<u>District I</u> 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 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.

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

Santa Fe, NM 87505

Tit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Type of action:  Below grade tank registration  Permit of a pit or proposed alternative method  Classus of a pit below grade tank as registration  RECEIVED  By Rvillalobos at 9:37 am, Dec 30, 2015
39-20878
Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request
ease 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 avironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator: Burlington Resources Oil & Gas Company, LP OGRID #: 14538
Address: PO BOX 4289, Farmington, NM 87499
Facility or well name: SAN JUAN 28-5 UNIT 95
API Number:30-039-20878 OCD Permit Number:
U/L or Qtr/Qtr M (SWSW) Section 31 Township 28N Range 5W County: Rio Arriba
Center of Proposed Design: Latitude <u>36.61381</u> <u>•N</u> Longitude <u>-107.40659</u> <u>•W</u> 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: Thicknessmil □ 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:   Max   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 45mil
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.
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

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.	
<u>Variances and Exceptions</u> :  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.	Company (1975)
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 acce,	ntable source
material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	pruble source
General siting	9
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - □ NM Office of the State Engineer - iWATERS database search; □ USGS; □ Data obtained from nearby wells	Yes No
<u>Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.</u> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No 図 NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area. (Does not apply to below grade tanks)</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☐ No
Within a 100-year floodplain. (Does not apply to below grade tanks) - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Wish's 100 ft at few sections In floring street in 15 at 1 a	70000
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).	☐ Yes ☑ No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	☐ Yes ☐ No
application.  - 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 300fect of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NM  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doct 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 19.1 and 19.15.17.13 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number:	uments are  NMAC  5.17.9 NMAC
Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doct 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 19.1 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:	15.17.9 NMAC

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 <sub>2</sub> S, Prevention Plan  Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan  Erosion Control Plan  Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well F	luid 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	
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC □ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC □ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. It 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 feet below the bottom of the buried waste.	☐ Yes ☐ No
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	□ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	
Within a 100-year floodplain.	Yes No
- FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	.11 NMAC 15.17.11 NMAC
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 believe to the best of my knowledge and believe to the best of my knowledge.	ief.
Name (Print): Title:	
Diam's	
Signature: Date:	
e-mail address:	
e-mail address: Telephone:	
e-mail address: Telephone:	
e-mail address:	2016  the closure report.
e-mail address:    Telephone:	2016  the closure report.
e-mail address:    Telephone:	2016 g the closure report.
e-mail address:	2016  If the closure report. If complete this  poop systems only)
e-mail address:    Telephone:	2016  If the closure report. If complete this  poop systems only)
e-mail address:    Telephone:	2016  If the closure report. If complete this  poop systems only)

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): Crystal Walker Title: Regulatory Coordinator
Signature:
e-mail address: <u>crystal.walker@cop.com</u> Telephone: (505) 326-9837

## Burlington Resources Oil & Gas Company San Juan Basin: New Mexico Assets

Below Grade Tank Closure Report

Lease Name: San Juan 28-5 Unit 95

API No.: 30-039-20878

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 was notified in person of the closure process and the notification is attached.

- 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 not 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 after the meter run is stripped 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)

### Walker, Crystal

From:

Journey, Denise D

Sent:

Wednesday, October 29, 2014 8:24 AM

To:

'Smith, Cory, EMNRD'

Cc:

McDaniel, Heather D; Marquez, Lori R

Subject:

San Juan 28-5 Unit 95 / 30-039-20878 BGT Closure

Importance:

High

Cory,

This is the well that NMOCD wanted plugged as quickly as possible due to erosion issues. The rig is planning on moving on Monday 11/3 and we need to strip the location and remove the BGT. We are unable to give you 72 hours notification of the BGT Closure. We plan of pulling the BGT late on 10/31 or early 11/1.

This particular BGT is one that was apparently missed in the 2008 BGT Project and we will be submitting a Closure Plan only using current 2013 Pit Rule standards.

If you have any questions or concerns, please give me a call.

Thanks,

Denise Journey

Staff Regulatory Technician ConocoPhillips Company Denise.Journey@conocophillips.com

(505) 326-9556 office

(505) 215-1750 cell

### Walker, Crystal

From: Smith, Mike W

Sent: Tuesday, September 09, 2014 7:57 AM

To: Dixon, Shorell (PAC); Mark Kelly (Mark\_Kelly@blm.gov); Randy McKee

(Randy Mckee@blm.gov); Robert Switzer (Robert Switzer@blm.gov); Roger Herrera

(rherrera@blm.gov); 'lloyd.bell@williams.com'; 'jesse.graham@williams.com'

Cc: Becker, Joey W; Payne, Wendy F; Busse, Dollie L; Journey, Denise D; Davis, Kenny R;

Clugston, Patricia L; White, Arleen R; Chavez, Jared (PAC); Jared Chavez; GRP:SJBU Fixed

Equipment North; GRP:SJBU Fixed Equipment South; GRP:SJBU Compliance

Subject: RE: Pre-P&A Onsite Reguest - SAN JUAN 28-5 UNIT 95 (09-08-14)

Sam Jaquez will meet Bob w / BLM this morning on location at 9:30 a.m. for the pre P&A on-site. Thanks.

Mike Smith | Lead Projects | San Juan Business Unit | Office: 505-599-3424 | Cell: 505-320-2492

From: Dixon, Shorell (PAC)

Sent: Monday, September 08, 2014 9:56 AM

To: Mark Kelly (Mark\_Kelly@blm.gov); Randy McKee (Randy\_Mckee@blm.gov); Robert Switzer

(Robert\_Switzer@blm.gov); Roger Herrera (rherrera@blm.gov); 'lloyd.bell@williams.com'; 'jesse.graham@williams.com' **Cc:** Becker, Joey W; Payne, Wendy F; Smith, Mike W; Busse, Dollie L; Journey, Denise D; Davis, Kenny R; Clugston, Patricia L; White, Arleen R; Chavez, Jared (PAC); Jared Chavez; GRP:SJBU Fixed Equipment North; GRP:SJBU Fixed Equipment South; GRP:SJBU Compliance

Subject: Pre-P&A Onsite Request - SAN JUAN 28-5 UNIT 95 (09-08-14)

Importance: High

<< File: San Juan 28-5 Unit 95 Pre PA Onsite Request 090814.doc >>

Shorell Dixon (PAC)

ConocoPhillips Company-SJBU

Projects - Technician

505-324-5175

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II

1301 W. Grand Avenue, Artesia, NM 88210

District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

### State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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

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

Name of Company Burlington Resources Oil & Gas Company   Address 3401 East 30th St, Farmington, NM   Telephone No.(505) 326-9837   Facility Name: San Juan 28-5 Unit 95   Facility Type: Gas Well	l Repor
Address 3401 East 30th St, Farmington, NM Facility Name: San Juan 28-5 Unit 95  Surface Owner Federal  Mineral Owner Federal  LOCATION OF RELEASE  Unit Letter Section Township All 28N SW 1170  South 880  NATURE OF RELEASE  Type of Release  Source of Release  Volume of Release  Source of Release  Was Immediate Notice Given?  Yes No Not Required  By Whom?  Was a Watercourse Reached?  I relephone No.(505) 326-9837  Facility Type: Gas Well  API No.30-039-20878  LOCATION OF RELEASE  LOCATION OF RELEASE  Feet from the North/South Line Feet from the 880  Vest Rio Arriba  Latitude 36.61381  Longitude -107.40659  NATURE OF RELEASE  Type of Release  Volume Recovered Date and Hour of Occurrence Date and Hour of Discovery  If YES, To Whom?  If YES, Volume Impacting the Watercourse.  If YES, Volume Impacting the Watercourse.	
Surface Owner Federal   Mineral Owner Federal   API No.30-039-20878	
Surface Owner Federal   Mineral Owner Federal   API No.30-039-20878	
LOCATION OF RELEASE  Unit Letter Section Township Range 5W 1170 South Feet from the 880 West Rio Arriba  Latitude 36.61381 Longitude -107.40659  NATURE OF RELEASE  Type of Release Volume Recovered Date and Hour of Occurrence Date and Hour of Discovery  Was Immediate Notice Given? If YES, To Whom?  Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.  If a Watercourse was Impacted, Describe Fully.*  N/A	
Unit Letter   Section   Township   Range   5W   1170   South   South   East/West Line   County   Rio Arriba    Latitude 36.61381   Longitude -107.40659    NATURE OF RELEASE    Type of Release   Volume of Release   Volume Recovered   Source of Release   Date and Hour of Occurrence   Date and Hour of Discovery    Was Immediate Notice Given?   If YES, To Whom?    By Whom?   Date and Hour   Was a Watercourse Reached?   Yes   No   Not Required   If a Watercourse was Impacted, Describe Fully.*   N/A	
M 31 28N 5W 1170 South 880 West Rio Arriba  Latitude 36.61381 Longitude -107.40659  NATURE OF RELEASE  Type of Release Volume Recovered Source of Release Date and Hour of Occurrence Date and Hour of Discovery  Was Immediate Notice Given? If YES, To Whom?  By Whom? Date and Hour  Was a Watercourse Reached? If YES, Volume Impacting the Watercourse.  If a Watercourse was Impacted, Describe Fully.*  N/A	
Latitude 36.61381 Longitude -107.40659  NATURE OF RELEASE  Type of Release  Source of Release  Volume of Release  Volume Recovered  Date and Hour of Occurrence  Date and Hour of Discovery  Was Immediate Notice Given?  □ Yes □ No ☑ Not Required  By Whom?  □ Yes ☑ No	
Type of Release Source of Release Wolume of Release Volume Recovered Date and Hour of Occurrence Date and Hour of Discovery  Was Immediate Notice Given?  Yes No Not Required  By Whom? Date and Hour  Date and Hour  If YES, To Whom?  Date and Hour  If YES, Volume Impacting the Watercourse.  If a Watercourse was Impacted, Describe Fully.*  N/A	
Type of Release  Source of Release  Date and Hour of Occurrence  Date and Hour of Discovery  Was Immediate Notice Given?  Yes □ No ☑ Not Required  By Whom?  Date and Hour  Date and Hour  If YES, To Whom?  Date and Hour  If YES, Volume Impacting the Watercourse.  If a Watercourse was Impacted, Describe Fully.*  N/A	
Source of Release  Date and Hour of Occurrence  Date and Hour of Discovery  If YES, To Whom?  By Whom?  Date and Hour  Date and Hour  Date and Hour  Page	
By Whom?  Was a Watercourse Reached?  If a Watercourse was Impacted, Describe Fully.*  N/A  No Not Required  Date and Hour  If YES, Volume Impacting the Watercourse.	
By Whom?  Was a Watercourse Reached?  Yes No  Date and Hour  If YES, Volume Impacting the Watercourse.  If a Watercourse was Impacted, Describe Fully.*  N/A	
Was a Watercourse Reached?  ☐ Yes ☒ No  If a Watercourse was Impacted, Describe Fully.*  N/A	
☐ Yes ☒ No  If a Watercourse was Impacted, Describe Fully.*  N/A	
If a Watercourse was Impacted, Describe Fully.* N/A	
N/A	
10.53	
Describe Cause of Problem and Remedial Action Taken.*	
No release was encountered during the BGT Closure.	
Describe Area Affected and Cleanup Action Taken.*	
N/A	
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 at regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endange	
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 liabil	
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human h	ealth
or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other	- Charles
federal, state, or local laws and/or regulations.  OIL CONSERVATION DIVISION	
Signature:	
Signature: Sala Walker	
Printed Name: Crystal Walker  Approved by Environmental Specialist:	
Title: Regulatory Coordinator Approval Date: Expiration Date:	
E-mail Address: crystal.walker@cop.com Conditions of Approval:	
Attached _	
Date: /2/24 / S Phone: (505) 326-9837 Attach Additional Sheets If Necessary	

## Animas Environmental Services, LLC



November 14, 2014

Lindsay Dumas ConocoPhillips San Juan Business Unit Office 214-07 5525 Hwy 64 Farmington, New Mexico 87401

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

RE: Below Grade Tank Closure Report

San Juan 28-5 #95

Rio Arriba County, New Mexico

Dear Ms. Dumas:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) San Juan 28-5 #95, located in Rio Arriba County, New Mexico. Tank removal was completed by CoP contractors while AES was on site.

### 1.0 Site Information

### 1.1 Location

Site Name - San Juan 28-5 #95

 $\label{legal Description-SW4-SW4-SW4-Section 31, T28N, R5W, Rio Arriba County, New Mexico Well Latitude/Longitude - N36.61380 and W107.40649, respectively BGT Latitude/Longitude - N36.61381 and W107.40659, respectively$ 

Land Jurisdiction - Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, November 2014

### 1.2 NMOCD Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases

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

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

(August 1993), the location was given a ranking score of 30 based on the following factors:

- Depth to Groundwater: A cathodic protection report form dated February 1997 reported the depth to groundwater at 85 feet below ground surface (bgs). (10 points)
- Wellhead Protection Area: The tank location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: Muñoz Creek is located approximately 45 feet southeast of the location. (20 points)

### 1.3 BGT Closure Assessment

AES was initially contacted by Jess Henson, CoP representative, on October 31, 2014, and on November 3, Stephanie Hinds and Corwin Lameman of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

### 2.0 Soil Sampling

On November 3, 2014, AES personnel conducted field sampling and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was also submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

### 2.1 Field Sampling

### 2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

### 2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to

conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

#### 2.1.3 Chlorides

Soil sample SC-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

### 2.2 Laboratory Analyses

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

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D; and
- Chloride per USEPA Method 300.0.

### 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM ranged from 0.0 ppm in S-1, S-3, S-4, and SC-1, up to 0.2 ppm in S-5. Field TPH concentrations ranged from 20.0 mg/kg in S-2 up to 62.5 mg/kg in S-1. The field chloride concentration in SC-1 was 40 mg/kg. Field sampling results are summarized in Table 1 and presented on Figure 2. The AES Field Sampling Report is attached.

Table 1. Soil Field Sampling VOCs, TPH, and Chloride Results San Juan 28-5 #95 BGT Closure, November 2014

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action I	Level (NMAC 19.	.15.17.13E)	() <u>200</u>	100	250
S-1	11/3/14	0.5	0.0	62.5	NA
S-2	11/3/14	0.5	0.1	20.0	NA
S-3	11/3/14	0.5	0.0	25.7	NA
S-4	11/3/14	0.5	0.0	34.2	NA
S-5	11/3/14	0.5	0.2	38.4	NA
SC-1	11/3/14	0.5	0.0	NA	40

### NA - not analyzed

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.025 mg/kg and 0.126 mg/kg, respectively. TPH concentrations as GRO/DRO were reported at less than 2.5 mg/kg and 46 mg/kg, respectively. The laboratory chloride concentration was reported below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results
San Juan 28-5 #95 BGT Closure. November 2014

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH- GRO (mg/kg)	TPH- DRO (mg/kg)	Chlorides (mg/kg)
	NMOCD Ac (NMAC 19.1		0.2 50		1	00	250
SC-1	11/3/14	0.5	<0.025	<0.126	<2.5	46	<30

### 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations were below the NMOCD action level of 100 mg/kg, with the highest concentration reported in S-1 with 62.5 mg/kg. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in SC-1 were below the NMOCD action level of 250 mg/kg. Based on field sampling and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at San Juan 28-5 #95.

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

Sincerely,

David J. Reese

**Environmental Scientist** 

Dail of Reve

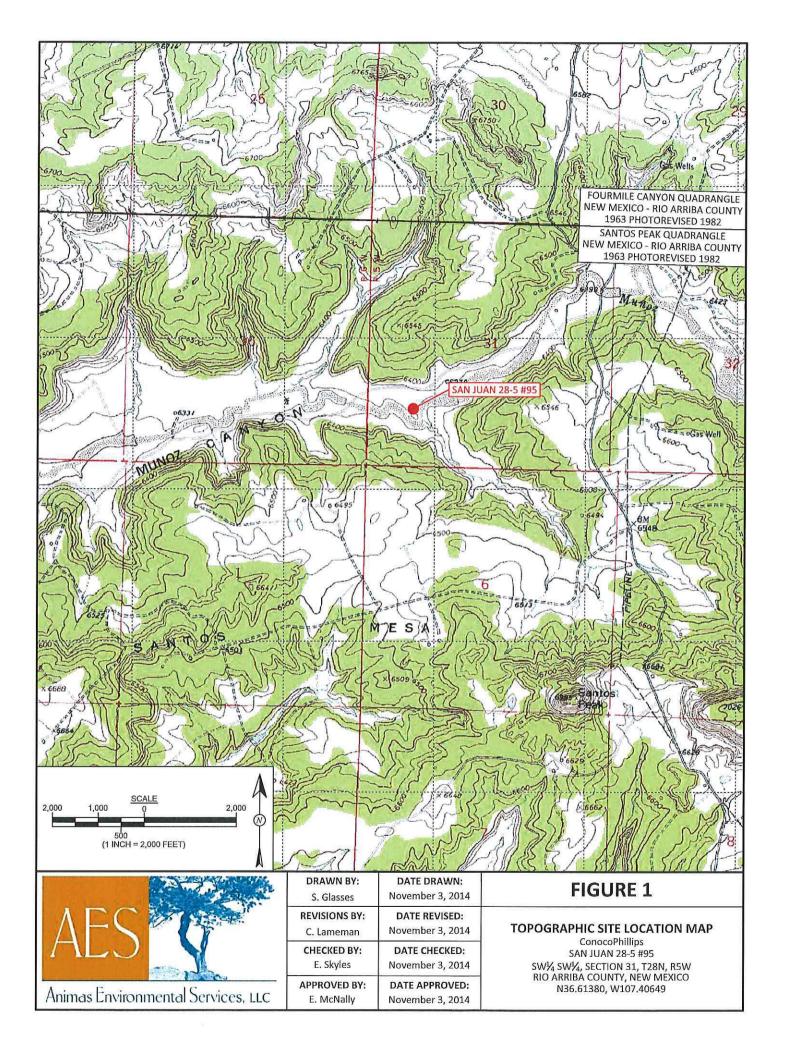
Lindsay Dumas San Juan 28-5 #95 BGT Closure Report November 14, 2014 Page 5 of 5

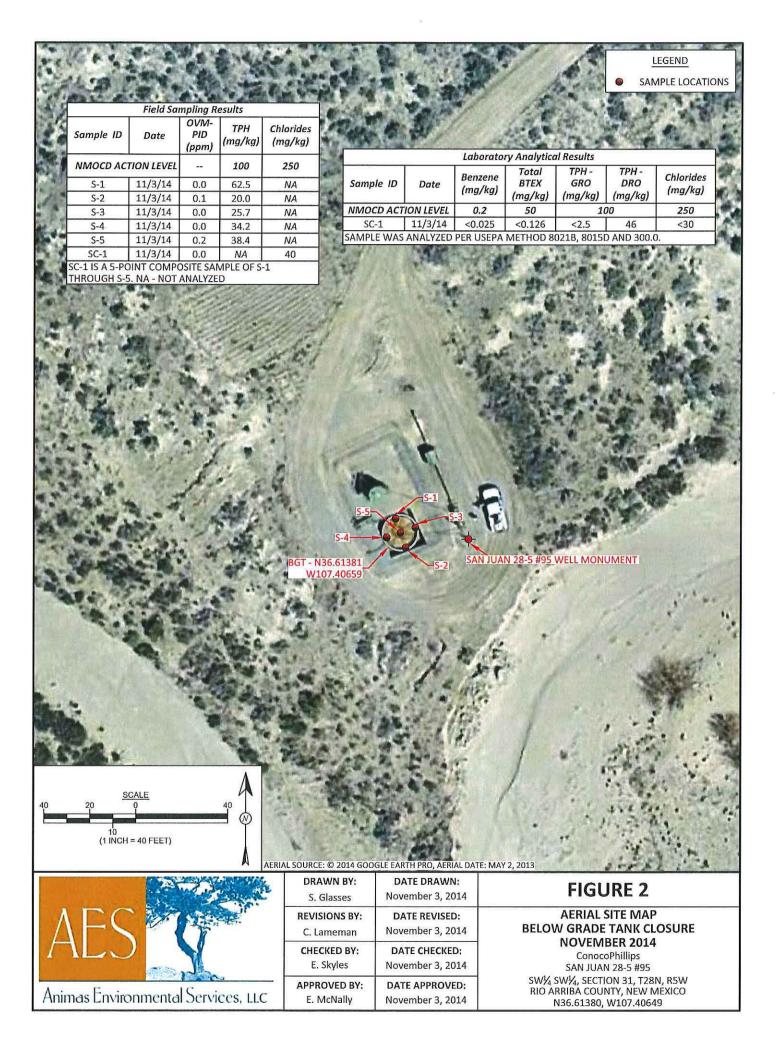
Elizabeth McNally, P.E.

### Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, November 2014 AES Field Sampling Report 110314 Hall Analytical Report 1411046

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\SJ 28-5 #95\San Juan 28-5 #95 BGT Closure Report 111414.docx





## AES Field Sampling Report



Client: ConocoPhillips

Project Location: San Juan 28-5 #95

Date: 11/3/2014

Matrix: Soil

		Time of			Field		Field TPH			TPH
	Collection	Sample	Sample	OVM	Chloride	Field TPH*	Analysis	TPH PQL		Analysts
Sample ID	Date	Collection	Location	(ppm)	(mg/kg)	(mg/kg)	Time	(mg/kg)	DF	Initials
S-1	11/3/2014	11:09	North	0.0	NA	62.5	11:52	20.0	1	SAH
S-2	11/3/2014	11:13	South	0.1	NA	20.0	11:56	20.0	1	SAH
S-3	11/3/2014	11:17	East	0.0	NA	25.7	11:58	20.0	1	SAH
S-4	11/3/2014	11:21	West	0.0	NA	34.2	12:01	20.0	1	SAH
S-5	11/3/2014	11:25	Center	0.2	NA	38.4	12:03	20.0	1	SAH
SC-1	11/3/2014	11:31	Composite	0.0	40		Not .	Analyzed for T	PH	

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

Alylanie S. Hinds

Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Page 1

Report Finalized: 11/3/14



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

November 05, 2014

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

FAX

RE: COP SJ 28-5 #95 OrderNo.: 1411046

### Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/4/2014 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

### Analytical Report

### Lab Order 1411046

Date Reported: 11/5/2014

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental

Project: COP SJ 28-5 #95

Lab ID: 1411046-001

Client Sample ID: SC-1

Collection Date: 11/3/2014 11:31:00 AM

Received Date: 11/4/2014 7:10:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	46	10	mg/Kg	1	11/4/2014 10:53:18 AM	16224
Surr: DNOP	115	63.5-128	%REC	1	11/4/2014 10:53:18 AM	16224
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	2.5	mg/Kg	1	11/4/2014 11:30:02 AM	R22323
Surr: BFB	93.6	80-120	%REC	1	11/4/2014 11:30:02 AM	R22323
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.025	mg/Kg	1	11/4/2014 11:30:02 AM	R22323
Toluene	ND	0.025	mg/Kg	1	11/4/2014 11:30:02 AM	R22323
Ethylbenzene	ND	0.025	mg/Kg	1	11/4/2014 11:30:02 AM	R22323
Xylenes, Total	ND	0.051	mg/Kg	1	11/4/2014 11:30:02 AM	R22323
Surr: 4-Bromofluorobenzene	96.7	80-120	%REC	1	11/4/2014 11:30:02 AM	R22323
EPA METHOD 300.0: ANIONS					Analyst	LGP
Chloride	ND	30	mg/Kg	20	11/4/2014 11:25:31 AM	16229

Matrix: SOIL

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

#### Qualifiers:

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

Page 1 of 5

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

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1411046

05-Nov-14

Client:

Animas Environmental

Project:

COP SJ 28-5 #95

Sample ID MB-16229

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID:

Prep Date:

PBS

11/4/2014

Batch ID: 16229

PQL

RunNo: 22340

SeqNo: 658213

Units: mg/Kg

Qual

Analyte

Result

Analysis Date: 11/4/2014

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

**RPDLimit** 

Chloride

Client ID:

ND 1.5

SampType: LCS Batch ID: 16229

PQL

1.5

TestCode: EPA Method 300.0: Anions

Analysis Date: 11/4/2014

RunNo: 22340 SeqNo: 658214

Units: mg/Kg

Prep Date: 11/4/2014

Sample ID LCS-16229

LCSS

SPK value SPK Ref Val %REC

HighLimit

%RPD

Analyte

Qual

Chloride

110

14

**RPDLimit** 

15.00

91.8

90

R

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits J

0 RSD is greater than RSDlimit

RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits 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.

Reporting Detection Limit RL

Page 2 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1411046

05-Nov-14

Client:

Animas Environmental

Project:

COP SJ 28-5 #95

Sample ID MB-16224	SampType: MBLK			TestCode: EPA Method 8015D: Diesel Range Organics						
Client ID: PBS	Batch ID: 16224			RunNo: 22316						
Prep Date: 11/4/2014	Analysis Date: 11/4/2014		SeqNo: 657533		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		114	63.5	128			

	6.7		6.2867.5		77 575	S 888	22.00			
Sample ID LCS-16224	SampType: LCS			TestCode: EPA Method 8015D: Diesel Range Organics						
Client ID: LCSS	Batcl	h ID: 16	224	F	RunNo: 2	2316				
Prep Date: 11/4/2014	Analysis Date: 11/4/2014			SeqNo: 657587			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.9	68.6	130			
Surr: DNOP	5.5		5.000		110	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

Page 3 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1411046

05-Nov-14

Client:

Animas Environmental

Project: COP SJ	1 28-5 #95						
Sample ID MB-16210 MK Client ID: PBS	SampType: MBLK Batch ID: R22323	TestCode: EPA Method 8015D: Gasoline Range RunNo: 22323					
Prep Date:	Analysis Date: 11/4/2014	SeqNo: 658052	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 930 1000	93.1 80	120				
Sample ID LCS-16210 MK	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: R22323	RunNo: 22323					
Prep Date:	Analysis Date: 11/4/2014	SeqNo: 658054	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Gasoline Range Organics (GRO) Surr: BFB	28 5.0 25.00 1000 1000		139 120				
Sample ID MB-16210	SampType: MBLK	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 16210	RunNo: 22323					
Prep Date: 11/3/2014	Analysis Date: 11/4/2014	SeqNo: 658078	Units: %REC				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Surr: BFB	930 1000	93.1 80	120				
Sample ID LCS-16210	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 16210 RunNo: 22323						
Prep Date: 11/3/2014	Analysis Date: 11/4/2014	SeqNo: 658081	Units: %REC				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
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

Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1411046

05-Nov-14

Client: Animas Environmental Project: COP SJ 28-5 #95

Sample ID MB-16210 MK TestCode: EPA Method 8021B: Volatiles SampType: MBLK Client ID: PBS Batch ID: R22323 RunNo: 22323 SeqNo: 658107 Prep Date: Analysis Date: 11/4/2014 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result ND 0.050 Benzene ND 0.050 Toluene Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 96.9 120 Surr: 4-Bromofluorobenzene 0.97 1.000 80

Sample ID LCS-16210 MK TestCode: EPA Method 8021B: Volatiles SampType: LCS LCSS RunNo: 22323 Client ID: Batch ID: R22323 Prep Date: Analysis Date: 11/4/2014 SeqNo: 658108 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.99 0.050 1.000 0 98.8 80 120 Benzene 0 120 Toluene 1.0 0.050 1.000 101 80 Ethylbenzene 1.0 0.050 1.000 0 103 80 120 0 80 120 Xylenes, Total 3.1 0.10 3.000 104 Surr: 4-Bromofluorobenzene 1.0 1.000 102 80 120

Sample ID MB-16210 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: Batch ID: 16210 RunNo: 22323 Prep Date: Analysis Date: 11/4/2014 SeqNo: 658110 Units: %REC 11/3/2014 PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result 0.97 1.000 96.9 80 120 Surr: 4-Bromofluorobenzene

TestCode: EPA Method 8021B: Volatiles Sample ID LCS-16210 SampType: LCS Client ID: LCSS Batch ID: 16210 RunNo: 22323 Prep Date: 11/3/2014 Analysis Date: 11/4/2014 SeqNo: 658111 Units: %REC SPK value SPK Ref Val %REC **RPDLimit** LowLimit HighLimit %RPD Qual Analyte Result

Surr: 4-Bromofluorobenzene 1.0 1.000 102 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

Page 5 of 5



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

# Sample Log-In Check List

					The state of the s	
Client Name: Anim	as Environmental	Work Order Num	nber: 1411046		ReptNo:	1
Received by/date:	A 11/04/1	7			nosamu	
Logged By: Ann	e Thorne	11/4/2014 7:10:00	AM	anne Al	_	
Completed By: Ann	e Thorne	11/4/2014		Anne Show	_	
Reviewed By:	1	104/14		J		
Chain of Custody	7	10 1/1		10 0000 - 20	ETV.	
1. Custody seals intac	ct on sample bottles?		Yes 🗌	No 🗆	Not Present 🗹	
2. Is Chain of Custody	y complete?		Yes 🗹	No 🗆	Not Present	
3. How was the samp	le delivered?		Courier			
Log In						
4. Was an attempt m	ade to cool the samples?		Yes 🗹	No 🗆	NA $\square$	
5. Were all samples r	ecelved at a temperature	of >0° C to 6.0°C	Yes 🗸	No 🗆	na 🗆	
6. Sample(s) in prope	er container(s)?		Yes 🗹	No 🗆		
7. Sufficient sample v	olume for indicated test(s	)?	Yes 🗹	No 🗆		
8. Are samples (except	pt VOA and ONG) properl	y preserved?	Yes 🗸	No 🗆		
9. Was preservative a	idded to bottles?		Yes $\square$	No 🗹	NA 🗆	
10.VOA vials have zer	o headspace?		Yes 🗆	No 🗆	No VOA Vials 🗹	
11, Were any sample	containers received broke	n?	Yes 🗆	No 🗹 🛚	# of preserved	
22					bottles checked	
12.Does paperwork m	atch bottle labels? s on chain of custody)		Yes 🗸	No 🗆	for pH: (<2 or	>12 unless noted)
27 C. S.	ctly identified on Chain of	Custody?	Yes 🗸	No 🗆	Adjusted?	
14. Is it clear what anal			Yes 🗸	No 🗆		
15. Were all holding tin	20 20		Yes 🗹	No □	Checked by:	-x4
(if no, notify custom	ner for authorization.)		南	·	6000 B (Cod/4	
Special Handling (	(if annlicable)					
		ala andano	Yes 🗌	No 🗆	NA 🗹	
· · ·	of all discrepancles with the	nis order?	res 🗀	No ∐	NA E	
Person Notific	ed:	j Dat	8	- COLOCIO COLO		
By Whom:		Via	eMail F	hone [ Fax	☐ In Person	
Regarding:	issuabartificial for a collapse sector.			Tradematics and North American and American		*
Client Instruc	tions:		LIL HARMITECTECATIONS - INDO FINA	THE STATE OF THE STATE OF THE	22 READ PROVIDENCE -	
17. Additional remarks	s:					
	mp °C   Condition   Se	al Intact   Seal No	Seal Date	Signed By		
1 1.4	Good Yes					

Standard   Rush   Same   Summar   Services   Standard   Rush   Same   Summar   Sum	HALL ENVIRONMENTAL						
Mailing Address: 604 W. Pinon St.  Farmington, NM & 7401  Project #:  Phone #: (505) 564-2281  email or Fax#: eskyles@animasenvironmental OA/QC Package:  Accreditation NELAP Date Time Matrix Sample Request ID  Container Type and # Type  Ag901 Hawkins NE - Albuman 4901 Hawkins NE - Albuman 500 Sampler:  Tel. 505-345-3975  Fax Analys  Project #:  Tel. 505-345-3975  Fax Analys  Analys  Analys  Analys  Com Date Time Matrix Sample Request ID  Container Type and # Type  Type and # Type  Ag901 Hawkins NE - Albuman 500 Sample Telegraphic Fax  Tel. 505-345-3975  Tel. 505-345-3975  Fax Analys  Analys  Analys  Analys  Com Date Time Matrix Sample Request ID  Container Type and # Type  Type Albuman 500 Sample Telegraphic Fax  Type Analys  Tel. 505-345-3975  Tel. 505-345-3975  Tel. 505-345-3975  Fax  Analys  Tel. 505-345-3975  Tel. 505-	SIS LABORATORY						
Phone #: (\$D\$) 564-2281  email or Fax#: eskyles@animasenvironmental project Manager:  QA/QC Package:  QA/QC Package:  QA/QC Package:  QA/CC Pa							
email or Fax#: eskyles@animasenvironmental  QA/QC Package:  Compared the project Manager:  QA/QC Package:  Compared the project Manager:  QA/QC Package:  Compared the project Manager:  Date Time Matrix Sample Request ID  Container Type and #  Project Manager:  Compared the proje	ax 505-345-4107						
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11/3/14 1F31 Soi) SC-1 1-402 NC COO! Y X	У.						
Date Time: Relinquished by:    Received by:   Date Time   Area : 24   Supe	dered by: Jess Henson pervisor: Brent Hottell er! KBARCIA						





