Form C-144 Revised June 6, 2013

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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	
5637	Proposed Alternative Method Permit or Closure Plan App	olication
	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-permit or proposed alternative method  Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank of	tted pit, below-grade tank,
Please he adviser	d that approval of this request does not relieve the operator of liability should operations result in pollution of	
environment. No	or does approval relieve the operator of its responsibility to comply with any other applicable governmental a	uthority's rules, regulations or ordinances.
1.	Consceptibling Company OCP ID #1 217917	
	ConocoPhillips Company OGRID #: 217817 PO BOX 4289, Farmington, NM 87499	OIL CONS. DIV DIST. 3
	vell name: SAN JUAN 29-6 UNIT 13	
	r:OCD Permit Number:	OCT 1 3 2016
	Otr <u>L (NWSW)</u> Section 6 Township 29N Range 6W Cour	
	oposed Design: Latitude 36.75220 °N Longitude -107.51002 °W NAD: □1927 ⊠	
	ner:  Federal  State  Private  Tribal Trust or Indian Allotment	
Temporary:  Permaner  Lined  String-Re	bsection F, G or J of 19.15.17.11 NMAC  Drilling Workover  Int Emergency Cavitation P&A Multi-Well Fluid Management Low Chlorid Unlined Liner type: Thickness mil LLDPE HDPE PVC Other einforced  Welded Factory Other Volume: bbl Dimensions: L	
3.		
	rade tank: Subsection I of 19.15.17.11 NMAC	
	120 bbl Type of fluid: Produced Water	
NO CONTRACTOR OF THE PARTY OF T	ruction material:Metal	+ off
<del>-</del>	sidewalls and liner  Visible sidewalls only  Other	11-011
	Thicknessmil  HDPE PVC Other UNSPECIFIED	
4.		
	ive Method:	
Submittal of	an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau	u office for consideration of approval.
5.		
Fencing: Su	ubsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)	
	ak, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a perman	nent residence, school, hospital,
institution or ☐ Four foot	t height, four strands of barbed wire evenly spaced between one and four feet	
	e. 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)	
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	
<ul> <li>8.</li> <li>Variances and Exceptions:</li> <li>Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.</li> </ul>	
Please check a box if one or more of the following is requested, if not leave blank:	
<ul> <li>□ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.</li> <li>□ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.</li> </ul>	
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 acceptance 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 図 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. ( <b>Does not apply to below grade tanks</b> )  - 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
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
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

7	
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 NI 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 19.1 and 19.15.17.13 NMAC   Previously Approved Design (attach copy of design)   API Number:   or Permit Number:	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 doc attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 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:	

r		
	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 <sub>2</sub> S, Prevention Plan  Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan	
	Erosion Control Plan Closure Plan - based upon the appropriate requirements of 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	
	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. I 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
	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
	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
	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
	<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	☐ Yes ☐ No
	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
1	Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

<ul> <li>adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	
- written communities from the mannerpanty, written approval obtained from the mannerpanty	☐ 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.	
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan 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 19.15.17.13 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	11 NMAC 15.17.11 NMAC
Operator Application Certification:	
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and beli	ief.
Name (Print): Title:	
Signature: Date:	
Signature	
e-mail address:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address:	7-20/6  the closure report.
e-mail address:	7-20/6  the closure report.
e-mail address:    Telephone:	T-20/6  The closure report.  Tomplete this

AA.
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: Regulatory Coordinator
Signature: Date: 10/11/2016
e-mail address: <u>crystal.walker@cop.com</u> Telephone: (505) 326-9837

# ConocoPhillips Company San Juan Basin Below Grade Tank Closure Report

Lease Name: San Juan 29-6 Unit 13

API No.: 30-039-07693

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.

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.

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.

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.

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

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.

- 8. 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.

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:

Busse, Dollie L

Sent:

Thursday, August 18, 2016 11:16 AM

To: Cc: 'Smith, Cory, EMNRD'; Vanessa.Fields@state.nm.us; 'Brandon.Powell@state.nm.us' kdiemer@blm.gov; Michael Porter; Maureen Joe (mjoe@blm.gov); Payne, Wendy F; Trujillo, Fasho D; Hunter, Lisa; Spearman, Bobby E; Walker, Crystal: Roberts, Kelly G;

Notor, Lori

Subject:

San Juan 29-6 Unit 13 - 72 Hour BGT Closure Notification

Importance:

High

**Subject: 72 Hour BGT Closure Notification** 

Anticipated Start Date: Thursday, August 25, 2016 at approximately 10:00 a.m. (weather permitting)

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:

San Juan 29-6 Unit 13

API#:

3003907693

Location:

Unit L (NWSW), Section 6, T29N, R6W

Footages:

1650' FSL & 982' FWL

Operator:

ConocoPhillips

Surface Owner: BLM (Lease #SF-080379)

Reason:

P&A'd 4/6/2016

Dollie L. Busse Regulatory Technician ConocoPhillips Company 505-324-6104 505-787-9959 Dollie.L.Busse@cop.com District I
1625 N. French Dr., Hobbs, NM 88240
District II
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.

						,		22.0	_			
			Rele	ease Notific	catio	n and Co	orrective A	ction				
						OPERATOR Initial Report Final Re					Final Repor	
Name of Co	ompany Co	onocoPhillip	s Compa	ny		Contact Crystal Walker						
		h St, Farmin				Telephone No.(505) 326-9837						
Facility Na	me: San Ju	an 29-6 Uni	t 13			Facility Typ	e: Gas Well					
Surface Owner Federal Mineral Owner						Federal		A	PI No	. 30-039-0	7693	
			ATIO	N OF REI	LEASE							
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/West	Line	County		
L	6	29N	6W	1650		South	982	West		Rio Arrib	a	
			Latitude	e 36.75220		Longitud	e107.51002					
				NAT	URE	OF RELI	EASE					
Type of Rele	ase					Volume of		Vol	lume R	ecovered		
Source of Re	lease					Date and H	Iour of Occurrence	e Dat	e and	Hour of Dis	covery	
Was Immedi	ate Notice C	Piven?				If YES, To	Whom?					
			Yes [	No Not R	equired	,						
By Whom?						Date and H	Iour					
Was a Water	course Reac					If YES, Vo	olume Impacting t	he Watercou	rse.			
			Yes 🛛 1	No								
If a Watercon	urse was Im	pacted, Descr	ibe Fully.									
N/A												
Describe Cau	ise of Proble	em and Reme	dial Action	n Taken.*	-							
No release w	as encount	ered during	the BGT	Closure.								
Describe Are	a Affected	and Cleanup A	Action Tak	cen.*				1-8-				
N/A												
							knowledge and u					
							nd perform correc					
							arked as "Final R on that pose a thr					
							e the operator of					
		vs and/or regu		tance of a C-141	report	oes not renev	e the operator or	coponsionity	101 00	inpriance v	riui aii)	Outer
				/			OIL CON	SERVAT	ION	DIVISIO	N	
Signature:	1	fal a	10	1								
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Printed Name	e: Crystal V	Valker				Approved by	Environmental S	pecialist:				
Title: Regula	atory Coord	inator				Approval Dat	e:	Expir	ation I	Date:		
Titte Troguit						- pp. o rui Dui		Linpu	LIGHT L			
E-mail Addre	ess: cry	stal.walker@	cop.com			Conditions of	Approval:			Attached		
					- 1					, mariou		

<sup>\*</sup> Attach Additional Sheets If Necessary

# Animas Environmental Services, LLC



October 7, 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

San Juan 29-6 Unit 13

Rio Arriba 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) San Juan 29-6 Unit 13, located in Rio Arriba County, New Mexico. Tank removal was completed by COPC contractors while AES was on site.

#### 1.0 Site Information

#### 1.1 Location

Site Name – San Juan 29-6 Unit 13
Legal Description – NW¼ SW¼, Section 6, T29N, R6W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.75197 and W107.50995, respectively
BGT Latitude/Longitude – N36.75220 and W107.51002, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, August 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 10 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

- Depth to Groundwater: A cathodic report dated February 1992 reported depth to water at 160 feet below ground surface (bgs). (0 points)
- Wellhead Protection Area: The tank location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: There is an unnamed wash which discharges to Gobernador Canyon located approximately 990 feet southwest of the location. (10 points)

#### 1.3 BGT Closure Assessment

AES was initially contacted by Robert Spearman of COPC on August 19, 2016, and on August 25, 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

On August 25, 2016, AES personnel conducted field sampling and collected one 5-point composite (BGT SC-1) from below the BGT. Soil was collected from approximately 0.5 feet below the former BGT. Soil sample BGT SC-1 was field screened for volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chloride, and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

## 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 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 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

The composite soil sample BGT SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample BGT SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH per USEPA Method 418.1; and
- Chloride per USEPA Method 300.0.

## 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM were measured at 0.1 ppm in BGT SC-1. Field TPH concentrations were reported at 21.6 mg/kg. The field chloride concentration was 40 mg/kg. Field sampling results are summarized in Table 1 and presented on Figure 2. The AES Field Sampling Report is attached.

Table 1. Soil Field VOCs, TPH, and Chloride Results San Juan 29-6 Unit 13 BGT Closure, August 2016

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action I	evel (NMAC 19.	15.17.13E)		100	250
BGT SC-1	8/25/16	0.5	0.1	21.6	40

Laboratory analytical results reported benzene and total BTEX concentrations in BGT SC-1 as less than 0.024 mg/kg and 0.22 mg/kg, respectively. TPH concentrations were reported at less than 19 mg/kg. The laboratory chloride concentration was reported below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results San Juan 29-6 Unit 13 BGT Closure, August 2016

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)
	NMOCD Action NMAC 19.15.		0.2	50	100	250
BGT SC-1	8/25/16	0.5	<0.024	<0.22	<19	<30

#### 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 21.6 mg/kg. Benzene and total BTEX concentrations were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in BGT SC-1 were 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 San Juan 29-6 Unit 13.

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

Sincerely,

Corwin Lameman

Drafter/ Field Technician

Shih Sh L

**Emilee Skyles** 

Geologist/Project Lead

Elizabeth McNally, P.E.

Elizabeth o Mindly

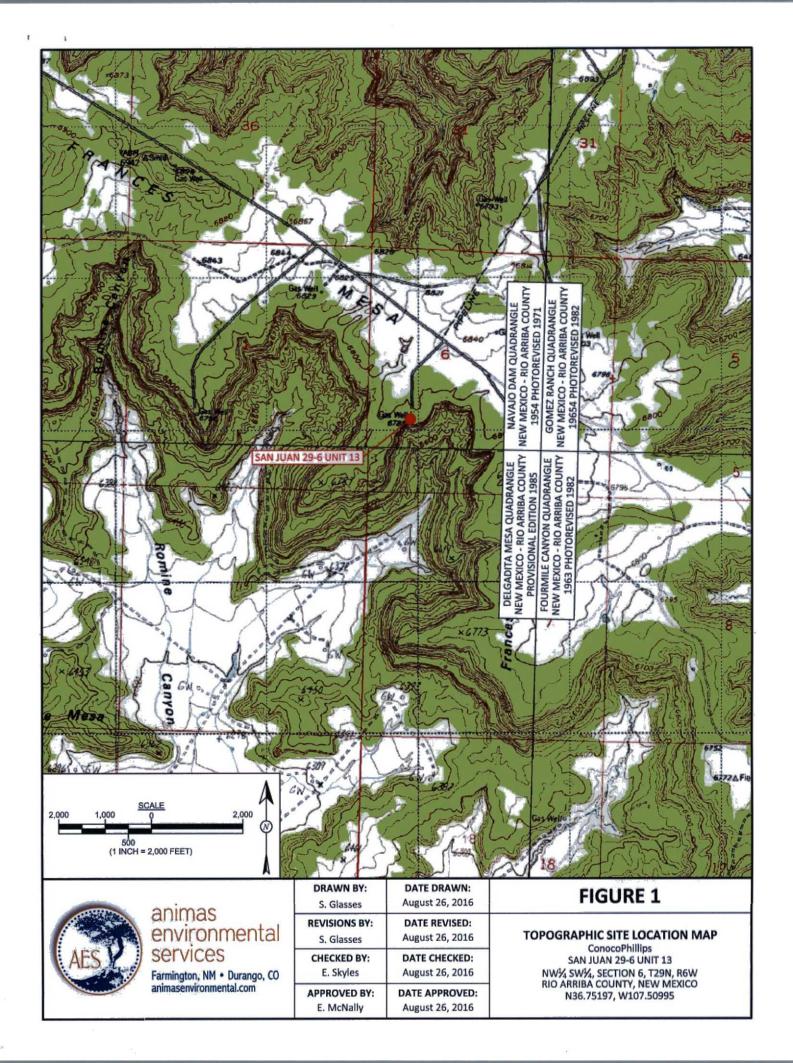
Robert Spearman San Juan 29-6 Unit 13 BGT Closure Report October 7, 2016 Page 5 of 5

#### Attachments:

L. Salver

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, August 2016 AES Field Sampling Report 082516 Hall Analytical Report 1608F43

R:\Animas 2000\Dropbox (Animas Environmental)\0000 AES Server Client Projects Dropbox\2016 Client Projects\ConocoPhillips\SJ 29-6 Unit 13\San Juan 29-6 Unit 13 BGT Closure Report 100716.docx





SAMPLE LOCATIONS

Field Sampling Results									
Sample ID	Date	Depth (ft)	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)				
NA	AOCD ACTIO	ON LEVEL		100	250				
BGT SC-1	8/25/16	0.5	0.1	21.6	40				
					A A CONTRACTOR				

	Laborato	ry Analytico	ıl Results		
Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)
VMOCD ACT	ION LEVEL	0.2	50	100	250
8/25/16	0.5	<0.024	<0.22	<19	<30
	VMOCD ACT	Date Depth (ft)	Date Depth (ft) Benzene (mg/kg)  NMOCD ACTION LEVEL 0.2	Date (ft) Benzene (mg/kg) BTEX (mg/kg)  NMOCD ACTION LEVEL 0.2 50	Date         Depth (ft)         Benzene (mg/kg)         Total BTEX (mg/kg)         TPH (mg/kg)           NMOCD ACTION LEVEL         0.2         50         100





animas environmental services

Farmington, NM • Durango, CO animasenvironmental.com

DRAWN BY: S. Glasses	DATE DRAWN: August 26, 2016					
REVISIONS BY: S. Glasses	DATE REVISED: August 26, 2016					
CHECKED BY: E. Skyles	DATE CHECKED: August 26, 2016					
APPROVED BY: E. McNally	DATE APPROVED: August 26, 2016					

# FIGURE 2

AERIAL SITE MAP BELOW GRADE TANK CLOSURE AUGUST 2016

ConocoPhillips
SAN JUAN 29-6 UNIT 13
NW¼ SW¼, SECTION 6, T29N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.75197, W107.50995

# **AES Field Sampling Report**



Client: ConocoPhillips

Project Location: San Juan 29-6 Unit 13

Date: 8/25/2016

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	8/25/2016	10:50	Composite	0.1	40	21.6	11:11	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:



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

September 01, 2016

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

FAX

RE: COPC San Juan 29-6 Unit 13

OrderNo.: 1608F43

#### Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/26/2016 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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

mule

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

#### Lab Order 1608F43

Date Reported: 9/1/2016

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental

Client Sample ID: BGT SC-1

Project: COPC San Juan 29-6 Unit 13

Collection Date: 8/25/2016 10:50:00 AM

Lab ID: 1608F43-001

Matrix: SOIL

Received Date: 8/26/2016 8:10:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH					Analyst:	MAB
Petroleum Hydrocarbons, TR	ND	19	mg/Kg	1	8/31/2016	27242
EPA METHOD 300.0: ANIONS					Analyst:	LGT
Chloride	ND	30	mg/Kg	20	8/30/2016 1:47:21 PM	27249
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	s			Analyst:	TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	8/30/2016 5:02:31 PM	27220
Surr: DNOP	92.4	70-130	%Rec	1	8/30/2016 5:02:31 PM	27220
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/29/2016 9:42:45 PM	27186
Surr: BFB	83.7	68.3-144	%Rec	1	8/29/2016 9:42:45 PM	27186
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst:	NSB
Benzene	ND	0.024	mg/Kg	1	8/29/2016 9:42:45 PM	27186
Toluene	ND	0.049	mg/Kg	1	8/29/2016 9:42:45 PM	27186
Ethylbenzene	ND	0.049	mg/Kg	1	8/29/2016 9:42:45 PM	27186
Xylenes, Total	ND	0.098	mg/Kg	1	8/29/2016 9:42:45 PM	27186
Surr: 4-Bromofluorobenzene	99.5	80-120	%Rec	1	8/29/2016 9:42:45 PM	27186

#### 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#:

1608F43

01-Sep-16

Client:

Animas Environmental

Project:

COPC San Juan 29-6 Unit 13

Sample ID MB-27249

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Batch ID: 27249

PQL

RunNo: 36886

HighLimit

Prep Date: 8/30/2016 Analysis Date: 8/30/2016

SeqNo: 1143014

Units: mg/Kg

**RPDLimit** Qual

Analyte Chloride

Result ND

Sample ID LCS-27249

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS

Batch ID: 27249

RunNo: 36886

Prep Date: 8/30/2016

Analysis Date: 8/30/2016

SeqNo: 1143015

Units: mg/Kg

Analyte

PQL

SPK value SPK Ref Val %REC

90

**HighLimit** 

%RPD

15.00

14

Page 2 of 6

110

Qual

Chloride

1.5

SPK value SPK Ref Val %REC LowLimit

95.1

%RPD **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
- 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
- Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1608F43

01-Sep-16

Client:

Animas Environmental

Project:

COPC San Juan 29-6 Unit 13

Sample ID MB-27242

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID: PBS

Batch ID: 27242 Analysis Date: 8/31/2016

20

RunNo: 36889

SeqNo: 1143188

Units: mg/Kg

Qual

Analyte Petroleum Hydrocarbons, TR Result PQL

ND

Result

Result

110

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

**RPDLimit** 

Sample ID LCS-27242

Prep Date: 8/30/2016

SampType: LCS

TestCode: EPA Method 418.1: TPH

Client ID: LCSS

Batch ID: 27242

RunNo: 36889

Prep Date: 8/30/2016

Analysis Date: 8/31/2016

SeqNo: 1143189

Units: mg/Kg

**RPDLimit** 

Analyte Petroleum Hydrocarbons, TR

Sample ID LCSD-27242

20 110

PQL

80.7 113 0

%RPD **HighLimit** 121

Qual

SampType: LCSD

TestCode: EPA Method 418.1: TPH

Client ID: LCSS02 Prep Date: 8/30/2016

Batch ID: 27242 Analysis Date: 8/31/2016 RunNo: 36889 SeqNo: 1143190

Units: mg/Kg

**RPDLimit** Qual

Analyte

PQL

SPK value SPK Ref Val %REC LowLimit 0

HighLimit

%RPD

Petroleum Hydrocarbons, TR

20 100.0

100.0

SPK value SPK Ref Val %REC

109

80.7

LowLimit

3.81

Page 3 of 6

20

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- 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
- Sample container temperature is out of limit as specified

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1608F43

01-Sep-16

Client:

Animas Environmental

Project:

COPC San Juan 29-6 Unit 13

Sample ID LCS-27220 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: RunNo: 36852 LCSS Batch ID: 27220 Prep Date: 8/29/2016 Analysis Date: 8/30/2016 SeqNo: 1142472 Units: mg/Kg HighLimit SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Analyte Result PQL Diesel Range Organics (DRO) 62.6 124 70 Surr: DNOP 4.3 5.000 86.1 130

100000000000000000000000000000000000000	17,000		15.75.50		35.00.0							
Sample ID MB-27220	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics			
Client ID: PBS	Batch	ID: 27	220	F	RunNo: 3	6852						
Prep Date: 8/29/2016	Analysis Date: 8/30/2016			8	SeqNo: 1	142473	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	ND	10										
Surr: DNOP	11		10.00		110	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#:

1608F43

01-Sep-16

Client:

Animas Environmental

Project:

COPC San Juan 29-6 Unit 13

Sample ID MB-27186

SampType: MBLK

TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS

Batch ID: 27186

RunNo: 36828

Prep Date: 8/26/2016

Analysis Date: 8/29/2016

SeqNo: 1141862

SPK value SPK Ref Val %REC PQL

5.0

Units: mg/Kg HighLimit

**RPDLimit** Qual

Analyte Gasoline Range Organics (GRO) Result ND

1000

84.6

144

Surr: BFB

850

68.3

LowLimit

LowLimit

Sample ID LCS-27186

Prep Date: 8/26/2016

SampType: LCS

TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS

Batch ID: 27186 Analysis Date: 8/29/2016 RunNo: 36828

SeqNo: 1141863

Units: mg/Kg

%RPD

Gasoline Range Organics (GRO)

Result PQL

SPK value SPK Ref Val %REC 25.00

89.4

80 68.3

HighLimit 120

%RPD

**RPDLimit** Qual

Surr: BFB

22 910 1000

90.7

144

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

RPD outside accepted recovery limits

% 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 Sample container temperature is out of limit as specified Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1608F43

01-Sep-16

Client:

Animas Environmental

Project:

COPC San Juan 29-6 Unit 13

Sample ID MB-27186	Samp	Гуре: МЕ	BLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batc	h ID: 27	186	F	RunNo: 36828							
Prep Date: 8/26/2016	Analysis Date: 8/29/2016			8	SeqNo: 1	141891	Units: mg/k	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	<b>RPDLimit</b>	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		102	80	120					
Comple ID 1 00 07400	Comp.	Fumou I C		Too	Cada: E	DA Mathad	0004B: Valar	ula -				

Sample ID LCS-27186	SampT	ype: LC	S	TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS Prep Date: 8/26/2016 Analyte Benzene Toluene Ethylbenzene	Batch	n ID: 27	186	F	RunNo: 3								
	Analysis D	Date: 8/	29/2016	5	SeqNo: 1	141892	Units: mg/h	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	<b>RPDLimit</b>	Qual			
Benzene	0.89	0.025	1.000	0	89.0	75.3	123						
Toluene	0.90	0.050	1.000	0	90.0	80	124						
Ethylbenzene	0.92	0.050	1.000	0	92.2	82.8	121						
Xylenes, Total	2.8	0.10	3.000	0	92.5	83.9	122						
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120						

## Qualifiers:

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

St. Joyl C. en

- 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 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name:	Animae Environmenta	Work Order Number	er: 1608F	43		RcptNo:	1
Received by/date	e: 4						:
Logged By:	Lindsay Mangin	8/26/2016 8:10:00 A	М		Of the state of		
Completed By:	Lindsay Mangin	8/26/2016 9:17:01 A	М		Andy Allego		
Reviewed By:	fc 00/20/16				000		
Chain of Cus	tody						
1, Custody sea	is intact on sample bott	les?	Yes		No 🗆	Not Present	
2. Is Chain of C	Custody complete?		Yes		No 🗆	Not Present	
3. How was the	sample delivered?		Couri	er			
Log In							
4. Was an atte	empt made to cool the sa	amples?	Yes		No 🗔	NA 🗆	
5. Were all san	mples received at a temp	perature of >0° C to 6.0°C	Yes		No 🗆	NA 🗆	
6. Sample(s) in	n proper container(s)?		Yes		No 🗆		
7. Sufficient sa	mple volume for indicate	ed test(s)?	Yes		No 🗆		
8. Are samples	(except VOA and ONG	) properly preserved?	Yes		No 🗆		
9. Was preserv	vative added to bottles?		Yes		No 🗹	NA 🗆	
10.VOA vials ha	ave zero headspace?		Yes		No 🗆	No VOA Vials	
11, Were any sa	ample containers receiv	ed broken?	Yes		No 🛃		
						# of preserved bottles checked	
	work match bottle labels		Yes		No 🗆	for pH:	r >12 unless noted)
The second secon	pancies on chain of cus	NO AND ANDRES STREET,	Yes		No 🗆	Adjusted?	12 unless noted)
	s correctly identified on ( nat analyses were reque	-	Yes		No 🗆		a Link (september 1 4 4 4
	ding times able to be mi		Yes		No 🗆	Checked by:	
	customer for authorizat						
Special Hand	iling (if applicable	l					
16. Was client in	notified of all discrepanci	es with this order?	Yes		No 🗆	NA 🛃	
Person	n Notified:	Date					
By Wh	nom:	Via:	eMa	il [	Phone Fax	☐ In Person	
Regar	ding:						
Client	Instructions:						
17. Additional r	-34		S				
13 544	District Control of the Control of t	CTLY TO SAYBOLT/at 8/22/	16-18	-			
18. Cooler Info		lan   Contintent   Contint	Carl D		Clear d Du	°	
1 Cooler N	1.8 Good	lon Seal Intact Seal No	Seal Da	ite	Signed By		
Page I o							

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Date	Time	Matrix	Sample Request ID		tainer and #	Preservative Type	HEA 1608	ELTO SANGER STREET	BTEX +JATE	BTEX + MTBE	TPH 8015B (GRO /	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHIONA			Air Bubbles (Y or N)
□ EDD	(Type)_			Samp	e Tem	perature //	<b>X</b>	egi va e	86.	BE +	(GR	14 PG	od 50	0 or	etals	8	sides	F	-00	Syp			گ
Accredit		□ Othe	r	Samp	ler:	(1 Yes	□ No "		Ā	TP	1/0	8.1)	5.4	8270		3,N	/ 80		8	$\mathbb{S}$			2
Stand			☐ Level 4 (Full Validation)			E. S	kyles		IMB's (8021)	TPH (Gas only)	DRO / WIE			SIMS)		2,P0	82 PC			300.			
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		Farmin	ofon NM 87481	Projec	et #:					Te	d. 50	5-34	5-39		_			345-		7			
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Client:	mimas	Environ	nmental Services		andard																\TC		
	Chain-of-Custody Record		1 4171-7	Around	Time.			HALL ENVIRONMENTAL															

