<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 1000 Rio Brazos Road, Aztec, NM 87410

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

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.

Form C-144

Revised June 6, 2013

<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank,
or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, 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
Operator: BP America Production Company OGRID #: 778
Address: 200 Energy Court, Farmington, NM 87401 OIL CONS. DIV DIST. 3
Facility or well name: GALLEGOS CANYON UNIT 347 JAN 1 0 2017
API Number: 3004526134 OCD Permit Number:
U/L or Qtr/Qtr J Section 15 Township 28N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.65913 Longitude -108.09557 NAD: □1927 ⋈ 1983
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment
Pit: Subsection F, G or J of 19.15.17.11 NMAC KRelease Confirmed Additional C-141 Regured Temporary: Drilling Workover Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no 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
Secondary containment with leak detection Visible sidewalls only Other Double wall/ Double bottom; no visible sidewalls
4. Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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, schools institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	hospital,
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)	
7. 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.	
9. 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 accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
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
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) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
 Within an unstable area. (Does not apply to below grade tanks) Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
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.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes No
 application. Visual inspection (certification) of the proposed site; Aerial photo; Satellite image 	
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
Within 100 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	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
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
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; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ 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
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
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ 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
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: 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 doc attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC	
Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.13.17.13 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
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 doc attached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC	cuments are
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ A List of wells with approved application for permit to drill associated with the pit. ☐ 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 ☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC	15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

Permanent 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 Liner Specifications and Compatibility Assessment - 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 19.15.17.12 NMAC Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H ₂ 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 Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	documents are
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
14.	
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached. □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC □ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	attached to the
15.	
Siting Criteria (regarding on-site closure methods only): 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
Ground water is more than 100 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
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). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
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. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	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	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	
- written communation of verification from the municipality, written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17. Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	.11 NMAC .15.17.11 NMAC
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 bell Name (Print): Signature: Date:	
Signature: Date:	
e-mail address: Telephone:	
e-mail address: DCD Approval: Permit Application (including closus plan) Closure Plan (ont) OCD Representative Signature: Approval Date: Title: OCD Permit Number:	31/17
OCD Approval: Permit Application (including closus plan) Closure Plan (only) OCD Representative Signature: Approval Date:	31/17 The closure report.
OCD Approval: Permit Application (including closus plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Title: OCD Permit Number: OCD Permit Number: Closure Report (required within 60 days of closure completion): 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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	the closure report.

22.	
Operator Closure Certification:	
	this closure report is true, accurate and complete to the best of my knowledge and sure requirements and conditions specified in the approved closure plan.
Name (Print): Steve Moskal	Title: Field Environmental Coordinator
Signature:	Date: Date:
e-mail address: steven.moskal@bp.com	Telephone: (505) 326-9497

BP AMERICA PRODUCTION COMPANY SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

GALLEGOS CANYON UNIT 347 API No. 3004526134 Unit Letter J, Section 15, T28N, R12W

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

- 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 is attached.
- 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 sludge in 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	Sample
	95 bbl BGT	(mg/Kg)	results
Benzene	US EPA Method SW-846 8021B or 8260B	0.2	< 0.024
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.098
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<47
Chlorides	US EPA Method 300.0 or 4500B	250 or background	780

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 under the BGT was sampled for TPH and BTEX with all concentrations below the stated limits. Chlorides exceeded the standard; however, the area was backfilled with clean, imported material and will not pose a threat to surface water or groundwater. The field report 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.**
- 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 a release has not occurred. Attached is a laboratory report and C-141.
- 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 indicate a release has not occurred. Attached is a laboratory report and field report.

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 has been backfilled. The location will be reclaimed once the well is plugged and 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 area has been backfilled. The location will be reclaimed once the well is plugged and 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 area has been backfilled. The location will be reclaimed once the well is plugged and 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 area has been backfilled. The location will be reclaimed once 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.

The area has been backfilled. The location will be reclaimed once the well is plugged and abandoned.

- 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.

 BP did not meet the 60 closure completion requirement due to an error in internal tracking. Closure report on C-144 form is included including photos of 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.

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

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

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

Form C-141

Revised August 8, 2011

			Rele	ease Notific	eation	and Co	orrective A	ction							
						OPERA'	ГOR	I	nitial Report 🛛 Fi	inal Report					
Name of Co						Contact: Steve Moskal									
Address: 20	0 Energy	Court, Farmi	ngton, N	M 87401			No.: 505-326-94								
Facility Nar	ne: Galleg	os Canyon U	Jnit 347			Facility Typ	e: Natural gas v	vell							
Surface Ow	ner: Fee			Mineral C	wner: l	Fee		API	No. 3004526134						
				LOCA	TION	ON OF RELEASE									
Unit Letter J	Section 15	Township 28N	Range 12W	Feet from the 1,520	North/ South	South Line	Feet from the 1,630	East/West Li East	ne County: San Juan						
			La	titude 36.65	913°	Longitue	de108.095	557°							
						OF RELI									
Type of Rele	ase: none			IVAI	CKE		Release: unknow	n Volu	ne Recovered: N/A						
		v grade tank –	95 bbl			Date and H	lour of Occurrence	e: Date	nd Hour of Discovery: no	ne					
Was Immedia	ate Notice (Yes 🛛	No Not Re	quired	If YES, To	Whom?								
By Whom?						Date and H									
Was a Water	course Reac		Yes 🛛	No		If YES, Vo	lume Impacting t	he Watercours							
If a Watercou	irse was Im	pacted, Descri	be Fully.*												
BTEX and TI	PH below B	GT closure st	andards.	Chloride concent	rations v	vere elevated	, but at a depth of	5 feet below g	val. Soil analysis resulted round surface with an estin ory results are attached.						
Describe Are	a Affected a	and Cleanup A	ction Tak	en.* No action ne	cessary.	Final laborat	tory analysis dete	rmined no rem	dial action is required.						
regulations al public health should their of or the environ	I operators or the envir operations h nment. In a	are required to conment. The ave failed to a	report an acceptanc dequately CD accept	d/or file certain re e of a C-141 repo investigate and re	elease no rt by the emediate	otifications ar NMOCD ma contamination	nd perform correct arked as "Final Re on that pose a thre	tive actions for eport" does not eat to ground w	oursuant to NMOCD rules releases which may endar relieve the operator of lial ater, surface water, human r compliance with any oth	nger bility n health					
Signature: 4	Musn	They					OIL CONS	SERVATIO	N DIVISION						
Printed Name					1	Approved by	Environmental Sp	pecialist:							
Title: Field E	nvironment	al Coordinato	r		1	Approval Dat	e:	Expirat	on Date:						
E-mail Addre	ss: steven.n	noskal@bp.co	m			Conditions of	Approval:		Attached						
Doto: Januar	10 2017		Phone	505-326-0407											

* Attach Additional Sheets If Necessary

#NCS 1703135192

Moskal, Steven

From:

Smith, Cory, EMNRD < Cory. Smith@state.nm.us>

Sent:

Monday, April 25, 2016 7:48 AM

To:

Moskal, Steven; Fields, Vanessa, EMNRD; kdiemer@blm.gov

Cc:

jeffcblagg@aol.com; blagg_njv@yahoo.com; Lowe, Leonard, EMNRD; Powell, Brandon,

EMNRD

Subject:

RE: BP Pit Close Notification - GALLEGOS CANYON UNIT 347

Steve,

OCD gives verbal approval to proceeded with BP default 2008 closure plan prior to receiving closure plan approval.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Moskal, Steven [mailto:Steven.Moskal@bp.com]

Sent: Monday, April 25, 2016 7:31 AM

To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD; kdiemer@blm.gov

Cc: jeffcblagg@aol.com; blagg njv@yahoo.com

Subject: RE: BP Pit Close Notification - GALLEGOS CANYON UNIT 347

The BGT is scheduled to be removed on Wednesday, 4/27/2016, at or around 11:00 AM.

Thank you,

Steve Moskal

BP Lower 48 – San Juan – Farmington Field Environmental Coordinator Office: (505) 326-9497

Office: (505) 326-9497 Cell: (505) 330-9179



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From: Railsback, Farrah (CH2M HILL) Sent: Friday, April 22, 2016 2:00 PM

To: Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)

Cc: <u>jeffcblagg@aol.com</u>; <u>blagg_njv@yahoo.com</u>; Moskal, Steven Subject: BP Pit Close Notification - GALLEGOS CANYON UNIT 347

BP America Production Company

200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

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

April 22, 2016

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

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

GALLEGOS CANYON UNIT 347 API 30-045-26134 (J) Section 15 – T28N – R12W 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 95 bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around April 25, 2016.

Should you have any questions, please feel free to contact BP at our Farmington office.

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

Farrah Railsback BGT Project Support 970-946-9199 -cell

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bp



BP America Production Company 200 Energy Court Farmington, NM 87401

May 13, 2016

Bureau of Land Management Katherina Diemer 6251 College Suite A Farmington, NM 87402

VIA EMAIL

Re: Notification of plans to close/remove a below grade tank

Well Name: GALLEGOS CANYON UNIT 347

API#: 3004526134

Dear Mrs. Diemer,

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 May 17, 2016. 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)-326-9497.

Sincerely,

Steven Moskal

BP America Production Company

Moskal, Steven

From:

Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us>

Sent:

Friday, May 13, 2016 10:31 AM

To:

Railsback, Farrah (CH2M HILL); Smith, Cory, EMNRD

Cc:

jeffcblagg@aol.com; blagg_njv@yahoo.com; Moskal, Steven

Subject:

RE: BP Pit Close Notification - GALLEGOS CANYON UNIT 347

Good morning,

The 17th was the second e-mail notification date that I had, did I miss an e-mail somewhere?

Thank you, Vanessa Fields

From: Railsback, Farrah (CH2M HILL) [mailto:Farrah.Railsback@bp.com]

Sent: Friday, May 13, 2016 10:27 AM

To: Smith, Cory, EMNRD < Cory. Smith@state.nm.us >; Fields, Vanessa, EMNRD < Vanessa. Fields@state.nm.us >

Cc: jeffcblagg@aol.com; blagg_njv@yahoo.com; Moskal, Steven < Steven.Moskal@bp.com >

Subject: RE: BP Pit Close Notification - GALLEGOS CANYON UNIT 347

The BP pit closure for this location has been rescheduled to start on or around May 17th.

BP America Production Company

200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

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

April 22, 2016

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

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

GALLEGOS CANYON UNIT 347 API 30-045-26134 (J) Section 15 – T28N – R12W 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 95 bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around May 17, 2016.

Should you have any questions, please feel free to contact BP at our Farmington office.

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

Farrah Railsback
BGT Project Support
970-946-9199 -cell

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From: Railsback, Farrah (CH2M HILL) Sent: Friday, April 22, 2016 2:00 PM

To: 'Smith, Cory, EMNRD'; 'Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us)'

Cc: 'jeffcblagg@aol.com'; 'blagg_njv@yahoo.com'; Moskal, Steven **Subject:** BP Pit Close Notification - GALLEGOS CANYON UNIT 347

BP America Production Company

200 Energy Court Farmington, NM 87401 Phone: (505) 326, 9200

Phone: (505) 326-9200

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

April 22, 2016

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

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

GALLEGOS CANYON UNIT 347 API 30-045-26134 (J) Section 15 – T28N – R12W 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 95 bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around April 25, 2016.

Should you have any questions, please feel free to contact BP at our Farmington office.

Sincerely,

Steven Moskal BP Field Environmental Coordinator

(505) 326-9497

Farrah Railsback
BGT Project Support
970-946-9199 -cell

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CLIENT: BP	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199 API #:	6134 A
FIELD REPORT:	(circle one): BGT CONFIRMATION / RELEASE INVESTIGATION / OTHER: PAGE #: 1	of
	28N RNG: 12W PM: NM CNTY: SJ ST: NM DATE FINISHED:	/17/16
LEASE #: SF078106	30'E NW/SE LEASE TYPE: FEDERAL / STATE / FEE / INDIAN ENVIRONMENTAL STRIKE PROD. FORMATION: FT CONTRACTOR: BP - A. SALAZAR PROD. FORMATION: FT CONTRACTOR: BP - A. SALAZAR	
2)	GPS COORD.: 36.65913 X 108.09557 DISTANCE/BEARING FROM W.H.: 38', S GPS COORD.: DISTANCE/BEARING FROM W.H.: GPS COORD.: DISTANCE/BEARING FROM W.H.:	41.5E
	GPS COORD.: DISTANCE/BEARING FROM W.H.:	OVM
SAMPLE ID: SAMPLE ID:	CHAIN OF CUSTODY RECORD(S) # OR LAB USED: HALL 1 (95) SAMPLE DATE: 05/17/16 SAMPLE TIME: 1040 LAB ANALYSIS: 8015B/8021B/300.0 (CI) SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: LAB ANALYSIS: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: SAMPLE DATE: SAMPLE TIME: LAB ANALYSIS: LAB ANALYSIS: SAMPLE TIME: LAB ANALYSIS: LAB ANALYSIS: LAB ANALYSIS: SAMPLE TIME: LAB ANALYSIS: LAB	READING (ppm) NA
	SAMPLE DATE:SAMPLE TIME: LAB ANALYSIS:	
SOIL COLOR: MODERATE BROWN COHESION (ALL OTHERS): NON COHESIVE SLIGHTLY CONSISTENCY (NON COHESIVE SOILS): LO MOISTURE: DRY SLIGHTLYMOIST MOIST/WE SAMPLE TYPE: GRAB (COMPOSITE) # DISCOLORATION/STAINING OBSERVED: YES N	COHESIVE / COHESIVE / HIGHLY COHESIVE DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD HC ODOR DETECTED: YES NO EXPLANATION - ET / SATURATED / SUPER SATURATED OF PTS	HLY PLASTIC
APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER: BEDROCK ENCOUNTERED @ 5. SAMPLE COLLECTION. SOIL IMPACT DIMENSION ESTIMATION:	.5 FT, BELOW GRADE. SANDSTONE - OLIVE GRAY IN COLOR. OCD & BLM REPS ON-SITE TO WITNESS	NA
SITE SKETCH WARRENDE PIPING FE	BGT Located : off on site PLOT PLAN circle: attached OVM CALIB, READ. = NA	POPM RF = 0.52 POPM NA PTES
T.B. = TANK BOTTOM; PBGTL = PREVIOUS BELO	DN DEPRESSION; B.G. = BELOW GRADE; B = BELOW, T.H. = TEST HOLE; ~= APPROX; W.H. = WELL HEAD; DW-GRADE TANK LOCATION; SPD = SAMPLE POINT DESIGNATION; R.W. = RETAINING WALL; NA-NOT WALL; DW-DOUBLE WALL; SB - SINGLE BOTTOM; DB - DOUBLE BOTTOM. TO NISTE: 05/17/16	/ N

Analytical Report

Lab Order 1605792

Date Reported: 5/19/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB@5' (95)

Project: GCU 347

Collection Date: 5/17/2016 10:40:00 AM

Lab ID: 1605792-001

Matrix: MEOH (SOIL)

Received Date: 5/18/2016 7:25:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	780	30	mg/Kg	20	5/18/2016 11:15:22 AM	25381
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	KJH
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/18/2016 10:19:51 AM	25376
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/18/2016 10:19:51 AM	25376
Surr: DNOP	85.0	70-130	%Rec	1	5/18/2016 10:19:51 AM	25376
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/18/2016 10:20:51 AM	R34327
Surr: BFB	117	80-120	%Rec	1	5/18/2016 10:20:51 AM	R34327
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	5/18/2016 10:20:51 AM	A34327
Toluene	ND	0.048	mg/Kg	1	5/18/2016 10:20:51 AM	A34327
Ethylbenzene	ND	0.048	mg/Kg	1	5/18/2016 10:20:51 AM	A34327
Xylenes, Total	ND	0.095	mg/Kg	1	5/18/2016 10:20:51 AM	A34327
Surr: 4-Bromofluorobenzene	108	80-120	%Rec	1	5/18/2016 10:20:51 AM	A34327

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 6
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Ch	nain-c	f-Cus	stody Record	Turn-Around	Time:	SAME				н	IΔ	п	El	NV	TE	50	NI	ME	NT	AL	
lient:	BLAG	G ENGR.	/ BP AMERICA	☐ Standard	☑ Rush _	DAY		100		77			1.00						ATO		,
				Project Name							www	w.ha	llen	viro	nme	enta	l.cor	n			
/lailing A	ddress:	P.O. BO	X 87		GCU #34	7		49	01 H	lawk	ins I	NE -	Alb	ouqu	erq	ue, l	MV 8	3710	9		
		BLOOM	FIELD, NM 87413	Project #:			1	Te	1. 50)5-34	15-39	975	F	ax !	505-	345	-410	7			
hone #:		(505) 63	2-1199	1								А	naly	ysis	Red	ques	st				
mail or F	ax#:			Project Mana	ger:									4				300.1)		T	
AVQC Pa	_		Level 4 (Full Validation)		NELSON VI	ELEZ	FIMB's (8021B)	(Gas only)	/ MRO)			(S)		PO4,SO	2 PCB's			- 1		a	
ccreditat	tion:			Sampler:	NELSON VI	ELEZ 977	38	1 (Ga	/ DRO	1.	7	OSIN		102	808			300.0 / water		sample	
NELAF		□ Other		On Ice:	Z Yes	□ No	#	TPH	10	418	504	827	v	103,1	/ sa		OA)	300.0			N N
EDD (Гуре)	T		Sample Temp	erature: / 6		4	BE +	(GR	poq	hod	00	etal	CI,N	icide	(A)	ni-V	4	9	posit	2 3
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX +-MTBE	BTEX + MTBE	TPH 80158 (GRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 82705IMS)	RCRA 8 Metals	Anions (F,CI,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil	olumes design	5 pt. composite	Air Bubbles (Y or N)
5/17/16	1040	SOIL	5PC-TB@ 5 '(95)	4 oz 1	Cool	-001	٧	_	٧					_	~		-	٧		V	_
ate:	Time:	Relinquishe	ed by:	Received by:		Date Time	Ren	narks	:	mental base	THE RESIDENCE OF	-	Contract of the Party of the Pa	-	-	-	-		LICABLE		
5/17/16	2000	711	2 Vf	Run	clt	5/17/2 2000	2			_	ance	-	-			Mos			ohn Rite	_	
ate:	Time:	Relinquishe	ed by: U	Received by:	1	Date Time		,	VID:	VH	IOXI	NEVE	32	٧N	/OSE	SHQF	EC	V	RITCJW	FEC	
17/10	7 OZY	samples sub	milted to Half Environmental may be suit	bcontracted to other		8/16 0725 es. This serves as notice		possit			P - (d data	will b	e clea	arty no	otated	on the	analytica	l report	

Hall Environmental Analysis Laboratory, Inc.

WO#:

1605792

19-May-16

Client:

Blagg Engineering

Project:

GCU 347

Sample ID MB-25381

SampType: mblk

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 25381

RunNo: 34348

Prep Date:

5/18/2016

Analysis Date: 5/18/2016

PQL

1.5

SeqNo: 1058949

Units: mg/Kg

RPDLimit

Analyte Chloride

Result ND SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Qual

SampType: Ics

Client ID:

LCSS

Batch ID: 25381

PQL

RunNo: 34348

Prep Date: 5/18/2016

Sample ID LCS-25381

Analysis Date: 5/18/2016

SeqNo: 1058950

Units: mg/Kg

%RPD

Analyte

SPK value SPK Ref Val

%REC

LowLimit HighLimit **RPDLimit**

Qual

Chloride

Result 14

1.5 15.00

93.6

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank B

E Value above quantitation range

Analyte detected below quantitation limits

Page 2 of 6

P Sample pH Not In Range

RL Reporting Detection Limit Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1605792

19-May-16

Client:

Blagg Engineering

Project:

GCU 347

Project:	GCU 347									
Sample ID LCS-25	376 Samp	Type: LCS		Test	Code: EP	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: LCSS	Bato	th ID: 25376		Ru	ınNo: 34	312				
Prep Date: 5/18/2	016 Analysis	Date: 5/18/20	16	Se	eqNo: 10	57969	Units: mg/Kg	3		
Analyte	Result	PQL SPK	value SPI	K Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (I	DRO) 46	10	50.00	0	92.6	62.6	124			
Surr: DNOP	4.7		5.000		94.9	70	130			
Sample ID MB-253	76 Samp	Type: MBLK		Test	Code: EP	A Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Bato	th ID: 25376		Ru	ınNo: 34	312				
Prep Date: 5/18/2	016 Analysis	Date: 5/18/20	16	Se	eqNo: 10	57971	Units: mg/Kg	3		
Analyte	Result	PQL SPK	value SP	K Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (I		10								
Motor Oil Range Organic		50	10.00		0F 7	70	120			
Surr: DNOP	9.6		10.00		95.7	70	130			
Sample ID 160579	2-001AMS Samp	Type: MS		TestC	Code: EP	A Method	8015M/D: Die	sel Range	Organics	
Client ID: 5PC-TB	@5' (95) Bato	h ID: 25376		Ru	ınNo: 34	312				
Prep Date: 5/18/2	O16 Analysis	Date: 5/18/20	16	Se	eqNo: 10	58180	Units: mg/Kg	3		
Analyte	Result	PQL SPK	value SP	K Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (I		9.6	47.89	8.838	71.6	33.9	141			
Surr: DNOP	4.4		4.789		91.9	70	130			
Sample ID 160579:	2-001AMSD Samp	Type: MSD		TestC	Code: EP	A Method	8015M/D: Die	sel Range	Organics	
Client ID: 5PC-TB	@5' (95) Bato	h ID: 25376		RunNo: 34312						
Prep Date: 5/18/2	O16 Analysis	Date: 5/18/20	16	Se	qNo: 10	58181	Units: mg/Kg	1		
Analyte	Result	PQL SPK	value SPk	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (I		10	49.75	8.838	120	33.9	141	45.4	20	R
Surr: DNOP	5.1		4.975		103	70	130	0	0	
Sample ID LCS-25	321 Samp	Type: LCS		TestC	ode: EP	A Method	8015M/D: Die:	sel Range	Organics	
Client ID: LCSS	Bato	h ID: 25321		Ru	inNo: 34	313				
Prep Date: 5/16/2	O16 Analysis I	Date: 5/18/20	16	Se	qNo: 10	58336	Units: %Rec			
Analyte	Result	PQL SPK	value SPk	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.6	70	130			
Sample ID LCS-25	322 Samp	Type: LCS	·	TestC	ode: EP	A Method	8015M/D: Die:	sel Range	Organics	
Client ID: LCSS	Bato	h ID: 25322			nNo: 34					
Prep Date: 5/16/2	O16 Analysis I	Date: 5/18/20	16	Se	qNo: 10	58337	Units: %Rec			
A 1. 1.	D	DOI 001	0.01	(D - () (-)	W DE0	Land inch	T.P T. I. S	0/ 000	DDDI'-"	0 1

Qualifiers:

Analyte

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Result

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

Page 3 of 6

Qual

RPDLimit

%RPD

P Sample pH Not In Range

SPK value SPK Ref Val %REC LowLimit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1605792

19-May-16

Client:

Blagg Engineering

Project:

GCU 347

Sample ID LCS-25322

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

70

Client ID:

LCSS

Batch ID: 25322

RunNo: 34313

Prep Date:

5/16/2016

Analysis Date: 5/18/2016 PQL

SegNo: 1058337

Units: %Rec

RPDLimit Qual

Analyte Surr: DNOP Result 4.1

SPK value SPK Ref Val 5.000

%REC LowLimit 82.7

HighLimit

130

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID:

PBS

Batch ID: 25321

%RPD

Prep Date: 5/16/2016

Sample ID MB-25321

Analysis Date: 5/18/2016

RunNo: 34313 SeqNo: 1058338

Units: %Rec

130

Analyte

SPK value SPK Ref Val %REC

HighLimit

%RPD

Qual

Surr: DNOP

9.1

10.00

91.0

RPDLimit

Sample ID MB-25322

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: Prep Date:

PBS

Batch ID: 25322

PQL

RunNo: 34313

Units: %Rec

Analyte

5/16/2016

Analysis Date: 5/18/2016

SeqNo: 1058339 SPK value SPK Ref Val

%REC Lowl imit

HighLimit

%RPD

RPDLimit Qual

Result 9.5

10.00

95.1

Surr: DNOP

130

Qualifiers:

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

Page 4 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1605792

19-May-16

Client:

Blagg Engineering

Project:

GCU 347

Sample ID 5ML RB	Samp	Гуре: МІ	BLK	Tes	tCode: E	PA Method	Method 8015D: Gasoline Range					
Client ID: PBS	Batc	h ID: R3	34327	F	RunNo: 3	4327						
Prep Date:	Analysis [Date: 5	/18/2016	5	SeqNo: 1	058588	Units: mg/k	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	ND	5.0										
Surr: BFB	1100		1000		107	80	120					
Sample ID 2.5UG GRO LCSB SampType: LCS TestCode: EPA Method 8015D: Gasoline Range												
Client ID: LCSS	Batcl	h ID: R3	34327	F	RunNo: 3	4327						
Prep Date:	Analysis D	Date: 5/	/18/2016	8	SeqNo: 1	058589	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.1	80	120					
Surr: BFB	1200		1000		116	80	120					
Sample ID 1605792-001AMS	Samp1	ype: MS	3	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	e			
Client ID: EDC TR@E' (95)	Ratel	1D. D2	4227		PunNo: 2	4227						

Sample ID 1605/92-001AMS	Samp	ype. IVIS	•	res	Code: El	PA Wethod	8015D: Gaso	nine Rang	е	
Client ID: 5PC-TB@5' (95)	Batc	n ID: R3	4327	RunNo: 34327						
Prep Date:	Analysis [Date: 5/	18/2016	S	eqNo: 1	058590	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	23.86	0	90.1	59.3	143			
Surr: BFB	1100		954.2		118	80	120			

Sample ID	1605792-001AMSD) SampTy _l	be: MS	SD	Tes	tCode: E	PA Method	8015D: Gaso	oline Rang	е		ı
Client ID:	5PC-TB@5' (95)	Batch I	Batch ID: R34327 RunNo: 34327									ı
Prep Date:		Analysis Da	e: 5	18/2016	S	SeqNo: 1	058591	Units: mg/h	ζg			١
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range	e Organics (GRO)	22	4.8	23.86	0	91.5	59.3	143	1.54	20		
Surr: BFB		1100		954.2		116	80	120	0	0		

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1605792

19-May-16

CI	ient:	

Blagg Engineering

Project:

GCU 347

Sample ID 5ML RB	SampT	ype: ME	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	ID: A3	4327	RunNo: 34327						
Prep Date:	Analysis D	ate: 5/	18/2016	S	SeqNo: 1	058603	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000	****	111	80	120			
Sample ID 100NG BTEX LCS	SampT	ype: LC	s	Test	Code: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	ID: A3	4327	R	tunNo: 3	4327				
Prep Date:	Analysis Da	ate: 5/	18/2016	S	eqNo: 1	058604	Units: mg/K	g		
	_									

Sample ID 100NG BTEX LC	S Samp	SampType: LCS TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	Batch ID: A34327 RunNo: 34327								
Prep Date:	Analysis [Date: 5/	18/2016	S	SeqNo: 1	058604	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	75.3	123			
Toluene	1.0	0.050	1.000	0	102	80	124			
Ethylbenzene	0.98	0.050	1.000	0	97.9	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	98.3	83.9	122			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	80	120			

Sample ID 1605793-001AMS	SampT	ype: MS	6	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: BatchQC	Batch	Batch ID: A34327 RunNo: 34327								
Prep Date:	Analysis Da	ate: 5/	18/2016	8	SeqNo: 1	058605	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.021	0.8540	0	99.8	71.5	122			
Toluene	0.85	0.043	0.8540	0	99.5	71.2	123			
Ethylbenzene	0.83	0.043	0.8540	0	97.7	75.2	130			
Xylenes, Total	2.5	0.085	2.562	0.01488	97.1	72.4	131			
Surr: 4-Bromofluorobenzene	0.99		0.8540		116	80	120			

Sample ID 1605793-001AN	ISD SampTy	D SampType: MSD TestCode: EPA Method 8021B: Volatiles									
Client ID: BatchQC	Batch	Batch ID: A34327 RunNo: 34327									
Prep Date:	Analysis Date: 5/18/2016 SeqNo: 1058606					058606	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.87	0.021	0.8540	0	102	71.5	122	1.98	20		
Toluene	0.88	0.043	0.8540	0	103	71.2	123	3.29	20		
Ethylbenzene	0.85	0.043	0.8540	0	100	75.2	130	2.26	20		
Xylenes, Total	2.6	0.085	2.562	0.01488	99.8	72.4	131	2.75	20		
Surr: 4-Bromofluorobenzene	1.0		0.8540		119	80	120	0	0		

Qualifiers:

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



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website, www.hallenvironmental.com

Sample Log-In Check List

Client Name: BLAGG	Work Order Number:	1605792		RcptN	o: 1
Received by/date:	05/18/16	and an electronic layer			
Logged By: Lindsay Mangin	5/18/2016 7:25:00 AM		July Alligo		
Completed By: Lindsay Mangin	5/18/2016 7:48:46 AM		Shelletta		
Reviewed By:	05/18/16		03.00		
Chain of Custody	0)/18/16		AND IN THE REAL PROPERTY OF THE PARTY OF THE		
Custody seals intact on sample bo	ttles?	Yes 🗌	No 🗆	Not Present	
2. Is Chain of Custody complete?		Yes 🗹	No 🗆	Not Present	
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the	samples?	Yes 🗹	No 🗆	NA []
5. Were all samples received at a ten	nperature of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗆	
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
7. Sufficient sample volume for indica	ited test(s)?	Yes 🗹	No 🗆		
8. Are samples (except VOA and ON	G) properly preserved?	Yes 🗸	No 🗔		
9. Was preservative added to bottles'	?	Yes	No 🗹	NA _	
10.VOA vials have zero headspace?		Yes 🗌	No 🗆	No VOA Vials	
11. Were any sample containers recei	ved broken?	Yes	No 🗹	# of amounted	
				# of preserved bottles checked	
 Does paperwork match bottle label (Note discrepancies on chain of cu 		Yes 🗸	No 🗔	for pH:	or >12 unless noted)
13. Are matrices correctly identified on		Yes V	No 🗌	Adjusted?	To the amood maday
14, Is it clear what analyses were requi		Yes 🗸	No 🗆		
15. Were all holding times able to be m (If no, notify customer for authoriza	net?	Yes 🗹	No 🗆	Checked by	
(ii no, notily customer for additionza	uon.)				
Special Handling (if applicable	u u				
16. Was client notified of all discrepand	cies with this order?	Yas 🗌	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	eMail	Phone Fax	In Person	
Regarding:					
Client Instructions:					
17. Additional remarks:				The second secon	
18. Cooler Information					
Cooler No Temp C Condi		Seal Date	Signed By		
1 1.6 Gocd	Yes				



