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 87:	505

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

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office. For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, o	or
Proposed Alternative Method Permit or Close	sure Plan Application
Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed a Modification to an existing permit/or registration Closure plan only submitted for an existing permit	alternative method n nitted or non-permitted pit, below-grade tank,
or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual plate Please be advised that approval of this request does not relieve the operator of liability should operation environment. Nor does approval relieve the operator of its responsibility to comply with any other appl	<i>t, below-grade tank or alternative request</i> s result in pollution of surface water, ground water or the icable governmental authority's rules, regulations or ordinances.
1.	OIL CONS. DIV DIST 3
Operator: <u>ConocoPhillips Company</u> OGRID #: <u>217817</u>	
Address: PO BOX 4289, Farmington, NM 87499	JAN 09 2017
Facility or well name: <u>PHILLIPS 1E</u>	
API Number:	
U/L or Qtr/QtrB Section16 Township28N Range11V	N County: <u>San Juan</u>
Center of Proposed Design: Latitude <u>36.66742 N</u> Longitude <u>-108.00551 W</u>	NAD: 🗌 1927 🖾 1983
Surface Owner: 🛛 Federal 🗌 State 🗌 Private 🗌 Tribal Trust or Indian Allotment	
Permanent Emergency Cavitation P&A Multi-Well Fluid Management Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC String-Reinforced Liner Seams: Welded Factory OtherVolume:b	Low Chloride Drilling Fluid yes no Other
3.	
Below-grade tank: Subsection I of 19.15.17.11 NMAC	
Volume:bbl Type of fluid:Produced Water	
Tank Construction material: <u>Metal</u>	
Secondary containment with leak detection 🛛 Visible sidewalls, liner, 6-inch lift and aut	tomatic overflow shut-off
□ Visible sidewalls and liner □ Visible sidewalls only □ Other	
Liner type: Thicknessmil	ECIFIED
4	
Alternative Method:	
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe E	nvironmental Bureau office for consideration of approval.
5.	
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and	l below-grade tanks)
Chain link, six feet in height, two strands of barbed wire at top (<i>Required if located within 1</i> institution or church)	1000 feet of a permanent residence, school, hospital,
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify	

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

Screen Netting Other

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

Signs: Subsection C of 19.15.17.11 NMAC

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

Signed in compliance with 19.15.16.8 NMAC

Variances and Exceptions:

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

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

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

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

General siting

or the stand	
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
 Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) Written confirmation or verification from the municipality; Written approval obtained from the municipality 	🗌 Yes 🗌 No
 Within the area overlying a subsurface mine. (Does not apply to below grade tanks) Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division 	🗌 Yes 🗌 No
 Within an unstable area. (Does not apply to below grade tanks) Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society: Topographic map 	Yes No
 Within a 100-year floodplain. (Does not apply to below grade tanks) FEMA map 	🗌 Yes 🗌 No
Below Grade Tanks	
 Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🛛 No
 Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site 	🗌 Yes 🛛 No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
 Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) Topographic map; Visual inspection (certification) of the proposed site 	🗌 Yes 🗌 No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial 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.	🗌 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	
 ake (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	
 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	MAC cuments are
attached.	
 Hydrogeologic Report (Berow-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 	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 19.1 and 19.15.17.13 NMAC	15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	
<u>Multi-Well Fluid Management Pit Checklist</u> : Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.	uments are
 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	15.17.9 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 	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H 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 19.15.17.9 NMAC and 19.15.17.13 NMAC	documents are
^{13.} <u>Proposed Closure</u> : 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 Onesite Trench Burial Onesite Trench Burial	luid Management Pit
 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 	unutneu io ine
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.	rce material are Please refer to
 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	
Form C-144 Oil Conservation Division Page 4 of 4	5
Tage 4 01	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	
- written commination of vermeation nom the municipanty, written approval obtained nom the municipanty	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 Blan Checklists (10.15.17.12 NMAC) Instructions: Each of the following items must be attached to the closure of	an Plaase indicate
by a check mark in the box, that the documents are attached.	.11 NMAC 15.17.11 NMAC tot be achieved)
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:	
e-mail address: Telephone:	
e-mail address: Telephone: <u>OCD Approva</u> l: Permit Application (including closure plan) X Closure Plan (only) OCD Conditions (see attachment) OCD Representative Signature: Approval Date:	12017
e-mail address: Telephone:	12017
e-mail address: Telephone: 0CD Approval: Permit Application (including closure plan) Closure Plan (only). OCD Conditions (see attachment) 0CD Representative Signature: Approval Date:	the closure report.
e-mail address: Telephone:	the closure report.
e-mail address:	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)	Crystal Walker	Title: <u> Regulatory Coordinator</u>	
Signature:	Sphil W.	ller	Date: 1/5/17
e-mail address:	crystal.walker@cop.com	Telephone: (505) 326-9837	

ConocoPhillips Company San Juan Basin Below Grade Tank Closure Report

Lease Name: Phillips 1E API No.: 30-045-23993

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:

 COPC shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do 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, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, COPC will file the C144 Closure Report as required.

The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.

 COPC shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.

3. COPC will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

The below-grade tank was disposed of in a division-approved manner.

4. If there is any on-site equipment associated with a below-grade tank, then COPC shall remove the equipment, unless the equipment is required for some other purpose.

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

5. COPC will test the soils beneath the below-grade tank to determine whether a release has occurred. COPC shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. COPC shall notify the division of its results on form C-141.

 Components
 Tests Method
 Limit (mg/kg)

 Benzene
 EPA SW-846 8021B or 8260B
 0.2

 BTEX
 EPA SW-846 8021B or 8260B
 50

 TPH
 EPA SW-846 418.1
 100

 Chlorides
 EPA 300.0
 250

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

6. If COPC or the division determines that a release has occurred, then COPC shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

A release was not determined for the above referenced well.

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then COPC shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.

- Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
 - i. Operator's name
 - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

Notification is attached.

9. The surface owner shall be notified of COPC's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

The closure process notification to the landowner was sent via email. (See Attached) (Well located on Federal Land, certified mail is not required for Federal Land per BLM/OCD MOU.)

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

11. COPC shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. COPC will repeat seeding or planting will be continued until successful vegetative growth occurs.

Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

- 13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
 - Soil Backfilling and Cover Installation (See Report)

>

- Re-vegetation application rates and seeding techniques (See Report)
- Photo documentation of the site reclamation (Included as an attachment)
- Confirmation Sampling Results (Included as an attachment)
- Proof of closure notice (Included as an attachment)

Walker, Crystal

.

From:	Brock, Christine
Sent:	Monday, December 12, 2016 2:03 PM
To:	Cory Smith (cory.smith@state.nm.us); Vanessa Field (Vanessa.Fields@state.nm.us);
	'brandon.powell@state.nm.us'
Cc:	'mjoe@blm.gov'; Whitney Thomas - BLM (l1thomas@blm.gov); Walker, Crystal; Busse,
	Dollie L; Payne, Wendy F; Trujillo, Fasho D
Subject:	Phillips 1E - 72 Hour BGT Closure Notification

All,

The BGT closure for the subject well has been scheduled for Thursday December 15th at approximately 9:00 am.

Phillips 1E – BLM/BLM

Twin: n/a 790' FNL & 1530' FEL Sec. 16, T28N, R11W Unit Letter " B " Lease # NM-013365 Latitude: 36.667221 (NAD 27) Longitude: -108.0048900 (NAD 27) Elevation: 5517' Pipeline: COP (has been stripped) API #03-045-23993

Thank you,

Christine Brock Regulatory Specialist ConocoPhillips - RBU – San Juan Asset

T: 505-326-9775 | F: 505-599-4086 | M: 505-320-8485 | christine.brock@cop.com

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

1220 S. St. Fran	cis Dr., Santa	a Fe, NM 87505	5	S	anta Fe	e, NM 875	505					
			Rel	ease Notifi	catior	and Co	orrective A	ction	l			
						OPERA	TOR		Initia	al Report	\boxtimes	Final Repor
Name of Co	ompany C	onocoPhillip	os Compa	iny		Contact Cr	ystal Walker					
Address 34	01 East 30	th St, Farmin	gton, NM	1		Telephone	No.(505) 326-98	837				
Facility Nat	me: Phillip	os 1E				Facility Typ	be: Gas Well					
Surface Ow	ner BLM			Mineral	Owner 1	BLM			API No	30-045-2	3993	
Surface Ow	ner beivi			Inneral					7111110	. 50 015 2		
Unit Letter	Section	Township	Range	Eeet from the	North/	South Line	LEASE Feet from the	Fast/	Vest Line	County		
B	16	28N	11W	790	l	North	1530		East	San Juan		
			Lati	tude 36.66742	2 L	ongitude	-108.00551					
				NAT		OF REL	FASE					
Type of Rele	ase				IUKE	Volume of	f Release		Volume I	Recovered		
Source of Release						Date and I	Hour of Occurrent	ce	Date and	Hour of Dis	covery	
Was Immedi	ate Notice (Given?				IFVES TO	Whom?					
was minicul			Yes [] No 🛛 Not R	Required	II 125, IV	, whom:					
By Whom?						Date and H	Hour					
Was a Water	course Read	ched?				If YES, V	olume Impacting	the Wate	ercourse.			
	🗌 Yes 🖾 No											
Describe Cat No release w	use of Probl v as encount	em and Reme tered during	dial Actio the BGT	n Taken.* Closure.								
Describe Are N/A	a Affected	and Cleanup A	Action Tal	ken.*								
I hereby cert regulations a public health should their or the enviro federal, state	ify that the i ll operators or the envi operations h nment. In a , or local lav	information g are required t ronment. The nave failed to addition, NMC ws and/or regu	iven above o report and acceptance adequately OCD accept alations.	e is true and comp nd/or file certain ce of a C-141 rep v investigate and otance of a C-141	plete to the release no port by the remediate report de	he best of my otifications a e NMOCD m e contaminat oes not reliev	v knowledge and u nd perform corre- narked as "Final R ion that pose a the ve the operator of	understan ctive act Report" d reat to gr respons	nd that purs ions for rel oes not rel round water bility for c	suant to NM eases which ieve the ope r, surface wa ompliance v	OCD r may en rator of ater, hu with any	ules and ndanger f liability man health y other
Signature:	~	101	F		OIL CONSERVATION DIVISION							
Printed Nam	e: Crystal V	Walker	na		Approved by Environmental Specialist:							
Title: Regul	atory Coord	linator				Approval Da	te:	1	Expiration	Date:		
E-mail Addr	ess: cr	ystal.walker@	cop.com			Conditions o	f Approval:			Attached		
Date:	11+	Phone: (505	5) 326-983	37								

* Attach Additional Sheets If Necessary

Animas Environmental Services, LLC



December 28, 2016

Robert Spearman ConocoPhillips San Juan Business Unit (505) 320-3045

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

RE: Below Grade Tank Closure Report Phillips 1E San Juan County, New Mexico

Dear Mr. Spearman:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (COPC) Phillips 1E, located in San Juan County, New Mexico. Tank removal was completed by COPC contractors on December 15, 2016, while AES was on site.

1.0 Site Information

1.1 Location

Site Name – Phillips 1E Legal Description – NW¼ NE¼, Section 16, T28N, R11W, San Juan County, New Mexico Well Latitude/Longitude – N36.66742 and W108.00520, respectively BGT Latitude/Longitude – N36.66742 and W108.00551, respectively Land Jurisdiction – Bureau of Land Management (BLM) Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, December 2016

1.2 NMOCD Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), the location was given a ranking score of 40 based on the following factors: 604 W. Piñon St. Farmington, NM 87401 505-564-2281

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

www.animasenvironmental.com

Robert Spearman Phillips 1E BGT Closure Report December 28, 2016 Page 2 of 4

- Depth to Groundwater: A State of New Mexico Energy and Minerals Resources Department Form C-144 completed December 22, 2008, reported the depth to groundwater at 45 feet below ground surface (bgs). (20 points)
- Wellhead Protection Area: The tank location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: An unnamed wash which discharges to Kutz Canyon Wash is located approximately 90 feet northwest of the location. (20 points)

1.3 BGT Closure Assessment

AES was initially contacted by Robert Spearman of COPC on December 12, 2016, and on December 15, 2016, Corwin Lameman of AES mobilized to the location. AES personnel collected one 5-point soil sample 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 VOC vapors with a photoionization 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-1 was laboratory analyzed for:

Robert Spearman Phillips 1E BGT Closure Report December 28, 2016 Page 3 of 4

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- Gasoline Range, Diesel Range, and Motor Oil Range Organics (GRO, DRO, and 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 Phillins 1F BGT Closure, December 2016

	rimps it bor closure, becember 2010									
Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)					
NMOCD Action L	evel (NMAC 19.	15.17.13E)		100	250					
BGT SC-1	12/15/16	0.5	0.0	<20.0	60					

Table 2. Soil Laboratory Analytical Results Phillips 1E BGT Closure, December 2016

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH TPH TPH Total GRO DRO MRO BTEX (8015) (8015) (8015) (mg/kg) (mg/kg) (mg/kg) (mg/kg)		TPH MRO (8015) (mg/kg	TPH (418.1) (mg/kg)	Chlorides (mg/kg)
ID Sampled (ft) (mg NMOCD Action Level (NMAC 19.15.17.13E)		0.2	50		100		100	250	
BGT SC-1	12/15/16	0.5	<0.025	<0.225	<5.0	14	<49	<20	<30

Robert Spearman Phillips 1E BGT Closure Report December 28, 2016 Page 4 of 4

3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations in BGT SC-1 were below the NMOCD action level of 100 mg/kg, with a concentration reported at less than 20.0 mg/kg. Benzene and total BTEX concentrations were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Laboratory analytical results reported TPH concentrations (per USEPA Methods 418.1 and 8015) in BGT SC-1 as below the NMOCD action level of 250 mg/kg. Based on field sampling and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at Phillips 1E.

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

Sincerely,

Nutino Scanole

Victoria Giannola Project Manager

Elizabeth V MeNdly

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, December 2016 AES Field Sampling Report 121516 Hall Analytical Report 1612884

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	BGT SC-1	12/15/16	0.5	<0.025	<0.225	<5.0	14	<49	<20	<30		
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AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: Phillips 1E

Date: 12/15/2016

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
BGT SC-1	12/15/2016	9:53	Composite	0.0	60	<20.0	10:10	20.0	1	CL

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Cin him

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 20, 2016

Elizabeth McNally Animas Environmental 604 Pinon Street Farmington, NM 87401 TEL: (505) 564-2281 FAX

RE: Copc Phillips 1E

OrderNo.: 1612884

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/16/2016 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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1612884

Date Reported: 12/20/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Animas Environmental
 Client Sample ID: BGT SC-1

 Project: Copc Phillips 1E
 Collection Date: 12/15/2016 9:53:00 AM

 Lab ID: 1612884-001
 Matrix: SOIL
 Received Date: 12/16/2016 7:15:00 AM

 Analyses
 Result
 PQL Qual Units
 DF Date Analyzed
 Batch

Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH					Analyst:	MAB
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	12/19/2016	29239
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	12/19/2016 12:09:24 PM	1 29269
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst:	том
Diesel Range Organics (DRO)	14	9.8	mg/Kg	1	12/19/2016 3:30:42 PM	29242
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	12/19/2016 3:30:42 PM	29242
Surr: DNOP	80.5	70-130	%Rec	1	12/19/2016 3:30:42 PM	29242
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	12/16/2016 5:58:19 PM	29188
Surr: BFB	88.1	68.3-144	%Rec	1	12/16/2016 5:58:19 PM	29188
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.025	mg/Kg	1	12/16/2016 5:58:19 PM	29188
Toluene	ND	0.050	mg/Kg	1	12/16/2016 5:58:19 PM	29188
Ethylbenzene	ND	0.050	mg/Kg	1	12/16/2016 5:58:19 PM	29188
Xylenes, Total	ND	0.10	mg/Kg	1	12/16/2016 5:58:19 PM	29188
Surr: 4-Bromofluorobenzene	94.3	80-120	%Rec	1	12/16/2016 5:58:19 PM	29188

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank	
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of	7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	'
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	L

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

.

WO#: 1612884 20-Dec-16

Client: Project:	Anima Cope I	s Environmental Phillips 1E					
Sample ID	MB-29269	SampType: MBLK	Tes	tCode: EPA Method	300.0: Anions		
Client ID:	PBS	Batch ID: 29269	F	RunNo: 39495			
Prep Date:	12/19/2016	Analysis Date: 12/19/2	016 S	SeqNo: 1236684	Units: mg/Kg		
Analyte		Result PQL SPK	value SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Chloride		ND 1.5					
Sample ID	LCS-29269	SampType: LCS	Tes	tCode: EPA Method	300.0: Anions		
Client ID:	LCSS	Batch ID: 29269	F	RunNo: 39495			
Prep Date:	12/19/2016	Analysis Date: 12/19/2	016 5	eqNo: 1236685	Units: mg/Kg		
Analyte		Result PQL SPK	value SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual
Chloride		14 1.5	15.00 0	92.9 90	110		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- 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 2 of 7

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1612884

20-Dec-16

Client: Project:	Animas Cope P	Environmental								
	coptr									
Sample ID	MB-29239	SampType	MBLK	Tes	tCode: E	PA Method	418.1: TPH			
Client ID:	PBS	Batch ID:	29239	F	RunNo: 3	9496				
Prep Date:	12/16/2016	Analysis Date:	12/19/2016	:	SeqNo: 1	236737	Units: mg/h	٢g		
Analyte		Result P	QL SPK valu	e SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hyd	drocarbons, TR	ND	20							
Sample ID	LCS-29239	SampType	LCS	Tes	tCode: E	PA Method	418.1: TPH			
Client ID:	LCSS	Batch ID:	29239	F	RunNo: 3	9496				
Prep Date:	12/16/2016	Analysis Date:	12/19/2016		SeqNo: 1	236738	Units: mg/h	٢g		
Analyte		Result P	QL SPK valu	e SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hyd	Irocarbons, TR	120	20 100.	0 0	123	80.7	121			S
Sample ID	LCSD-29239	SampType	LCSD	Tes	tCode: E	PA Method	418.1: TPH			
Client ID:	LCSS02	Batch ID:	29239	F	RunNo: 3	9496				
Prep Date:	12/16/2016	Analysis Date:	12/19/2016	5	SeqNo: 1	236739	Units: mg/k	٢g		
Analyte		Result P	QL SPK valu	e SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hyd	rocarbons, TR	120	20 100.	0 0	123	80.7	121	0	20	S

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

Page 3 of 7

Animas Environmental Copc Phillips 1E

Client:

Project:

Client ID:

Sample ID LCS-29257

Prep Date: 12/19/2016

LCSS

SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Batch ID: 29257 RunNo: 39484 Analysis Date: 12/19/2016 SeqNo: 1236591 Units: %Rec

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.9	70	130			
Sample ID MB-29257	SampTy	pe: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 29	257	F	RunNo: 3	9484				
Prep Date: 12/19/2016	Analysis Da	ate: 12	2/19/2016	S	SeqNo: 1	236592	Units: %Re	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.2		10.00		82.3	70	130			
Sample ID LCS-29242	SampTy	pe: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch	ID: 29	242	R	unNo: 3	9484		-		
Prep Date: 12/16/2016	Analysis Da	ate: 12	2/19/2016	S	eqNo: 1	236862	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.1	63.8	116			
Surr: DNOP	4.2		5.000		83.6	70	130			
Sample ID MB-29242	SampTy	pe: ME	BLK	Test	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 29	242	R	unNo: 3	9484				
Prep Date: 12/16/2016	Analysis Da	ate: 12	2/19/2016	S	eqNo: 12	236863	Units: mg/K	g		
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)										
motor on runge organice (mrce)	ND	50								
Sur: DNOP	ND 7.7	50	10.00		76.8	70	130			
Surr: DNOP	ND 7.7 SampTy	50 vpe: MS	10.00	Tesi	76.8 Code: EF	70 PA Method	130 8015M/D: Die	esel Range	e Organics	
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1	ND 7.7 SampTy Batch	50 vpe: MS ID: 29	10.00 3 242	Test	76.8 Code: EF	70 PA Method 9484	130 8015M/D: Die	esel Range	e Organics	
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016	ND 7.7 SampTy Batch Analysis Da	50 ype: MS ID: 29 ate: 12	10.00 5 242 2/19/2016	Tesi R S	76.8 Code: EF	70 PA Method 9484 237170	130 8015M/D: Die Units: mg/K	esel Range	e Organics	
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte	ND 7.7 SampTy Batch Analysis Da Result	50 vpe: MS ID: 29 ate: 12 PQL	10.00 3 242 2/19/2016 SPK value	Tesi R S SPK Ref Val	76.8 Code: EF CunNo: 39 GeqNo: 12 %REC	70 PA Method 9484 237170 LowLimit	130 8015M/D: Die Units: mg/K HighLimit	esel Range	e Organics	Qual
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte Diesel Range Organics (DRO)	ND 7.7 Batch Analysis Da Result 51	50 rpe: MS ID: 29 ate: 12 PQL 9.8	10.00 5 242 2/19/2016 SPK value 48.92	Test R S SPK Ref Val 14.26	76.8 Code: EF RunNo: 39 GeqNo: 12 %REC 76.0	70 PA Method 9484 237170 LowLimit 51.6	130 8015M/D: Die Units: mg/K HighLimit 130	esel Rango g %RPD	e Organics	Qual
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte Diesel Range Organics (DRO) Surr: DNOP	ND 7.7 SampTy Batch Analysis Da Result 51 4.3	50 rpe: MS ID: 29 ate: 12 PQL 9.8	10.00 5 242 2/19/2016 SPK value 48.92 4.892	Test R S SPK Ref Val 14.26	76.8 Code: EF RunNo: 39 GeqNo: 12 %REC 76.0 87.9	70 PA Method 9484 237170 LowLimit 51.6 70	130 8015M/D: Die Units: mg/K HighLimit 130 130	esel Rango g %RPD	e Organics RPDLimit	Qual
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1612884-001AMS	ND 7.7 SampTy Batch Analysis Da Result 51 4.3 D SampTy	50 rpe: MS ID: 29: ate: 12 PQL 9.8	10.00 5 242 2/19/2016 SPK value 48.92 4.892 5D	Test R SPK Ref Val 14.26 Test	76.8 Code: EF SunNo: 39 SeqNo: 12 %REC 76.0 87.9 Code: EF	70 PA Method 9484 237170 LowLimit 51.6 70 PA Method	130 8015M/D: Die Units: mg/K HighLimit 130 130 8015M/D: Die	sel Rango %RPD sel Rango	PDLimit	Qual
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1	ND 7.7 SampTy Batch Analysis Da Result 51 4.3 D SampTy Batch	50 rpe: MS ID: 29 ate: 12 9.8 rpe: MS ID: 29	10.00 242 2/19/2016 SPK value 48.92 4.892 35D 242	Tesi R S SPK Ref Val 14.26 Tesi R	76.8 Code: EF SeqNo: 12 %REC 76.0 87.9 Code: EF	70 PA Method 9484 237170 LowLimit 51.6 70 PA Method 9484	130 8015M/D: Die Units: mg/K HighLimit 130 130 8015M/D: Die	sel Range g %RPD esel Range	e Organics RPDLimit	Qual
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016	ND 7.7 SampTy Batch Analysis Da Result 51 4.3 D SampTy Batch Analysis Da	50 rpe: MS ID: 29 ate: 12 PQL 9.8 rpe: MS ID: 29 ate: 12	10.00 3 242 2/19/2016 SPK value 48.92 4.892 35D 242 2/19/2016	Test R SPK Ref Val 14.26 Test R S	76.8 Code: EF unNo: 39 GeqNo: 12 %REC 76.0 87.9 Code: EF unNo: 39 GeqNo: 12	70 PA Method 9484 237170 LowLimit 51.6 70 PA Method 9484 237171	130 8015M/D: Die Units: mg/K HighLimit 130 130 8015M/D: Die Units: mg/K	sel Range %RPD sel Range	e Organics RPDLimit	Qual
Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte Diesel Range Organics (DRO) Surr: DNOP Sample ID 1612884-001AMS Client ID: BGT SC-1 Prep Date: 12/16/2016 Analyte	ND 7.7 SampTy Batch Analysis Da Result 4.3 D SampTy Batch Analysis Da Result	50 rpe: MS ID: 29: ate: 12 9.8 rpe: MS ID: 29: ate: 12 PQL PQL	10.00 242 2/19/2016 SPK value 48.92 4.892 242 2/19/2016 SPK value	Tesi R SPK Ref Val 14.26 Tesi R SPK Ref Val	76.8 Code: EF SeqNo: 12 %REC 76.0 87.9 Code: EF SunNo: 39 SeqNo: 12 %REC	70 PA Method 9484 237170 LowLimit 51.6 70 PA Method 9484 237171 LowLimit	130 8015M/D: Die Units: mg/K HighLimit 130 130 8015M/D: Die Units: mg/K HighLimit	esel Rango %RPD esel Rango %RPD	e Organics RPDLimit	Qual

Qualifiers:

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

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

WO#: 1612884

20-Dec-16

Hall Environmental Analysis Laboratory, Inc.

Client:Animas EnvironmentalProject:Copc Phillips 1E

Sample ID	1612884-001AMSE	SampTy	be: M	SD	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	BGT SC-1	Batch	D: 29	242	R	RunNo: 3	9484				
Prep Date:	12/16/2016	Analysis Da	e: 1	2/19/2016	S	SeqNo: 1	237171	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.1		4.643		87.5	70	130	0	0	

Qualifiers:

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

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WO#: 1612884 20-Dec-16

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1612884

20-Dec-16

Client: Animas Project: Copc Pl	Environmental hillips 1E								
Sample ID MB-29188	SampType:	MBLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch ID:	29188	F	RunNo: 3	9451				
Prep Date: 12/14/2016	Analysis Date:	12/16/2016	S	SeqNo: 1	235878	Units: mg/M	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5	.0							
Surr: BFB	880	1000		88.1	68.3	144			
Sample ID LCS-29188	SampType:	LCS	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID: LCSS	Batch ID:	29188	R	unNo: 39	9451				
Prep Date: 12/14/2016	Analysis Date:	12/16/2016	S	eqNo: 12	235879	Units: mg/k	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25 5	.0 25.00	0	100	74.6	123			
Surr: BFB	960	1000		95.8	68.3	144			

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

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i limits

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Animas H	Environmen	Ital								
Project:	Copc Phi	illips 1E									
Sample ID	MB-29188	SampTy	ype: ME	3LK	Tes	tCode: El	PA Method	8021B: Volati	iles		
Client ID:	PBS	Batch	ID: 29	188	F	unNo: 3	9451				
Prep Date:	12/14/2016	Analysis Da	ate: 12	2/16/2016	5	eqNo: 1	235892	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-Brom	ofluorobenzene	0.96		1.000		96.4	80	120			
Sample ID	LCS-29188	SampTy	pe: LC	s	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID:	LCSS	Batch	ID: 29	188	F	unNo: 3	9451				
Prep Date:	12/14/2016	Analysis Da	ate: 12	2/16/2016	S	eqNo: 1	235893	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Prep Date: 12/14/2016	Analysis D	Date: 12	2/16/2016	S	SeqNo: 1	235893	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	110	75.2	115			
Toluene	1.0	0.050	1.000	0	103	80.7	112			
Ethylbenzene	0.98	0.050	1.000	0	98.3	78.9	117			
Kylenes, Total	3.0	0.10	3.000	0	98.9	79.2	115			

102

80

120

1.000

1.0

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- Holding times for preparation or analysis exceeded Η
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH Not In Range
- RL **Reporting Detection Limit**
- W Sample container temperature is out of limit as specified

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20-Dec-16

WO#: 1612884

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Holl Environmental And 4 Albuque TEL: 505-345-3975 FA Website: www.hallen	ulysis 1901 F erque, X: 50. rvironi	Laboratory lawkins NE NM 87109 5-345-4107 mental.com	San	nple Log-In	Check List
Client Name: Animas Environmental	Work Order Number: 16	61288	34		Rcpl	No: 1
Received by/date: LM	12/16/16					
Logged By: Andy Jansson 1	2/16/2016 7:15:00 AM		Port	12-0-		
Completed By And -1 Jansson	12/16/16					
Reviewed By: a.J / WA	12/16/16					
Chain of Custody						 COLUMN COLUMN CONTRACTOR
1. Custody seals intact on sample bottles?	Ň	res [No 🗌	Not Present	~
2. Is Chain of Custody complete?	Ň	res [~	No	Not Present	
3. How was the sample delivered?	<u>c</u>	Courie	I			
Log In						
4. Was an attempt made to cool the samples?		Yes	V	No 🗌	NA	
5. Were all samples received at a temperature of	f >0°C to 6.0°C Y	'es		No L.	NA	
6. Sample(s) in proper container(s)?		Yes	\checkmark	No 🗌		
7. Sufficient sample volume for indicated test(s)?	, ,	res l	✓	No 🗌		
8 Are samples (except VOA and ONG) properly	preserved?	res E		No 🗌		
9. Was preservative added to bottles?	,	res [No 🗹	NA	
10.VOA vials have zero headspace?	1	res [No 🗌	No VOA Vials	\checkmark
11. Were any sample containers received broken	?	Yes [No 🗸	# of preserved	1
12. Does paperwork match bottle labels?	1	res F	~	No	for pH:	
(Note discrepancies on chain of custody)	unted 0	100 6	1	No 🗌	Adjusted	<2 or >12 Unless not ?
14. Is it clear what analyses were requested?	usiouy: 1	res l		No 🗌		2.2 million (1997)
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Y	res -	V	No	Checked I	ру:
Special Handling (if applicable)						
16. Was client notified of all discrepancies with th	is order?	/es		No	NA	
Person Notified:	Date				and and the first second process and	
By Whom:	Via:	eMail	Phone	Fax	In Person	
Regarding:						-
Client Instructions:						
17. Additional remarks:			and a comparison of the second s			
18. <u>Cooler Information</u> Cooler No Temp ^o C Condition Sea	I Intact Seal No Sea	al Dat	e Sigr	ied By		
1 3.3 Good Not F	Present					

ient:	Animas	Envior	mental Services	Standard Project Name	K Rush	3-Day Tumanand				A		L' AL	envi	IS	nent	AE al.co	30	RA	TOR	Y
ailing	Address	LADY W	linn St	Co	PC Phil	lips 1E		490	01 H	awkii	ns NI	Ε-	Albi	uque	erque	e, NI	M 87	109		
		Torrain	when NAI Q7421	Project #:			1	Те	50	5-34	5-39	75	F	ax f	505-	345-	4107	7		
	+ 575-	51.4-7	2x1									A	naly	sis	Req	uest				
nail or	Fax#: c	to memory	ARAMINAR SPININGA MANTUL LAN	Project Mana	aer:			(<u>)</u>	ô			Т		4)						
	Package	121110-100			30		021)	on	MR		1			SO.	B's					
Stan	dard		Level 4 (Full Validation)	CI	amemanl	E. McNally	8 (8(Ga	0			N		0 ⁴	B					
credi	tation			Sampler:	, CI		ALC: N	H	DR	_	=	20 S		03	082			(3)		=
NEL	AP	□ Othe	r	On Ice:	A Yes	□ No	F.	F +	02	18.	4.	82		0 ³ ,N	\$/8		(Y	p.y		2
EDD	(Type)			Sample Tem	erature: 3	3	3第	BE	<u>(</u>	d 4	2 pc	0 or	etals	N,N	ide	A	- 0	Chlo		2
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + MF	BTEX + MT	TPH 8015B	TPH (Metho	EDB (Metho	PAH's (831	RCRA 8 Me	Anions (F,C	8081 Pestic	8260B (VO	8270 (Semi	300.0 [1		Air Ruhhles
5-16	0953	Soil	BGT SC-1	1-MOOH Kit 2-402 101-5	Meot	-001	×		x	×								\star		
											_									
							+				-	-	-	_						
							-		_		-	-			-					
							-					_	_						_	
te: 5/10 te:	Time: 1647 Time: 1613	Relinquishe	ed by:	Received by:	u Walt	Date Time	Rer Wor Supi	marki #:1 ervise	s: B 030 w: h KG	HII + 103 (iche AFC	to Co 89 val 1 IA	en o Vissi	cep	hill	i ps ord	l lere a U u	I By	Ba	blay 57:	Karm



