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.

12611
39-27758

RECEIVED
By OCD at 10:32 am, Jan 27, 2015

Pit, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Below grade tank registration
- ☐ Permit of a pit or proposed alternative method
- ☒ Closure of a pit, below-grade tank, or proposed 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

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: **Burlington Resources** OGRID #: 14538
Address: PO BOX 4289, Farmington, NM 87499
Facility or well name: San Juan 30-6 Unit 489S
API Number: 3003927758 OCD Permit Number:
U/L or Qtr/Qtr D (NWNW) Section 24 Township 30N Range 6W County: Rio Arriba
Center of Proposed Design: Latitude 36.802450000 °N Longitude -107.42146000 °W NAD: ☒ 1927 ☐ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
Closed Prior to Closure Plan Approval.
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 120 bbl Type of fluid: Produced Water
Constituents Exceed Standards outline by 19.15.17.13 NMAC. Please submit a separate C-141 under 19.15.29 NMAC
Tank Construction material: Metal
☐ Secondary containment with leak detection ☒ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness 45 mil ☐ HDPE ☐ PVC ☒ Other LLDPE

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

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

☐ Alternate. Please specify_____

6.

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

☐ Screen ☐ Netting ☐ Other_____

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

7.

Signs: Subsection C of 19.15.17.11 NMAC

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

☐ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

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

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

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

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

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 acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

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 ☒ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - 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

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (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 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

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 documents are 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 19.15.17.9 NMAC 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: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, 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 Fluid Management Pit ☐ 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

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 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	

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	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☐ 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

17.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure ~~Plan (only)~~ ☒ OCD Conditions (see attachment) see front page

OCD Representative Signature: _____ **Approval Date:** Mar 27, 2015

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. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date:** 5/9/13

20.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark 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 _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

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): Kenny Davis Title: Staff Regulatory Technician

Signature: Date: 12/3/14

e-mail address: kenny.r.davis@conocophillips.com Telephone: 505-599-4045

Burlington Resources Oil Gas Company, LP
San Juan Basin
Below Grade Tank Closure Report

Lease Name: SJ 30-6 Unit 489S
API No.: 3003927758

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 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.

    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 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 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. 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 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.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

[X] Initial Report [X] Final Report

Name of Company **Burlington Resources**	Contact **Kenny Davis**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 599-4045
Facility Name: **San Juan 30-6 Unit 489S**	Facility Type: **Gas Well**

Surface Owner **Federal**	Mineral Owner **Federal**	Lease No.**SF-078741**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	**24**	**30N**	**6W**	1005	North	365	West	**Rio Arriba**

Latitude36.802450000 Longitude-107.42146000

NATURE OF RELEASE

Type of Release BGT Closure Summary	Volume of Release N/A	Volume Recovered N/A
Source of Release: NONE	Date and Hour of Occurrence N/A	Date and Hour of Discovery N/A
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? N/A ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Constituents Exceed Standards outline by 19.15.17.13 NMAC. Please submit a separate C-141 under 19.15.29 NMAC

Describe Cause of Problem and Remedial Action Taken.*
N/A

Describe Area Affected and Cleanup Action Taken.*
BGT Closure: NO RELEASE FOUND UPON REMOVAL

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Kenny Davis	Approved by District Supervisor:	
Title: Staff Regulatory Technician	Approval Date:	Expiration Date:
E-mail Address: Kenny.r.davis@conocophillips.com	Conditions of Approval:	Attached ☐
Date: 12/4/14 Phone: (505) 599-4045		

* Attach Additional Sheets If Necessary

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

June 10, 2013

Crystal Tafoya
ConocoPhillips
San Juan Business Unit
Office 214-05
5525 Hwy 64
Farmington, New Mexico 87401

RE: Below Grade Tank Closure and Final Excavation Report
San Juan 30-6 #489S
Rio Arriba County, New Mexico

Dear Ms. Tafoya:

On May 9, 2013, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 30-6 #489S, located in Rio Arriba County, New Mexico. The historical release was discovered during BGT closure sampling at the location, and the final excavation was completed by contractors while AES was on location on May 9, 2013.

1.0 Site Information

1.1 Location

Site Name – San Juan 30-6 #489S
Legal Description – NW¼ NW¼, Section 24, T30N, R6W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.80262 and W107.42197, respectively
BGT Latitude/Longitude – N36.80275 and W107.42184, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2013

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a C-144 form dated January 2005 for the San Juan 30-6 #489S reported the depth to groundwater as between 50 and 99 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 Center online mapping tool (http://ford.nmt.edu/react/project.html) 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 between 50 and 99 feet bgs. An unnamed wash which discharges to La Jara Canyon is located approximately 170 feet northwest of the location. Based on this information, the location was assessed a ranking score of 30.

1.3 Assessments

AES was initially contacted by Freddie Martinez, CoP representative, on May 8, 2013, and on May 9, 2013, Heather Woods and Jesse Christopherson 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 (SC-1) was composited from the four perimeter samples and one center sample. Sample locations are shown on Figure 2.

Based on the field screening results from the BGT assessment, AES recommended an area of excavation and provided excavation guidance while onsite on May 9, 2013. AES personnel collected a total of five confirmation soil samples (SC-2 through SC-6) from the walls and base of the excavation. The final excavation measured approximately 22 feet by 22 feet by 8 to 10 feet in depth. Sample locations and final excavation extents are presented on Figure 3.

2.0 Soil Sampling

On May 9, 2013, 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 VOCs and chloride and was submitted for confirmation laboratory analysis. In addition, AES personnel collected five 5-point composite (SC-2 through SC-6) soil samples from the sidewalls and base of the final excavation for confirmation field screening of VOCs and TPH.

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 8260B; and
- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

BGT closure field screening readings for VOCs via OVM ranged from 0.4 ppm in S-5 up to 4.8 ppm in S-2. Field TPH concentrations ranged from 376 mg/kg in S-5 to greater than 2,500 mg/kg in S-1 through S-4. The field chloride concentration in SC-1 was 60 mg/kg.

Final excavation field screening results for VOCs via OVM concentrations ranged from 0.1 ppm in SC-5 and SC-6 to 1.2 ppm in SC-3. Field TPH concentrations ranged from less than 20 mg/kg in SC-5 up to 55.5 mg/kg in SC-2. 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 30-6 #489S BGT Closure and Final Excavation
May 2013

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action Level* (NMAC 19.15.17.13E)			**100**	**100**	**250**
S-1	5/9/13	0.5	4.0	**>2,500**	NA
S-2	5/9/13	0.5	4.8	**>2,500**	NA
S-3	5/9/13	0.5	1.7	**>2,500**	NA
S-4	5/9/13	0.5	2.3	**>2,500**	NA
S-5	5/9/13	0.5	0.4	**376**	NA
SC-1	5/9/13	0.5	0.5	NA	60
SC-2	5/9/13	8 to 10	0.7	55.5	NA
SC-3	5/9/13	1 to 10	1.2	35.0	NA
SC-4	5/9/13	1 to 8	0.3	44.6	NA
SC-5	5/9/13	1 to 10	0.1	<20.0	NA
SC-6	5/9/13	1 to 10	0.1	25.4	NA

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993) and *NMAC 19.15.17.13E.*
NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.049 mg/kg and 0.24 mg/kg, respectively. 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 30-6 #489S BGT Closure and Final Excavation
May 2013

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total 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**	**100**		**250**
SC-1	5/9/13	0.5	<0.049	<0.24	NA	NA	<30

NA - not analyzed

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 exceeded the NMOCD action level of 100 mg/kg in five samples, S-1 through S-4 (greater than 2,500 mg/kg) and S-5 (376 mg/kg). Benzene and total BTEX concentrations in SC-1 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 screening results during the BGT closure assessment, a release was confirmed at the San Juan 30-6 #489S, and AES provided excavation guidance while onsite. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking of 30. Field screening results for VOCs via OVM were below the NMOCD action level of 100 ppm in each confirmation sample, with the highest concentration of 1.2 ppm reported in SC-3. Field TPH concentrations were also reported below the NMOCD action level of 100 mg/kg in each sample collected from the base and walls of the final excavation, with the highest concentration reported in SC-2 (55.5 mg/kg).

Based on excavation of petroleum hydrocarbon impacted soils, field screening, and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at the San Juan 30-6 #489S. If you have any questions about this report or site conditions, please do not hesitate to contact Deborah Watson at (505) 564-2281.

Sincerely,

Landrea R. Cupps

Landrea Cupps
Environmental Scientist

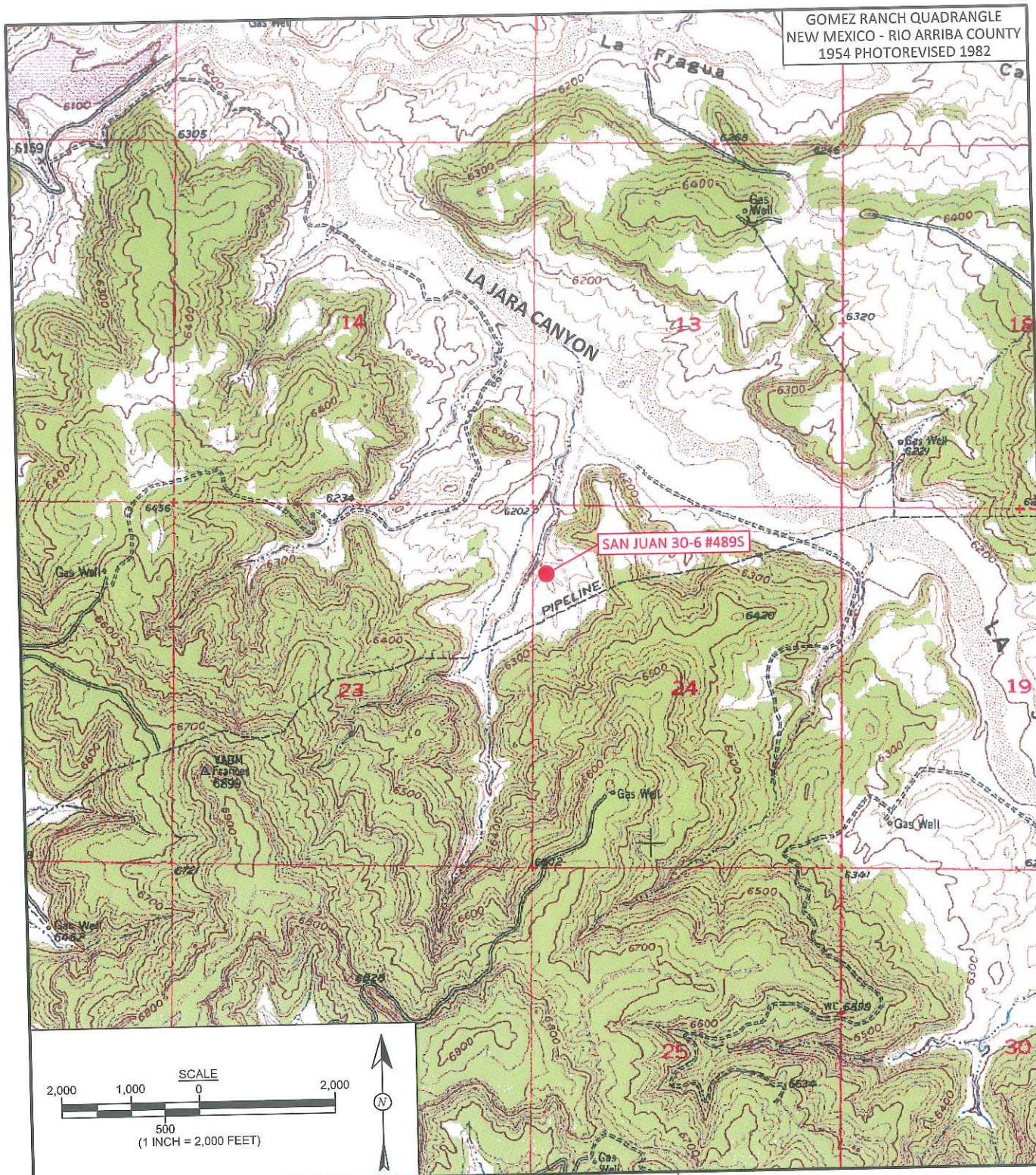
Elizabeth D McNally

Elizabeth McNally, P.E.

Attachments:

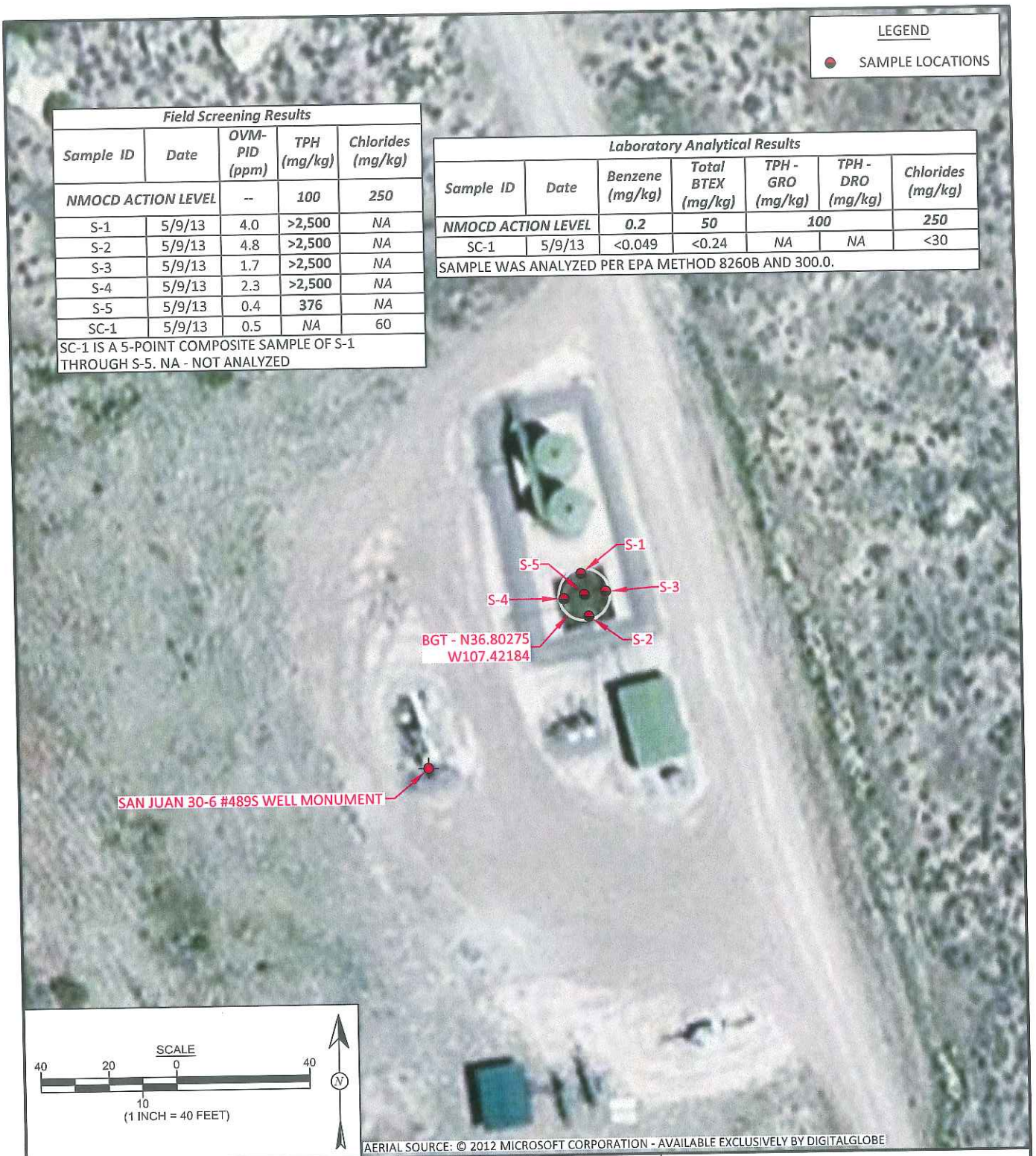
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2013
Figure 3. Excavation Sample Locations and Results, May 2013
AES Field Screening Report 050913
Hall Analytical Report 1305409

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 30-6 #489S\San Juan 30-6 #489S BGT Closure Report 061013.docx



DRAWN BY: C. Lameman	**DATE DRAWN:** May 13, 2013	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** May 13, 2013	**TOPOGRAPHIC SITE LOCATION MAP** ConocoPhillips SAN JUAN 30-6 #489S NW¼ NW¼, SECTION 24, T30N, R6W RIO ARRIBA COUNTY, NEW MEXICO N36.80262, W107.42197
CHECKED BY: D. Watson	**DATE CHECKED:** May 13, 2013	
APPROVED BY: E. McNally	**DATE APPROVED:** May 13, 2013	

AES
Animas Environmental Services, LLC



Field Screening Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	5/9/13	4.0	>2,500	NA
S-2	5/9/13	4.8	>2,500	NA
S-3	5/9/13	1.7	>2,500	NA
S-4	5/9/13	2.3	>2,500	NA
S-5	5/9/13	0.4	376	NA
SC-1	5/9/13	0.5	NA	60

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

Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2	50	100		250
SC-1	5/9/13	<0.049	<0.24	NA	NA	<30

SAMPLE WAS ANALYZED PER EPA METHOD 8260B AND 300.0.

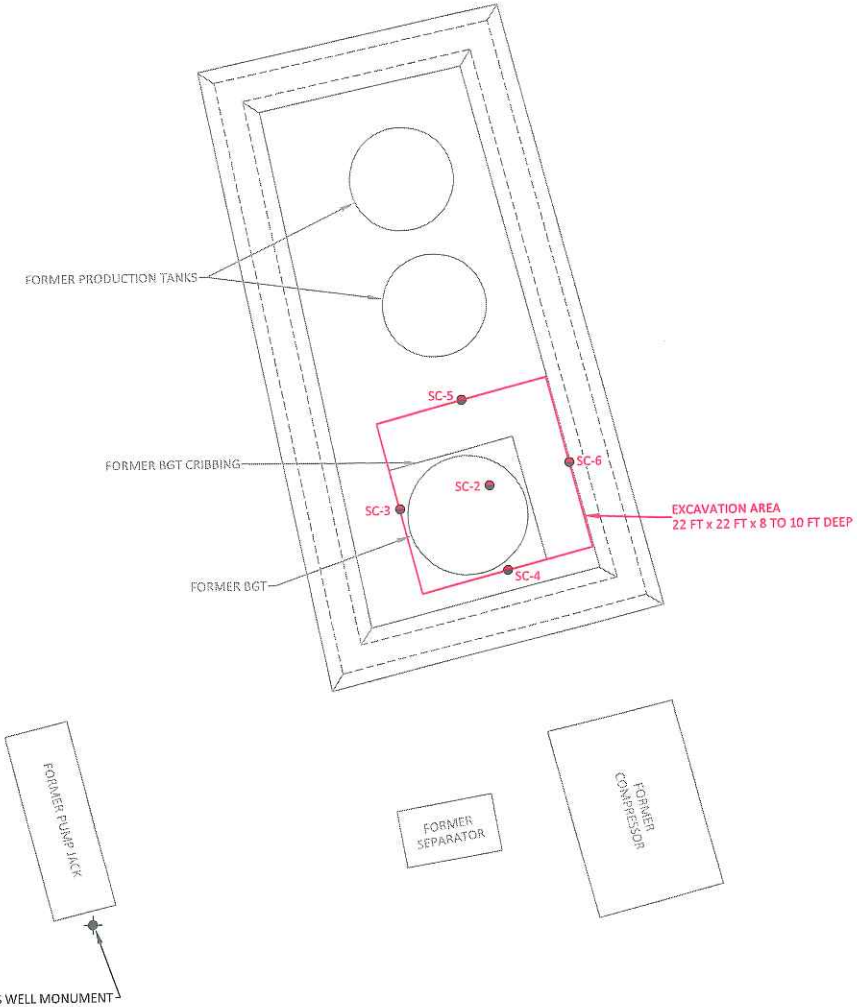
AERIAL SOURCE: © 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: May 13, 2013	**FIGURE 2**
REVISIONS BY: C. Lameman	DATE REVISED: May 13, 2013	**AERIAL SITE MAP** **BELOW GRADE TANK CLOSURE** **MAY 2013**
CHECKED BY: D. Watson	DATE CHECKED: May 13, 2013	ConocoPhillips SAN JUAN 30-6 #489S
APPROVED BY: E. McNally	DATE APPROVED: May 13, 2013	NW¼ NW¼, SECTION 24, T30N, R6W RIO ARRIBA COUNTY, NEW MEXICO N36.80262, W107.42197

FIGURE 3

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
MAY 2013
ConocoPhillips
SAN JUAN 30-6 #489S
NW¼ NW¼, SECTION 24, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.80262, W107.42197



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-2	5/9/13	8 to 10	0.7	55.5
SC-3	5/9/13	1 to 10	1.2	35.0
SC-4	5/9/13	1 to 8	0.3	44.6
SC-5	5/9/13	1 to 10	0.1	<20.0
SC-6	5/9/13	1 to 10	0.1	25.4
ALL SAMPLES WERE 5-POINT COMPOSITE SAMPLES.				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: May 15, 2013
REVISIONS BY: C. Lameman	DATE REVISED: May 15, 2013
CHECKED BY: D. Watson	DATE CHECKED: May 15, 2013
APPROVED BY: E. McNally	DATE APPROVED: May 15, 2013

LEGEND

SAMPLE LOCATIONS

SECONDARY CONTAINMENT BERM

N

SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: San Juan 30-6 #489S

Date: 5/9/2013

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	5/9/2013	11:26	BGT North	4.0	NA	12:16	>2500	20.0	1	HW
S-2	5/9/2013	11:20	BGT South	4.8	NA	12:19	>2500	20.0	1	HW
S-3	5/9/2013	11:30	BGT East	1.7	NA	12:22	>2500	20.0	1	HW
S-4	5/9/2013	11:32	BGT West	2.3	NA	12:26	>2500	20.0	1	HW
S-5	5/9/2013	11:34	BGT Center	0.4	NA	12:28	376	20.0	1	HW
SC-1	5/9/2013	11:30	BGT Composite	0.5	60	*Not Analyzed for TPH.*				
SC-2	5/9/2013	15:39	Excavation Base	0.7	NA	16:27	55.5	20.0	1	HW
SC-3	5/9/2013	16:51	West Wall	1.2	NA	17:04	35.0	20.0	1	HW
SC-4	5/9/2013	16:53	South Wall	0.3	NA	17:09	44.6	20.0	1	HW
SC-5	5/9/2013	15:47	North Wall	0.1	NA	16:33	<20.0	20.0	1	HW
SC-6	5/9/2013	15:49	East Wall	0.1	NA	16:35	25.4	20.0	1	HW

ND Not Detected at the Reporting Limit
NA Not Analyzed
DF Dilution Factor
**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Heather M. Woods

Report Finalized: 05/09/13

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 14, 2013

Debbie Watson

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

RE: CoP San Juan 30-6 #489S

OrderNo.: 1305409

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/10/2013 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. 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
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1305409**
Date Reported: **5/14/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP San Juan 30-6 #489S
Lab ID: 1305409-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 5/9/2013 11:38:00 AM
Received Date: 5/10/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	ND	30		mg/Kg	20	5/10/2013 12:35:44 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**
Benzene	ND	0.049		mg/Kg	1	5/13/2013 1:27:11 PM
Toluene	ND	0.049		mg/Kg	1	5/13/2013 1:27:11 PM
Ethylbenzene	ND	0.049		mg/Kg	1	5/13/2013 1:27:11 PM
Xylenes, Total	ND	0.097		mg/Kg	1	5/13/2013 1:27:11 PM
Surr: 1,2-Dichloroethane-d4	85.2	70-130		%REC	1	5/13/2013 1:27:11 PM
Surr: 4-Bromofluorobenzene	82.6	70-130		%REC	1	5/13/2013 1:27:11 PM
Surr: Dibromofluoromethane	89.5	70-130		%REC	1	5/13/2013 1:27:11 PM
Surr: Toluene-d8	93.1	70-130		%REC	1	5/13/2013 1:27:11 PM

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
P	Sample pH greater than 2
RL	Reporting Detection Limit
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
S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1305409

14-May-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #489S

Sample ID	1305367-001AMS	SampType:	MS		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC	Batch ID:	7384		RunNo:	10562				
Prep Date:	5/10/2013	Analysis Date:	5/10/2013		SeqNo:	298384	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	7.5	15.00	0	91.9	64.4	117			

Sample ID	1305367-001AMSD	SampType:	MSD		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC	Batch ID:	7384		RunNo:	10562				
Prep Date:	5/10/2013	Analysis Date:	5/10/2013		SeqNo:	298385	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	13	7.5	15.00	0	90.0	64.4	117	2.14	20	

Sample ID	1305413-001AMS	SampType:	MS		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC	Batch ID:	7384		RunNo:	10562				
Prep Date:	5/10/2013	Analysis Date:	5/10/2013		SeqNo:	298401	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	44	30	15.00	34.12	65.0	64.4	117			

Sample ID	1305413-001AMSD	SampType:	MSD		TestCode:	EPA Method 300.0: Anions				
Client ID:	BatchQC	Batch ID:	7384		RunNo:	10562				
Prep Date:	5/10/2013	Analysis Date:	5/10/2013		SeqNo:	298402	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	45	30	15.00	34.12	75.8	64.4	117	3.65	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- 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
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1305409

14-May-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #489S

Sample ID **mb-7389** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **7389** RunNo: **10577**

Prep Date: **5/10/2013** Analysis Date: **5/13/2013** SeqNo: **299207** Units: **mg/Kg**

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: 1,2-Dichloroethane-d4	0.41		0.5000		82.9	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.3	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.2	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID **lcs-7389** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **LCSS** Batch ID: **7389** RunNo: **10577**

Prep Date: **5/10/2013** Analysis Date: **5/13/2013** SeqNo: **299208** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.4	70	130			
Toluene	1.0	0.050	1.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.4	70	130			
Surr: 4-Bromofluorobenzene	0.42		0.5000		83.7	70	130			
Surr: Dibromofluoromethane	0.46		0.5000		92.0	70	130			
Surr: Toluene-d8	0.46		0.5000		91.3	70	130			

Sample ID **1305409-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **SC-1** Batch ID: **R10577** RunNo: **10577**

Prep Date: Analysis Date: **5/13/2013** SeqNo: **299209** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.050	1.000	0.004596	86.3	67.5	124			
Toluene	0.95	0.050	1.000	0	94.9	55.8	142			
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		84.8	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.5000		85.8	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.6	70	130			
Surr: Toluene-d8	0.47		0.5000		93.0	70	130			

Sample ID **1305409-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **SC-1** Batch ID: **R10577** RunNo: **10577**

Prep Date: Analysis Date: **5/13/2013** SeqNo: **299210** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		86.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.43		0.5000		86.1	70	130	0	0	
Surr: Dibromofluoromethane	0.46		0.5000		92.2	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- 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
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1305409**

14-May-13

Client: Animas Environmental

Project: CoP San Juan 30-6 #489S

Sample ID **1305409-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8260B: Volatiles Short List**	
Client ID: **SC-1**	Batch ID: **R10577**	RunNo: **10577**	
Prep Date:	Analysis Date: **5/13/2013**	SeqNo: **299210**	Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Toluene-d8	0.44		0.5000		88.6	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit
- 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
- S Spike Recovery outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1305409 | RcptNo: 1

Received by/date: AG 05/10/13

Logged By: Michelle Garcia 5/10/2013 10:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 5/10/2013 10:08:48 AM Michelle Garcia

Reviewed By: 05/10/13

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is 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 ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
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?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
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 ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: Animas Environmental Services	Turn-Around Time: Cl- same day BTEx- 24 hr. ☐ Standard ☒ Rush Same Day
Mailing Address: 624 E. Comanche Farmington, NM 87401	Project Name: CoP San Juan 30-6 #489S
Phone #:	Project #:
email or Fax#:	Project Manager: D. Watson
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)	Sampler: H. Woods
Accreditation ☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: C

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1305409	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4) See Cl- Chloride	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
5/9/13	1138	Soil	SC-1	1-4 oz Jar	—	-001	X							X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/10/13	615	Heather M. Woods	Chat Waltz	5/10/13	615
5/10/13	645	Chat Waltz		05/10/13	1000

Remarks: Bill to ConocoPhillips

WO: 10338227

Activity: C200

Supervisor: Terry Bowker

User ID: BENALE

Ordered by: Freddie Martinez

Area: 8

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.