (see 19. for cooler specific	information)	Yes	✓	No		
5.	Was an attempt made to cool the samples?		Yes		No		
6.	Were all samples received at a temperature of	>0° C to 6.0°C	Yes	✓	No		
7.	Sample(s) in proper container(s)?		Yes	<	No		
8.	Sufficient sample volume for indicated test(s)?		Yes	$\checkmark$	No		
9.	Are samples (except VOA and ONG) properly pa	reserved?	Yes	$\checkmark$	No		
10.	Was preservative added to bottles?		Yes		No	✓	NA 🗌
11.	VOA vials have zero headspace?		Yes		No		No VOA Vials 🗹
12.	Were any sample containers received broken?		Yes		No		
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No		# of preserved bottles checked for pH:
	Are matrices correctly identified on Chain of Cus	tody?	Yes			_	(<2 or >12 unless noted)
	Is it clear what analyses were requested?		Yes				Adjusted?
16.	Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		NO		Checked by:
<u>Spe</u>	cial Handling (if applicable)						
17.	Was client notified of all discrepancies with this of	order?	Yes		No		NA 🗹
	Person Notified:	Date					
	By Whom:	Via:	eMail		Ph	one	Fax In Person
	Regarding: Client Instructions:						

18. Additional remarks:

у 1 1

.

### 19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

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Client:	BLAGE	ENG.	veen, Inc.					HALL ENVIRONMENTAL											
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email or	r Fax#:			Project Mana	ger:		<del>,</del>	(Ylu	sel)				( <sup>†</sup> 0					l	
QA/QC Package: Standard			J. Bu	A65		s (8021)	(Gas o	as/Die:				PO4.S	2 PCB's						
Accredi		□ Othe	r	Sampler: J	Ales of a		ENT-	H T P H	015B (C	118.1)	504.1)	AH)	0ª.NO	s / 808		(A)			
	(Type)_			Sample Reim	veraluieus (s) I		MERE	TBE	8 PC	od 4	pol	- Jo		cide	(A	N-I	A S		
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	REAL NO	BTEX + 🕁	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	KUKA 8 Metals Anions (F,CI,NO <sub>3</sub> ,NO <sub>3</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CALORIDE		
2/12	1510	SOR	95 B67 5-pt C6	403-21	Leve	-001	X		r X	×	<u></u>					8	X		
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If necessary, samples submitted to Hall Environmental may be subcontracted to other adcredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

