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

State of New Mexico **Energy Minerals and Natural Resources** Department Oil Conservation Division 1220 South St. Francis Dr.

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

1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	to the appropriate NMOCD District Office.
Type of action: Below grade Permit of a p	tank registration bit or proposed alternative method pit, below-grade tank, or proposed alterna to an existing permit/or registration only submitted for an existing permitted	or non-permitted pit, below-grade tank,
Please be advised that approval of this request does not relieve environment. Nor does approval relieve the operator of its re		It in pollution of surface water, ground water or the
Derator: Burlington Resources Address: PO BOX 4289, Farmington, NM 87499 Facility or well name: SAN JUAN 32-9 UNIT 230S API Number: 30-045-33283 OCD Permit Number: U/L or Qtr/Qtr F (SWNW) Section 36 Township 3 Center of Proposed Design: Latitude 36.94348 □N Surface Owner: Federal State Private Triba	<u>2N</u> Range <u>10W</u> County: <u>San Juan</u> I Longitude <u>107.83910 °W</u> NAD: □19	
Pit: Subsection F, G or J of 19.15.17.11 NMAC Temporary: □ Drilling □ Workover Permanent □ Emergency □ Cavitation □ P&A □ Lined □ Unlined Liner type: Thicknessmil String-Reinforced Liner Seams: □ Welded □ Factory □ Other	☑ LLDPE ☐ HDPE ☐ PVC ☐ Other	
	d: Produced Water sible sidewalls, liner, 6-inch lift and automatic	
Alternative Method: Submittal of an exception request is required. Exception	ns must be submitted to the Santa Fe Environn	nental Bureau office for consideration of approval.
5. Fencing: Subsection D of 19.15.17.11 NMAC (Applies Chain link, six feet in height, two strands of barbed v		

☐ Alternate. Please specify_

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

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 accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. (Does not apply to below grade tanks) - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	:
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

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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 Natructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the do attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 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
11.	
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docattached. Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the description is the subsection of the following items must be attached to the application.	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 Preeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC 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 Alternative Closure Method	uid Management Pit
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 □ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	nttached to the
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
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	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	
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. 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 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 believed.	ef.
Name (Print): Title:	
Signature: Date:	
e-mail address:	
OCD Approval: Permit Application (including closure plan) Clasare Plan (only) OCD Conditions (see attachment)	/
OCD Representative Signature: Approval Date: 7/14	1/15
Title: OCD Permit Number:	
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. Closure Completion Date:	the closure report. complete this
20.	
Closure Method: ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-lo ☐ If different from approved plan, please explain.	op systems only)
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please incomark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure for private land only) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude NAD: 1927 1983	dicate, by a check

· ·
22.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and
belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print): Denise Journey Title: Staff Regulatory Technician
Signature: Date: 7/9/15
e-mail address: Denise.Journey@conocophillips.com Telephone: (505) 326-9556

Burlington Resources Oil Gas Company, LP San Juan Basin Below Grade Tank Closure Report (Without Reclamation)

Lease Name: San Juan 32-9 Unit 230S

API No.: 30-045-33283

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:

- 1. BR 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.
- 2. The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.
- 3. BR 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. BR 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 BR 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. BR 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 BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

A release was/was not determined for the above referenced well.

9. 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 BR 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.

Notice of Corrective Action Soil Sampling attached.

11. The surface owner shall be notified of BR'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.)

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 will be 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. BR 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 will be 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)

From:

Journey, Denise D Smith, Cory, EMNRD

To: Cc:

Ellison, Stephen G. (LDZX); Bruner, John P; Notor, Lori; Walker, Crystal

Subject:

RE: Notification of Corrective Action - Sampling of Soil - Below Grade Tank Excavation - San Juan 32-9 Unit 230S

Date:

Tuesday, June 09, 2015 1:51:20 PM

Subject: Notification of Corrective Action – Sampling of Soil – Below Grade Tank Excavation – San Juan 32-9 Unit 230S

Anticipated Start Date:

Monday, June 15, 2015 @ 9:00 am

In response to Notice of Violation (3-15-01), Conoco-Phillips will conduct sampling and analysis of soil from the below-grade tank excavation at the San Juan 32-9 Unit 230S.

Well Name:

San Juan 32-9 Unit 230S

API#:

30-045-33282

Location:

UL F, Sec. 36, T32N, R10W

Footages:

1825' FNL & 1470' FWL

Operator:

Burlington Resources

Surface Owner: FEE

Denise Journey Staff Regulatory Technician ConocoPhillips Company 505-326-9556 505-215-1750

Denise.Journey@conocophillips.com



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

OrderNo.: 1506720

June 23, 2015

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

FAX

RE: CoP SJ 32-9 Unit 230S

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/16/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers 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

mules

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1506720

Date Reported: 6/23/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Project: CoP SJ 32-9 Unit 230S

Lab ID: 1506720-001

Client Sample ID: SC-1

Collection Date: 6/15/2015 12:10:00 PM

Received Date: 6/16/2015 7:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 418.1: TPH					Analys	st: TOM	
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	6/19/2015	19801	
EPA METHOD 300.0: ANIONS					Analys	t: LGT	
Chloride	ND	30	mg/Kg	20	6/18/2015 6:11:28 PM	19805	
EPA METHOD 8021B: VOLATILES					Analys	t: RAA	
Benzene	ND	0.049	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Toluene	ND	0.049	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Ethylbenzene	ND	0.049	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Xylenes, Total	ND .	0.099	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Surr: 4-Bromofluorobenzene	94.1	80-120	%REC	1	6/18/2015 3:06:24 PM	19772	

Matrix: SOIL

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 1 of 4

- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506720

23-Jun-15

Client:

Animas Environmental

Project:

CoP SJ 32-9 Unit 230S

Sample ID MB-19805

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 19805

RunNo: 26944

Prep Date: 6/18/2015 Analysis Date: 6/18/2015

SegNo: 804433

Units: mg/Kg

Qual

Analyte

SPK value SPK Ref Val

%REC LowLimit HighLimit

%RPD **RPDLimit**

Qual

Chloride

ND 1.5

Sample ID LCS-19805

SampType: LCS

TestCode: EPA Method 300.0: Anions

LowLimit

90

64.2

Client ID: LCSS

Batch ID: 19805

PQL

1.5

RunNo: 26944

SPK value SPK Ref Val

15.00

15.00

15.00

HighLimit

Prep Date: 6/18/2015

Analysis Date: 6/18/2015

SeqNo: 804434 %REC

Units: mg/Kg

110

%RPD **RPDLimit**

Analyte Chloride

Sample ID 1506620-006AMS

SampType: MS

15

32

35

TestCode: EPA Method 300.0: Anions

97.2

Client ID: Prep Date: 6/18/2015

BatchQC

Batch ID: 19805

RunNo: 26944 SeqNo: 804436

Units: mg/Kg

131

Analyte

Analysis Date: 6/18/2015 Result

1.5

SPK value SPK Ref Val

19.63

%REC LowLimit HighLimit

RPDLimit Qual

Qual

Chloride

Sample ID 1506620-006AMSD

SampType: MSD

TestCode: EPA Method 300.0: Anions

Client ID: **BatchQC** Batch ID: 19805

RunNo: 26944

84.7

Prep Date:

6/18/2015

Analysis Date: 6/18/2015

SeqNo: 804437

Units: mg/Kg

Analyte

HighLimit

RPDLimit

Chloride

SPK value SPK Ref Val 19.63

%REC LowLimit 102

64.2

131

7.82

%RPD

%RPD

Oualifiers:

Ε

Value exceeds Maximum Contaminant Level.

Spike Recovery outside accepted recovery limits

Analyte detected below quantitation limits

RSD is greater than RSDlimit 0

Value above quantitation range

R RPD outside accepted recovery limits

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

P Sample pH Not In Range

Н

Reporting Detection Limit

Page 2 of 4

Hall Environmental Analysis Laboratory, Inc.

WO#:

1506720

23-Jun-15

Client:

Animas Environmental

Project:

CoP SJ 32-9 Unit 230S

Sample ID MB-19801

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID: PBS

Batch ID: 19801

RunNo: 26959

Prep Date: 6/18/2015

Analysis Date: 6/19/2015

20

SeqNo: 805046

Units: mg/Kg

SPK value SPK Ref Val

100.0

%REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

Petroleum Hydrocarbons, TR

Sample ID LCS-19801

ND

SampType: LCS

TestCode: EPA Method 418.1: TPH

Client ID: LCSS

Batch ID: 19801

RunNo: 26959

Prep Date: 6/18/2015 Analysis Date: 6/19/2015

20

SeqNo: 805048

Units: mg/Kg

126

Analyte Petroleum Hydrocarbons, TR **PQL**

SPK value SPK Ref Val %REC

LowLimit HighLimit 86.7

%RPD

RPDLimit Qual

Sample ID LCSD-19801

Client ID: LCSS02

110

98

SampType: LCSD Batch ID: 19801 TestCode: EPA Method 418.1: TPH

98.4

RunNo: 26959

Prep Date:

6/18/2015

Analysis Date: 6/19/2015

SeqNo: 805050

Units: mg/Kg

HighLimit

RPDLimit Qual

Analyte

SPK value SPK Ref Val %REC 100.0

0

107

LowLimit 86.7

126 8.16

%RPD

20

Petroleum Hydrocarbons, TR

20

Qualifiers:

Е

Value exceeds Maximum Contaminant Level.

Spike Recovery outside accepted recovery limits

Analyte detected below quantitation limits

RSD is greater than RSDlimit O

Value above quantitation range

RPD outside accepted recovery limits R

В Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Reporting Detection Limit

P Sample pH Not In Range

Page 3 of 4

Hall Environmental Analysis Laboratory, Inc.

WO#:

1506720

23-Jun-15

Client:

Animas Environmental

Project:

CoP SJ 32-9 Unit 230S

Sample ID 1	1506720-001AMS	SampT	SampType: MS TestCode: EPA Method 8021B: Volatiles								
Client ID:	SC-1	Batch	ID: 19	772	RunNo: 26938						
Prep Date:	6/17/2015	Analysis Da	ate: 6/	18/2015	S	SeqNo: 8	04183	Units: mg/F	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.92	0.049	0.9862	0	92.9	69.2	126			
oluene		0.92	0.049	0.9862	0	93.1	65.6	128			
thylbenzene		0.93	0.049	0.9862	0	94.6	65.5	138			
(ylenes, Total		2.8	0.099	2.959	0	94.8	63	139			
Surr: 4-Bromo	ofluorobenzene	1.0		0.9862		101	80	120			
Sample ID 1	1506720-001AMS) SampT	ype: MS	SD	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	SC-1	Batch	ID: 19	772	F	RunNo: 2	6938				
Prep Date:	6/17/2015	Analysis Da	ate: 6/	18/2015	S	SeqNo: 8	04184	Units: mg/k	(g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
lenzene		0.82	0.050	0.9980	0	81.8	69.2	126	11.6	18.5	
oluene		0.82	0.050	0.9980	0	81.7	65.6	128	11.8	20.6	
thylbenzene		0.83	0.050	0.9980	0	83.2	65.5	138	11.7	20.1	
(ylenes, Total		2.5	0.10	2.994	0	82.4	63	139	12.8	21.1	
Surr: 4-Bromo	ofluorobenzene —————————————————————————————————	1.0		0.9980		101	80	120	0	0	
Sample ID I	LCS-19772	SampTy	ype: LC	s	Test	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: I	LCSS	Batch	ID: 19	772	R	RunNo: 2	6938				
Prep Date:	6/17/2015	Analysis Da	ate: 6/	18/2015	S	SeqNo: 8	04185	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
enzene		1.0	0.050	1.000	0	104	76.6	128			
oluene		1.0	0.050	1.000	0	103	75	124			
thylbenzene		1.1	0.050	1.000	0	106	79.5	126			
lylenes, Total		3.1	0.10	3.000	0	105	78.8	124			
Surr: 4-Bromo	ofluorobenzene	1.0		1.000		104	80	120			
Sample ID I	MB-19772	SampTy	/pe: ME	BLK	Test	Code: El	PA Method	8021B: Volat	tiles	-	
Client ID: F	PBS	Batch	ID: 19	772	R	tunNo: 2	6938				
Prep Date:	6/17/2015	Analysis Da	ate: 6/	18/2015	S	eqNo: 8	04187	Units: mg/K	ζg		

SPK value SPK Ref Val %REC LowLimit

Qualifiers:

Analyte

Benzene

Toluene

Ethylbenzene Xylenes, Total

* Value exceeds Maximum Contaminant Level.

Result

ND

ND

ND

ND

0.93

PQL

0.050

0.050

0.050

0.10

1.000

E Value above quantitation range

Surr: 4-Bromofluorobenzene

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

80

HighLimit

120

%RPD

RPDLimit

Qual

ND Not Detected at the Reporting Limit

93.4

- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 4 of 4



Hall Environmental Analysis Löboratory 4901 Havkins NE Albaguerque, NM 87109

TEL: 505-345-3975 FAN: 505-315-4107 Website: www.hallanvironmental.com

Sample Log-In Check List

RoptNo: 1 Work Order Number: 1506720 Client Name: Animas Environmental Receivéd by/caté: Celin Som Logged By: Celina Sessa E/16/2015 7:20:00 AM 6/18/2015 9:32:43 AM Completed By: Celina Sessa Reviewed By: 06/16/15 Chain of Custody Not Present No. ... Yes 📙 1. Custody seals intact on sample bottles? No i 🔲 Not Present Yes 🛂 2. Is Chain of Custody complete? 3 How was the sample delivered? Courier Log In No 🗆 NA 🗌 Yes 🗹 4. Was an attempt made to cool the samples? NA 🗍 Yes 🔽 No 🗌 Were all samples received at a temperature of >0° C to 6.0°C Yes 🗹 No 🗌 Sample(s) in proper container(s)? Yes 🔽 No 7. Sufficient sample volume for indicated test(s)? Yes 🗸 8. Are samples (except VOA and CNG) properly preserved? Yes No 🗵 NA. 9. Was preservative added to bottles? No 🗀 No VOA Vials Yes 10 VOA vials have zero headspace? No 🗸 11 Were any sample containers received broken? # of preserved bottles checked No 🗆 Yes 🗸 for pH: 12. Does paperwork match botile labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? Yes V No 🗌 13 Are matrices correctly identified on Chain of Custody? No 🗆 V Yes 14. Is it clear what analyses were requested? Checked by: Yes 🗸 No 🗌 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (If applicable) Yes 🗌 No 🗌 NA Z 16. Was client notified of all discrepancies with this order? Person Notified: Date eMail Phone Fax In Person By Whom: Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No Temp °C | Condition | Seal Intact | Seal No Seal Date 1.8 Good Yes

Ch	iain-o	f-Cus	tody Record	Turn-Around T	īme:										والمنطقة وموادي				
lient:	Animas	Enviro	nmental Services, LLC	X Standard	□ Rusi	HALL ENVIRONME ANALYSIS LABOR www.hallenvironmental.com													
		*		Project Name:					ļ	1		halle	nviron	men	tal co	L A	B		CA
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		Farmin	gton, NM 87401	Project #:							5-397		Fax						
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mail or F		eskyles@	Danimasenvironmental.com	Project Manag															
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Daté	Time	Matrix	Sample Request ID	Container Type and #	Přeservátive Type	HEAL NO.	BTEX - 8021B	TPH - EPA 418.1	Chlorides - EPA		and the second s					77.77			Air Bubbles (Y or N)
6/15/15	12:10	Soil	SC-1	1 - 4:02.	.cooj		Х	х	Х				-						
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) 5 15	Time:	Relinquish	the Walles	Received by	$= \infty l_{is}$	/ 1410	Area	£											
1	If necessary s	samples subm	nitted to Hall Environmental may be sub	confracted to other ac			this po	ssiriit	y, Any	sup-co	ontracte	d data	will be c	learly r	votated	on the	analýti	çal rep	st.

Animas Environmental Services, LLC



June 26, 2015

Crystal Walker ConocoPhillips San Juan Business Unit (505) 326-9837

Via electronic mail to: <u>SJBUE-Team@ConocoPhillips.com</u>

RE: Below Grade Tank Closure Report

San Juan 32-9 Unit #230S San Juan County, New Mexico

Dear Ms. Walker:

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 32-9 Unit #230S, located in San Juan 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 32-9 Unit #230S Legal Description – SE¼ NW¼, Section 36, T32N, R10W, San Juan County, New Mexico Well Latitude/Longitude – N36.94361 and W107.83915, respectively BGT Latitude/Longitude – N36.94348 and W107.83910, respectively Land Jurisdiction – State of New Mexico

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, June 2015

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 280 Durango, CO 970-403-3084

- **Depth to Groundwater:** Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is interpreted to be greater than 100 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: An unnamed wash that drains to Ditch Canyon then the Animas River is located approximately 700 feet northwest of the location. (10 points)

1.3 BGT Closure Assessment

AES was initially contacted by Crystal Walker of CoP on June 9, 2015, and on June 15, 2015, Dylan Davis of AES mobilized to the location. AES personnel collected one five-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 June 15, 2015, AES personnel conducted field sampling and collected one 5-point composite (SC-1) from below the BGT. Soil was collected from approximately 0.5 feet below the former BGT. Soil sample 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 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 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 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 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 0.0 ppm in SC-1. Field TPH concentrations were reported at 24.3 mg/kg. The field chloride concentration was 20 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 Sampling VOCs, TPH, and Chloride Results San Juan 32-9 Unit #230S BGT Closure, June 2015

	Date	Depth below	VOCs OVM Reading	Field TPH	Field Chlorides
Sample ID	Sampled	BGT (ft)	(ppm)	(mg/kg)	(mg/kg)
NMOCD Action I	evel (NMAC 19.	.15.17.13E)	••	100	<i>250</i>
SC-1	6/15/15	0.5	0.0	24.3	20

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.049 mg/kg and 0.246 mg/kg, respectively. TPH concentrations were reported at less than 20 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 32-9 Unit #230S BGT Closure, June 2015

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)
	NMOCD Action Lev (NMAC 19.15.17.13		0.2	50	100	250
SC-1	6/15/15	0.5	<0.049	<0.246	<20	<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 SC-1 were below the NMOCD action level of 100 mg/kg, with a concentration reported at 24.3 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 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 32-9 Unit #230S.

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

Sincerely,

David J. Reese

Environmental Scientist

Elizabeth V MeNdly

David & Rem

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map

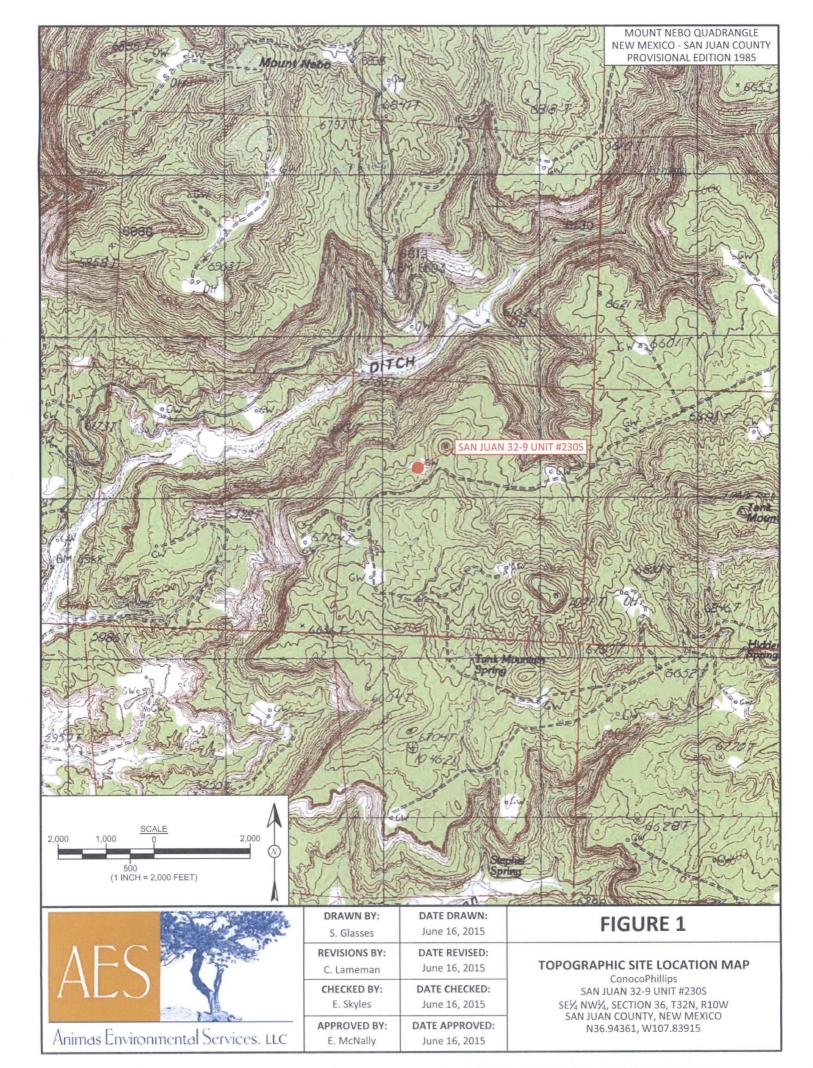
Figure 2. Aerial Site Map, June 2015

AES Field Sampling Report 061515

Hall Analytical Report 1506720

Crystal Walker San Juan 32-9 Unit #230S BGT Closure Report June 26, 2015 Page 5 of 5

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SAMPLE LOCATIONS

Field Sampling Results											
Sample ID	Date Depth (ft)		OVM- PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)						
NΛ	10CD ACTIO		100	250							
SC-1	6/15/15	0.5	0.0	24.3	20						

Laboratory Analytical Results												
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)	Chlorides (mg/kg)						
NMOCD ACTION LEVEL			0.2	50	100	250						
SC-1	6/15/15 0.5		<0.049	<0.246	<20	<30						
CARADIENMAC	ANIALVIZED	DED LIGEDA	A AFTILOD O	0040 4404	1110 200 0							

SC-1 IS A 5-POINT COMPOSITE SAMPLE. SAMPLE WAS ANALYZED PER USEPA METHOD 8021B, 418.1 AND 300.0. AN JUAN 32-9 UNIT #230S WELLHEAD BGT - N36.94348 W107.83910 2.000 2,000 500 (1 INCH = 2,000 FEET) AERIAL SOURCE: © 2014 GOOGLE EARTH PRO, AERIAL DATE: MARCH 15, 2015



CH CH

S. Glasses

REVISIONS BY:
C. Lameman

CHECKED BY:
E. Skyles

DATE REVISED:
June 16, 2015

DATE CHECKED:
June 16, 2015

DATE CHECKED:
June 16, 2015

DATE APPROVED:
June 16, 2015

DATE DRAWN:

DRAWN BY:

FIGURE 2

AERIAL SITE MAP BELOW GRADE TANK CLOSURE JUNE 2015

ConocoPhillips
SAN JUAN 32-9 UNIT #230S
SE¼ NW¼, SECTION 36, T32N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.94361, W107.83915

Client: ConocoPhillips

Project Location: San Juan 32-9 Unit #230S

Date: 6/15/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)
SC-1	6/15/2015	12:10	Composite	0.0	20	24.3	12:35	20.0

DF

Dilution Factor

NA

Not Analyzed

PQL

Practical Quantitation Limit

*Field TPH concentrations recorded may be below PQL.

Field Chloride - Quantab Chloride Titra

Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEP

Analyst: Dyla Daw



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

OrderNo.: 1506720

June 23, 2015

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

FAX

RE: CoP SJ 32-9 Unit 230S

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/16/2015 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers 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

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1506720

Date Reported: 6/23/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Project: CoP SJ 32-9 Unit 230S

Lab ID: 1506720-001

Client Sample ID: SC-1

Collection Date: 6/15/2015 12:10:00 PM

Matrix: SOIL Received Date: 6/16/2015 7:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 418.1: TPH					Analys	t: TOM	
Petroleum Hydrocarbons, TR	ND	20	mg/Kg	1	6/19/2015	19801	
EPA METHOD 300.0: ANIONS					Analys	t: LGT	
Chloride	ND	30	mg/Kg	20	6/18/2015 6:11:28 PM	19805	
EPA METHOD 8021B: VOLATILES					Analys	t: RAA	
Benzene	ND	0.049	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Toluene	ND	0.049	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Ethylbenzene	ND	0.049	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Xylenes, Total	ND	0.099	mg/Kg	1	6/18/2015 3:06:24 PM	19772	
Surr: 4-Bromofluorobenzene	94.1	80-120	%REC	1	6/18/2015 3:06:24 PM	19772	

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 1 of 4

- P Sample pH Not In Range
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506720 23-Jun-15

Client:

Project:

Animas Environmental CoP SJ 32-9 Unit 230S

Sample ID MB-19805

SampType: MBLK

TestCode: EPA Method 300.0: Anions

PBS Client ID:

Batch ID: 19805

RunNo: 26944

Prep Date: 6/18/2015

Analysis Date: 6/18/2015

SeqNo: 804433

%REC

Units: mg/Kg

HighLimit

%RPD

%RPD

%RPD

Qual

Analyte Chloride

ND 1.5

Sample ID LCS-19805

SampType: LCS

15

TestCode: EPA Method 300.0: Anions

LowLimit

LowLimit

64.2

90

LowLimit

Client ID: LCSS

Batch ID: 19805

RunNo: 26944

Prep Date: 6/18/2015 Analysis Date: 6/18/2015

PQL

1.5

SeqNo: 804434

Units: mg/Kg

Analyte

Chloride

Result

%REC

97.2

HighLimit

110

RPDLimit

RPDLimit

Qual

Sample ID 1506620-006AMS

SampType: MS

TestCode: EPA Method 300.0: Anions

Client ID:

BatchQC

Batch ID: 19805

RunNo: 26944

131

Prep Date:

6/18/2015

Analysis Date: 6/18/2015

SPK value SPK Ref Val

19.63

SPK value SPK Ref Val

SPK value SPK Ref Val

15.00

15.00

SeqNo: 804436

%REC

84.7

Units: mg/Kg HighLimit

RPDLimit Qual

Qual

Analyte Chloride

Sample ID 1506620-006AMSD

SampType: MSD

TestCode: EPA Method 300.0: Anions

Client ID:

BatchQC

Batch ID: 19805

RunNo: 26944

Prep Date:

6/18/2015

SeqNo: 804437

Units: mg/Kg

Analyte

Analysis Date: 6/18/2015

1.5

35

Result

32

SPK value SPK Ref Val %REC

LowLimit

HighLimit

%RPD **RPDLimit**

Chloride

19.63 15.00

102

64.2

131

7.82

20

Page 2 of 4

Oualifiers:

Value exceeds Maximum Contaminant Level.

Value above quantitation range Е

Analyte detected below quantitation limits

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded Н ND Not Detected at the Reporting Limit

Sample pH Not In Range

Reporting Detection Limit

S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

WO#: 1506720

23-Jun-15

Client:

Animas Environmental

Project:

CoP SJ 32-9 Unit 230S

Sample ID MB-19801

SampType: MBLK

TestCode: EPA Method 418.1: TPH

Client ID: PBS

Batch ID: 19801

RunNo: 26959

Prep Date: 6/18/2015 Analysis Date: 6/19/2015

SeqNo: 805046

Units: mg/Kg

SPK value SPK Ref Val

%REC LowLimit HighLimit

%RPD **RPDLimit** Qual

Petroleum Hydrocarbons, TR Sample ID LCS-19801 ND

Result

98

110

SampType: LCS

TestCode: EPA Method 418.1: TPH

Client ID: LCSS

Batch ID: 19801

RunNo: 26959

126

Prep Date: 6/18/2015

Analysis Date: 6/19/2015

20

SeqNo: 805048

Units: mg/Kg

Analyte

Petroleum Hydrocarbons, TR

PQL

20

20

SPK value SPK Ref Val

100.0

%REC 98.4 LowLimit HighLimit

86.7

LowLimit

RPDLimit

Qual

Sample ID LCSD-19801

SampType: LCSD

TestCode: EPA Method 418.1; TPH RunNo: 26959

Client ID: LCSS02

Batch ID: 19801

SeqNo: 805050

Units: mg/Kg

Analyte

Prep Date: 6/18/2015

Analysis Date: 6/19/2015

HighLimit

%RPD **RPDLimit** Qual

Petroleum Hydrocarbons, TR

SPK value SPK Ref Val %REC

100.0

0

0

107

86.7

126

8.16

%RPD

20

Qualifiers:

Е

S

Value exceeds Maximum Contaminant Level.

Spike Recovery outside accepted recovery limits

Analyte detected below quantitation limits O RSD is greater than RSDlimit

RPD outside accepted recovery limits

Value above quantitation range

R

Analyte detected in the associated Method Blank В

Holding times for preparation or analysis exceeded Н

ND Not Detected at the Reporting Limit Page 3 of 4

Р Sample pH Not In Range

Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#:

1506720

23-Jun-15

Client: Project:

Animas Environmental CoP SJ 32-9 Unit 230S

Sample ID 1506720-001AMS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: SC-1 Batch ID: 19772 RunNo: 26938 Prep Date: 6/17/2015 Analysis Date: 6/18/2015 SeqNo: 804183 Units: mg/Kg Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.92 0.049 0.9862 0 92.9 69.2 Benzene 126 Toluene 0.92 0.049 0.9862 0 93.1 65.6 128 Ethylbenzene 0.93 0.049 0.9862 0 94.6 65.5 138 Xylenes, Total 2.8 0.099 2.959 0 94.8 63 139 Surr: 4-Bromofluorobenzene 1.0 0.9862 101 80 120

Sample ID 1506720-001AM	SD Samp1	Гуре: М\$	SD	Tes	PA Method	8021B: Vola	tiles			
Client ID: SC-1	Batch	h ID: 19 '	772	F	RunNo: 2	6938				
Prep Date: 6/17/2015	Analysis D	Date: 6/	18/2015	SeqNo: 804184			Units: mg/h	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.050	0.9980	0	81.8	69.2	126	11.6	18.5	
Toluene	0.82	0.050	0.9980	0	81.7	65.6	128	11.8	20.6	
Ethylbenzene	0.83	0.050	0.9980	0	83.2	65.5	138	11.7	20.1	
Xylenes, Total	2.5	0.10	2.994	0 82.4 63			139	12.8	21.1	
Surr: 4-Bromofluorobenzene	1.0		0.9980		101	80	120	0	0	

Sample ID LCS-19772	TestCode: EPA Method 8021B: Volatiles												
Client ID: LCSS	Batcl	n ID: 19	772	F	RunNo: 2	6938							
Prep Date: 6/17/2015	Analysis D)ate: 6/	18/2015	9	SeqNo: 804185 l			Units: mg/Kg					
Analyte	Result	Result PQL SPK value SPK Ref Val %REC LowLimit		HighLimit	%RPD	RPDLimit	Qual						
Benzene	1.0	0.050	1.000	0	104	76.6	128						
Toluene	1.0	0.050	1.000	0	103	75	124						
Ethylbenzene	1.1	0.050	1.000	0	106	79.5	126						
Xylenes, Total	3.1	0.10	3.000	0	105	78.8	124						
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120						

Sample ID MB-19772 SampType: MBLK TestCode: EPA Meth						PA Method	8021B: Volat	tiles			
Client ID: PBS	Batch	n ID: 19	772	F	RunNo: 2	6938					
Prep Date: 6/17/2015	Analysis D)ate: 6/	18/2015	5	SeqNo: 804187 U		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									
Surr: 4-Bromofluorobenzene	0.93		1.000		93.4	80	120				

Qualifiers:

* Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Page 4 of 4

P Sample pH Not In Range

RL Reporting Detection Limit



Hall Environmenial Analysis Laboratory 4901 Hawkins NE Albuquergue, NM 87109

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Numb	er: 1506720		RoptNo; 1							
Received by/cate: LM 06/10/15			A MANAGEMENT AND	To an advantage of the second						
Logged Bý: Celling Sessa 6/16/2015 7:20:00 A	М	Celin S	ine							
Completed By: Celina Sessa 6/16/2015 9:32:43 A	М	Celia S	22000	enemonate () be						
Reviewed By: 3 06/16/15										
Chain of Custody										
1. Custody seals intact on sample bottles?	Yes 📙	No 🗆	Not Present 🗹							
2, 1s Chain of Custody complete?	Yes 🗹	No ·	Not Present 🔲							
3. How was the sample delivered?	Courier									
Log In										
4. Was an attempt made to cool the samples?	Yes 🗹	No □	NA I							
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🕢	No [ná 🗆							
6. Sample(s) in proper container(s)?	Yes 🗹	No 🗀								
7. Sufficient sample volume for indicated test(s)?	Yes 🗹	No.								
8. Are samples (except VOA and ONG) properly preserved?	Yos 🗹	No 🗆								
9. Was preservative added to bottles?	Yes 🗌	No 💆	NA 🗆							
10.VOA vials have zero headspace?	Yes 🗌	No C	No VOA Vials 🗹							
11. Were any sample containers received broken?	Yes 🗆	No 🗹	# of preserved							
12. Dies paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🔽	No. 🗆	bottles checked for pH: (<2 or >	12 unless noted)						
13. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗆	Adjüsted?	dhann dilicitu ar the electricitation area.						
14. Is it clear what analyses were requested?	Yes 🛂	No 🗆								
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by:							
Special Handling (If applicable)										
16. Was dient notified of all discrepancies with this order?	Ycs 🗌	No 🗆	NA 🔽							
Peison Notified: Date	e [- Constitution of the Cons								
By Whom: Via:	eMail	Phone 🔲 Fax	☐ In Person							
Regarding:										
Client Instructions:		**************************************								
17. Additional remarks:										
18. Cooler Information	i 4	_:	i							
Cooler No Temp °C Condition Seal Intact Seal No 1 8 Good Yes	Seal Date	Signed By								
1 1.8 Good Yes										

Ch	Chair-or-Custody record		Turn-Around T	īme:				* * #		B. B. A.			F . H. S .	# TE E		电影		— 19	
Client:	Animas	Enviro	nmental Services, LLC	X Standard	□Rush		<u> </u>	推	£		HA								
		¥.		Project Name:					1	l į	AN	AL allen	ironi	menta	⊃o a al.cor	_ <i>_}</i> A n	R	JK	A
/ailing Ad	dress	604 W	Pinon St.		CoP:SJ:3249	Unit 230S		490	01 H		ns NE								
		the state of the s	gton, NM 87401	Project #:				Te	el, 50	5-34	5-3975	5]	Fax	505-3	345-4	107			
hone#:	505-564										A	nalys	s R	eque	st				
mail or F	ax#:	eskyles@	Danimasenvironmental.com	Project Manag	jer:														
IA/QC Pac	kage:				E. Skyles								•						
K Standar	<u>d</u>		☐ Level 4 (Full Validation)	T							:								
\ccreditati		em (Outbre)		Sampler: D: Davis					0.0										برا
J NELAP J EDD (T		□ Other		On Ice: Sample Temp		⊡(No) \$			300:0		ļ				1				Z
<u> </u>) per			Colinpionis	1,777		2:1B	- EPA 418	-EPA										Air Bubbles (Y or N)
Date	Time	Matrix	Sample Request ID	Container	Preservative	HEALNO	- 8021B	EPA											pple
Date	""		Countries i redución re-	Type and #	Type	The Towns of Mary 12 to 1	втех	Į	Chlorides										Han.
						1500720	18	TPH	ច										13
6/15/15 1	12:10	Soil	SC-1	1 - 4;0%,	cool	-001	Х	Х	Х.										
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Date!	Time	Relinquish		Received by:	1	Date Time	Area	3;.1											
15/15	1804	1804 Matte Madas			a helis 1920														
1	If necessary	samples subr	nided to Hall Environmental may be sul	contracted to other 8			this po	eskil.	ty. An	y sub-c	cutrected	dața wi	ll be çi	early no	otated c	on the	analýtica	rogor lé	ţ;



