<u>District I</u> 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 6, 2013 Revised

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 Application	<u>on</u>
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, be	pelow-grade tank,
or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternation	tive request
lease be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface was a vironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's responsibility.	
Operator: Burlington Resources Oil & Gas Company, LP OGRID #: 14538	
Address: PO BOX 4289, Farmington, NM 87499	Oll COME DAY
Facility or well name: <u>HUERFANO UNIT NP 270</u>	OIL CONS. DIV 3
API Number:30-045-23836 OCD Permit Number:	FEB 17 2017
U/L or Qtr/Qtr N Section 7 Township 26N Range 10W County: San Juan	LED I & SOIL
Center of Proposed Design: Latitude36.497747 <u>•N</u> Longitude107.940497 <u>•W</u> 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	Fluid yes no
4. Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for	r 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 reside institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	ence, school, 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	
8. 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.	
Exception(s). Requests must be submitted to the Santa Te Environmental Buleau 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 acceptate 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 ☐ 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
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).	☐ Yes ☒ No
- Topographic map; Visual inspection (certification) of the proposed site	
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 application.	☐ Yes ☐ No
- 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. and 19.15.17.13 NMAC Previously Approved Design (attach copy of design) API Number:	15.17.9 NMAC
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 docattached. 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 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	.15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

12. 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	documents are
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 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	
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
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 ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
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	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

- Written confirmation or 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
16. On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan.	an. Please indicate,
by 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. 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 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 cannot 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 Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 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	
Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date:	Mga_
18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 2122	M9aJ
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 2122 Title: COD Permit Number:	the closure report.
18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 2122 Title: OCD Permit Number: 19. 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	the closure report.
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date: 2120 Title: OCD Permit Number: OCD Permit Number: 19. 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:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print) <u>Christine Brock</u> Title: <u>Regulatory Specialist</u>
Signature: le Mistèrie La rock Date: 2/16/17
e-mail address: christine brock@con.com. Telephone: (505) 326-9775

ConocoPhillips Company San Juan Basin: New Mexico Assets

Below Grade Tank Closure Report

Lease Name: Huerfano Unit NP 270

API No.: 30-045-23836

In accordance with Rule 19.15.17.13 NMAC, the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

General Plan Requirements:

1. Prior to initiating any BGT closure, except in the case of an emergency, COPC will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or one week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner will be notified as soon as practical.

The surface owner was notified by email of the closure process and the notification is attached.

- Notice of closure will be given to the Division District Office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
 - a. Operators Name
 - b. Well Name and API Number
 - c. Location

Notification is attached.

3. All liquids will be removed from the BGT following cessation of operation. Produced water will be disposed of at one of COP's approved Salt Water Disposal facilities or at a Division District Office approved facility.

All recovered liquids were disposed of at an approved SWD facility or an approved Division District Office facility within 60 days of cessation of operation.

4. Solids and sludge's will be shoveled and/or vacuumed out for disposal at one of the Division District Office approved facilities, depending on the proximity of the BGT site: Envirotech Land Farm (Permit #NM-01-011), JFJ Land Farm % Industrial Ecosystems Inc. (Permit #NM-01-0010B), and Basin Disposal (Permit #NM-01-005).

Any sludge or soil required to be removed to facilitate closure was transported to Envirotech Land Farm (Permit # NM-01-011) and/or JFJ Landfarm % IEI (Permit# NM-01-0010B).

5. COPC will obtain prior approval from Division District Office to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division District Office. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liner materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19.15.35 NMAC. Disposal will be at a licensed disposal facility, presently San Juan County Landfill operated by Waste Management under NMED Permit SWM-052426.

The below-grade tank was disposed of in a division-approved manner. The liner was cleaned per 19.15.35.8.C(1)(m) NMAC and disposed of at the San Juan County Regional Landfill located on CR 3100.

6. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure, will be removed.

All on-site equipment associated with the below-grade tank was removed.

- 7. Following removal of the tank and any liner material, COPC will test the soils beneath the BGT as follows:
 - a. At a minimum, a five-point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination.
 - b. The laboratory sample shall be analyzed for the constituents listed in Table I of 19.15.17.13.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Table I of 19.15.17.13 and the results are attached.

8. If the Division District Office and/or COPC determine there is a release, COPC will comply with 19.15.17.13.C.3b.

A release was not determined for the above referenced well.

9. Upon completion of the tank removal, pursuant to 19.15.17.13.C.3c, if all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot top soil or background thickness whichever is greater and to existing grade. The surface will be re-contoured to match the native grade and to prevent ponding.

The tank removal area passed all requirements of Table I of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material which included at least one foot of suitable material to establish vegetation at the site.

10. For those portions of the former BGT area no longer required for production activities, COPC will seed the disturbed area the first favorable growing season after the BGT is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division District Office approved methods. COPC will notify the Division District Office when reclamation and re-vegetation is complete.

Reclamation of the BGT shall be considered complete when:

- Vegetative cover reflects a life form ratio of +/- 50% of pre disturbance levels.
- Total percent plant cover of at least 70% of pre-disturbance levels (Excluding noxious weeds) OR
- Pursuant to 19.15.17.13.H.5d COPC will comply with obligations imposed by other applicable federal or tribal agencies in which there re-vegetation and reclamation requirements provide equal or better protection of fresh water, human health and the environment.

Provision 10 will be accomplished pursuant to 19.15.17.H.5d and notification will be submitted upon completion.

11. For those portions of the former BGT area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

The former BGT area is not required for production activities and reseeding will be per the procedure noted above.

Closure Report:

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using Division District Office Form C-144. The Report will include the following:

- Proof of Closure Notice (surface owner and Division District Office) (Attached)
- Backfilling & cover installation (See Report)
- Confirmation Sampling Analytical Results (Attached)
- Application Rate & Seeding techniques (See Report)
- Photo Documentation of Reclamation (Attached)

Brock, Christine

From:

Busse, Dollie L

Sent:

Thursday, February 02, 2017 2:02 PM

To:

Smith, Cory, EMNRD; Vanessa.Fields@state.nm.us; 'Brandon.Powell@state.nm.us'

Cc:

Whitney Thomas - BLM (l1thomas@blm.gov); Maureen Joe (mjoe@blm.gov); Payne, Wendy F;

Munkres, Travis W; Hunter, Lisa; Spearman, Bobby E; Prasanna, Sonu; Walker, Crystal; Brock,

Christine

Subject:

Huerfano Unit NP 270 - 72 Hour BGT Closure Notification

Importance:

High

Subject: 72 Hour BGT Closure Notification

Anticipated Start Date: Wednesday, February 8, 2017 at approximately 10:00 a.m.

The subject well has a below-grade tank that will begin the closure process between 72 hours and one week from this notification. Please contact me at any time if you have any questions or concerns.

Well Name:

Huerfano Unit NP 270

API#:

3004523836

Location:

Unit N (SESW), Section 7, T26N, R10W

Footages:

800' FSL & 1800' FWL

Operator:

Burlington Resources

Surface Owner: BLM (Lease #SF-077942-A)

Reason:

P&A'd 11/18/2016

Dollie L. Busse Regulatory Technician ConocoPhillips Company 505-324-6104 505-787-9959 Dollie.L.Busse@cop.com <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

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

						,						
	Release Notification and Corrective Action											
						OPERA	ΓOR		☐ Initi	al Report	\boxtimes	Final Report
Name of Co	ompany B	urlington Re	sources			Contact Christine Brock						
		th St, Farmin		[Telephone No.(505) 326-9775						
		ano Unit NP				Facility Typ	e: Gas Well					
Surface Ow	ner Feder	-01		Mineral (Jumer	Federal			A PI No	30-045-2	3836	
Sui lace Ow	ner reder	aı		Willierar	JWHCI	rederai			ATTNO). 30-043-2	23630	
				LOCA		N OF REI						
Unit Letter	Section	Township	Range	Feet from the	1	/South Line	Feet from the	1	Vest Line	County		
N	7	26N	10W	800		SOUTH	1800	W	EST	SAN JUA	N	
]	Latitude	36.497747		Longitud	e <u>-107.940497</u>	7				
				NAT	TURE	OF RELI	EASE					
Type of Rele	ase			1112	CILL	Volume of			Volume l	Recovered		
Source of Re							lour of Occurren	ce		Hour of Dis	covery	
W I 1	-4- N-4' (O:0				ICVEC T-	W/I 0					
Was Immedi	ate Notice (Yes [No Not R	eauired	If YES, To	wnom?					
By Whom? Date and							lour					
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Yes 🛛 1	No		11 125, 10	paring					
If a Watercon	urse was Im	pacted, Descr	ibe Fully.*	k						-		
N/A												
Describe Cau	ise of Probl	em and Reme	dial Action	n Taken.*								
No release w	No release was encountered during the BGT Closure.											
	a Affected	and Cleanup	Action Tak	ten.*								
N/A												
				is true and comp								
				nd/or file certain to be of a C-141 rep								
should their	operations h	nave failed to	adequately	investigate and	remedia	te contaminati	on that pose a thi	reat to gr	ound wate	r, surface wa	ter, hu	man health
				tance of a C-141	report o	does not reliev	e the operator of	responsi	bility for c	ompliance v	ith any	y other
federal, state	, or local lav	ws and/or regu	ulations.				OH GOV	CEDI	ATTON	DHIIGIG	× × ×	
Signature:	1.1.	1	0	11			OIL CON	SERV	ATION	DIVISIO	N	
\ \	linus	style 4	210	CH								
						Approved by Environmental Specialist:						

Approval Date:

Conditions of Approval:

Expiration Date:

Attached

christine.brock@cop.com

Printed Name: Christine Brock

Title: Regulatory Specialist

11611

E-mail Address:

Phone: (505) 326-9775 * Attach Additional Sheets If Necessary

Animas Environmental Services, LLC



February 15, 2017

Lisa Hunter ConocoPhillips San Juan Business Unit (505) 326-9525

Via electronic mail to: SJBUE-Team@ConocoPhillips.com

RE: Below Grade Tank Closure Report

Huerfano Unit NP 270

San Juan County, New Mexico

Dear Ms. Hunter:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (COPC) Huerfano Unit NP 270, located in San Juan County, New Mexico. Tank removal was completed by COPC contractors on February 8, 2017, while AES was on site.

1.0 Site Information

1.1 Location

Site Name – Huerfano Unit NP 270
Legal Description – SE¼ SW¼, Section 7, T26N, R10W, San Juan County, New Mexico
Well Latitude/Longitude – N36.49758 and W107.94032, respectively
BGT Latitude/Longitude – N36.49775 and W107.94049, respectively
Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, February 2017

1.2 Depth to Groundwater Determination (NMAC 19.15.17.13 Table 1)

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a cathodic report dated November 2011 for the Huerfano Unit NP 270 reported the depth to groundwater as greater than 100 feet below ground surface (bgs).

604 W. Piñon St. Farmington, NM 87401 505-564-2281

> 1911 Main, Ste 206 Durango, CO 81301 970-403-3084

Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is also interpreted to be greater than 100 feet bgs.

1.3 BGT Closure Assessment

AES was initially contacted by Lisa Hunter of COPC on January 18, 2017, and on February 8, 2017, Corwin Lameman of AES mobilized to the location. AES personnel collected one 5-point soil sample (BGT SC-1) composited from four perimeter samples and one center sample of the BGT footprint from below the BGT liner.

2.0 Soil Sampling

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

A portion of BGT SC-1 was utilized for field screening of volatile organic compound (VOC) vapors with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Soil sample BGT SC-1 was also analyzed in the field for total petroleum hydrocarbons (TPH) per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

2.1.3 Chlorides

Soil sample BGT SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

Soil sample BGT SC-1was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH as Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Motor Oil Range Organics (MRO) per USEPA Method 8015M/D;
- TPH per USEPA Method 418.1; and
- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

Field sampling results and laboratory analytical results are summarized in Tables 1 and 2, respectively, and presented on Figure 2. The AES Field Sampling Report and the laboratory analytical report are attached.

Table 1. Soil Field VOCs, TPH, and Chloride Results Huerfano Unit NP 270 BGT Closure, February 2017

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	TPH 418.1 (mg/kg)	Field Chlorides (mg/kg)
-	CD Action Level				
(NMAC 1	9.15.17.13 Tabl	e 1)		2,500	20,000
BGT SC-1	2/8/17	0.5	0.0	69.3	80
DG1 3C-1	2/0/1/	0.5	0.0	05.5	

Table 2. Soil Laboratory Analytical Results Huerfano Unit NP 270 BGT Closure, February 2017

Sample ID	Date Sampled	Depth (ft)	Benzene (8021) (mg/kg)	Total BTEX (8021) (mg/kg)	TPH – GRO (8015) (mg/kg)	TPH – DRO (8015) (mg/kg	TPH – MRO (8015) (mg/kg	TPH (418.1) (mg/kg)	Chlorides (300.0) (mg/kg)
	NMOCD Acti 19.15.17.13		10	50		1,000		2,500	20,000
BGT SC-1	2/8/17	0.5	<0.015	<0.132	<2.9	18	54	65	<30

3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13 Table 1. Field TPH concentrations in BGT SC-1 were below the NMOCD action level of 2,500 mg/kg, with a concentration reported at 69.3 mg/kg. Benzene and total BTEX concentrations were below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. Laboratory analytical results reported TPH concentrations in BGT SC-1 (per USEPA Methods 8015 and 418.1) as below the NMOCD action levels. Chloride concentrations in BGT SC-1 were below the NMOCD action level of 20,000 mg/kg for depths to groundwater greater than 100 feet. Based on field sampling and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at Huerfano Unit NP 270.

Lisa Hunter Huerfano Unit NP 270 BGT Closure Report February 15, 2017 Page 4 of 4

If you have any questions about this report or site conditions, please do not hesitate to contact Elizabeth McNally at (505) 564-2281.

Sincerely,

Victoria Giannola Project Manager

Nution Scanole

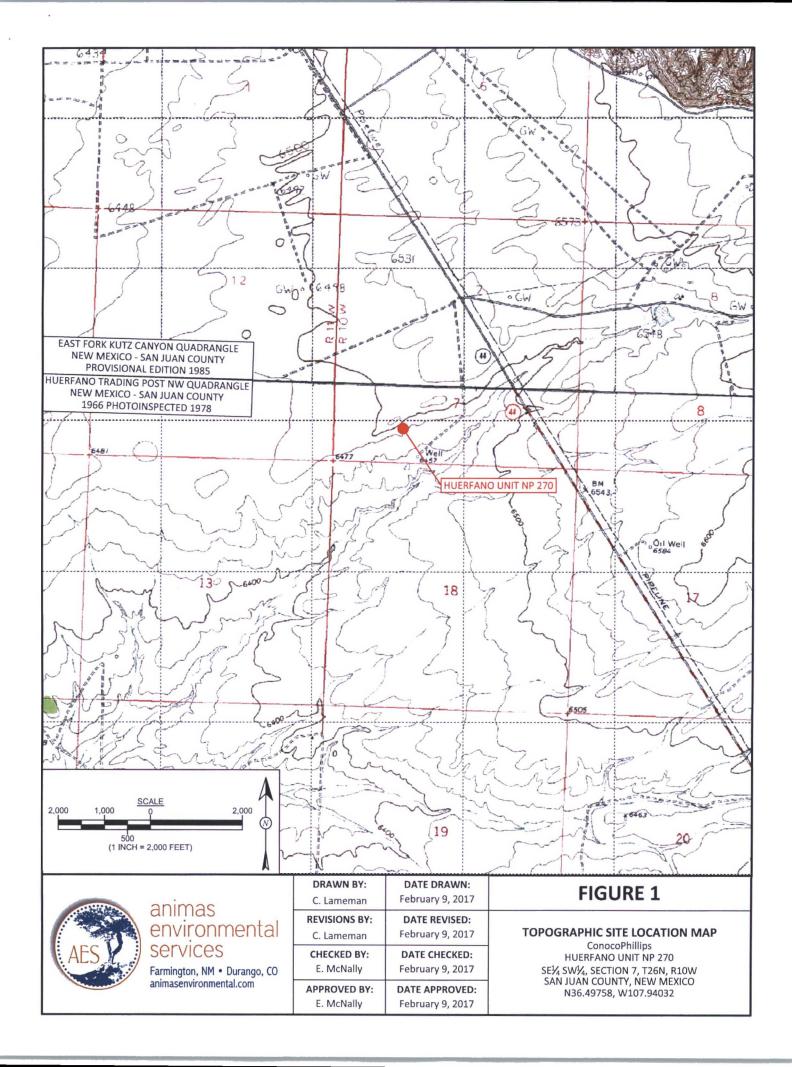
Elizabeth McNally, P.E.

Elizabeth v MeNelly

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, February 2017 AES Field Sampling Report 020817 Hall Analytical Report 1702432

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 aes server client projects dropbox\2017 Client Projects\ConocoPhillips\Huerfano Unit NP 270\COPC Huerfano Unit NP 270 BGT 021517 VG EM.docx



LEGEND

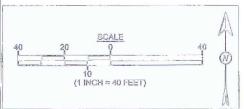
SAMPLE LOCATION

	Fle	ld Somplin	ig Aesuk	ig.	
Semple ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
REAG	OCD ACTH	on level	ver.	2,500	20,000
BGT SC-1	2/8/17	0.5	0.0	69.3	80

			Lob	orweory Am	olytical Resi	alies			
Sample ID	Date	Desth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPM- GRO (mg/kg)	TPM- DRO (ng/kg)	TPM- SERO (mg/kg)	TPH 418.1 (mg/kg)	Chlorides (mg/kg)
Į.	NIMOCO AC	tion level	10	50		1,000		2,500	20,000
BGT SC-1	2/8/17	0.5	<0.015	< 0.132	<2.9	18	54	65	<30



HUERFANO UNIT NP 270 WELL MONUMENT-



AERIAL SOURCE: @ 2017 GOOGLE EARTH PRO, AERIAL DATE: MARCH 15, 2015.



animas environmental services

Farmington, NM • Durango, CO animasenvironmental.com

DRAWN BV:	DATE DRAWN:
C. Lameman	February 9, 2017
REVISIOMS BY:	DAVE REVISED:
S. Glasses	February 15, 2017
CHECKED BY:	DATE CHECKED:
E. McNally	February 15, 2017
APPROVED BY:	DATE APPROVED:
E. McNally	February 15, 2017

AERIAL SITE MAP BELOW GRADE TANK OLOSURE FEBRUARY 2017 Conocophilips HUERFANG UNIT NP 270 SEX SWW, SECTION 7, T26N, RIOW SAN JUAN COUNTY, NEW MEXICO N36.49758, W107.34032

AES Field Sampling Report



Client: ConocoPhillips

Project Location: Huerfano Unit NP 270

Date: 2/8/2017

Matrix: Soil

					Field		Field TPH			TPH
	Collection	Collection	Sample	OVM	Chloride	Field TPH*	Analysis	TPH PQL		Analysts
Sample ID	Date	Time	Location	(ppm)	(mg/kg)	(mg/kg)	Time	(mg/kg)	DF	Initials
BGT SC-1	2/8/2017	10:25	Composite	0.0	80	69.3	11:45	20.0	1	CL

DF

Dilution Factor

NA

Not Analyzed

PQL

Practical Quantitation Limit

Field Chloride - Quantab Chloride Titrators or Drop Count

Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

^{*}Field TPH concentrations recorded may be below PQL.



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

February 14, 2017

Corwin Lameman Animas Environmental 604 Pinon Street Farmington, NM 87401 TEL: (505) 564-2281

FAX

RE: COPC Huerfano Unit NP 270

OrderNo.: 1702432

Dear Corwin Lameman:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/9/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1702432

Date Reported: 2/14/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: BGT SC-1

Project: COPC Huerfano Unit NP 270

Collection Date: 2/8/2017 10:25:00 AM

Lab ID: 1702432-001

Matrix: MEOH (SOIL) Received Date: 2/9/2017 8:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH					Analyst:	MAB
Petroleum Hydrocarbons, TR	65	18	mg/Kg	1	2/10/2017	30137
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	ND	30	mg/Kg	20	2/13/2017 12:08:39 PM	30199
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	MAB
Diesel Range Organics (DRO)	18	9.8	mg/Kg	1	2/10/2017 7:39:18 PM	30132
Motor Oil Range Organics (MRO)	54	49	mg/Kg	1	2/10/2017 7:39:18 PM	30132
Surr: DNOP	87.0	70-130	%Rec	1	2/10/2017 7:39:18 PM	30132
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	2/9/2017 4:35:52 PM	30119
Surr: BFB	88.9	54-150	%Rec	1	2/9/2017 4:35:52 PM	30119
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.015	mg/Kg	1	2/9/2017 4:35:52 PM	30119
Toluene	ND	0.029	mg/Kg	1	2/9/2017 4:35:52 PM	30119
Ethylbenzene	ND	0.029	mg/Kg	1	2/9/2017 4:35:52 PM	30119
Xylenes, Total	ND	0.059	mg/Kg	1	2/9/2017 4:35:52 PM	30119
Surr: 4-Bromofluorobenzene	102	80-120	%Rec	1	2/9/2017 4:35:52 PM	30119

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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1702432

14-Feb-17

Client:

Animas Environmental

Project:

COPC Huerfano Unit NP 270

Result

Sample ID MB-30199

SampType: mblk

Client ID:

PBS

Batch ID: 30199

PQL

RunNo: 40683

TestCode: EPA Method 300.0: Anions

Prep Date: 2/13/2017

Units: mg/Kg

Analyte

Analysis Date: 2/13/2017

SeqNo: 1274855

%RPD

RPDLimit

Qual

Chloride

ND 1.5

Sample ID LCS-30199

SampType: Ics

Batch ID: 30199

PQL

TestCode: EPA Method 300.0: Anions

HighLimit

RunNo: 40683

Client ID: Prep Date:

2/13/2017

LCSS

Analysis Date: 2/13/2017

SeqNo: 1274856

Units: mg/Kg

HighLimit

%RPD

Analyte

SPK value SPK Ref Val

%REC

LowLimit 90

RPDLimit

14

15.00

94.3

Qual

Chloride

1.5

0

SPK value SPK Ref Val %REC LowLimit

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

% 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 J

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#:

1702432 14-Feb-17

Client:

Animas Environmental

Project:

Analyte

COPC Huerfano Unit NP 270

Result

Sample ID MB-30137

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID:

PBS

Batch ID: 30137 Analysis Date: 2/10/2017

PQL

RunNo: 40639

SeqNo: 1273468

HighLimit

Units: mg/Kg

%RPD **RPDLimit**

Petroleum Hydrocarbons, TR

Sample ID LCS-30137

Prep Date: 2/9/2017

ND

SampType: LCS

TestCode: EPA Method 418.1: TPH

Client ID: LCSS Batch ID: 30137

RunNo: 40639

Prep Date: 2/9/2017 Analysis Date: 2/10/2017

SeqNo: 1273469

Units: mg/Kg

Analyte

SPK value SPK Ref Val %REC LowLimit

Prep Date:

Result PQL

SPK value SPK Ref Val %REC 0

LowLimit

RPDLimit

110

100

100.0

107

61.7

HighLimit %RPD 138

Qual

Petroleum Hydrocarbons, TR

Sample ID LCSD-30137

SampType: LCSD Batch ID: 30137

20

TestCode: EPA Method 418.1: TPH

RunNo: 40639

Units: mg/Kg

Qual

Analyte Petroleum Hydrocarbons, TR

Client ID: LCSS02

2/9/2017

Analysis Date: 2/10/2017

SPK value SPK Ref Val %REC LowLimit 100.0

0

101

SeqNo: 1273470

HighLimit %RPD

5.10

RPDLimit

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

RPD outside accepted recovery limits R

% Recovery outside of range due to dilution or matrix

В Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Page 3 of 6

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1702432

14-Feb-17

Client:

Animas Environmental

Project:

COPC Huerfano Unit NP 270

Sample ID MB-30132	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 30132		RunNo: 40642							
Prep Date: 2/9/2017	Analysis Dat	e: 2/ 1	10/2017	SeqNo: 12734		273486	73486 Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		90.9	70	130			
Sample ID LCS-30132	SampType: LCS TestCode: EPA N						8015M/D: Die	esel Range	e Organics	
Client ID: LCSS Batch ID: 30132			RunNo: 40642							
Prep Date: 2/9/2017	Analysis Date: 2/10/2017			S	eqNo: 1	273579	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.9	63.8	116			
Surr: DNOP	4.5		5.000		90.3	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Page 4 of 6

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1702432

14-Feb-17

Client:

Animas Environmental

Project:

Analyte

COPC Huerfano Unit NP 270

Sample ID MB-30119

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID:

Batch ID: 30119

RunNo: 40618

Prep Date: 2/8/2017 Analysis Date: 2/9/2017

890

SeqNo: 1273205

Units: mg/Kg

HighLimit

%RPD **RPDLimit**

Qual

Gasoline Range Organics (GRO)

Result **PQL** ND 5.0

1000

SPK value SPK Ref Val %REC

54

LowLimit

LowLimit

Surr: BFB

88.7

150

Sample ID LCS-30119

SampType: LCS

RunNo: 40618

TestCode: EPA Method 8015D: Gasoline Range

Client ID: Prep Date: 2/8/2017

LCSS

Batch ID: 30119

Analysis Date: 2/9/2017

PQL

SeqNo: 1273206

Units: mg/Kg

SPK value SPK Ref Val 25.00

103

76.4

%RPD

RPDLimit Qual

Gasoline Range Organics (GRO) Surr: BFB

970

Result

5.0 1000

96.5

%REC

54

HighLimit 150

Qualifiers:

R

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits J
- P Sample pH Not In Range
- RL Reporting Detection Limit Sample container temperature is out of limit as specified
- Page 5 of 6

Hall Environmental Analysis Laboratory, Inc.

WO#:

1702432

14-Feb-17

Client:

Animas Environmental

Project:

COPC Huerfano Unit NP 270

Sample ID MB-30119	Samp	уре: МЕ	BLK	Tes	tCode: E					
Client ID: PBS Batch ID: 30119			RunNo: 40618							
Prep Date: 2/8/2017	Analysis Date: 2/9/2017			5	SeqNo: 1	273222	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			
Sample ID LCS-30119	SampT	SampType: LCS TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batcl	n ID: 30	119	RunNo: 40618						
Prep Date: 2/8/2017	Analysis E	Analysis Date: 2/9/2017			SeqNo: 1	273223	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.1	75.2	115			
Toluene	1.0	0.050	1.000	0	102	80.7	112			
Ethylbenzene	1.0	0.050	1.000	0	103	78.9	117			
Xylenes, Total	3.1	0.10	3.000	0	103	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

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

ion range

Page 6 of 6



