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  |
| Type of action:  Below grade tank registration  Permit of a pit or proposed alternative method  Closure of a pit, below-grade tank, or proposed alternative method  Modification to an existing permit/or registration  Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank,                       |
| or proposed alternative method  |
| Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request  |
| 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 vironment. 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: <u>SAN JUAN 30-6 UNIT 455S</u>   |
| API Number: <u>30-039-29439</u> OCD Permit Number:  |
| U/L or Qtr/Qtr _ D Section _ 18 _ Township _ 30 N _ Range _ 6 W _ County: Rio Arriba  |
| Center of Proposed Design: Latitude <u>36.816975 °N</u> Longitude <u>-107.511465 °W</u> NAD: □1927 ⊠ 1983   |
| Surface Owner:  Federal  State  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:bbl Type of fluid:Produced Water   |
| Tank Construction material: Metal 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: Thicknessmil  |
| 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

| 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  |                 |
| Variances and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. |                 |
| 9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.   | ptable source   |
| General siting   |                 |
| Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.  - □ NM Office of the State Engineer - iWATERS database search; □ USGS; □ Data obtained from nearby wells  | ☐ Yes ☐ No ☑ NA |
| Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.  NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | ☐ Yes ☐ No ☐ 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  |                 |
| Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site   | ☐ Yes ⊠ No      |
| Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site   | ☐ Yes ☑ No      |
| Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)   |                 |
| Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)  - Topographic map; Visual inspection (certification) of the proposed site  | ☐ Yes ☐ No      |
| Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.  Visual inspection (certification) of the proposed site: Aerial photo: Satellite image.   | ☐ Yes ☐ No      |
| - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  |                 |
| Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.  NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  | ☐ Yes ☐ No      |

| 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             |
| <ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | ☐ 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             |
| <ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>   | ☐ 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                 |
| <ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>   | ☐ Yes ☐ No             |
| Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the dot 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 19.15.17.1   Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC | 9 NMAC<br>15.17.9 NMAC |
| Previously Approved Design (attach copy of design) API Number: or Permit Number:  |                        |
| 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 dot attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC   | 9.15.17.9 NMAC         |
| Previously Approved Design (attach copy of design) API Number: or Permit Number:  |                        |
|   |                        |

| Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the 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 | locuments are                     |
|---|-----------------------------------|
| 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 Fin Alternative  Proposed Closure Method: Waste Excavation and Removal  Waste Removal (Closed-loop systems only)  On-site Closure Method (Only for temporary pits and closed-loop systems)  In-place Burial On-site Trench Burial  Alternative Closure Method   | uid Management Pit                |
| 14.  Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC  □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  □ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC   | nttached to the                   |
| Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P. 19.15.17.10 NMAC for guidance.   | ce material are<br>lease refer to |
| 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<br>☐ 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<br>☐ 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<br>☐ 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                               |
| 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 19.15.17.13 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cann Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC | .11 NMAC<br>.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 bel   | ief.                                     |
| Name (Print): Title:   |  |
| Signature: Date:   | -  |
| e-mail address: Telephone:   |  |
| 18.  OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)   |  |
| \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \  |  |
| OCD Representative Signature: Approval Date: Approval Date:  | 2016                                     |
| OCD Representative Signature: Approval Date: 6/27/.  Title: OCD Permit Number:   | 2016                                     |
| I I I  | g the closure report.                    |
| 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 is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not   | g the closure report.                    |
| Title: Compliance Officer  OCD Permit Number:  Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not section of the form until an approved closure plan has been obtained and the closure activities have been completed.   | g the closure report.<br>I complete this |

| 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: 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 455S

**API No.:** 30-039-29439

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 closure process notification 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 of closure was not provided to the Aztec Division office between 72 hours and one week prior to closure.

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-01-010B), 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 in May 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)

<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

\* Attach Additional Sheets If Necessary

#### 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.

|  |  |  | Rele   | ase Notifica  | atio                         | n and Co  | rrective A   | ction   | 5  |   |  |                                     |
|--|--|--|--|---|------------------------------|---|--|---|--|---|--|-------------------------------------|
|  |  |  |  |   |                              | OPERA'  | ГOR  |   | ☐ Initia   | al Report   | $\boxtimes$                                | Final Report                        |
|  |  |  |  | l & Gas Compan  |                              |   | ystal Walker   |   |  |   |  |                                     |
| Address 340<br>Facility Nar                    |  |  |  |   |                              | Telephone No. (505) 326-9837  |  |   |  |   |  |                                     |
|  |  |  | JINII 455  |   |                              | Facility Type: Gas Well   |  |   |  |   |  |                                     |
| Surface Ow                                     | Surface Owner Federal Mineral Owner  |  |  |   |                              | Federal   |  |   | API No   | .30-039-29  | 9439                                       |                                     |
|  |  |  |  | LOCA  | TIO                          | N OF RE   | LEASE  |   |  |   |  |                                     |
| Unit Letter                                    | Section  | Township   | Range  | Feet from the   | North                        | /South Line   | Feet from the  | East/W  | est Line   | County  |  |                                     |
|  |  |  |  | Latitude 36.8   |                              | Longitud  OF REL  |  |   |  |   |  |                                     |
| Type of Rele                                   | ase  |  |  | MAI   | UKE                          | Volume of   |  |   | Volume F   | Recovered   |  |                                     |
| Source of Release                              |  |  |  |   |                              | 100 - | lour of Occurrence   | ce  |  | Hour of Dis   | covery                                     |                                     |
| W I 1!   | Was Immediate Notice Given?  |  |  |   |                              |   | Whom?  |   |  |   |  |                                     |
| was immedia                                    | ate Notice G   |  | Yes  | No Not Rec  | quired                       | If YES, To  | WHOII!   |   |  |   |  |                                     |
| By Whom?                                       |  | 120  |  |   |                              | Date and I  |  |   |  |   |  |                                     |
| Was a Watercourse Reached?  ☐ Yes ☐ No         |  |  |  |   |                              | If YES, Vo  | lume Impacting t   | the Water   | rcourse.   |   |  |                                     |
| If a Watercou<br>N/A                           | ırse was Imp   | acted, Descri  | ibe Fully.*  |   |                              |   |  |   |  |   |  |                                     |
| Describe Cau<br>No release w                   | as encounte  | ered during (  | the BGT (  | Closure.  |                              |   |  |   |  |   |  |                                     |
| regulations a<br>public health<br>should their | Il operators a<br>or the environations had<br>operations had<br>nment. In ad | are required to<br>conment. The<br>live failed to a<br>dition, NMC | o report an<br>acceptance<br>adequately<br>OCD accep | is true and comple<br>id/or file certain re<br>se of a C-141 repor<br>investigate and re<br>tance of a C-141 re | lease n<br>t by th<br>mediat | notifications a<br>ne NMOCD m<br>te contaminat  | nd perform correct arked as "Final R on that pose a threat the operator of | ctive action<br>eport" do<br>reat to gro<br>responsib | ons for rele<br>oes not reli<br>ound water<br>oility for c | eases which<br>leve the ope<br>r, surface wa<br>ompliance v | may er<br>rator of<br>ater, hu<br>vith any | ndanger<br>Fliability<br>man health |
| Signature:                                     | Fanc   | Pott   | 5  |   |                              |   | OIL CON  | SERV.   | ATION  | DIVISIO   | <u>)N</u>                                  |                                     |
| Printed Name                                   | e: Kelly G. I  | Roberts  |  |   |                              | Approved by Environmental Specialist:   |  |   |  |   |  |                                     |
| Title: Regul                                   | atory Techn  | ician  |  |   |                              | Approval Da   | te:  | E   | Expiration   | Date:   |  |                                     |
| E-mail Addre                                   | 1  | Roberts@cop  |  | 5   |                              | Conditions of Approval:  Attached   |  |   |  |   |  |                                     |



October 23, 2013

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

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

> Durango, Colorado 970-403-3084

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

RE: Below Grade Tank Closure Report

San Juan 30-6 #455S

Rio Arriba County, New Mexico

Dear Ms. Tafoya:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) San Juan 30-6 #455S, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

#### 1.0 Site Information

#### 1.1 Location

Site Name - San Juan 30-6 #455S

Legal Description – NW¼ NW¼, Section 18, T30N, R6W, Rio Arriba County, New Mexico Well Latitude/Longitude – N36.81684 and W107.51121, respectively BGT Latitude/Longitude – N36.81699 and W107.51147, respectively Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, September 2013

#### 1.2 NMOCD Ranking

Prior to site work, the location was given a ranking score in accordance with New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993). The location was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic report dated May 1991 for the San Juan 30-6 #456 located 4,000 feet east and 54 feet lower in elevation reported the depth to groundwater as 120 feet below ground surface (bgs). (0 points)
- Wellhead Protection Area: The tank location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: An unnamed wash which eventually discharges to Frances Creek is located approximately 300 feet southeast of the location. (10 points)

#### 1.3 BGT Closure Assessment

AES was initially contacted by Fred Martinez, CoP representative, on September 23, 2013, and on September 24, 2013, Stephanie Lynn and Jesse Christopherson of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

#### 2.0 Soil Sampling

On September 24, 2013, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

#### 2.1 Field Screening

#### 2.1.1 Volatile Organic Compounds

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

#### 2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.

#### 2.1.3 Chlorides

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

#### 2.2 Laboratory Analyses

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

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B; 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-4 and SC-1 up to 0.2 ppm in S-1. Field TPH concentrations ranged from 31.7 mg/kg in S-4 up to 70.0 mg/kg in S-3. The field chloride concentration in SC-1 was less than 20 mg/kg. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results
San Juan 30-6 #455S BGT Closure, September 2013

| Sample ID    | Date<br>Sampled | Depth<br>below<br>BGT (ft) | VOCs OVM<br>Reading<br>(ppm) | Field<br>TPH (418.1)<br>(mg/kg) | Field<br>Chlorides<br>(mg/kg) |
|--------------|-----------------|----------------------------|------------------------------|---------------------------------|-------------------------------|
| NMOCD Action | Level (NMAC 19  | 9.15.17.13E)               |                              | 100                             | 250                           |
| S-1          | 09/24/13        | 0.5                        | 0.2                          | 59.0                            | NA                            |
| S-2          | 09/24/13        | 0.5                        | 0.1                          | 50.8                            | NA                            |
| S-3          | 09/24/13        | 0.5                        | 0.1                          | 70.0                            | NA                            |
| S-4          | 09/24/13        | 0.5                        | 0.0                          | 31.7                            | NA                            |
| S-5          | 09/24/13        | 0.5                        | 0.1                          | 57.7                            | NA                            |
| SC-1         | 09/24/13        | 0.5                        | 0.0                          | NA                              | <20                           |

NA - not analyzed

Laboratory analytical results showed reported benzene and total BTEX concentrations in SC-1 as less than 0.050 mg/kg and 0.25 mg/kg, respectively. The laboratory chloride concentration was reported below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results
San Juan 30-6 #455S BGT Closure, September 2013

| Sample ID                              | Date Sampled | Depth<br>(ft) | Benzene<br>(mg/kg) | Total<br>BTEX<br>(mg/kg) | TPH-<br>GRO<br>(mg/kg) | TPH-<br>DRO<br>(mg/kg) | Chlorides<br>(mg/kg) |
|--|--------------|---------------|--------------------|--------------------------|------------------------|------------------------|----------------------|
| NMOCD Action Level (NMAC 19.15.17.13E) |              |               | 0.2                | 50                       | 1                      | 00                     | 250                  |
| SC-1                                   | 9/24/13      | 0.5           | <0.050             | <0.25                    | NA                     | NA                     | <30                  |

NA - not analyzed

#### 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations were reported below the NMOCD action level of 100 mg/kg, with the highest concentration reported in S-3 with 70.0 mg/kg. Benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in SC-1 were below the NMOCD action level of 250 mg/kg. Based on field screening and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at San Juan 30-6 #455S.

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

Sincerely,

David J. Reese

**Environmental Scientist** 

David of Rene

Crystal Tafoya San Juan 30-6 #455S BGT Closure Report October 23, 2013 Page 5 of 5

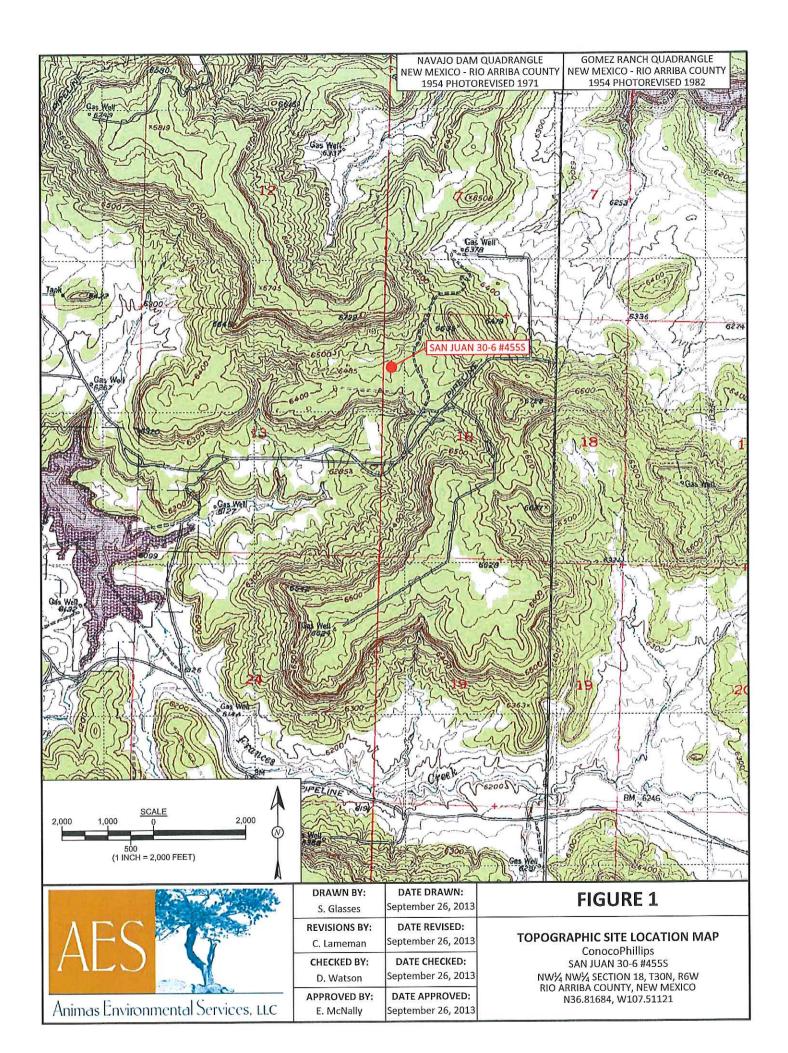
Elizabeth V MeNelly

Elizabeth McNally, P.E.

#### Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, September 2013 AES Field Screening Report 092413 Hall Analytical Report 1309B38

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 30-6 #455S\San Juan 30-6 #455S BGT Closure Report 102313.docx



LEGEND

SAMPLE LOCATIONS

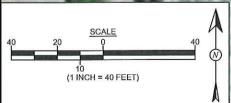
| Field Screening Results |         |                      |                |                      |  |  |  |
|-------------------------|---------|----------------------|----------------|----------------------|--|--|--|
| Sample ID               | Date    | OVM-<br>PID<br>(ppm) | TPH<br>(mg/kg) | Chlorides<br>(mg/kg) |  |  |  |
| NMOCD ACTION LEVEL      |         |                      | 100            | 250                  |  |  |  |
| S-1                     | 9/24/13 | 0.2                  | 59.0           | NA                   |  |  |  |
| S-2                     | 9/24/13 | 0.1                  | 50,8           | NA                   |  |  |  |
| S-3                     | 9/24/13 | 0.1                  | 70.0           | NA                   |  |  |  |
| S-4                     | 9/24/13 | 0.0                  | 31.7           | NA                   |  |  |  |
| S-5                     | 9/24/13 | 0.1                  | 57.7           | NA                   |  |  |  |
| SC-1                    | 9/24/13 | 0.0                  | NA             | <20                  |  |  |  |

| 30-1           | 3/24/13     | 0.0       | IVA       |     |
|----------------|-------------|-----------|-----------|-----|
| SC-1 IS A 5-PC | DINT COMPO  | OSITE SAI | MPLE OF S | 5-1 |
| THROUGH S-5    | S. NA - NOT | ANALYZE   | D         |     |

|           |                    | Laborato           | ry Analytica             | al Results              |                         |                      |
|-----------|--------------------|--------------------|--------------------------|-------------------------|-------------------------|----------------------|
| Sample ID | Date               | Benzene<br>(mg/kg) | Total<br>BTEX<br>(mg/kg) | TPH -<br>GRO<br>(mg/kg) | TPH -<br>DRO<br>(mg/kg) | Chlorides<br>(mg/kg) |
| NMOCD ACT | NMOCD ACTION LEVEL |                    | 50                       | 10                      | 00                      | 250                  |
| SC-1      | 9/24/13            | <0.050             | <0.25                    | NA                      | NA                      | <30                  |



SAN JUAN 30-6 #455S WELL MONUMENT



AERIAL SOURCE: © 2013 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE



| DRAWN BY:<br>S. Glasses     | DATE DRAWN:<br>September 26, 2013    |  |
|-----------------------------|--------------------------------------|--|
| REVISIONS BY:<br>C. Lameman | DATE REVISED:<br>September 26, 2013  |  |
| CHECKED BY:<br>D. Watson    | DATE CHECKED:<br>September 26, 2013  |  |
| APPROVED BY:<br>E. McNally  | DATE APPROVED:<br>September 26, 2013 |  |

### AERIAL SITE MAP BELOW GRADE TANK CLOSURE SEPTEMBER 2013 ConocoPhillips

FIGURE 2

SAN JUAN 30-6 #455S NW¼ NW¼ SECTION 18, T30N, R6W RIO ARRIBA COUNTY, NEW MEXICO N36.81684, W107.51121

# **AES Field Screening Report**

Client: ConocoPhillips

www.animasenvironmental.com

Animas Environmental Services, LLC

624 E. Comanche Farmington, NM 87401 505-564-2281 Durango, Colorado 970-403-3084

Project Location: San Juan 30-6 #455S Date: 9/24/2013

Matrix: Soil

|           |                    | Time of              |                    |       | Field               | Field TPH        |                       |                       |    | ТРН                  |
|-----------|--------------------|----------------------|--------------------|-------|---------------------|------------------|-----------------------|-----------------------|----|----------------------|
| Sample ID | Collection<br>Date | Sample<br>Collection | Sample<br>Location | (mdd) | Chloride<br>(mg/kg) | Analysis<br>Time | Field TPH*<br>(mg/kg) | TPH PQL<br>(mg/kg)    | DF | Analysts<br>Initials |
| S-1       | 9/24/2013          | 10:32                | North              | 0.2   | NA                  | 11:29            | 59.0                  | 20.0                  | 1  | SF                   |
| S-2       | 9/24/2013          | 10:33                | South              | 0.1   | NA                  | 11:33            | 50.8                  | 20.0                  | 1  | SL                   |
| S-3       | 9/24/2013          | 10:35                | East               | 0.1   | NA                  | 11:36            | 70.0                  | 20.0                  | 1  | SL                   |
| S-4       | 9/24/2013          | 10:36                | West               | 0.0   | NA                  | 11:39            | 31.7                  | 20.0                  | П  | SL                   |
| S-5       | 9/24/2013          | 10:38                | Center             | 0.1   | NA                  | 11:42            | 57.7                  | 20.0                  | П  | SL                   |
| SC-1      | 9/24/2013          | 10:41                | Composite          | 0.0   | <20                 |                  | Not +                 | Not Analyzed for TPH. | H. |                      |

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with

Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Not Detected at the Reporting Limit

A D

Dilution Factor Not Analyzed QL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Stephanicalyn

Analyst:



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

OrderNo.: 1309B38

September 27, 2013

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

FAX

RE: COP SJ 30-6 #455S

#### Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/25/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <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 1309B38

Date Reported: 9/27/2013

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental

COP SJ 30-6 #455S Project:

Lab ID: 1309B38-001 Client Sample ID: SC-1

Collection Date: 9/24/2013 10:41:00 AM

Received Date: 9/25/2013 9:50:00 AM Matrix: MEOH (SOIL)

| Analyses                    | Result | RL Qu  | al Units | DF | Date Analyzed         | Batch     |
|-----------------------------|--------|--------|----------|----|-----------------------|-----------|
| EPA METHOD 8021B: VOLATILES |        |        |          |    | Analys                | t: NSB    |
| Benzene                     | ND     | 0.050  | mg/Kg    | 1  | 9/25/2013 11:12:07 AM | / R13602  |
| Toluene                     | ND     | 0.050  | mg/Kg    | 1  | 9/25/2013 11:12:07 AM | / R13602  |
| Ethylbenzene                | ND     | 0.050  | mg/Kg    | 1  | 9/25/2013 11:12:07 AM | / R13602  |
| Xylenes, Total              | ND     | 0.10   | mg/Kg    | 1  | 9/25/2013 11:12:07 AM | / R13602  |
| Surr: 4-Bromofluorobenzene  | 109    | 80-120 | %REC     | 1  | 9/25/2013 11:12:07 AM | /I R13602 |
| EPA METHOD 300.0: ANIONS    |        |        |          |    | Analys                | t: JRR    |
| Chloride                    | ND     | 30     | mg/Kg    | 20 | 9/25/2013 1:22:19 PM  | 9490      |

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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits J
- RSD is greater than RSDlimit 0
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank В
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit

- Not Detected at the Reporting Limit \$P\$ age  $\,1\,$  of  $3\,$  Sample pH greater than 2 for VOA and TOC only.
- Reporting Detection Limit RL

#### **QC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1309B38 27-Sep-13

Client: Project: Animas Environmental COP SJ 30-6 #455S

Sample ID LCS-9490

SampType: LCS

TestCode: EPA Method 300.0: Anions

Client ID:

LCSS

Batch ID: 9490

RunNo: 13631

Prep Date: 9/25/2013

Analysis Date: 9/25/2013

SeqNo: 388139

Units: mg/Kg

Analyte

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit**  Qual

1.5

91.4

Chloride

14

15.00

110

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

Analyte detected below quantitation limits J

0 RSD is greater than RSDlimit

R RPD outside accepted recovery limits

Spike Recovery outside accepted recovery limits S

В Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded H

Not Detected at the Reporting Limit

Sample pH greater than 2 for VOA and TOC only.

Reporting Detection Limit

Page 2 of 3

#### **QC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 1309

1309B38 27-Sep-13

Client: Project: Animas Environmental COP SJ 30-6 #455S

TestCode: EPA Method 8021B: Volatiles Sample ID 5ML RB SampType: MBLK Client ID: PBS Batch ID: R13602 RunNo: 13602 SeqNo: 387895 Units: mg/Kg Prep Date: Analysis Date: 9/25/2013 %RPD **RPDLimit** Qual Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit 0.050 ND Benzene 0.050 ND Toluene Ethylbenzene ND 0.050 ND 0.10 Xylenes, Total 1.000 111 80 120 Surr: 4-Bromofluorobenzene 1.1

| Sample ID 100NG BTEX LC    | <b>S</b> Samp | Type: LC        | S         | Tes         | tCode: El | PA Method | 8021B: Vola | tiles |          |      |
|----------------------------|---------------|-----------------|-----------|-------------|-----------|-----------|-------------|-------|----------|------|
| Client ID: LCSS            | Bato          | h ID: <b>R1</b> | 3602      | F           | RunNo: 1  | 3602      |             |       |          |      |
| Prep Date:                 | Analysis I    | Date: 9/        | 25/2013   | 8           | SeqNo: 3  | 87896     | Units: mg/k | (g    |          |      |
| Analyte                    | Result        | PQL             | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit   | %RPD  | RPDLimit | Qual |
| Benzene                    | 1.0           | 0.050           | 1.000     | 0           | 103       | 80        | 120         |       |          |      |
| Toluene                    | 1.0           | 0.050           | 1.000     | 0           | 104       | 80        | 120         |       |          |      |
| Ethylbenzene               | 1.0           | 0.050           | 1.000     | 0           | 105       | 80        | 120         |       |          |      |
| Xylenes, Total             | 3.2           | 0.10            | 3.000     | 0           | 108       | 80        | 120         |       |          |      |
| Surr: 4-Bromofluorobenzene | 1.2           |                 | 1.000     |             | 116       | 80        | 120         |       |          |      |

| Sample ID 1309B38-001AM    | <b>S</b> SampT | Гуре: <b>М</b>  | 3         | Tes         | tCode: El | PA Method | 8021B: Vola | tiles |          |      |
|----------------------------|----------------|-----------------|-----------|-------------|-----------|-----------|-------------|-------|----------|------|
| Client ID: SC-1            | Batch          | h ID: <b>R1</b> | 3602      | F           | RunNo: 1  | 3602      |             |       |          |      |
| Prep Date:                 | Analysis D     | Date: 9/        | 25/2013   | 8           | SeqNo: 3  | 87898     | Units: mg/k | ζg    |          |      |
| Analyte                    | Result         | PQL             | SPK value | SPK Ref Val | %REC      | LowLimit  | HighLimit   | %RPD  | RPDLimit | Qual |
| Benzene                    | 0.65           | 0.050           | 0.6812    | 0           | 95.4      | 67.3      | 145         |       |          |      |
| Toluene                    | 0.66           | 0.050           | 0.6812    | 0           | 97.3      | 66.8      | 144         |       |          |      |
| Ethylbenzene               | 0.67           | 0.050           | 0.6812    | 0           | 98.8      | 61.9      | 153         |       |          |      |
| Xylenes, Total             | 2.1            | 0.10            | 2.044     | 0.01574     | 103       | 65.8      | 149         |       |          |      |
| Surr: 4-Bromofluorobenzene | 0.79           |                 | 0.6812    |             | 117       | 80        | 120         |       |          |      |

| Sample ID 1309B38-001AN    | ISD SampT  | уре: <b>М</b> S | SD        | TestCode: EPA Method 8021B: Volatiles |          |          |             |      |          |      |
|----------------------------|------------|-----------------|-----------|---------------------------------------|----------|----------|-------------|------|----------|------|
| Client ID: SC-1            | Batch      | 1D: <b>R1</b>   | 3602      | F                                     | RunNo: 1 | 3602     |             |      |          |      |
| Prep Date:                 | Analysis D | ate: 9/         | 25/2013   | S                                     | SeqNo: 3 | 87899    | Units: mg/K | g    |          |      |
| Analyte                    | Result     | PQL             | SPK value | SPK Ref Val                           | %REC     | LowLimit | HighLimit   | %RPD | RPDLimit | Qual |
| Benzene                    | 0.63       | 0.050           | 0.6812    | 0                                     | 92.7     | 67.3     | 145         | 2.85 | 20       |      |
| Toluene                    | 0.64       | 0.050           | 0.6812    | 0                                     | 93.7     | 66.8     | 144         | 3.75 | 20       |      |
| Ethylbenzene               | 0.65       | 0.050           | 0.6812    | 0                                     | 95.8     | 61.9     | 153         | 3.02 | 20       |      |
| Xylenes, Total             | 2.1        | 0.10            | 2.044     | 0.01574                               | 100      | 65.8     | 149         | 2.38 | 20       |      |
| Surr: 4-Bromofluorobenzene | 0.79       |                 | 0.6812    |                                       | 116      | 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 for VOA and TOC only.
- RL Reporting Detection Limit

Page 3 of 3



nun Environmenia Anaiysis Lavorator) 4901 Hawkins NE Albuquerque, NM 87105

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

#### Sample Log-In Check List

| OU.                                     | Automotive        |                | Mode O-I N                                | abor 1200r  | 220         |                | ReptNo                            | . 1                    |
|---|-------------------|----------------|---|-------------|-------------|----------------|-----------------------------------|------------------------|
| Client Name:                            | Animas Envi       | onmental       | Work Order Nun                            | mber: 1309t |             | ·              | Reptive                           |                        |
| Received by/dat                         | te:               |                | 01/25/13                                  |             |             | *              |                                   |                        |
| Logged By:                              | Lindsay Ma        | ngin           | 9/25/2013 9:50:00                         | AM          |             | James Hours    | )                                 |                        |
| Completed By:                           | Lindsay Ma        |                | 9/25/2013 10:09:2                         | з АМ        |             | Simily Happy   | )                                 |                        |
| Reviewed By:                            | 70                |                | 09/25/13                                  |             |             | 000            |                                   |                        |
| Chain of Cus                            | etody             |                | 01/23/13                                  |             | *           | :II            |                                   |                        |
| 1. Custody sea                          |                   | mnle hottles?  |   | Yes         | П           | No 🗆           | Not Present                       |                        |
| 2. Is Chain of                          |                   |                | 19  | Yes         | <b>V</b>    | No 🗆           | Not Present                       |                        |
| 3. How was the                          |                   |                |   | Cour        |             |                |                                   |                        |
| J. 110W Was th                          | e sample delive   | 1001           |   |             |             |                |                                   |                        |
| Log In                                  |                   |                |   |             |             |                |                                   |                        |
| 4. Was an atte                          | empt made to      | ool the sample | es?                                       | Yes         | 1           | No 🗆           | NA 🗆                              | I                      |
|   |                   |                |   |             |             | 🗖              |                                   |                        |
| <ol><li>Were all sa</li></ol>           | mples received    | at a temperati | ure of >0° C to 6.0°C                     | Yes         | <b>✓</b>    | No ∐           | NA 🗌                              |                        |
| 6. Sample(s)                            | in proper conta   | iner(s)?       |   | Yes         | V           | No 🗌           |                                   |                        |
|   |                   |                |   |             | -           |                |                                   |                        |
| 7. Sufficient sa                        |                   |                |   | Yes         | Accessed to | No ∐           |                                   |                        |
| 8, Are sample                           | s (except VOA     | and ONG) pro   | perly preserved?                          | Yes         | <b>V</b>    | No ∐<br>□      | T                                 | I'                     |
| <ol><li>Was preser</li></ol>            | vative added to   | bottles?       |   | Yes         |             | No 🗹           | NA 🗀                              |                        |
| 10,VOA vials h                          | nave zero head    | space?         |   | Yes         |             | No □           | No VOA Vials                      | Ĭ                      |
| 11. Were any s                          |                   |                | oken?                                     | Yes         |             | No 🗸           |                                   | 133                    |
| 11 • 12 • 14 • 14 • 14 • 14 • 14 • 14 • |                   |                |   |             |             | _              | # of preserved<br>bottles checked |                        |
| 12.Does paper                           |                   |                |   | Yes         | V           | No 🗆           | for pH:                           | 2 or >12 unless noted) |
|   | epancies on ch    |                |   | Yes         |             | No 🗆           | Adjusted?                         | or an amount of the    |
| 13. Are matrice                         |                   |                |   | Yes         |             | No 🗆           |                                   | <del>(1</del>          |
| 14. Is it clear w<br>15. Were all ho    | 3380              |                |   | Yes         |             | No 🗆           | Checked by                        | :                      |
|   | customer for      |                | 59 <b>0</b> 3                             | 103         |             |                |                                   |                        |
|   |                   |                |   |             |             |                |                                   |                        |
| Special Hand                            | dling (if app     | licable)       |   |             |             |                |                                   |                        |
| 16.Was client                           | notified of all d | screpancies w  | ith this order?                           | Yes         |             | No 🗌           | NA 🗹                              | ]                      |
| Perso                                   | on Notified:      | -0             | Di  | ate:        |             |                |                                   |                        |
| By W                                    |                   |                | Vi  |             | ail 🗌       | ] Phone [] Fax | ☐ In Person                       |                        |
| 1000                                    | rding:            |                | arw / · · · · · · · · · · · · · · · · · · |             |             |                |                                   | 1 0                    |
|   | t Instructions:   |                | ***********                               |             |             |                |                                   |                        |
| 17. Additional                          | remarks:          |                |   |             |             |                |                                   |                        |
| 18. <u>Cooler Inf</u>                   | formation         |                | **  |             |             |                |                                   |                        |
| Cooler                                  | No Temp °C        |                | Seal Intact   Seal N                      | o Seal D    | ate         | Signed By      | _                                 |                        |
| 1                                       | 1.0               | Good           | Yes                                       |             |             | <u> </u>       | _1                                |                        |

| HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 | TEX + MTBE + TPH (Gas only) TEX + MTBE + TPH (Gas only) PH 8015B (GRO / DRO / MRO) PH (Method 418.1) CRA 8 Metals Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) Anions (F,CI,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> ) | Marks: B.M. to Conoco Phillips  Marks: B.M. to Conoco Phillips  With add: C200  Ordered by: Freddy Wortnez  Benisor: Carlos Rey  Arra: 8  Billing. Any sub-contracted data will be clearly notated on the analytical report.   |
|---|---|--|
| Turn-Around Time:  □ Standard A Rush Same day Project Name:  Co P SJ 30-6 # 455 S Project #:  | Project Manager:  D. Watson Sampler: S.Lyun SamplerTemperature Container Preservative Type and # Type   |  |
| nain-of-Custody Record  nimes Euvironmendal Services, LLC  ddress: 624 E. Comanche Farmington, NM 87401                                     | email or Fax#:  QA/QC Package:  Accreditation  □ NELAP  □ EDD (Type)  Date  Time  Matrix  Sample Request ID   | 124   13   104    50;   50-1   Meta 124   124   13   140 |

