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.

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

13835

39-29338

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

RECEIVED
By Rvillalobos at 9:41 am, Dec 30, 2015

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.

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

Operator: Burlington Resources Oil & Gas Company, LP OGRID #: 14538

Address: PO BOX 4289, Farmington, NM 87499

Facility or well name: SAN JUAN 30-6 UNIT 405S

API Number: 30-039-29338 OCD Permit Number: _____

U/L or Qtr/Qtr E Section 9 Township 30 N Range 6 W County: Rio Arriba

Center of Proposed Design: Latitude 36.828031 °N Longitude -107.473974 °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

☐ 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

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 _____ mil ☐ HDPE ☐ PVC ☒ Other UNSPECIFIED

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. ☐ Yes ☐ No ☒ NA
- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . ☐ Yes ☐ No ☒ NA
NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

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)** ☐ Yes ☐ No
- Written confirmation or verification from the municipality; Written approval obtained from the municipality

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

Within an unstable area. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Within a 100-year floodplain. **(Does not apply to below grade tanks)** ☐ Yes ☐ No
- FEMA map

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). ☐ Yes ☒ No
- Topographic map; Visual inspection (certification) of the proposed site

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. ☐ Yes ☒ No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

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.) ☐ Yes ☐ No
- Topographic map; Visual inspection (certification) of the proposed site

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. ☐ Yes ☐ No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. ☐ Yes ☐ No
NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

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: Jonathan D. Kelly **Approval Date:** 6/27/2016

Title: Compliance Officer **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:** 11/6/14

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 _____ °N _____ Longitude _____ °W _____ 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): Kelly G. Roberts Title: Regulatory Technician

Signature: Kelly G. Roberts Date: 12/17/15

e-mail address: Kelly.Roberts@cop.com Telephone: (505) 326-9775

Burlington Resources Oil & Gas Company
San Juan Basin: New Mexico Assets
Below Grade Tank Closure Report

Lease Name: SAN JUAN 30-6 UNIT 405S
API No.: 30-039-29338

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 Requirements:

1. Prior to initiating any BGT closure, except in the case of an emergency, BR will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or one week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner will be notified as soon as practical.

   The surface owner notification of the closure process was not found.

2. Notice of closure will be given to the District Division office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
   a. Operators Name
   b. Well Name and API Number
   c. Location

   Notification is attached.

3. All liquids will be removed from the BGT following cessation of operation. Produced water will be disposed of at one of COP's approved Salt Water Disposal facilities or at a District Division approved facility.

   All recovered liquids were disposed of at an approved SWD facility or an approved District Division facility within 60 days of cessation of operation.

4. Solids and sludge's will be shoveled and/or vacuumed out for disposal at one of the District Division approved facilities, depending on the proximity of the BGT site: Envirotech Land Farm (Permit #NM-01-011), JFJ Land Farm % Industrial Ecosystems Inc. (Permit #NM-01-0010B), and Basin Disposal (Permit #NM-01-005).

   Any sludge or soil required to be removed to facilitate closure was transported to Envirotech Land Farm (Permit # NM-01-011) and/or JFJ Landfarm % IEI (Permit# NM-01-0010B).

5. BR will obtain prior approval from District Division to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel

materials will be recycled or reused as approved by the District Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liner materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19.15.35 NMAC. Disposal will be at a licensed disposal facility, presently San Juan County Landfill operated by Waste Management under NMED Permit SWM-052426.

The below-grade tank was disposed of in a division-approved manner. The liner was cleaned per 19.15.35.8.C(1)(m) NMAC and disposed of at the San Juan County Regional Landfill located on CR 3100.

6. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure, will be removed.

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

7. Following removal of the tank and any liner material, BR will test the soils beneath the BGT as follows:
   a. At a minimum, a five-point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination.
   b. The laboratory sample shall be analyzed for the constituents listed in Table I of 19.15.17.13.

   A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Table I of 19.15.17.13 and the results are attached.

8. If the District Division and/or BR determine there is a release, BR will comply with 19.15.17.13.C.3b.

   A release was determined for the above referenced well.

9. Upon completion of the tank removal, pursuant to 19.15.17.13.C.3c, if all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot top soil or background thickness whichever is greater and to existing grade. The surface will be re-contoured to match the native grade and to prevent ponding.

   The tank removal area passed all requirements of Table I of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material which included at least one foot of suitable material to establish vegetation at the site.

10. For those portions of the former BGT area no longer required for production activities, BR will seed the disturbed area the first favorable growing season after the BGT is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other

District Division-approved methods. BR will notify the District Division when reclamation and re-vegetation is complete.

Reclamation of the BGT shall be considered complete when:

- Vegetative cover reflects a life form ratio of +/- 50% of pre disturbance levels.
- Total percent plant cover of at least 70% of pre-disturbance levels (Excluding noxious weeds) OR
- Pursuant to 19.15.17.13.H.5d BR will comply with obligations imposed by other applicable federal or tribal agencies in which there re-vegetation and reclamation requirements provide equal or better protection of fresh water, human health and the environment.

Provision 10 will be accomplished pursuant to 19.15.17.H.5d and notification will be submitted upon completion.

11. For those portions of the former BGT area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

The former BGT area is not required for production activities and reseeding will be completed in June 2016 per the procedure noted above.

Closure Report:
All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using District Division Form C-144. The Report will include the following:

- Proof of Closure Notice (surface owner and District Division) **(Attached)**
- Backfilling & cover installation **(See Report)**
- Confirmation Sampling Analytical Results **(Attached)**
- Application Rate & Seeding techniques **(See Report)**
- Photo Documentation of Reclamation **(Attached)**

Debrick, Danna (PAC.)

From: Davis, Kenny R
Sent: Wednesday, October 29, 2014 10:12 AM
To: brandon.powell@state.nm.us; 'Cory.Smith@state.nm.us'; jonathan.kelly@state.nm.us
Subject: BR_SJ 30-6 Unit 405s_BGT Closure Notice

Subject: 72 Hour BGT Closure Notification

The subject well has a below-grade tank that will begin the closure process between 72 hours and one week from this notification. Please contact me at any time if you have any questions or concerns.

Well Name: SJ 30-6 Unit 405S

API#: 3003929338

Location: Unit E: (SWNW), Sec. 09, T30N, R6W

Footages: 2360'FNL & 895'FWL

Operator: BR **Surface Owner: Federal**

Kenny Davis
Staff Regulatory Technician
ConocoPhillips Company
(505) 599-4045
Kenny.r.davis@cop.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
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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 August 8, 2011

Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 258-1607**
Facility Name: **San Juan 30-6 #405 S**	Facility Type: **Gas Well**

Surface Owner **Fee**	Mineral Owner **Federal (NM-03384)**	API No. **3003924589**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	**09**	**30N**	**06W**	**790**	**South**	**845**	**West**	**Rio Arriba**

Latitude 36.82805 Longitude -107.47397

NATURE OF RELEASE

Type of Release **Hydrocarbon**	Volume of Release **Unknown**	Volume Recovered **None**
Source of Release **Below Grade Tank (BGT) Closure**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **November 6, 2014**
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? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

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

Describe Cause of Problem and Remedial Action Taken.*
Below-Grade Tank Closure activities with samples taken resulting in constituents exceeded standards outlined by 19.15.17.13 NMAC.

Describe Area Affected and Cleanup Action Taken.*
NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 10. Historical hydrocarbon impacted soil was found during the BGT closure for the subject well. The total excavation was approximately 16' x 10' x 10' in depth and 60 yds of soil was transported to IEI land farm and 60yds of clean soil was transported from Aztec Machine and placed in the excavation site. Samples were collected and analytical results are below applicable NMOCD action levels. No further work will be performed. The final report is attached for review.

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: **Lisa Hunter**	Approved by Environmental Specialist:	
Title: **Field Environmental Specialist**	Approval Date:	Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval:	Attached ☐
Date: **December 16, 2015** Phone: **(505) 258-1607**		

* Attach Additional Sheets If Necessary

May 29, 2015

Lisa Hunter
ConocoPhillips
San Juan Business Unit
(505) 326-9786

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

RE: Below Grade Tank Closure, Release Assessment, and Final Excavation Report
San Juan 30-6 #405S
Rio Arriba County, New Mexico

Dear Ms. Hunter:

On November 6 and 7, 2014, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, a release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 30-6 #405S located in Rio Arriba County, New Mexico. The release consisted of an unknown quantity of petroleum hydrocarbons from the onsite 120 barrel (bbl) BGT. An initial release assessment was completed on November 6, 2014, and the final excavation was completed by CoP contractors while AES was on location on November 7, 2014.

1.0 Site Information

1.1 Location

Site Name – San Juan 30-6 #405S
Location – SW¼ NW¼, Section 9, T30N, R6W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.82788, W107.47418
BGT/Release Location Latitude/Longitude – N36.82805, 107.47397
Land Jurisdiction – U.S. Bureau of Reclamation (BOR)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, November 2014

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD

604 W. Piñon St.
Farmington, NM 87401
505-564-2281

1911 Main, Ste 280
Durango, CO
970-403-3084

www.animasenvironmental.com

Guidelines for Remediation of Leaks, Spills, and Releases (August 1993) prior to site work. The release was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic report form dated May 1991 for the San Juan 30-6 #403, located approximately 2,500 feet east and 60 feet lower in elevation, reported moisture at 140 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body**: Navajo Reservoir is located approximately 890 feet northeast of the location. (10 points)

1.3 Assessment

1.3.1 BGT Closure Assessment

AES was initially contacted by Steve Welch, CoP representative, on November 5, 2014, and on November 6, 2014, Stephanie Hinds and Emilee Skyles of AES traveled to the location. Soil sampling consisted of collection of five soil samples from below the BGT. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample. Based on the field analytical results, a release was confirmed. Please note the BGT was 5 feet bgs.

1.3.2 Release Assessment

On the same day, AES personnel completed the release assessment field work. The assessment included collection and field sampling of 10 soil samples from four soil borings (SB-1 through SB-4). Based on field sampling results, AES recommended excavation of the release area.

1.3.3 Excavation Clearance

Based on field results and dialogue with CoP, AES returned on November 7, 2014, to the location to collect soil samples of the excavation. The field sampling activities included collection of an additional soil boring sample from SB-3, two discrete samples from an assessment trench (TH-1), as well as three confirmation composite soil samples (SC-1 through SC-3) from the east and south walls and the base of the excavation. An additional confirmation soil sample (SC-4) was composited from the samples collected from TH-1. The area of the final excavation measured approximately 16 feet by 10 by 10 feet in depth. Sample locations and final excavation extents are presented on Figure 3.

2.0 Soil Sampling

A total of 23 soil samples (S-1 through S-5, SB-1 through SB-4, and TH-1) and 5 composite samples (BGT SC-1 and SC-1 through SC-4) were collected during the BGT closure assessment, release assessment, and excavation clearance. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were analyzed for total petroleum hydrocarbon (TPH). All composite samples (BGT SC-1 and SC-1 through SC-4) collected were submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted 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 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 soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto sample chain of custody records. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil sample SB-3 and composite samples BGT SC-1 and SC-1 through SC-4 were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

In addition, soil sample BGT SC-1 was laboratory analyzed for:

- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

2.3.1 BGT Closure Assessment

On November 6, 2014, BGT closure field screening results for VOCs via OVM ranged from 0.0 ppm in S-1, S-3, SC-4, S-5, and SC-1 up to 0.7 ppm in S-2. Field TPH concentrations ranged from 93.1 mg/kg in S-5 up to greater than 2,500 mg/kg in S-1.

2.3.2 Release Assessment

On the same day, initial assessment field screening readings for VOCs via OVM were measured at 0.0 ppm in all samples. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-3 to greater than 2,500 mg/kg in SB-4.

2.3.3 Excavation Clearance

On November 7, 2014, final excavation clearance field screening results for VOCs via OVM were recorded at 0.0 ppm in all samples. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-3 and TH-1 to greater than 2,500 mg/kg in SC-1. Field screening VOCs and TPH results are summarized in Table 1 and on Figures 2 and 3. The AES field sampling reports are attached.

Table 1. Soil Field Sampling VOCs, TPH, and Chloride Results
San Juan 30-6 #405S BGT Closure, Release Assessment and Final Excavation
November 2014

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*TPH 418.1 (mg/kg)*	*Field Chlorides (mg/kg)*
NMOCD Action Level*			***NE/100***	***100/1,000***	***250/NE***
S-1	11/6/14	0.5	0.0	**>2,500**	NA
S-2	11/6/14	0.5	0.7	96.7	NA
S-3	11/6/14	0.5	0.0	**2,070**	NA
S-4	11/6/14	0.5	0.0	**371**	NA
S-5	11/6/14	0.5	0.0	93.1	NA
BGT SC-1	11/6/14	0.5	0.0	NA	80
SB-1	11/6/14	6	0.0	145	NA
		8	0.0	613	NA
SB-2	11/6/14	5	0.0	24.4	NA

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action Level*			NE/100	100/1,000	250/NE
		6	NA	52.6	NA
		8	NA	22.8	NA
SB-3	11/6/14	5	NA	<20.0	NA
		6	NA	22.0	NA
		8	0.0	35.5	NA
	11/7/14	10	0.0	20.1	NA
SB-4	11/6/14	6	NA	**>2,500**	NA
		8	NA	**1,350**	NA
SC-1	11/7/14	10	0.0	**>2,500**	NA
SC-2	11/7/14	5 to 10	0.0	449	NA
SC-3	11/7/14	5 to 10	0.0	<20.0	NA
SC-4	11/7/14	5 to 10	NA	NA	NA
TH-1	11/7/14	5	NA	<20.0	NA
		10	0.0	<20.0	NA

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

Laboratory analysis of sample BGT SC-1 was used to confirm field sampling results from the BGT closure. Laboratory analytical results reported benzene and total BTEX concentrations below laboratory detection limits, the TPH concentration as 640 mg/kg, and the chloride concentration as 9.2 mg/kg.

Laboratory analyses for SB-3 and SC-1 through SC-4 were used to confirm field sampling results from the final excavation extents. Benzene and total BTEX concentrations were reported below laboratory detection limits in all samples. Total TPH concentrations ranged from below laboratory detection limits in SB-3, SC-3, and SC-4, up to 200 mg/kg in SC-1. Results are summarized in Table 2 and included on Figures 2 and 3. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides
San Juan 30-6 #405S BGT Closure, Release Assessment, and Final Excavation
November 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level*			0.2/10	50	100/1,000		250/NE
BGT SC-1	11/6/14	0.5	<0.048	<0.240	**<4.8**	**640**	9.2
SB-3	11/7/14	10	<0.046	<0.230	<4.6	<10	NA
SC-1	11/7/14	10	<0.034	<0.170	<3.4	200	NA
SC-2	11/7/14	5 to 10	<0.048	<0.241	<4.8	92	NA
SC-3	11/7/14	5 to 10	<0.046	<0.230	<4.6	<10	NA
SC-4	11/7/14	5 to 10	<0.049	<0.245	<4.9	<10	NA

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

3.0 Conclusions and Recommendations

On November 6 and 7, 2014, AES conducted a BGT closure and assessment of petroleum contaminated soils at the San Juan 30-6 #405S. NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10.

Field BGT closure sampling TPH results on November 6, 2014, were above the NMOCD action level of 100 mg/kg in S-1, S-3, and S-4, with greater than 2,500 mg/kg, 2,070 mg/kg, and 371 mg/kg, respectively. Laboratory results for BGT SC-1 were reported at 640 mg/kg for TPH. Chloride concentrations in BGT SC-1 were reported below the NMOCD action level of 250 mg/kg. Based on field concentrations, a release was confirmed.

On November 6, 2014, release assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH were reported in SB-4. All VOC concentrations were reported at 0.0 ppm, and the highest TPH concentration was reported in SB-4 with concentrations greater than 2,500 mg/kg. Excavation of the release area was recommended.

On November 7, 2014, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below

applicable NMOCD action levels for TH-1 and the final walls and base of the excavation. Field TPH concentrations were below the applicable NMOCD action level of 1,000 mg/kg for TH-1 and the final walls and base of the excavation, with the exception of SC-1 (base) which had a TPH concentration of greater than 2,500 mg/kg. However, laboratory analytical results reported benzene, total BTEX, and TPH (as GRO/DRO) concentrations in all samples below NMOCD action levels.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 30-6 #405S, VOCs, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for the final sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,

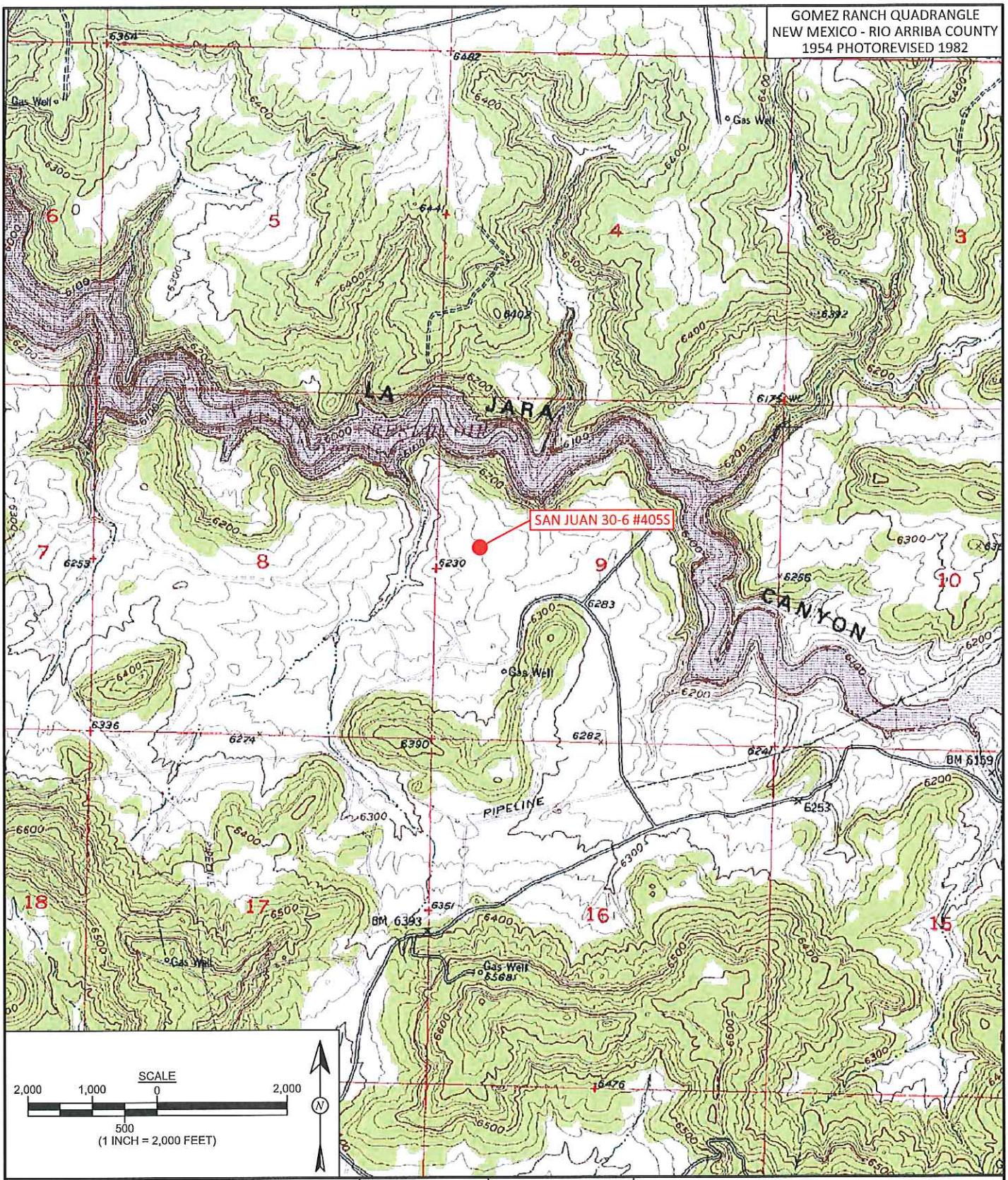
Emilee Skyles
Staff Geologist

Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, November 2014
- Figure 3. Release Assessment and Excavation Sample Locations and Results, November 2014
- AES Field Sampling Report 110614—BGT Closure
- AES Field Sampling Report 110614—Release Assessment
- AES Field Sampling Report 110714
- Hall Laboratory Analytical Report 1411329
- Hall Laboratory Analytical Report 1411337
- Hall Laboratory Analytical Report 1411340

R:\Animas 2000\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2015 Projects\ConocoPhillips\SJ 30-6 #405S\San Juan 30-6 #405S BGT Closure Assessment and Excavation Report 052915.docx



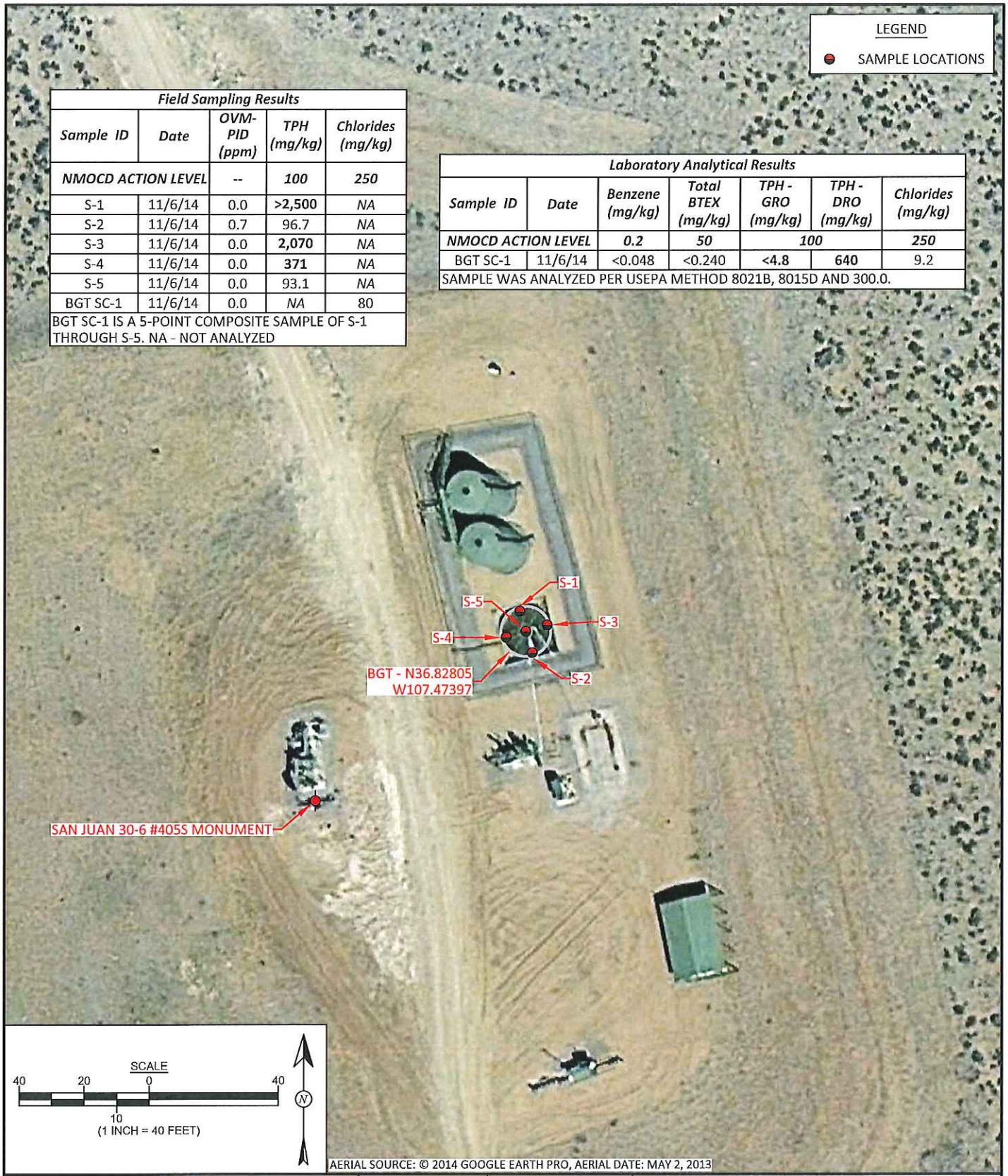
Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** November 07, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** November 07, 2014
CHECKED BY: E. Skyles	**DATE CHECKED:** November 07, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** November 07, 2014

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
SAN JUAN 30-6 #405S
SW¼ NW¼, SECTION 9, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.82788, W107.47418



Field Sampling Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	11/6/14	0.0	**>2,500**	NA
S-2	11/6/14	0.7	96.7	NA
S-3	11/6/14	0.0	**2,070**	NA
S-4	11/6/14	0.0	**371**	NA
S-5	11/6/14	0.0	93.1	NA
BGT SC-1	11/6/14	0.0	NA	80

BGT 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
BGT SC-1	11/6/14	<0.048	<0.240	**<4.8**	**640**	9.2

SAMPLE WAS ANALYZED PER USEPA METHOD 8021B, 8015D AND 300.0.

AERIAL SOURCE: © 2014 GOOGLE EARTH PRO, AERIAL DATE: MAY 2, 2013

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	DATE DRAWN: November 07, 2014
REVISIONS BY: C. Lameman	DATE REVISED: November 07, 2014
CHECKED BY: E. Skyles	DATE CHECKED: November 07, 2014
APPROVED BY: E. McNally	DATE APPROVED: November 07, 2014

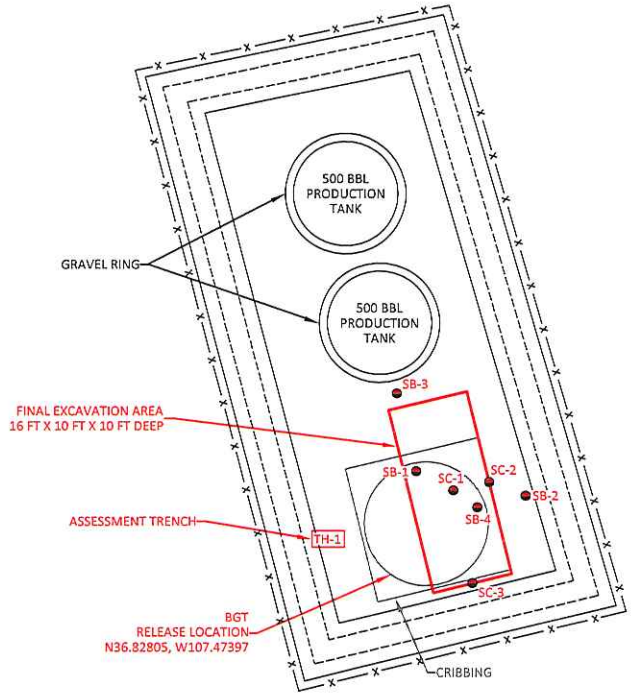
FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
NOVEMBER 2014
ConocoPhillips
SAN JUAN 30-6 #405S
SW¼ NW¼, SECTION 9, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.82788, W107.47418

FIGURE 3

RELEASE ASSESSMENT AND EXCAVATION SAMPLE LOCATIONS AND RESULTS NOVEMBER 2014

ConocoPhillips
SAN JUAN 30-6 #405S
SW¼ NW¼, SECTION 9, T30N, R6W
RIO ARRIBA COUNTY, NEW MEXICO
N36.82788, W107.47418



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SB-1	11/6/2014	6	0.0	145
		8	0.0	613
SB-2	11/6/14	5	0.0	24.4
		6	NA	52.6
		8	NA	22.8
SB-3	11/6/14	5	NA	<20.0
		6	NA	22.0
		8	0.0	35.5
	11/7/14	10	0.0	20.1
SB-4	11/6/2014	6	NA	>2,500
		8	NA	1,350
SC-1	11/7/14	10	0.0	>2,500
SC-2	11/7/14	5 to 10	0.0	449
SC-3	11/7/14	5 to 10	0.0	<20.0
SC-4	11/7/14	5 to 10	NA	NA
TH-1	11/7/14	5	NA	<20.0
		10	0.0	<20.0

SC-1 THROUGH SC-3 WERE COMPOSITE SAMPLES. SC-4 IS A COMPOSITE OF TH-1 AT 5 AND 10 FEET.
NA - NOT ANALYZED

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SB-3	11/7/14	10	<0.046	<0.230	<4.6	<10
SC-1	11/7/14	10	<0.034	<0.170	<3.4	200
SC-2	11/7/14	5 to 10	<0.048	<0.241	<4.8	92
SC-3	11/7/14	5 to 10	<0.046	<0.230	<4.6	<10
SC-4	11/7/14	5 to 10	<0.049	<0.245	<4.9	<10

SC-1 THROUGH SC-3 WERE COMPOSITE SAMPLES. SC-4 IS A COMPOSITE OF TH-1 AT 5 AND 10 FEET. ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: November 7, 2014
REVISIONS BY: C. Lameman	DATE REVISED: November 7, 2014
CHECKED BY: E. Skyles	DATE CHECKED: November 7, 2014
APPROVED BY: E. McNally	DATE APPROVED: November 7, 2014

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

N

SCALE
15 5 0 15
10
(1 INCH = 15 FEET)

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 30-6 #405S

Date: 11/6/2014

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	11/6/2014	12:50	North	0.0	NA	>2,500	13:22	20.0	1	EMS
S-2	11/6/2014	12:52	South	0.7	NA	96.7	13:24	20.0	1	EMS
S-3	11/6/2014	12:54	East	0.0	NA	2,075	13:27	20.0	1	EMS
S-4	11/6/2014	12:56	West	0.0	NA	371	13:29	20.0	1	EMS
S-5	11/6/2014	12:58	Center	0.0	NA	93.1	13:30	20.0	1	EMS
SC-1	11/6/2014	13:20	Composite	0.0	80	*Not Analyzed for TPH*				

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below PQL.*

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

Analyst:

Report Finalized: 11/6/14

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 30-6 #405S

Date: 11/6/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 6'	11/6/2014	14:15	0.0	145	14:35	20.0	1	SAH
SB-1 @ 8'	11/6/2014	14:18	0.0	613	14:38	20.0	1	SAH
SB-2 @ 5'	11/6/2014	14:22	0.0	24.4	14:42	20.0	1	SAH
SB-2 @ 6'	11/6/2014	15:10	NA	52.6	15:25	20.0	1	SAH
SB-2 @ 8'	11/6/2014	15:48	NA	22.8	16:02	20.0	1	SAH
SB-3 @ 5'	11/6/2014	14:44	NA	19.5	15:04	20.0	1	SAH
SB-3 @ 6'	11/6/2014	14:48	NA	22.0	15:09	20.0	1	SAH
SB-3 @ 8'	11/6/2014	14:52	0.0	35.5	15:17	20.0	1	SAH
SB-4 @ 6'	11/6/2014	14:55	NA	>2,500	15:14	20.0	1	SAH
SB-4 @ 8'	11/6/2014	15:25	NA	1,347	15:41	20.0	1	SAH

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Stephanie A. Hinds

Report Finalized: 11/6/14

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 30-6 #405S

Date: 11/7/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-3 @ 10'	11/7/2014	12:45	0.0	20.1	13:07	20.0	1	SAH
SC-1	11/7/2014	11:30	0.0	>2,500	11:42	20.0	1	SAH
SC-2	11/7/2014	12:15	0.0	449	12:29	20.0	1	SAH
SC-3	11/7/2014	12:22	0.0	9.3	12:39	20.0	1	SAH
SC-4	11/7/2014	12:50	NA	*Not Analyzed for TPH*				
TH-1 @ 5'	11/7/2014	12:32	NA	16.1	12:49	20.0	1	SAH
TH-1 @ 10'	11/7/2014	12:36	0.0	17.4	12:51	20.0	1	SAH

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

**TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Stephanie A. Hinds

Report Finalized: 11/7/14

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

November 12, 2014

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

RE: COP SJ 30-6 #405S OrderNo.: 1411329

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/8/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1411329**
Date Reported: **11/12/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COP SJ 30-6 #405S
Lab ID: 1411329-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 11/7/2014 11:30:00 AM
Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	200	100		mg/Kg	10	11/10/2014 2:14:03 PM	16305
Surr: DNOP	0	63.5-128	S	%REC	10	11/10/2014 2:14:03 PM	16305
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	11/10/2014 10:15:56 AM	R22439
Surr: BFB	97.3	80-120		%REC	1	11/10/2014 10:15:56 AM	R22439
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.034		mg/Kg	1	11/10/2014 10:15:56 AM	R22439
Toluene	ND	0.034		mg/Kg	1	11/10/2014 10:15:56 AM	R22439
Ethylbenzene	ND	0.034		mg/Kg	1	11/10/2014 10:15:56 AM	R22439
Xylenes, Total	ND	0.068		mg/Kg	1	11/10/2014 10:15:56 AM	R22439
Surr: 4-Bromofluorobenzene	123	80-120	S	%REC	1	11/10/2014 10:15:56 AM	R22439

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411329**

12-Nov-14

Client: Animas Environmental

Project: COP SJ 30-6 #405S

Sample ID **MB-16305**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **16305**	RunNo: **22412**
Prep Date: **11/10/2014**	Analysis Date: **11/10/2014**	SeqNo: **660791** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	7.8		10.00		77.7	63.5	128			

Sample ID **LCS-16305**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **16305**	RunNo: **22412**
Prep Date: **11/10/2014**	Analysis Date: **11/10/2014**	SeqNo: **660792** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.8	68.6	130			
Surr: DNOP	3.6		5.000		71.4	63.5	128			

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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411329**

12-Nov-14

Client: Animas Environmental
Project: COP SJ 30-6 #405S

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R22439**	RunNo: **22439**
Prep Date:	Analysis Date: **11/10/2014**	SeqNo: **661771** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.4	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R22439**	RunNo: **22439**
Prep Date:	Analysis Date: **11/10/2014**	SeqNo: **661772** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.4	65.8	139			
Surr: BFB	940		1000		94.1	80	120			

Sample ID **1411329-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **R22439**	RunNo: **22439**
Prep Date:	Analysis Date: **11/10/2014**	SeqNo: **661797** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.4	17.10	0	88.3	71.8	132			
Surr: BFB	710		684.0		104	80	120			

Sample ID **1411329-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **R22439**	RunNo: **22439**
Prep Date:	Analysis Date: **11/10/2014**	SeqNo: **661806** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.4	17.10	0	87.7	71.8	132	0.682	20	
Surr: BFB	630		684.0		91.8	80	120	0	0	

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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411329**

12-Nov-14

Client: Animas Environmental

Project: COP SJ 30-6 #405S

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R22439**	RunNo: **22439**
Prep Date:	Analysis Date: **11/10/2014**	SeqNo: **661844** 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: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R22439**	RunNo: **22439**
Prep Date:	Analysis Date: **11/10/2014**	SeqNo: **661845** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	111	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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: 1411329 RcptNo: 1

Received by/date: AF 11/08/14

Logged By: Anne Thorne 11/8/2014 10:20:00 AM Anne Thorne

Completed By: Anne Thorne 11/10/2014 Anne Thorne

Reviewed By: AT / JF 11/10/14

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	4.3	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon St. Farmington, NM 87401

Phone #: (505) 564-2281

email or Fax#: eSkyles@animasenvironmental.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name: CoP SJ 30-6 #405S

Project #:

Project Manager: E. Skyles

Sampler: E. Skyles

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.3°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411329	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 ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/7/14	11:30	soil	SC-1	MeOH kit 1-4oz	MeOH cool	-001	X		X													

Date: 11/7/14 Time: 1610 Relinquished by: [signature]
Received by: Christine Walsh Date: 11/7/14 Time: 1610

Date: 11/7/14 Time: 1740 Relinquished by: [signature]
Received by: [signature] Date: 11/8/14 Time: 10:2[illegible]

Remarks: Bill to Conoco Phillips
WO#: 10367096
~~AREA~~: 8
ORDERED BY: STEVE?

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.

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

November 13, 2014

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

RE: CoP SJ 30-6 #405 S

OrderNo.: 1411337

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/8/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1411337**
Date Reported: **11/13/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 30-6 #405 S
Lab ID: 1411337-001 **Matrix:** SOIL

Client Sample ID: BGT SC-1
Collection Date: 11/6/2014 1:20:00 PM
Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	640	99		mg/Kg	10	11/12/2014 10:10:25 PM	16308
Surr: DNOP		-		%REC	10	11/12/2014 10:10:25 PM	16308
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/11/2014 6:19:07 PM	16320
Surr: BFB	92.6	80-120		%REC	1	11/11/2014 6:19:07 PM	16320
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	11/11/2014 6:19:07 PM	16320
Toluene	ND	0.048		mg/Kg	1	11/11/2014 6:19:07 PM	16320
Ethylbenzene	ND	0.048		mg/Kg	1	11/11/2014 6:19:07 PM	16320
Xylenes, Total	ND	0.096		mg/Kg	1	11/11/2014 6:19:07 PM	16320
Surr: 4-Bromofluorobenzene	96.9	80-120		%REC	1	11/11/2014 6:19:07 PM	16320
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Chloride	9.2	7.5		mg/Kg	5	11/11/2014 12:44:07 PM	16341

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411337**

13-Nov-14

Client: Animas Environmental
Project: CoP SJ 30-6 #405 S

Sample ID **MB-16341**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **16341**	RunNo: **22478**							
Prep Date: **11/11/2014**	Analysis Date: **11/11/2014**	SeqNo: **662481**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-16341**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **16341**	RunNo: **22478**							
Prep Date: **11/11/2014**	Analysis Date: **11/11/2014**	SeqNo: **662482**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.1	90	110			

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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1411337

13-Nov-14

Client: Animas Environmental

Project: CoP SJ 30-6 #405 S

Sample ID **MB-16308**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **16308**	RunNo: **22457**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **661933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.2		10.00		91.9	63.5	128			

Sample ID **LCS-16308**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **16308**	RunNo: **22457**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **661934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.6	130			
Surr: DNOP	4.0		5.000		80.7	63.5	128			

Sample ID **MB-16334**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **16334**	RunNo: **22488**
Prep Date: **11/11/2014**	Analysis Date: **11/12/2014**	SeqNo: **663176** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.2	63.5	128			

Sample ID **LCS-16334**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **16334**	RunNo: **22488**
Prep Date: **11/11/2014**	Analysis Date: **11/12/2014**	SeqNo: **663181** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.2	63.5	128			

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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411337**

13-Nov-14

Client: Animas Environmental

Project: CoP SJ 30-6 #405 S

Sample ID **MB-16320**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662399** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.1	80	120			

Sample ID **LCS-16320**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662400** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	65.8	139			
Surr: BFB	1000		1000		103	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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411337**

13-Nov-14

Client: Animas Environmental

Project: CoP SJ 30-6 #405 S

Sample ID **MB-16320**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662527** 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: 4-Bromofluorobenzene	0.97		1.000		97.3	80	120			

Sample ID **LCS-16320**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662528** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	99.7	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **1411337-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BGT SC-1**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662530** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.048	0.9588	0	112	77.4	142			
Toluene	1.1	0.048	0.9588	0.007753	111	77	132			
Ethylbenzene	1.1	0.048	0.9588	0.01482	115	77.6	134			
Xylenes, Total	3.3	0.096	2.876	0	114	77.4	132			
Surr: 4-Bromofluorobenzene	1.0		0.9588		106	80	120			

Sample ID **1411337-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BGT SC-1**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662531** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.048	0.9597	0	101	77.4	142	9.64	20	
Toluene	0.96	0.048	0.9597	0.007753	99.4	77	132	11.1	20	
Ethylbenzene	1.0	0.048	0.9597	0.01482	103	77.6	134	10.6	20	
Xylenes, Total	3.0	0.096	2.879	0	103	77.4	132	10.5	20	
Surr: 4-Bromofluorobenzene	1.0		0.9597		105	80	120	0	0	

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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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: **1411337** RcptNo: **1**

Received by/date: AF 11/08/14

Logged By: **Lindsay Mangin** 11/8/2014 10:20:00 AM

Completed By: **Lindsay Mangin** 11/10/2014 9:03:12 AM

Reviewed By: CS 11/10/14

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 ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 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	4.3	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon St.
Farmington, NM 87401

Phone #: (505) 564-2281

email or Fax#: eskyles@animasenvironmental.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name:
COP SJ 30-6 #405 S

Project #:

Project Manager:
E. Skyles

Sampler: S. Hinds

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.3°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411336
			BGT (CWS 11/10/14) *			
11/6/14	13:20	Soil	SC-1	1-4oz	cool	-001

Analysis Request

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)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides 300.0				Air Bubbles (Y or N)
X		X									X				

Date	Time	Relinquished by:	Received by:	Date	Time
11/7/14	1610	Stephanie Hinds	Chad White	11/7/14	1610
11/7/14	1740			11/8/14	10:20

Remarks: Bill to Conoco Phillips

WO: 10367096

~~Area~~ * Updated sample name to BGT-SC-1 per Emilee Skyles. CWS 11/10/14

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.

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

November 13, 2014

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

RE: CoP SJ 30-6 #405 S

OrderNo.: 1411340

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/8/2014 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1411340**
Date Reported: **11/13/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-2
Project: CoP SJ 30-6 #405 S
Collection Date: 11/7/2014 12:15:00 PM
Lab ID: 1411340-001 **Matrix:** SOIL **Received Date:** 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	92	9.8		mg/Kg	1	11/12/2014 2:19:39 PM	16308
Surr: DNOP	124	63.5-128		%REC	1	11/12/2014 2:19:39 PM	16308
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/12/2014 2:53:42 AM	16323
Surr: BFB	93.2	80-120		%REC	1	11/12/2014 2:53:42 AM	16323
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	11/12/2014 2:53:42 AM	16323
Toluene	ND	0.048		mg/Kg	1	11/12/2014 2:53:42 AM	16323
Ethylbenzene	ND	0.048		mg/Kg	1	11/12/2014 2:53:42 AM	16323
Xylenes, Total	ND	0.097		mg/Kg	1	11/12/2014 2:53:42 AM	16323
Surr: 4-Bromofluorobenzene	97.2	80-120		%REC	1	11/12/2014 2:53:42 AM	16323

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 30-6 #405 S
Lab ID: 1411340-002 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 11/7/2014 12:22:00 PM
Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/11/2014 9:01:50 PM	16308
Surr: DNOP	131	63.5-128	S	%REC	1	11/11/2014 9:01:50 PM	16308
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/12/2014 3:22:16 AM	16323
Surr: BFB	93.3	80-120		%REC	1	11/12/2014 3:22:16 AM	16323
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.046		mg/Kg	1	11/12/2014 3:22:16 AM	16323
Toluene	ND	0.046		mg/Kg	1	11/12/2014 3:22:16 AM	16323
Ethylbenzene	ND	0.046		mg/Kg	1	11/12/2014 3:22:16 AM	16323
Xylenes, Total	ND	0.092		mg/Kg	1	11/12/2014 3:22:16 AM	16323
Surr: 4-Bromofluorobenzene	96.4	80-120		%REC	1	11/12/2014 3:22:16 AM	16323

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 30-6 #405 S
Lab ID: 1411340-003 **Matrix:** SOIL

Client Sample ID: SC-4
Collection Date: 11/7/2014 12:50:00 PM
Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/11/2014 9:23:36 PM	16308
Surr: DNOP	132	63.5-128	S	%REC	1	11/11/2014 9:23:36 PM	16308
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/12/2014 3:50:50 AM	16323
Surr: BFB	93.1	80-120		%REC	1	11/12/2014 3:50:50 AM	16323
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	11/12/2014 3:50:50 AM	16323
Toluene	ND	0.049		mg/Kg	1	11/12/2014 3:50:50 AM	16323
Ethylbenzene	ND	0.049		mg/Kg	1	11/12/2014 3:50:50 AM	16323
Xylenes, Total	ND	0.098		mg/Kg	1	11/12/2014 3:50:50 AM	16323
Surr: 4-Bromofluorobenzene	95.7	80-120		%REC	1	11/12/2014 3:50:50 AM	16323

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 30-6 #405 S
Lab ID: 1411340-004 **Matrix:** SOIL

Client Sample ID: SB-3 @ 10'
Collection Date: 11/7/2014 12:45:00 PM
Received Date: 11/8/2014 10:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/11/2014 9:44:57 PM	16308
Surr: DNOP	136	63.5-128	S	%REC	1	11/11/2014 9:44:57 PM	16308
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/12/2014 4:19:22 AM	16323
Surr: BFB	93.5	80-120		%REC	1	11/12/2014 4:19:22 AM	16323
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.046		mg/Kg	1	11/12/2014 4:19:22 AM	16323
Toluene	ND	0.046		mg/Kg	1	11/12/2014 4:19:22 AM	16323
Ethylbenzene	ND	0.046		mg/Kg	1	11/12/2014 4:19:22 AM	16323
Xylenes, Total	ND	0.092		mg/Kg	1	11/12/2014 4:19:22 AM	16323
Surr: 4-Bromofluorobenzene	96.1	80-120		%REC	1	11/12/2014 4:19:22 AM	16323

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411340**

13-Nov-14

Client: Animas Environmental
Project: CoP SJ 30-6 #405 S

Sample ID **MB-16308**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **16308**	RunNo: **22457**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **661933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.2		10.00		91.9	63.5	128			

Sample ID **LCS-16308**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **16308**	RunNo: **22457**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **661934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.6	130			
Surr: DNOP	4.0		5.000		80.7	63.5	128			

Sample ID **MB-16334**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **16334**	RunNo: **22488**
Prep Date: **11/11/2014**	Analysis Date: **11/12/2014**	SeqNo: **663176** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.2	63.5	128			

Sample ID **LCS-16334**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **16334**	RunNo: **22488**
Prep Date: **11/11/2014**	Analysis Date: **11/12/2014**	SeqNo: **663181** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.2	63.5	128			

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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411340**

13-Nov-14

Client: Animas Environmental

Project: CoP SJ 30-6 #405 S

Sample ID **MB-16320**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662399** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		92.1	80	120			

Sample ID **LCS-16320**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662400** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	80	120			

Sample ID **MB-16323**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **16323**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662409** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.0	80	120			

Sample ID **LCS-16323**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **16323**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662410** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	65.8	139			
Surr: BFB	1000		1000		101	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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1411340**

13-Nov-14

Client: Animas Environmental

Project: CoP SJ 30-6 #405 S

Sample ID **MB-16320**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662527** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.3	80	120			

Sample ID **LCS-16320**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **16320**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662528** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **MB-16323**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **16323**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662537** 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: 4-Bromofluorobenzene	0.98		1.000		98.3	80	120			

Sample ID **LCS-16323**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **16323**	RunNo: **22464**
Prep Date: **11/10/2014**	Analysis Date: **11/11/2014**	SeqNo: **662538** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.050	1.000	0	91.2	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.7	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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: 1411340 RcptNo: 1

Received by/date: AF 11/08/14

Logged By: Lindsay Mangin 11/8/2014 10:20:00 AM

Completed By: Lindsay Mangin 11/10/2014 9:42:26 AM

Reviewed By: CS 11/10/14

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 ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 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	4.3	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon St. Farmington, NM 87401

Phone #: (505) 564-2281

email or Fax#: eskyles@animasenvironmental.com

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ NELAP ☐ Other ____

☐ EDD (Type) ____

Turn-Around Time: ☒ Standard ☐ Rush ____

Project Name: CoP SJ 30-6 #405 S

Project #:

Project Manager: E. Skyles

Sampler: E. Skyles

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.3°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1411340	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 ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
11/7/14	12:15	Soil	SC-2	1-4 oz	Cool	-001	X		X									
11/7/14	12:22	Soil	SC-3	1-4 oz	Cool	-002	X		X									
11/7/14	12:50	Soil	SC-4	1-4 oz	Cool	-003	X		X									
11/7/14	12:45	Soil	SB-3 @ 10'	1-4 oz	Cool	-004	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/7/14	1610			11/7/14	1610
11/7/14	1740			11/8/14	10:20

Remarks: Bill to Conoco Phillips

WO: 10367096 Ordered by: Steve

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.


BURLINGTON
ConocoPhillips RESOURCES
SAN JUAN 30-6 UNIT #405S
FORMATION FRC
LATITUDE N 36° 49.6
LONGITUDE W 107° 28.4
2360' FNL 895' FWL
SEC. 09 T030N R006W
LEASE NO. NMNM-03384 ELEV. 6212
API NO. 30-039-32350
RIO ARRIBA COUNTY, NEW MEXICO
EMERGENCY NUMBER (505) 324-5170