١. \$ 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 April 3, 2017

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	
Proposed Alternative Method Permit or Closure Plan A	pplication
Type of action: Below grade tank registration	
Permit of a pit or proposed alternative method	- 1
Closure of a pit, below-grade tank, or proposed alternative meth Modification to an existing permit/or registration	od
Closure plan only submitted for an existing permitted or non-per	rmitted pit, below-grade tank,
or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, below-grade ta	nk or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollutio environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable government	
Operator: BP America Production Company OGRID #: 778	
Operator:       BP America Production Company       OGRID #: 778         Address:       200 Energy Court, Farmington, NM 87401       OGRID #: 778	
Facility or well name: SANDOVAL GC A 001A	
API Number:         3004522294         OCD Permit Number:           U/L or Qtr/Qtr         C         Section         35         Township         30N         Range         09W         County	SanJuan
Center of Proposed Design: Latitude <u>36.77222</u> Longitude <u>-107.75408</u>	
Surface Owner: 🔳 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment	OIL CONS. DIV DIST. 3
2. <u>Pit</u> : Subsection F, G or J of 19.15.17.11 NMAC - KRelesse Convirmed Additioner C-141 Required.	
PIT: Subsection F, G or J of 19.15.17.11 NMAC - C - Star A C C	DEC 2 2 2017
Temporary: Drilling Workover C-14 Chired.	
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chlor	-
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other	
String-Reinforced	
Liner Seams: Welded Factory Other Volume: bbl Dimen	sions: Lx Wx D
3	
Below-grade tank: Subsection I of 19.15.17.11 NMAC TANK A	
Volume: 95 bbl Type of fluid: Produced Water	
Tank Construction material: Steel	
Secondary containment with leak detection 🗌 Visible sidewalls, liner, 6-inch lift and automatic overflow sl	nut-off
Visible sidewalls and liner Visible sidewalls only Other Single wall/ Double bottom; sidewa	lls not visible
Liner type: Thickness mil 🗌 HDPE 🗌 PVC 🗌 Other	
4.	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bure	au office for consideration of approval.
5.	
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks	5)
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a perm	anent 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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t 1	
<ul> <li>6.</li> <li>Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)</li> <li>Screen Netting Other</li> <li>Monthly inspections (If netting or screening is not physically feasible)</li> </ul>	
<ul> <li><sup>7.</sup></li> <li><u>Signs</u>: Subsection C of 19.15.17.11 NMAC</li> <li>12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers</li> <li>Signed in compliance with 19.15.16.8 NMAC</li> </ul>	
<ul> <li>8.</li> <li><u>Variances and Exceptions:</u> Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</li> <li><i>Please check a box if one or more of the following is requested, if not leave blank:</i> <ul> <li>Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.</li> <li>Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> </ul> </li> </ul>	
9. <u>Siting Criteria (regarding permitting)</u> : 19.15.17.10 NMAC <i>Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below.</i> 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 ☐ 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 application.	🗌 Yes 🗌 No
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock</li> </ul>	
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

1 g	
<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	
<ul> <li>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).</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 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	
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 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
<ul> <li>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.</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 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
10.         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 do 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 NMAC         Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC         Design Plan - based upon the appropriate requirements of 19.15.17.10 NMAC         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         Previously Approved Design (attach copy of design)       API Number: or Permit Number:	<i>cuments are</i> 9 NMAC
11.         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.         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         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 19.15.17.10 NMAC         Previously Approved Design (attach copy of design)       API Number:	

Permanent Pits Permit Amplitudion Checklist: Subsection B of 19.15.17.9 NMAC           Intructions: Each of the following interms musb batabach of the application. Plass inflatant, by a check mark in the box, that the documents are trached.           Intructions: Each of the following interms musb batabach of the application. Plass inflatant, by a check mark in the box, that the documents are trached.           Intermative interms of the application of the appropriate requirements of 19.15.17.11 NMAC           Intermative interms of the appropriate requirements of 19.15.17.11 NMAC           Icak Detection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Icak Detection Constructural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Icak Detection. Constructural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Icak Detection. Constructural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Icak Detection. Plan           Icak Detection. Plan </th <th>k x</th> <th></th>	k x	
Internet         Hydrogooligic Report - hased upon the requirements of Partgraph (1) of Subsection B of 19.15.17.19 NMAC           Bitting Criteria Compliance Demonstrations - hased upon the appropriate requirements of 19.15.17.11 NMAC           Bitting Criteria Compliance Demonstrations - hased upon the appropriate requirements of 19.15.17.11 NMAC           Bitting Criteria Compliance Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Bitting Criteria Compliance Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Charle Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC           Outlity Control/Quilty Assume Construction and Installation Plan           Bitting Control Plan           Construction and Installation Plan           Bitting Control Plan           Construction Plan           Constre Method: Ap Construction Plan<	12. Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Fach of the following items must be attached to the application. Please indicate by a check mark in the box, that the	documents are
Proposed Closure:         19.15.17.13 NMAC           structions:         Hease complete the applicable backs, Backs 14 through 18, in regards to the proposed closure plan.           'pre-         Alternative           'proposed Closure:         Waste Excavation and Removal           Alternative         Waste Excavation and Removal           'Proposed Closure:         Waste Excavation and Removal           On-site Closure Method (Only for temporary pits and closed-loop systems)           In-place Burial         On-site Trench Burial           Atternative:         Closure:           Protocols and Procodures - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC           Optional Places Indicate, by a check mark in the box: that the documents are attached.           Optional Removal (Closure Plan.           Protocols and Procodures - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC           Optional Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)           Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC           Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC           Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC           Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	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         Freeboard and Overtopping Prevention 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	uocumenis ure
ype:       Cavitation       P&A       Permanent Pi       Below-grade Tank       Multi-well Fluid Management Pi         Alternative       Waste Excavation and Removal       Below-grade Tank       Multi-well Fluid Management Pi         Image: Closure Method       Waste Excavation and Removal       Closed-Loop systems)       Image: Closed Head O(Oh) for temporary pis and closed-loop systems)         Image: Closure Method       On-site Trench Burial       On-site Trench Burial       On-site Trench Burial         Average: Closure Method       On-site Trench Burial       On-site Trench Burial       On-site Trench Burial         Average: Closure Method       On-site Trench Burial       On-site Trench Burial       On-site Trench Burial         Average: Closure Method       Only Fluid (1):15:17:13 NMAC)       Fluid (1):15:17:13 NMAC       Fluid (1):15:17:13 NMAC         Image: Plane: Metase indicate, by a check mark in the box: that the documents are attached.       Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)       Site Stackfill and Cover Design Specifications - based upon the appropriat requirements of Subsection I of 19:15:17:13 NMAC         Bister Reclamation Plan - based upon the appropriat requirements of Subsection I of 19:15:17:13 NMAC       Site Reclamation Plan - based upon the appropriat requirements of Subsection I of 19:15:17:13 NMAC         Site Reclamation Plan - based upon the appropriate requirements of Subsection I of 19:15:17:13 NMAC       Site Reclamation	13. <u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable baxes. Baxes 14 through 18, in regards to the proposed closure plan	
i.         Vaste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the losure 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            Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC            Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC            B set Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC            B still Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC            B still Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC            B still Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC            B still Reclamation Plan - based upon the appropriate requirements of Subsections: Each siting criteria requirements of Subsections and/or demonstrations of acceptable source material are rovided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 9.15.17.10 NMAC for guidance.             round water is between 25-50 fect below the bottom of the buried waste.	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	luid Management Pit
iting Criteria (regarding on-site closure methods only):       19.15.17.10 NMAC         nstructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are revided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 9.15.17.10 NMAC for guidance.         Stround water is less than 25 feet below the bottom of the buried waste.	<ul> <li>closure plan. Please indicate, by a check mark in the box, that the documents are attached.</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 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>	
<ul> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> <li>NA</li> <li>NA</li> <li>NA</li> <li>Yes</li> <li>NO</li> <li>NA</li> <li>Yes</li> <li>NO</li> </ul>		
<ul> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> <li>NA</li> <li>NA</li> <li>Yes</li> <li>NA</li> <li>NA</li> <li>Yes</li> <li>No</li> <li>No</li> <li>Yes</li> <li>No<td>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</td><td></td></li></ul>	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	
<ul> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> <li>NA</li> <li>NA</li> <li>Yes No</li> <li>No</li> <li>Yes No</li> </ul>	<ul> <li>Ground water is between 25-50 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>	
<ul> <li>ake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> <li>Vithin 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> <li>Vithin 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> <li>Vritten confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Yes No</li> <li>No</li> <li>Visini 300 feet of a wetland.</li> <li>JS Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	<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>	
<ul> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> <li>Vithin 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> <li>Vritten confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Yes No</li> <li>Notifina 300 feet of a wetland.</li> <li>Visitian SFish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	<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
t the time of initial application NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site Vritten confirmation or verification from the municipality; Written approval obtained from the municipality Vithin 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Ves 🗌 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
Vithin 300 feet of a wetland. JS Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<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
JS Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 🗌 Yes 🗌 No	Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
Vithin incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	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	

<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>	
- written commation of vermeation non the maneipanty, written approval obtained non the maneipanty	🗌 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>	Yes No
Within a 100-year floodplain.	
- 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 play 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 19.15.17.13 NMAC</li> <li>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</li> <li>Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC</li> <li>Mate 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 cann</li> <li>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> <li>Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>	11 NMAC 15.17.11 NMAC
17. 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 beli	ief.
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
18. OCD Approval: Permit Application (including closure plan) V Closure Plan (only) V OCD Conditions (see attachment)	
18.       OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:       Approval Date:       12	/22/17
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:       Approval Date:       12	/22/17
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:	/22/17
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:	
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:	
OCD Approval:       Permit Application (including closure plan)       Closure Plan (only)       OCD Conditions (see attachment)         OCD Representative Signature:	complete this

Oil Conservation Division

*	
Operator Closure Certification:	
	tted with this closure report is true, accurate and complete to the best of my knowledge and
belief. I also certify that the closure complies with all appli-	cable closure requirements and conditions specified in the approved closure plan.
Name (Print): Erin Garifalos	Title: Field Environmental Coordinator
Valle (Ffliit).	
ani anol a	
bun garifalos	December 6, 2017
Signature:	Date: December 6, 2017
avia serifolos@ha ser	(820) 600 7048
e-mail address: erin.garifalos@bp.com	Telephone: (832) 609-7048

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

#### BELOW-GRADE TANK CLOSURE PLAN

### SANDOVAL GC A 001A

#### API No. 3004522294

#### Unit Letter C Section 35 T 30N R 09W

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	10	< 0.020
Total BTEX	US EPA Method SW-846 8021B or 8260B	50	< 0.080
TPH	US EPA Method SW-846 418.1 or 8015 extended	100	<47
Chlorides	US EPA Method 300.0 or 4500B	620	<30

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

> Soil under the BGT was sampled for chloride, TPH and BTEX with all concentrations below the stated limits. Impacted soils were discovered during confirmation sampling to the east of the BGT. That release will be addressed following the spill and release guidelines. 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.

8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.

Sampling results indicate a release has occurred at impacted soil adjacent to the BGT. The release will be address following the spill and release guidelines. 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 occurred at impacted soil adjacent to the BGT. The release will be address following the spill and release guidelines. Attached is a laboratory report and field report. The location will be reclaimed when the well is plugged and abandoned.

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 and a 105 BBL shallow low profile above-grade tank set atop BGT location. 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 and a 105 BBL shallow low profile above-grade tank set atop BGT location. 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 and a 105 BBL shallow low profile above-grade tank set atop BGT location. 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 and a 105 BBL shallow low profile above-grade tank set atop BGT location. 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 and a 105 BBL shallow low profile above-grade tank set atop BGT location. 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

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- 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 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.

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised April 3, 2017

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

#### **Release Notification and Corrective Action OPERATOR** Initial Report **Final Report** Contact Erin Garifalos Name of Company BP America Production Company Telephone No. (832) 609-7048 Address 200 Energy Court, Farmington, NM 87401 Facility Type: Natural Gas Well Facility Name SANDOVAL GC A 001A Mineral Owner: Federal API No. 3004522294 Surface Owner: Federal LOCATION OF RELEASE North/South Line East/West Line Feet from the Feet from the County Unit Letter Section Township Range San Juan 1.590 1.150North West 35 30N 09W С Longitude -107.75408 Latitude 36.77222 NAD83 NATURE OF RELEASE Volume of Release: : unknown Volume Recovered: : N/A Type of Release:: none Source of Release: below grade tank - 95 bbl Date and Hour of Occurrence: Date and Hour of Discovery: n/a n/a If YES, To Whom? Was Immediate Notice Given? Yes 🔽 No 🗌 Not Required By Whom? Date and Hour If YES, Volume Impacting the Watercourse. Was a Watercourse Reached? Yes 🖌 No If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* Sampling of the soil beneath the BGT was done during removal. Soil analysis resulted for TPH, BTEX and chloride concentrations below BGT closure standards. Impacted soils were discovered during the confirmation sampling. The release will be addressed following the spill and release guidelines. Field reports and laboratory results are attached. Describe Area Affected and Cleanup Action Taken.\* The release will be addressed following the spill and release guidelines. Final laboratory analysis determined no remedial action is required. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION oun garifialos Signature: Approved by Environmental Specialist: Printed Name: Erin Garifalos Title Field Environmental Coordinator **Expiration Date:** Approval Date: E-mail Address: erin.garifalos@bp.com Conditions of Approval: Attached Date: December 6, 2017 Phone: (832) 609-7048 \* Attach Additional Sheets If Necessary 2NCS1735633477

## bp



BP America Production Company 200 Energy Court Farmington, NM 87401

September 29, 2017

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

#### VIA EMAIL

Re: Notification of plans to close/remove a below grade tank Well Name: SANDOVAL GC A 001A API #: 3004522294

Dear Mrs. Thomas,

As part of the NM "Pit Rule": 19.15.17.13 Closure Requirements, Paragraph J. BP America Production Company (BP) is required to notify the surface owner of BP's plans to close/remove a below grade tank. BP wishes to inform you of our plans to close/remove the below grade tank on its well pad located on your surface. BP plans to commence this work on or about October 5, 2017. 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 (832)-609-7048.

Sincerely,

Erin Garifalos

BP America Production Company

 From:
 Buckley, Farrah (CH2M HILL)

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

 Cc:
 ieffcblaq@aol.com; blaqq niv@vahoo.com; Garifalos, Erin

 Subject:
 BP Pit Close Notification - SANDOVAL GC A 001A

 Date:
 Friday, September 29, 2017 11:20:25 AM

BP America Production Company 200 Energy Court Farmington, NM 87401 Phone: (505) 326-9200

#### SENT VIA E-MAIL TO: <u>CORY.SMITH@STATE.NM.US;</u> <u>VANESSA.FIELDS@STATE.NM.US</u>

September 29, 2017

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

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

SANDOVAL GAS COM A 001A API 30-045-22294 (C) Section 35– T30N – R9W San Juan County, New Mexico

Dear Mr. Cory Smith and Mrs. Vanessa Fields,

In regards to the captioned subject and requirements of the NMOCD pit rule, this letter is notification that BP is planning to close a 95bbl BGT that will no longer be operational at this well site. We anticipate this work to start on or around October 5, 2017.

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

Sincerely,

Erin Garifalos

Field Environmental Coordinator - San Juan

Cell: 832-609-7048

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

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

CLIENT: BP	P.O. BOX 87, B	NGINEERING, IN LOOMFIELD, NN		API #: 3004522294
		5) 632-1199		(if applicble):
FIELD REPORT:	(circle one): BGT CONFIRMATION /		THER:	PAGE #: <u>1</u> of <u>1</u>
SITE INFORMATION				DATE STARTED: 10/05/17
QUAD/UNIT: C SEC: 35 TWP:	<b>30N</b> RNG: <b>9W</b> PM:	NM CNTY: SJ	ST: NM	DATE FINISHED:
1/4 -1/4/FOOTAGE: 1,150'N / 1,5 LEASE #: SF078139		YPE: FEDERAL STATE / STRIKE NTRACTOR: MBF - R. P		ENVIRONMENTAL SPECIALIST(S): NJV
REFERENCE POINT				GL ELEV.: 5,712'
				RING FROM W.H.: 186', N63.5W
2)				RING FROM W.H.:
3)				RING FROM W.H.:
4)				RING FROM W.H.:
SAMPLING DATA:	CHAIN OF CUSTODY RECORD(S) # O			OVM READING
1) SAMPLE ID: 5PC - TB @ 5'			LAB ANALYSIS	(mpq)
2) SAMPLE ID:				
3) SAMPLE ID:				
4) SAMPLE ID:				
5) SAMPLE ID: SOIL DESCRIPTION	SAMPLE DATE:			
SOIL COLOR: DARK YEL COHESION (ALL OTHERS): NON COHESIVE (SLIGHT) CONSISTENCY (NON COHESIVE SOILS): LC MOISTURE: DRY (SLIGHTLY MOIST MOIST) W SAMPLE TYPE: GRAB (COMPOSITE) # DISCOLORATION/STAINING OBSERVED: YES N SITE OBSERVATION APPARENT EVIDENCE OF A RELEASE OBSERVE EQUIPMENT SET OVER RECLAIMED AREA: OTHER: MMOCD OR BLM NOT PRESENT IMPACTED SOILS.	OOSE <u>(FIRM</u> ) DENSE / VERY DENSE ET / SATURATED / SUPER SATURATED OF PTS. <u>5</u> IO EXPLANATION - MOSTLY BLACK JS: LOST INTEGRITY OF EQUIPMENT: D AND/OR OCCURRED : YES NO EXPL YES NO EXPLANATION - 105 BBL	DENSITY (COHESIVE CLAYS & S HC ODOR DETECTED: YES NO I SOILS ONLY. ANY AREAS DISPLAYING WETNES WITHIN ESE QUADRANT OF YES NO EXPLANATION - ANATION: PHYSICALLY FROM SHALLOW LOW PROFILE A	SILTS): SOFT FIRM	SICALLY FROM DISCOLORED
EXCAVATION DIMENSION ESTIMATION:		ft. X ft.		TIMATION (Cubic Yards) :
	EAREST WATER SOURCE: >1,000'	NEAREST SURFACE WATER:	>1,000' NMOC	D TPH CLOSURE STD: 1,000 ppm
PB T.B	BGT Located : off on site	PLOT PLAN circl PRESSOR		CALIB. READ. =       100.0 ppm       PPm       RF =1.00         CALIB. GAS =       100 ppm       PPm       RF =1.00         :       11:25 (am)pm       DATE:       10/05/17         MISCELL. NOTES       /O:       PR       PR         ID:       VHIXONEVB2       U       U         J#:       06/14/10       CD Appr. date(s):       02/07/17
NOTES: BGT = BELOW-GRADE TANK; E.D. = EXCAVATIO T.B. = TANK BOTTOM; PBGTL = PREVIOUS BEL APPLICABLE OR NOT AVAILABLE; SW - SINGLI		LOW; T.H. = TEST HOLE; ~ = APPROX.; V DINT DESIGNATION; R.W. = RETAINING V	- <b>S.P.D.</b>	
NOTES: GOOGLE EARTH IMAG		ONSITE: 10/05/1	7	

Hall Er	nvironmental Analys	sis Labora	tory, Inc.			Lab Order <b>1710371</b> Date Reported: <b>10/11/2</b>	017
CLIENT: Project: Lab ID:	Blagg Engineering SANDOVAL GC A #1A 1710371-001	Matrix:	SOIL	Collection I	Date: 10/	C-TB @ 5' (95) /5/2017 11:05:00 AM /6/2017 7:20:00 AM	
Analyses		Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analyst	JRR
Chloride		ND	30	mg/Kg	20	10/6/2017 11:14:45 AM	34279
EPA MET	HOD 8015M/D: DIESEL RAN	GE ORGANICS	S			Analyst	TOM
Diesel Ra	ange Organics (DRO)	ND	9.3	mg/Kg	1	10/6/2017 9:50:53 AM	34275
Motor Oil	Range Organics (MRO)	ND	47	mg/Kg	1	10/6/2017 9:50:53 AM	34275
Surr: D	DNOP	98.8	70-130	%Rec	1	10/6/2017 9:50:53 AM	34275
EPA MET	HOD 8015D: GASOLINE RAM	NGE				Analyst	NSB
Gasoline	Range Organics (GRO)	ND	4.0	mg/Kg	1	10/6/2017 11:17:18 AM	34265
Surr: E	BFB	91.2	54-150	%Rec	1	10/6/2017 11:17:18 AM	34265
EPA MET	HOD 8021B: VOLATILES					Analyst	NSB
Benzene		ND	0.020	mg/Kg	1	10/6/2017 11:17:18 AM	34265
Toluene		ND	0.040	mg/Kg	1	10/6/2017 11:17:18 AM	34265
Ethylben	zene	ND	0.040	mg/Kg	1	10/6/2017 11:17:18 AM	34265
Xylenes,		ND	0.080	mg/Kg	1	10/6/2017 11:17:18 AM	34265
Surr: 4	-Bromofluorobenzene	96.2	66.6-132	%Rec	1	10/6/2017 11:17:18 AM	34265

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

Oual	lifiers:

. . .

- \* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 5

**Analytical Report** 

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

Client:	and the second se		/ BP AMERICA	Turn-Around T	Rush_	SAME DAY				4		AL	Y	SI		A	30	R/		_	
Mailing A	ddress:	P.O. BO	X 87	SAN	DOVAL GC	A #1A		49	01 H									3710	9		
		BLOOM	FIELD, NM 87413	Project #:			1			)5-34					505						
Phone #:		(505) 63	2-1199	1			te!	Ī.				A	Anal	ysis	Red	ques	st	. 67			
email or F	ax#:			Project Manag	jer:									-				1			
QA/QC Pa	-		Level 4 (Full Validation)		NELSON VE	ELEZ	(8021B)	(yino	/ MRO)			IS)		04'SO	PCB's			er - 300.1)			8
Accreditat	tion:			Sampler:	NELSON VE	LEZ nr	8)	Gas	RO /	1)	<del>,</del>	SIN		02,1	3082			/ water			sample
D NELAP		Other_		On lice:	DKYes	and the second		Hdl	0/0	418.	504.	3270		O3,N	s/8		A)	0.00			e sa
EDD (Ty	/pe)			Sample Temp	erature /	8		+ 3	(GRC	po	pou	or	etals	N)	cide	A	i-VC	il - 3		e	osit
Date	Time	Matrix	Sample Request ID	A loldar Container Type and #	Preservative Type	HEAL NO.	BTEX +-MHE	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO	TPH (Method 418.1)	EDB (Method 504.1)	PAH (8310 or 8270SIMS)	<b>RCRA 8 Metals</b>	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081. Pesticides / 8082	8260B (VOA)	8270 (Semi-VOA)	Chloride (soil - 300.0 /		Grab sample	5 pt. composite
10/5/17	1105	SOIL	5PC - TB @ 5' (95)	4 oz 1	Cool	-201	V		٧									V			V
																					1
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																-				-	+
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Date: /	Time:	Relinquish					Ren	arks		BUL	DIREC				THE		ACTI		OPPE	SPON	DING
10/5/17	1:51D Time:	Relinquishe	Mar VJ	Received by:	fact	Date Time		ONT	ACT:		FEREN	NCE #	WHEI LOS	N_APP	LICAL	BLE;		MILL	VIAL	ron	PINO I
10/5/m	1000	A samples		Ul	m L	1.8/0/1172-0720	Re		ice #		P -		-						÷		

### QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

**Client: Blagg Engineering** SANDOVAL GC A #1A **Project:** 

Sample ID MB-34279 Client ID: PBS	SampType: mblk Batch ID: 34279	TestCode: EPA Method RunNo: 46172	300.0: Anions	
Prep Date: 10/6/2017	Analysis Date: 10/6/2017	SeqNo: 1471142	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-34279	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-34279 Client ID: LCSS	SampType: Ics Batch ID: 34279	TestCode: EPA Method RunNo: 46172	300.0: Anions	
			300.0: Anions Units: mg/Kg	
Client ID: LCSS	Batch ID: 34279 Analysis Date: 10/6/2017	RunNo: 46172		RPDLimit Qual

Qualifiers:

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

Page 2 of 5

11-Oct-17

WO#: 1710371

## QC SUMMARY REPORT

WO#: 1710371 11-Oct-17

Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:SANDOVAL GC A #1A

Sample ID LCS-34275	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 34275			RunNo: 46160						
Prep Date: 10/6/2017	Analysis D	ate: 10	)/6/2017	S	SeqNo: 1	469181	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.9	73.2	114			
Surr: DNOP	4.8		5.000		95.4	70	130			
Sample ID MB-34275	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PBS	Batch	ID: 34	275	RunNo: 46160						
Prep Date: 10/6/2017	Analysis D	ate: 10	)/6/2017	S	SeqNo: 1	469182	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Notor Oil Range Organics (MRO)	ND	50								

Qualifiers:

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

Page 3 of 5

1 180 0 01

### QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:Blagg EngineeringProject:SANDOVAL GC A #1A

Sample ID MB-34265	SampTy	pe: ME	BLK	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 34265			F	RunNo: 46173					
Prep Date: 10/5/2017	Analysis Da	te: 10	0/6/2017	S	SeqNo: 1	470392	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	870		1000		87.0	54	150			
Sample ID LCS-34265	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range					e				
Client ID: LCSS	Batch	Batch ID: 34265 RunNo: 46173								
Prep Date: 10/5/2017	Analysis Da	te: 10	)/6/2017	SeqNo: 1470393			Units: mg/k	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	76.4	125			
Surr: BFB	990		1000		99.0	54	150			

Qualifiers:

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

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## **QC SUMMARY REPORT**

Hall Environmental Analysis Laboratory, Inc.

**Client:** Blagg Engineering SANDOVAL GC A #1A **Project:** 

Sample ID MB-34265	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batc	h ID: 34	265	F	unNo: 4	6173				
Prep Date: 10/5/2017	Analysis E	Date: 10	0/6/2017	S	eqNo: 1	470424	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	0.94		1.000		93.8	66.6	132			
Sample ID LCS-34265	Samp	Type: LC	S	Tes	Code: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	Batch ID: 34265 RunNo: 46			6173	73				
Prep Date: 10/5/2017	Analysis D	Date: 10	)/6/2017	S	eqNo: 1	470425	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.1	80	120			
Delizene	0.57	0.020	1.000	0	51.1	00	120			
Toluene	0.98	0.020	1.000	0	97.6	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			

Qualifiers:

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

WO#:

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental A Albu TEL: 505-345-3975 Website: www.hal	4901 Hawkins querque, NM 87 FAX: 505-345-4	NE 109 Sam	Sample Log-In Check List		
Client Name: BLAGG	Work Order Number:	1710371		RcptNo: 1		
Received By: Anne Thorne	10/6/2017 7:20:00 AM		Anne Home	~		
Completed By: Anne Thome	10/6/2017 7:52:31 AM		1- 11			
Reviewed By: JC 10-017 @ 08	12		and from			
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes	No 🗆	Not Present		
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present		
3. How was the sample delivered?		Courier				
Log In						
4. Was an attempt made to cool the sample	s?	Yes 🗹	No 🗆			
5. Were all samples received at a temperatu	ire of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗋		
6. Sample(s) in proper container(s)?		Yes 🗹	No 🗌			
7. Sufficient sample volume for indicated tes	t(s)?	Yes 🗹	No 🗌			
8. Are samples (except VOA and ONG) prop	erly preserved?	Yes 🖌	No 🗌			
9. Was preservative added to bottles?		Yes	No 🗹	NA		
10.VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials		
11. Were any sample containers received bro	oken?	Yes	No 🗹	# of preserved bottles checked		
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗌	for pH: (<2 or >12 unless note		
13. Are matrices correctly identified on Chain	of Custody?	Yes 🗹	No 🗌	Adjusted?		
14. Is it clear what analyses were requested?		Yes 🗹	No 🗆			
15. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗌	Checked by:		
Created Handling //f annualia)						
Special Handling (if applicable) 16. Was client notified of all discrepancies wit	h this order?	Yes	No 🗌	NA 🗹		
Person Notified:	Date		and the second			
By Whom:	and a second	eMail 🗍 P	hone 🗌 Fax	In Person		
Regarding:		AND AN ALCOHOLD AND AND AND AND AND AND AND AND AND AN	CO. C.			
Client Instructions:				en un en		

18. Cooler Information

	p-C Condition	Seal Intact	Seal No	Seal Date	Signed By
1 1.8	Good	Yes			

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