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

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

Form C-144 Revised June 6, 2013

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.

12601
39-27473

## Pit Relow-Grade Tank or

OCD Received

	11t, Delow-Grade Talik, or	JCD Received
39-27473	Proposed Alternative Method Permit or Closure Plan Application	1-27-15
	Type of action:  Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below	/-grade tank.
	or proposed alternative method	Stade talli,
	Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative re	equest
environment. Nor d	hat approval of this request does not relieve the operator of liability should operations result in pollution of surface water, g does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules,	
1. Operator: Cond	occoPhillips Company OGRID #: 217817	
	PO BOX 4289, Farmington, NM 87499	
	name: San Juan 30-5 Unit 207A	
	30-039-27473 OCD Permit Number:	
	E (SWNW) Section 18 Township 30N Range 5W County: Rio Ariba	
	sed Design: Latitude <u>36.81601000 °N</u> Longitude <u>-107.40376000 °W</u> NAD: ⊠1927 □ 1983	
	ction F, G or J of 19.15.17.11 NMAC  Closed Prior to Closure	Plan Approval
1	Drilling Workover	
	☐ Emergency       ☐ Cavitation       ☐ P&A       ☐ Multi-Well Fluid Management       Low Chloride Drilling Fluid [         nlined       Liner type:       Thickness       mil       ☐ LLDPE       ☐ HDPE       ☐ PVC       ☐ Other	
String-Reinfo		-
	Welded ☐ Factory ☐ Other Volume:bbl Dimensions: Lx V	W vD
Emer Scams.	weited 1 actory 0 other volume	VXD
3. Below-grade	e tank: Subsection I of 19.15.17.11 NMAC	
Volume:	120bbl Type of fluid:Produced Water_	_
Tank Construction	on material: Metal	
Secondary co	containment with leak detection 🛛 Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
☐ Visible sidev	walls and liner  Visible sidewalls only  Other	
Liner type: Thiel	ckness 45 mil HDPE PVC Other <u>LLDPE</u>	
4.  Alternative N Submittal of an e	Method: exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consi	deration of approval.
5.		
	ection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)	
Chain link, si	ix feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, so	chool, hospital.

Four foot height, four strands of barbed wire evenly spaced between one and four feet

institution or church)

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.	
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 accept material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	otable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - □ NM Office of the State Engineer - iWATERS database search; □ USGS; ☑ Data obtained from nearby wells	☐ Yes ⊠ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<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).  - 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.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.    Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC   Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC   Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19. and 19.15.17.13 NMAC   Previously Approved Design (attach copy of design) API Number: or Permit Number:	NMAC 15.17.9 NMAC
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the 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  Previously Approved Design (attach copy of design) API Number: or Permit Number: or Permit Number:	.15.17.9 NMAC

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.	locuments are
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	
13.  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 Fl 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	uid Management Pit
Alternative Closure Method	
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a 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	nttached to the
15.	
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P. 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	Yes No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

- Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure pl by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  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 bel  Name (Print): Title:	
Signature: Date:	
e-mail address: Telephone:	
18.  OCD Approval: Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)	
OCD Representative Signature:  Title: Environmental Specialst  OCD Permit Number:	, 2015
OCD Representative Signature:	g the closure report.
Title: Environmental Specialst  OCD Permit Number:  19.  Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.	g the closure report. t complete this

22. Operator Closure Certification:	
	his closure report is true, accurate and complete to the best of my knowledge and ure requirements and conditions specified in the approved closure plan.
Name (Print): Kenny Davis	Title: Staff Regulatory Technician
Signature:	Date:12/2/14
e-mail address: kenny.r.davis@conocophillips.com	Telephone: 505-599-4045

# ConocoPhillips Company San Juan Basin Below Grade Tank Closure Report

Lease Name: SJ 30-5 Unit 207A

API No.: 3003927473

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, BR 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.
- 3. 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.

4. 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.

5. 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.

6. 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.



7. 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).

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 300.1	250

8. 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.

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.

- 10. 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 missing due to employee turnovers. ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour notification.

11. 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 not found. COPC was not aware that the original notification sent at the time of Permitting was not the only closure notification required.

ConocoPhillips has reviewed our internal processes and has updated them to include the required 72 hour notification.

12. 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.

13. 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 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.

14. 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.

- 15. 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)

Closure Documentation was not submitted within the 60 day requirement due to employee turnovers. ConocoPhillips has reviewed our internal processes and has updated them to ensure closure documentation is submitted with the 60 day time frame.

<u>District I</u> 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 Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

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

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					<b>PERA</b>			Initia	l Report	Final Repo	rt
Name of Co	mnany Con	ocoPhillips Com	pany	C	ontact Cry	ystal Tafoya	0.77				-
Address 3401 East 30 St. Patitington, 1444					elephone N	To.(505) 326-983	31				
Facility Nar	ne: San Jua	n 30-5 Unit 207	7A	F	acility Typ	e: Gas Well	-				_
Surface Ow			Mineral C	wner Bl	LM (SF-07	(8994)		API No	.30-039-2	7473	
			LOCA	TION	OF REI	LEASE					$\neg$
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By Whom?					Date and I	Hour olume Impacting	the Wat	ercourse.			
Was a Wate	rcourse Reach	ned?	⊠ No		II YES, V	Olume impacting	the wat	O(COUIDO.		·*	
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Describe A	rea Affected a	and Cleanup Action	on Taken.*	N=0.0000=0000	400	tle rueg telz	han and	then trans	norted to	the lab and analytic	al
The regula	itory standar	d for closure at t	on Taken.* his site was determin vere below the regula	tory star	100 ppm. <i>I</i> dards set fo	a sample was tak	CD Gui	delines for	r Remedia	tion of Leaks, Spills	;
results for	TPH, BTEX	and Chlorides W	rere below the regularies is required. The fin	al report	is attached	for review.					
and Keleas	se, therefore	NO IMITATION CONTRACTOR									
Thereby on	etify that the i	nformation given	above is true and con	nplete to t	he best of m	ny knowledge and	underst	and that pu	rsuant to N	MOCD rules and	
regulations	all operators	are required to re	port and/or the certain	I Tologoo I	10111104110110	1 1 UT75-no1	Donort	does not to	elieve the o	operator of liability	
public heal	ith or the envi	ronment. The acc	replance of a C-141 ic	port of th		11 - thet mass of	breat to	around wa	ter, surface	water, human health	1
should the	ir operations l	ave failed to adec	quately investigate and acceptance of a C-14	l renort o	loes not reli	eve the operator o	f respon	sibility for	compliance	ce with any other	
or the envi	ronment. In a	ws and/or regulati	ions.	to to Paragraph					T DIVITO	TAON	_
Teucrai, sic		200				OIL CO	<b>VSER</b>	VATIO	N DIAIS	SION	
	11	lat. Taloy	a								
Signature:	Coyota	- Ty			Approved	by Environmental	Special	ist:			
					PP						
Printed Na	ame: Crystal	Tafoya						Paratiration	n Dotor		
Title: Fie	ld Environm	ental Specialist			Approval I	Date:		Expiration	on Date:		
		tafoya@conocop	hillips.com		Conditions	s of Approval:			Attac	hed [	
Detai 12/	17/2012	Phone: (5	505) 326-9837								

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



December 14, 2012

Crystal Tafoya ConocoPhillips San Juan Business Unit Office 214-5 5525 Hwy 64 Farmington, New Mexico 87401 624 E. Comanche

Farmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3274

RE:

**Below Grade Tank Closure Report** 

San Juan 30-5 #207A

Rio Arriba County, New Mexico

Dear Ms. Tafoya:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) San Juan 30-5 #207A, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

#### 1.0 Site Information

#### 1.1 Location

Site Name – San Juan 30-5 #207A
Legal Description - SW¼ NW¼, Section 18, T30N, R5W, Rio Arriba County, New Mexico
Well Latitude/Longitude - N36.81604 and W107.40439, respectively
BGT Latitude/Longitude - N36.81578 and W107.40469, respectively
Land Jurisdiction - Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, October 2012

#### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated March 2005 reported the depth to groundwater between 50 and 100 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research

Crystal Tafoya San Juan 30-5 #207A BGT Closure Report December 14, 2012 Page 2 of 5

Center online mapping tool (<a href="http://ford.nmt.edu/react/project.html">http://ford.nmt.edu/react/project.html</a>) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. An unnamed ephemeral wash is located approximately 100 feet south-southwest of the location. Based on this information, the location was assessed a ranking score of 20.

#### 1.3 BGT Closure Assessment

AES was initially contacted by Bruce Yazzie, CoP representative, on October 22, 2012, and on October 24, 2012, Heather Woods and Zach Truijillo of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

#### 2.0 Soil Sampling

On October 24, 2012, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for chloride and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

### 2.1 Field Screening

2.1.1 Volatile Organic Compounds

A portion of each sample 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 samples were also analyzed in the field for TPH per 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 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 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 SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- Total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B;
- Chloride per USEPA Method 300.0.

#### 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 1.5 ppm in S-2 up to 6.3 ppm in S-4. Field TPH concentrations ranged from less than 20.0 mg/kg in S-2 up to 102 mg/kg in S-3. The field chloride concentration in SC-1 was 40 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results San Juan 30-5 #207A BGT Closure, October 2012

		Depth	<b>VOCs OVM</b>	Field	Field
	Date	below	Reading	TPH	Chlorides
Sample ID	Sampled	BGT (ft)	(ppm)	(mg/kg)	(mg/kg)
NMOCD Action I	evel (NMAC 19.	15.17.13E)	da der	100	250
S-1	10/24/12	0.5	3.2	61.4	NA
S-2	10/24/12	0.5	1.5	<20.0	NA
S-3	10/24/12	0.5	2.3	102	NA
S-4	10/24/12	0.5	6.3	23.8	NA
S-5	10/24/12	0.5	4.6	25.1	NA
SC-1	10/24/12	0.5	NA	NA	40

NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and less than 0.25 mg/kg, respectively. TPH concentrations were reported as less than 5.0 mg/kg GRO and less than 9.7 mg/kg DRO. 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. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results San Juan 30-5 #207A BGT Closure, October 2012

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action	Level (NMAC 19.15	.17.13E)	0.2	50	1	00	250
SC-1	10/24/2012	0.5	<0.050	<0.25	<5.0	<9.7	<30

#### 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in one sample, S-3, with 102 mg/kg. However, laboratory analytical results for TPH as GRO/DRO in SC-1 were reported below the NMOCD action level of 100 mg/kg. The chloride concentration in SC-1 was also below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended.

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

Sincerely, Lelany Chrodium

Kelsey Christiansen
Fnyironmental Scientist

Crystal Tafoya San Juan 30-5 #207A BGT Closure Report December 14, 2012 Page 5 of 5

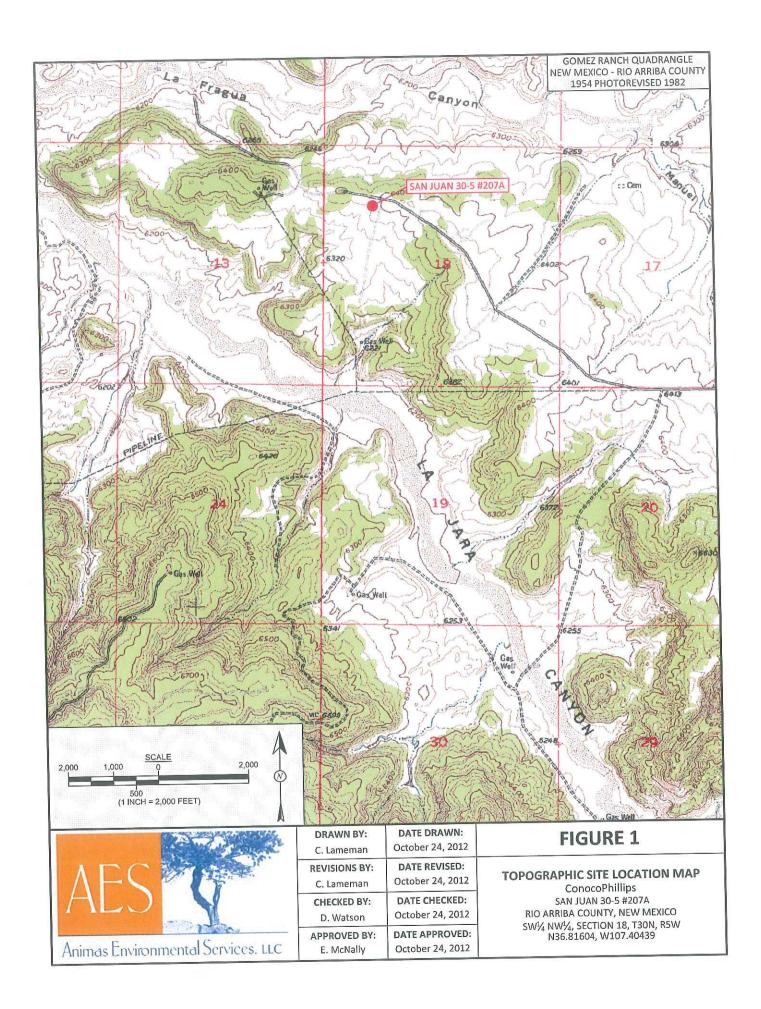
Elizabeth v MiNdly

Elizabeth McNally, P.E.

#### Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, October 2012 AES Field Screening Report 102412 Hall Analytical Report 1210B45

R:\Animas 2000\Dropbox\December 2012\ConocoPhillips\SJ 30-5 #207A\SJ 30-5 #207A BGT Closure Report 121412.docx





SAMPLE LOCATIONS

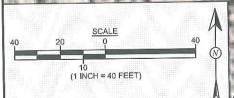
	Field So	reenin	g Results		
Sample ID	Date	OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)	
NMO	D ACTION LEVEL		100	250	
S-1	10/24/12	3.2	61.4	NA NA	
S-2	10/24/12	1.5	<20.0	NA	
S-3	10/24/12	2.3	102	NA	
S-4	10/24/12	6.3	23.8	NA	
S-5	10/24/12	4.6	25.1	NA	
SC-1	10/24/12	NA	NA	40	

SC-1 IS A 5-POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5. NA - NOT ANALYZED

		Laborato	ry Analytico	ıl Results		
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACT	ION LEVEL	0.2	50	1	00	250
SC-1	10/24/12	<0.050	<0.25	<5.0	<9.7	<30







AERIAL SOURCE: © 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE



DRAWN BY:	DATE DRAWN: October 29, 2012
C. Lameman  REVISIONS BY:	DATE REVISED:
C. Lameman  CHECKED BY:	October 29, 2012  DATE CHECKED:
D. Watson	October 29, 2012
APPROVED BY: E. McNally	October 29, 2012

# AERIAL SITE MAP BELOW GRADE TANK CLOSURE OCTOBER 2012

ConocoPhillips SAN JUAN 30-5 #207A RIO ARRIBA COUNTY, NEW MEXICO SW½ NW¼, SECTION 18, T30N, R5W N36.81604, W107.40439

# **AES Field Screening Report**

Animas Environmental Services. LLC

www.animasenvironmental.com

624 E. Comanche Farmington, NM 87401 505-564-2281

Durango, Colorado 970-403-3274

Project Location: SJ 30-5 #207A Date: 10/24/2012

Matrix: Soil

Client: ConocoPhillips

						i				TPH
		Time of			Field	Field IPF	88			Amaliyete
	10		9	N/VO	Chloride	Analysis	Field TPH*	TPH PQL		Alidiyətə
	Collection	Sample	sampie		(ma/ka)	Time	(mg/kg)	(mg/kg)	DF	Initials
Sample ID	Date	Collection	Location	(mdd)	(911/S) 1/S/		5		7	LINAWA)
		17.15	North	3.2	NA	12:52	61.4	20.0	Т	ANIMIL
S-1	10/54/5012	TZ.1J					110000000000000000000000000000000000000	0	~	LINAWA
2 6 3 3 8			Courth	7.	AN	12:55	<20.0	20.0	Т	ANIAILI
S-2	10/24/2012	/T:7T	200111	?					7	LINAVA
	9		ļ,	23	AN	12:58	102	20.0	Т	ANIAILI
S-3	10/24/2012	T7:73	Edst	2:3				10.00	7	110.014
1	0,007,000	10.01	West	6.3	NA	13:01	23.8	20.0	-	ANIAIL
S-4	TO/54/5015		3000				1	C	_	HMW
1	(10/1/01)	17.73	Center	4.6	AN	13:03	25.1	70.0	4	22121
S-5	10/24/2012							1	- 10	
7 00	C10C/AC/01	12.25	Composite	AN	40		Not	Not Analyzed for IPH	II.	
1	/ / / / / / / / / / / / / / / / / / / /		()							

Practical Quantitation Limit PQL Not Detected at the Reporting Limit 9

Not Analyzed

Dilution Factor NA PF

\*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Heather M. Woods Total Petroleum Hydrocarbons - USEPA 418.1 Analyst: Silver Nitrate



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

October 31, 2012

Debbie Watson
Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: COP San Juan 30-5 #207A

OrderNo.: 1210B45

#### Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/25/2012 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. 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. 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.

Sincerely,

Andy Freeman

Laboratory Manager

Only

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

Lab Order 1210B45

Date Reported: 10/31/2012

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental Services

COP San Juan 30-5 #207A Project:

1210B45-001 Lab ID:

Client Sample ID: SC-1

Collection Date: 10/24/2012 12:25:00 PM

Received Date: 10/25/2012 10:05:00 AM Matrix: MEOH (SOIL)

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	FORGANICS				Analyst: JMP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	10/25/2012 11:34:20 AM
Surr: DNOP	102	77.6-140	%REC	1	10/25/2012 11:34:20 AM
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	. 1	10/25/2012 11:12:05 PM
Surr: BFB	96.2	84-116	%REC	1	10/25/2012 11:12:05 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
	ND	0.050	mg/Kg	1	10/25/2012 11:12:05 PM
Benzene Toluene	ND	0.050	mg/Kg	1	10/25/2012 11:12:05 PM
Ethylbenzene	ND	0.050	mg/Kg	1	10/25/2012 11:12:05 PM
Xylenes, Total	ND	0.10	mg/Kg	1	10/25/2012 11:12:05 PM
Surr: 4-Bromofluorobenzene	102	80-120	%REC	1	10/25/2012 11:12:05 PM
EPA METHOD 300.0: ANIONS					Analyst: SRM
Chloride	ND	30	mg/Kg	20	10/25/2012 12:22:04 PM

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range E
- Analyte detected below quantitation limits
- Sample pH greater than 2
- Reporting Detection Limit

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Η
- Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits Page 1 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1210B45

31-Oct-12

Client:

Animas Environmental Services

Project:

COP San Juan 30-5 #207A

Sample ID MB-4526

SampType: MBLK

TestCode: EPA Method 300.0: Anions

LowLimit

Client ID: PBS

Batch ID: 4526

RunNo: 6496

%REC

Prep Date: 10/25/2012 Analysis Date: 10/25/2012

SeqNo: 187004

Units: mg/Kg

HighLimit

Analyte

SPK value SPK Ref Val Result PQL

%RPD

Qual **RPDLimit** 

Chloride

1.5 ND

Sample ID LCS-4526

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 4526

RunNo: 6496

10/25/2012 Prep Date:

SeqNo: 187005

Analysis Date: 10/25/2012

Units: mg/Kg

Analyte Chloride

SPK value SPK Ref Val Result PQL

1.5

LowLimit %REC 95.7

0

SPK Ref Val

7.197

HighLimit %RPD 110

**RPDLimit** 

Qual

Sample ID 1210A01-002AMS

SampType: MS

RunNo: 6496

TestCode: EPA Method 300.0: Anions

Client ID: BatchQC Batch ID: 4526

20

15.00

15.00

Prep Date:

10/25/2012

Analysis Date: 10/25/2012

SeqNo: 187036 %REC

Units: mg/Kg HighLimit

Analyte

SPK value Result PQL

7.5

117

**RPDLimit** %RPD

Qual

Qual

Chloride

Sample ID 1210A01-002AMSD

SampType: MSD

TestCode: EPA Method 300.0: Anions

LowLimit

64.4

Client ID:

BatchQC

Batch ID: 4526

RunNo: 6496

83.2

Prep Date:

10/25/2012

Analyte

Analysis Date: 10/25/2012

SeqNo: 187037

Units: mg/Kg

**RPDLimit** %RPD

Chloride

PQL 7.5 20

SPK value SPK Ref Val 15.00

7.197

%REC 85.9

64.4

LowLimit

HighLimit 117

2.04

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range

Analyte detected below quantitation limits

Sample pH greater than 2

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit ND RPD outside accepted recovery limits Page 2 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1210B45

31-Oct-12

Client:

Animas Environmental Services

Project:	COP San J	Iuan 30-5 #	207A								
Sample ID	MB-4517	SampTy	oe: MB	LK	Test	Code: EP	A Method	3015B: Diese	l Range O	rganics	
Client ID:		Batch I	D: 451	7	R	unNo: 64	41				
E1927. 15		Analysis Da	te: 10	/25/2012	S	eqNo: 18	6402	Units: mg/K	g		
Prep Date.	10/24/2012				SPK Ref Val	%PEC	Lowl imit	HighLimit	%RPD	RPDLimit	Qual
Analyte		Result	PQL 10	SPK value	SPN Rei vai	MINEC	LOWLITTIC	riigitaitii		788000000000000000000000000000000000000	
	Organics (DRO)	ND	10	10.00		101	77.6	140			
Surr: DNOP	)	10		10.00				15000.000			
Sample ID	LCS-4517	SampTy	pe: LC	S	Tes	tCode: EF	PA Method	8015B: Diese	el Range C	rganics	
Client ID:	LCSS	Batch	ID: 45	17	F	RunNo: 64	441				
Prep Date:	: 10/24/2012	Analysis Da	ate: 10	)/25/2012		SeqNo: 18	86419	Units: mg/K	(g		
	. 10/2-112012	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	Organics (DRO)	42	10	50.00	0	84.3	52.6	130			
Surr: DNOi		4.5	10	5.000		90.8	77.6	140			
Sull. DNO		1.0									
Sample ID	1210A51-001AMS	SampT	ype: MS	3	Tes	tCode: E	PA Method	8015B: Dies	el Range (	organics	
Client ID:	BatchQC	Batch	ID: 45	17		RunNo: 6	441				
Pren Date	: 10/24/2012	Analysis D	ate: 1	0/25/2012		SeqNo: 1	86977	Units: mg/l	<b>&lt;</b> g		
r rep Date	. 10/24/2012				SPK Ref Val	% DEC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte		Result	PQL 9.8		O N Rei Vai	81.6	57.2	146	24/4/05 (22)		
interior of the state of the st	e Organics (DRO)	40	9.8	4.902	U	90.3	3000000000	140			
Surr: DNO	IP	4.4		4.902							
Sample II	1210A51-001AMS	SampT	ype: M	SD	Te	stCode: E	PA Method	l 8015B: Dies	el Range	Organics	
Client ID:	BatchQC	Batch	1D: 45	517		RunNo: 6	6441				
	e: 10/24/2012	Analysis D	ate: 1	0/25/2012		SeqNo: 1	186978	Units: mg/	Kg		
Analyte		Result	PQL	SPK value	SPK Ref Va				%RPD	RPDLimit	Qual
	e Organics (DRO)	43	9.9	49.70	0	85.9			6.54		
Surr: DNC		4.5		4.970		91.1	77.6	140	0	0	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range E
- Analyte detected below quantitation limits
- Sample pH greater than 2

- Analyte detected in the associated Method Blank В
- Holding times for preparation or analysis exceeded Η
- Not Detected at the Reporting Limit ND
- RPD outside accepted recovery limits

Page 3 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1210B45

31-Oct-12

Client:

Animas Environmental Services

Project: COP San	Juan 30-5 #	‡207A								
Sample ID MB-4474	SampTy	pe: MBL	.K	Test	Code: EP/	A Method 8	015B: Gasol	ine Range		
8		ID: 4474		Ru	ınNo: 648	37				
Client ID: PBS	MD-700-700			S	eqNo: <b>18</b> 5	7625	Units: mg/K	q		
Prep Date: 10/23/2012	Analysis Da						11 m	<del>-</del>	RPDLimit	Qual
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLIMIL	Quai
Gasoline Range Organics (GRO)	ND	5.0				0.4	116			
Surr: BFB	950		1000		95.0	84	110			
Sample ID LCS-4474	SampTy	ype: LCS	3	Test	Code: EP	A Method	8015B: Gaso	line Range	e	
Client ID: LCSS	Batch	ID: 447	4	R	unNo: <b>64</b>	87				
	Analysis Da	ate: 10	/25/2012	S	eqNo: 18	7626	Units: mg/K	(g		
Prep Date: 10/23/2012				ODK Def Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	Result			SPK Ref Val	102	74	117	70111 =	STORY NEWSTONIA	3,000,000
Gasoline Range Organics (GRO)	25	5.0	25.00 1000	U	100	84	116			
Surr: BFB	1000		1000		75,000	10000				
Sample ID 1210A08-001AMS	SampT	ype: MS		Tes	tCode: EF	PA Method	8015B: Gase	oline Rang	е	
Client ID: BatchQC		n ID: 447	74	F	RunNo: 64	487				
Cilcin in a	Analysis D	ate: 10	/25/2012	5	SeqNo: 18	87638	Units: mg/l	<b>K</b> g		
Prep Date: 10/23/2012				SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	Result	PQL 4.9	24.34	11.22	90.8	70	130			
Gasoline Range Organics (GRO)	33	4.9	973.7	11.22	117	84	116			S
Surr: BFB	1100		973.1							
Sample ID 1210A08-001AM	SD Samp	Туре: М	SD				1 8015B: Gas	oline Rang	ge	
Client ID: BatchQC	Batc	h ID: 44	74	1	RunNo: 6	487				
Prep Date: 10/23/2012	Analysis [	Date: 1	0/25/2012		SeqNo: 1	87639	Units: mg/			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit		%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	1000 1000	7A W 1003	89.9	70		0.479	22.1	
Gasolille Kange Organics (OKO)	1100		975.6		115	84	116	0	0	

1100

#### Qualifiers:

Surr: BFB

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2 P

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND

RPD outside accepted recovery limits

Page 4 of 5

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1210B45

31-Oct-12

Client:

Animas Environmental Services

Project:

COP San Juan 30-5 #207A

Sample ID MB-4474	SampT	ype: MB	LK	Test	Code: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: 447	74	F	RunNo: 6	487				
Prep Date: 10/23/2012	Analysis D	ate: 10	/25/2012	S	SeqNo: 1	87651	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10			22.20		120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			
Sample ID LCS-4474	Samp	Type: LC	cs	Tes	stCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Bato	h ID: 44	174		RunNo: (	6487				
	A - alerata I	Doto: 4	0/25/2012		SeaNo: '	187652	Units: mg/	Kg		

Sample ID LGS-4474	ournp.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
Client ID: LCSS	Batch	ID: 447	4	R	tunNo: 6	487				
Prep Date: 10/23/2012	Analysis D	ate: 10	/25/2012	S	SeqNo: 1	87652	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
With the second	1.0	0.050	1.000	0	105	76.3	117			
Benzene Toluene	1.0	0.050	1.000	0	104	80	120			
	1.1	0.050	1.000	0	106	77	116			
Ethylbenzene Xylenes, Total	3.2	0.10	3.000	0	106	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID 1210A21-001AMS	SampT	ype: MS		Test	Code: El	PA Method	8021B: Volat	iles		
Client ID: BatchQC		ID: 447		Б	RunNo: 64	487				
Prep Date: 10/23/2012	Analysis D	ate: 10	/25/2012	5	SeqNo: 1	87719	Units: mg/K	g		
Name of the second seco	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	0.94	0.048	0.9653	0	97.3	67.2	113			
Benzene Toluene	0.96	0.048	0.9653	0	99.1	62.1	116			
Ethylbenzene	0.97	0.048	0.9653	0	101	67.9	127			
Xylenes, Total	2.9	0.097	2.896	0	101	60.6	134			
Surr: 4-Bromofluorobenzene	1.0	3	0.9653		106	80	120			

Sample ID 1210A21-001AM	SD SampT	ype: MS	D	Test	Code: EF	PA Method	8021B: Volat	iles		
Client ID: BatchQC		ID: 447	74	B	RunNo: 6	487				
Prep Date: 10/23/2012	Analysis D	ate: 10	/25/2012	8	SeqNo: 1	87720	Units: mg/K	g		
. 10p = 4.10.	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte	0.99	0.048	0.9653	0	102	67.2	113	5.00	14.3	
Benzene	remain.	0.048	0.9653	0	104	62.1	116	5.16	15.9	
Toluene	1.0	2020200	0.9653	0	108	67.9	127	6.85	14.4	
Ethylbenzene	1.0	0.048	0.49900		109	60.6	134	7.20	12.6	
Xylenes, Total	3.1	0.097	2.896	0		80	120	0	0	
Surr: 4-Bromofluorobenzene	1.0		0.9653		106	00	120	ŭ		

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
  - R RPD outside accepted recovery limits

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Hall Environmental Analysis Laborator) 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: Animas Environmental  Received by/date: 10/25/2012 10:05:00 AM  Completed By: Ashley Gallegos 10/25/2012 10:26:44 AM  Reviewed By: 10/25/2012 10:26:44 AM  Yes No  Yes No  Yes No  Courier  Log In  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples? Yes No  No  No  Reviewed By: 10/25/2012 10:05:00 AM  Yes No	Not Present V Not Present No Not Present NA NA NA
Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Completed By: Ashley Gallegos 10/25/2012 10:26:44 AM  Reviewed By: 10/25/2012 10:26:44 AM  Logged By: Ashley Gallegos 10/25/2012 10:26:44 AM  Reviewed By: 10/25/2012 10:26:44 AM  Logged By: Ashley Gallegos 10/25/2012 10:26:44 AM  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Yes IV  No  2. Is Chain of Custody complete? Yes IV  No  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Yes IV  No  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Yes IV  No  Are sample(s) in proper container(s)? Yes IV  No  Ye	NA N
Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Completed By: Ashley Gallegos 10/25/2012 10:26:44 AM  Reviewed By: 10/25/2012 10:26:44 AM  Logged By: Ashley Gallegos 10/25/2012 10:26:44 AM  Reviewed By: 10/25/2012 10:26:44 AM  Logged By: Ashley Gallegos 10/25/2012 10:26:44 AM  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Yes IV  No  2. Is Chain of Custody complete? Yes IV  No  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Yes IV  No  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Logged By: Ashley Gallegos 10/25/2012 10:05:00 AM  Yes IV  No  Are sample(s) in proper container(s)? Yes IV  No  Ye	NA N
Completed By: Ashley Gallegos  Reviewed By: 10/25/2012 10:26:44 AM  Reviewed By: 10/25/2012 10:26:44 AM  1. Were seals intact? Yes No  2. Is Chain of Custody complete? Yes No  3. How was the sample delivered?  Courier  Log In  4. Coolers are present? (see 19. for cooler specific information) Yes No  5. Was an attempt made to cool the samples? Yes No  6. Were all samples received at a temperature of >0° C to 6.0°C Yes No  7. Sample(s) in proper container(s)? Yes No  8. Sufficient sample volume for indicated test(s)? Yes No  9. Are samples (except VOA and ONG) properly preserved?	NA N
Chain of Custody  1. Were seals intact?  2. Is Chain of Custody complete?  3. How was the sample delivered?  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	NA N
1. Were seals intact? 2. Is Chain of Custody complete? 3. How was the sample delivered?  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	NA N
1. Were seals intact?  2. Is Chain of Custody complete?  3. How was the sample delivered?  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	NA N
1. Were seals intact?  2. Is Chain of Custody complete?  3. How was the sample delivered?  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	NA N
2. Is Chain of Custody complete?  3. How was the sample delivered?  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	IO NA I
3. How was the sample delivered?  Log In  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	NA : NA : NO : ! NO : !
Log In  4. Coolers are present? (see 19. for cooler specific information)  5. Was an attempt made to cool the samples?  6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?	NA : NA : NO : ! NO : !
4. Coolers are present? (see 19. for cooler specific information)  Yes ✓ No  Was an attempt made to cool the samples?  Yes ✓ No  Were all samples received at a temperature of >0° C to 6.0°C  Yes ✓ No  Sample(s) in proper container(s)?  Sufficient sample volume for indicated test(s)?  Are samples (except VOA and ONG) properly preserved?  Yes ✓ No	NA : NA : NO : ! NO : !
5. Was an attempt made to cool the samples?  Yes ✓ No  Were all samples received at a temperature of >0° C to 6.0°C  Yes ✓ No  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes ✓ No	NA : NA : NO : ! NO : !
5. Was an attempt made to cool the samples?  Yes ✓ No  No  Were all samples received at a temperature of >0° C to 6.0°C  Yes ✓ No  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes ✓ No	lo : ! NA !
6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes V No	lo : ! NA !
6. Were all samples received at a temperature of >0° C to 6.0°C  7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes V No	lo :
7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes V No	lo :
7. Sample(s) in proper container(s)?  8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes V No	lo I
8. Sufficient sample volume for indicated test(s)?  9. Are samples (except VOA and ONG) properly preserved?  Yes V: No	lo I
Sufficient samples votation of includes teachy      Are samples (except VOA and ONG) properly preserved?  Yes V No	
Are samples (except VOA and ONG) properly preserved?  Yes  No. No.	No !
The state of the s	
	NO V NA
	El manage la
	No VOA Vials 🗸
12. Were any sample containers received broken?  Yes No.	
13. Does paperwork match bottle labels? Yes ❖. No	bottles checked
(Note discrepancies on chain of custody)  4.4 Are matrices correctly identified on Chain of Custody?  Yes V	for pH: (<2 or >12 unless
14. Are matices correctly definition of the state of the	
15. Is it clear what analyses here requested	
16. Were all holding times able to be met?  (If no, notify customer for authorization.)	Checked by:
Special Handling (if applicable)  17 Was client political of all discrepancies with this order?  Yes     No.	No !! NA №
17. Was client notified of all discrepancies with this order?	NO 1
Person Notified: Date:	
By Whom: Via:   eMail	Phone Fax I In Person
Regarding:	
Client Instructions:	

19. Cooler Information

Cooler No Temp °C Condition Seal Intact Seal No

	F. C. L.	Client: Animas Fauranas 1st Santas	□ Standard	R Rush Some Day	n Day			E &	14	3	S	N N	OR	ANALYSIS LABORATORY	RY
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dres	Mailing Address: 624 E.	Comanche	Cop San Juan	30-5	#207A	46	301 Hz	4901 Hawkins NE -	- H	Albuq	nerqu	buquerque, NM 87	Albuquerque, NM 87109		
कि कि	Farmington, N.M. 8740	17401	Project #:				el. 50	Tel. 505-345-3975	6) BS	Analysis	s Red	Request			
email or Fax#:	)		Project Manager:				lesei			.08					
QA/QC Package:		☐ Level 4 (Full Validation)	D. Watson				( <b>1885</b> )			100	-03:00			-	
Accreditation	□ Other	J.	Sampler: H. U	Woods	<b>超</b> 医强度 (1)	d  + =	86108			SIE		- (	(AO\		
□ EDD (Type)			Sample Tempel	O Total			po		-	Mets		AO	/-im		
Tme	Matrix	Sample Request ID	Container Pr Type and #	Preservative Type	HENLING GWWW	BTEX + M	TPH Meth	TPH (Met	N9) 0168	RCRA 8 I	8081 Pes	V) 80628	eS) 0728		
1225	Soil	56-1	Med Hert A	Me OH Non	100-	×	X	+		×			+		-
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0/24/12 1424 Date: Time:		the M. Wood	Received by:	Wester	184/12 1624 Date Time	Mo: Activit Superv	Mo. 1033 738 Activity: C200 Supervisor: Harr	Wo: 1033 7384 Activity: C200 Supervisor: Harry	Dee		Work or Area:	B B	e. B	Work ordered tog: Bruce Yazzie Area: B	عتتته
2.75	<		\{ )-	70 01	AIN INDE IN INDE KGARGIA	287	10: K	Use 10: KGARCI	۵						

