

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.

15663

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

- Type of action:
- Below grade tank registration
  - Permit of a pit or proposed alternative method
  - Closure of a pit, below-grade tank, or proposed alternative method
  - Modification to an existing permit/or registration
  - Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

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

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

OIL CONS. DIV. DIST. 3

DEC 01 2016

1.  
Operator: Burlington Resources Oil & Gas Company, LP OGRID #: 14538  
Address: PO BOX 4289, Farmington, NM 87499  
Facility or well name: PHILLIPS COM 1E  
API Number: 30-045-24198 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr K Section 23 Township 31N Range 13W County: San Juan / Rio Arriba  
Center of Proposed Design: Latitude 36.88265 °N Longitude -108.17646 °W NAD:  1927  1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

2.  
 **Pit:** Subsection F, G or J of 19.15.17.11 NMAC  
Temporary:  Drilling  Workover  
 Permanent  Emergency  Cavitation  P&A  Multi-Well Fluid Management Low Chloride Drilling Fluid  yes  no  
 Lined  Unlined Liner type: Thickness \_\_\_\_\_ mil  LLDPE  HDPE  PVC  Other \_\_\_\_\_  
 String-Reinforced  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_ Volume: \_\_\_\_\_ bbl Dimensions: L \_\_\_\_\_ x W \_\_\_\_\_ x D \_\_\_\_\_

3.  
 **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 120 bbl Type of fluid: Produced Water  
Tank Construction material: Metal  
 Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
 Visible sidewalls and liner  Visible sidewalls only  Other \_\_\_\_\_  
Liner type: Thickness \_\_\_\_\_ mil  HDPE  PVC  Other NONE

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

5.  
**Fencing:** Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  
 Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)  
 Four foot height, four strands of barbed wire evenly spaced between one and four feet  
 Alternate. Please specify \_\_\_\_\_



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

Screen  Netting  Other \_\_\_\_\_

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

7. **Signs:** Subsection C of 19.15.17.11 NMAC

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

Signed in compliance with 19.15.16.8 NMAC

8. **Variations and Exceptions:**  
 Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  
**Please check a box if one or more of the following is requested, if not leave blank:**

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

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

9. **Siting Criteria (regarding permitting):** 19.15.17.10 NMAC  
*Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.*

<u>General siting</u>	
<b>Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.</b> - <input type="checkbox"/> NM Office of the State Engineer - iWATERS database search; <input type="checkbox"/> USGS; <input type="checkbox"/> Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<b>Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.</b> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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. <b>(Does not apply to below grade tanks)</b> - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. <b>(Does not apply to below grade tanks)</b> - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. <b>(Does not apply to below grade tanks)</b> - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. <b>(Does not apply to below grade tanks)</b> - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b><u>Below Grade Tanks</u></b>	
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b><u>Temporary Pit using Low Chloride Drilling Fluid</u></b> (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	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No

Within 100 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

**Temporary Pit Non-low chloride drilling fluid**

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes  No

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

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes  No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

Within 300 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

**Permanent Pit or Multi-Well Fluid Management Pit**

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

Yes  No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes  No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

Yes  No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

Yes  No

10.

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

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

- Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

11.

**Multi-Well Fluid Management Pit Checklist:** Subsection B of 19.15.17.9 NMAC

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

- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- A List of wells with approved application for permit to drill associated with the pit.
- Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_ or Permit Number: \_\_\_\_\_

12. **Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

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

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

13. **Proposed Closure:** 19.15.17.13 NMAC

**Instructions:** Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type:  Drilling  Workover  Emergency  Cavitation  P&A  Permanent Pit  Below-grade Tank  Multi-well Fluid Management Pit  
 Alternative
- Proposed Closure Method:  Waste Excavation and Removal  
 Waste Removal (Closed-loop systems only)  
 On-site Closure Method (Only for temporary pits and closed-loop systems)  
      In-place Burial  On-site Trench Burial  
 Alternative Closure Method

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

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

15. **Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

**Instructions:** Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

- |   |   |
|---|---|
| Ground water is less than 25 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is between 25-50 feet below the bottom of the buried waste<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Ground water is more than 100 feet below the bottom of the buried waste.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> 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).<br>- Topographic map; Visual inspection (certification) of the proposed site                        | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input type="checkbox"/> 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.<br>- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Written confirmation or verification from the municipality; Written approval obtained from the municipality   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet of a wetland.<br>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

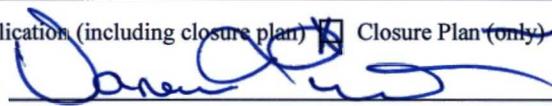
16.  
**On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

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

17.  
**Operator Application Certification:**  
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18.  
**OCD Approval:**  Permit Application (including closure plan)  Closure Plan (only)  OCD Conditions (see attachment)

OCD Representative Signature:  Approval Date: 12-27-2016  
Title: Environmental Specialist OCD Permit Number: \_\_\_\_\_

19.  
**Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC  
*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

Closure Completion Date: 9/20/2016

20.  
**Closure Method:**  
 Waste Excavation and Removal  On-Site Closure Method  Alternative Closure Method  Waste Removal (Closed-loop systems only)  
 If different from approved plan, please explain.

21.  
**Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

Proof of Closure Notice (surface owner and division)  
 Proof of Deed Notice (required for on-site closure for private land only)  
 Plot Plan (for on-site closures and temporary pits)  
 Confirmation Sampling Analytical Results (if applicable)  
 Waste Material Sampling Analytical Results (required for on-site closure)  
 Disposal Facility Name and Permit Number  
 Soil Backfilling and Cover Installation  
 Re-vegetation Application Rates and Seeding Technique  
 Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude \_\_\_\_\_ °N \_\_\_\_\_ Longitude \_\_\_\_\_ °W \_\_\_\_\_ NAD:  1927  1983

**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:  Date: 12/1/2016

e-mail address: crystal.walker@cop.com Telephone: (505) 326-9837

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

**Lease Name: Phillips Com 1E**  
**API No.: 30-045-24198**

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

General Plan:

1. BR shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, BR will file the C144 Closure Report as required.

**The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.**

2. BR shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

**All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.**

3. BR will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

**The below-grade tank was disposed of in a division-approved manner.**

4. If there is any on-site equipment associated with a below-grade tank, then BR shall remove the equipment, unless the equipment is required for some other purpose.

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

5. BR will test the soils beneath the below-grade tank to determine whether a release has occurred. BR shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. COPC shall notify the division of its results on form C-141.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	100
Chlorides	EPA 300.0	250

6. If BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

**A release was determined for the above referenced well.**

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

**The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.**

8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
- i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

**Notification is attached.**

9. The surface owner shall be notified of BR's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

**The closure process notification to the landowner was sent via certified mail. (See Attached) (Well located on Federal Land, certified mail is not required for Federal Land per BLM/OCD MOU.)**

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

**The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.**

11. BR shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. COPC will repeat seeding or planting will be continued until successful vegetative growth occurs.

**Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.**

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

**The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.**

13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
  - Soil Backfilling and Cover Installation **(See Report)**
  - Re-vegetation application rates and seeding techniques **(See Report)**
  - Photo documentation of the site reclamation **(Included as an attachment)**
  - Confirmation Sampling Results **(Included as an attachment)**
  - Proof of closure notice **(Included as an attachment)**

## Walker, Crystal

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**From:** Walker, Crystal  
**Sent:** Tuesday, March 08, 2016 9:14 AM  
**To:** Cory Smith; Jonathan Kelly; Katherina Diemer (kdiemer@blm.gov); Flaniken, Jon (mflanike@blm.gov)  
**Cc:** Busse, Dollie L; Farrell, Larissa L; Roberts, Kelly G; Walker, Crystal; SJBUE-Team; Coats, Nathan W; Notor, Lori  
**Subject:** BGT Re-Sample Notification for sampling 3/14 & 3/15

Good morning,

The following locations contained below-grade tanks that require re-sampling, which is scheduled for Monday, March 14<sup>th</sup> and Tuesday, March 15<sup>th</sup> will begin at 9:00am at the first location and continue to the next.

Sampling Order	Name	Sampling Date
1	PHILLIPS COM 1E	3/14/2016
2	PINON MESA A 100*	3/14/2016
3	MCCORD 104S	3/14/2016
4	HUDSON 2	3/14/2016
5	CORNELL 1R	3/14/2016
6	MURPHY 1	3/15/2016
7	GRENIER A 2R	3/15/2016
8	HARE 15M	3/15/2016
9	HARE 4	3/15/2016
10	DELO 9	3/15/2016

\*indicates a long walk to location due to reclamation

Please feel free to contact me at any time if you have any questions or concerns regarding this information.

Thank you,

**Crystal Walker**  
Regulatory Coordinator  
ConocoPhillips Lower 48

T: 505-326-9837 | F: 505-599-4086 | M: 505-215-4361 | [crystal.walker@cop.com](mailto:crystal.walker@cop.com)

Visit the new Lower 48 website:  
[www.conocophillipsuslower48.com](http://www.conocophillipsuslower48.com)

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

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

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

### Release Notification and Corrective Action

#### OPERATOR

Initial Report  Final Report

Name of Company <b>ConocoPhillips Co.</b>	Contact <b>Bobby Spearman</b>
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505)-320-3045</b>
Facility Name: <b>Phillips Com1E</b>	Facility Type: <b>Gas well</b>
Surface Owner: <b>FEE</b>	Mineral Owner: <b>FED</b>
API No. <b>3004524198</b>	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<b>K</b>	<b>23</b>	<b>31N</b>	<b>13W</b>	<b>1650</b>	<b>South</b>	<b>1700</b>	<b>West</b>	<b>San Juan</b>

Latitude **36.88265** Longitude **-108.17654**

#### NATURE OF RELEASE

Type of Release <b>Hydrocarbon</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>None</b>
Source of Release <b>BGT</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

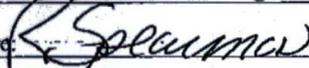
Historic contamination was encountered after a soil sample was taken on 3-15-16

Describe Area Affected and Cleanup Action Taken.\*

Historical hydrocarbon impacted soil was found during the BGT closure for the subject well. The excavation was 55'x 52' x 10' and 1059 yds of soil was transported to Envirotech landfarm and 1059 yds of clean soil was transported from 1059 and placed in the excavation site. The soil sampling report is attached for review.

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

#### OIL CONSERVATION DIVISION

Signature: 	Approved by Environmental Specialist:	
Printed Name: <b>Bobby Spearman</b>	Approval Date:	Expiration Date:
Title: <b>Field Environmental Specialist</b>	Conditions of Approval:	
E-mail Address: <b>Robert.E.Spearman@conocophillips.com</b>	Attached <input type="checkbox"/>	
Date: <b>11-21-16</b>	Phone: <b>(505) 320-3045</b>	

\* Attach Additional Sheets If Necessary



November 9, 2016

Robert Spearman  
ConocoPhillips  
San Juan Business Unit  
(505) 320-3045

Via electronic mail to:  
[SJBUE-Team@ConocoPhillips.com](mailto:SJBUE-Team@ConocoPhillips.com)

**RE: Below Grade Tank Closure, Release Assessment, and Final Excavation Report  
Phillips Com 1E  
San Juan County, New Mexico**

Dear Mr. Spearman:

On March 14, April 18 and September 20, 2016, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, a release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (COPC) Phillips Com 1E located in San Juan County, New Mexico. At the request of the New Mexico Oil Conservation Division (NMOCD), resampling of the location below the former BGT was required in order to meet all required closure criteria listed in New Mexico Administrative Code (NMAC) 19.15.17.13E. The historic release at the BGT consisted of an unknown quantity produced water and hydrocarbons. An initial release assessment was completed on April 18, 2016, and the final excavation was completed by COPC contractors while AES was on location on September 20, 2016.

---

## 1.0 Site Information

### 1.1 Location

Site Name – Phillips Com 1E

Location – NE¼ SW¼, Section 23, T31N, R13W  
San Juan County, New Mexico

Well Head Latitude/Longitude – N36.88279, W108.17654

BGT/Release Location Latitude/Longitude – N36.88265, W108.17646

Land Jurisdiction – Private

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, March 2016

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

1911 Main, Ste 206  
Durango, CO 81301  
970-403-3084

## **1.2 NMOCD Ranking**

In accordance with NMOCD release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 20 based on the following factors:

- **Depth to Groundwater:** A Site-Specific Hydrology Report form dated August 2008 reported the depth to groundwater at 81 feet below ground surface (bgs). (10 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An unnamed wash is located approximately 400 feet south, and the Thompson Arroyo is located approximately 550 feet northeast of the location. Both ultimately drain into the La Plata River west of the location. (10 points)

## **1.3 Assessment**

AES was initially contacted by Robert Spearman, COPC representative, on March 1, 2016. At the request of the NMOCD, resampling of the location below the former BGT was required in order to meet required closure criteria listed in NMAC 19.15.17.13E. On March 14, 2016, Corwin Lameman and Emilee Skyles of AES traveled to the location. Soil sampling consisted of collection of one discrete soil sample from below the former BGT.

On April 18, 2016, AES personnel completed the release assessment field work. The assessment included collection and field sampling of 16 soil samples from 11 soil borings (SB-1 through SB-11). Based on field sampling results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On September 20, 2016, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of six confirmation soil samples (SC-1 through SC-6) from the walls and base of the excavation. The area of the final excavation measured approximately 55 feet by 52 feet by 10 to 12 feet in depth. The depth of the excavation was limited due to a confining sandstone unit from 3 to 10 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

## 2.0 Soil Sampling

A total of 16 soil samples (SB-1 through SB-11) and 7 composite samples (S-1, and SC-1 through SC-6) were collected during the assessments. All soil samples except S-1 were field screened for volatile organic compounds (VOCs), and selected samples were analyzed for total petroleum hydrocarbon (TPH). All composite samples (S-1, and SC-1 through SC-6) collected were submitted for confirmation laboratory analysis.

### 2.1 Field Sampling

#### 2.1.1 Volatile Organic Compounds

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

#### 2.1.2 Total Petroleum Hydrocarbons

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

### 2.2 Laboratory Analyses

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto sample chain of custody records. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil samples S-1, and SC-1 through SC-6 were laboratory analyzed for:

- Chlorides per USEPA Method 300.0; and
- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B.

S-1 was also analyzed for:

- TPH per USEPA Method 418.1.

SC-1 through SC-6 were also analyzed for:

- TPH as Gasoline Range Organics (GRO), Motor Oil Range Organics (MRO) and Diesel Range Organics (DRO) per USEPA Method 8015.

### 2.3 Field and Laboratory Analytical Results

On April 18, 2016, release assessment field screening results for VOCs via OVM ranged from 0.0 ppm in SB-5, SB-6, and SB-8, through SB-11 up to 4,455 ppm in SB-3. Field TPH concentrations were reported at less than 20.0 mg/kg in SB-8 through SB-11 up to to 1,474 mg/kg in SB-3.

On September 20, 2016, final excavation field screening results for VOCs via OVM ranged from 2.8 ppm in SC-6 up to 139 ppm in SC-3. Field TPH concentrations were less than 20.0 mg/kg in SC-1 through SC-6. Field screening VOC and TPH results are summarized in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Soil Field VOCs, TPH, and Chloride Results  
 Phillips Com 1E BGT Closure, Release Assessment and Final Excavation  
 March through September 2016

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
<i>NMOCD Action Level*</i>			<i>NE/100*</i>	<i>100/100*</i>
S-1	3/14/16	4.5	NA	NA
		2	0.0	NA
SB-1	4/18/16	4	<b>404</b>	<b>568</b>
		4.5	<b>2,494</b>	NA
SB-2	4/18/16	2	0.0	NA
		3	40.1	26.2
SB-3	4/18/16	2	0.0	NA
		4	<b>4,455</b>	<b>1,470</b>
SB-4	4/18/16	2	0.0	NA
		4	<b>2,354</b>	<b>1,390</b>
SB-5	4/18/16	4	0.0	<20.0
SB-6	4/18/16	4	0.0	<20.0
SB-7	4/18/16	3.75	<b>508</b>	67.0
SB-8	4/18/16	2	0.0	<20.0
SB-9	4/18/16	3.5	0.0	<20.0
SB-10	4/18/16	1	0.0	<20.0
SB-11	4/18/16	4	0.0	<20.0

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>VOCs via OVM (ppm)</b>	<b>Field TPH (mg/kg)</b>
<b>NMOCD Action Level*</b>			<b>NE/100*</b>	<b>100/100*</b>
SC-1	9/20/16	0 to 10	19.2	<20.0
SC-2	9/20/16	0 to 10	21.7	<20.0
SC-3	9/20/16	0 to 10	<b>139</b>	<20.0
SC-4	9/20/16	0 to 10	3.3	<20.0
SC-5	9/20/16	10 to 12	22.0	<20.0
SC-6	9/20/16	10 to 12	2.8	<20.0

NA – not analyzed

\*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) and *NMAC 19.15.17.13E*.

Laboratory analysis of sample S-1 was used to determine the BTEX, TPH, and chloride concentrations for BGT closure sampling results. BTEX concentrations were measured at 302 mg/kg; TPH concentrations were reported at 2,700 mg/kg; and chloride concentration was less than 30 mg/kg.

Laboratory analyses for SC-1 through SC-6 were used to confirm field sampling results from the final excavation extents. Benzene concentrations and total BTEX concentrations were reported below laboratory detection limits in all samples (SC-1 through SC-6). Total TPH (GRO/DRO/MRO) concentrations were also below laboratory detection limits in SC-1 through SC-6. Results are summarized in Table 2 and included on Figure 4. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, TPH and Chlorides Phillips Com 1E BGT Closure, Release Assessment, and Final Excavation March, April, and September 2016

<b>Sample ID</b>	<b>Date Sampled</b>	<b>Sample Depth (ft bgs)</b>	<b>Benzene (mg/kg)</b>	<b>Total BTEX (mg/kg)</b>	<b>Total TPH (418.1) (mg/kg)</b>	<b>TPH GRO (mg/kg)</b>	<b>TPH DRO (mg/kg)</b>	<b>TPH MRO (mg/kg)</b>	<b>Chlorides (mg/kg)</b>
<b>NMOCD Action Level*</b>			<b>0.2/10*</b>	<b>50</b>	<b>100/100*</b>	<b>100/100*</b>			<b>250/NE*</b>
S-1	3/14/16	5	<1.2	<b>302</b>	<b>2,700</b>	NA	NA	NA	<30
SC-1	9/20/16	0 to 10	<0.023	<0.206	NA	<4.6	<9.3	<46	110
SC-2	9/20/16	0 to 10	<0.024	<0.220	NA	<4.9	<9.8	<49	<30
SC-3	9/20/16	0 to 10	<0.018	<0.165	22	<3.7	<9.9	<50	98

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	Total TPH (418.1) (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level*			0.2/10*	50	100/100*		100/100*		250/NE*
SC-4	9/20/16	0 to 10	<0.024	<0.219	NA	<4.9	<9.9	<50	<30
SC-5	9/20/16	10 to 12	<0.025	<0.225	NA	<5.0	<9.5	<47	96
SC-6	9/20/16	10 to 12	<0.025	<0.225	NA	<5.0	12	<46	<30

NA – not analyzed

\*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) and *NMAC 19.15.17.13E*.

### 3.0 Conclusions and Recommendations

On March 14, and April 18, 2016, AES conducted a BGT closure and assessment of petroleum contaminated soils associated with the Phillips Com 1E. NMOCD action levels for BGT closures are specified in NMAC 19.15.17.13E. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 20.

BGT closure sampling results for total BTEX and total TPH in March 2016 were above the NMOCD action level of 0.2 mg/kg and 100 mg/kg, respectively, with S-1 reporting laboratory concentrations at 302 mg/kg and 2,700 mg/kg, respectively. Laboratory results for chloride concentrations in BGT SC-1 were reported below the NMOCD action level of 250 mg/kg. Based on laboratory concentrations of total BTEX and total TPH, a release was confirmed.

In April 2016, release assessment field sampling results above the NMOCD action level of 100 ppm VOCs were reported in SB-1, SB-3, SB-4 and SB-7, and field sampling results above the NMOCD Action level of 100 mg/kg TPH were reported in SB-1, SB-3, and SB-4. The highest VOC concentration of 4,453 ppm and the highest TPH concentration of 1,470 mg/kg were both reported in SB-3. Excavation of the release area was recommended.

On September, 2016, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for all four of the final walls as well as the base of the excavation, except SC-3. Field TPH concentrations were below the applicable NMOCD action level of 100 mg/kg for the four final walls and the base of the excavation. Laboratory analytical results reported benzene and total BTEX concentrations in SC-1

through SC-6 as below NMOCD action levels. TPH concentrations as GRO/DRO/MRO were also reported below the applicable NMOCD action level in all samples.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Phillips Com 1E, benzene, total BTEX, and TPH concentrations were all below the applicable NMOCD action levels for the final sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,



Victoria Giannola  
Project Manager



Emilee Skyles  
Geologist/Project Lead

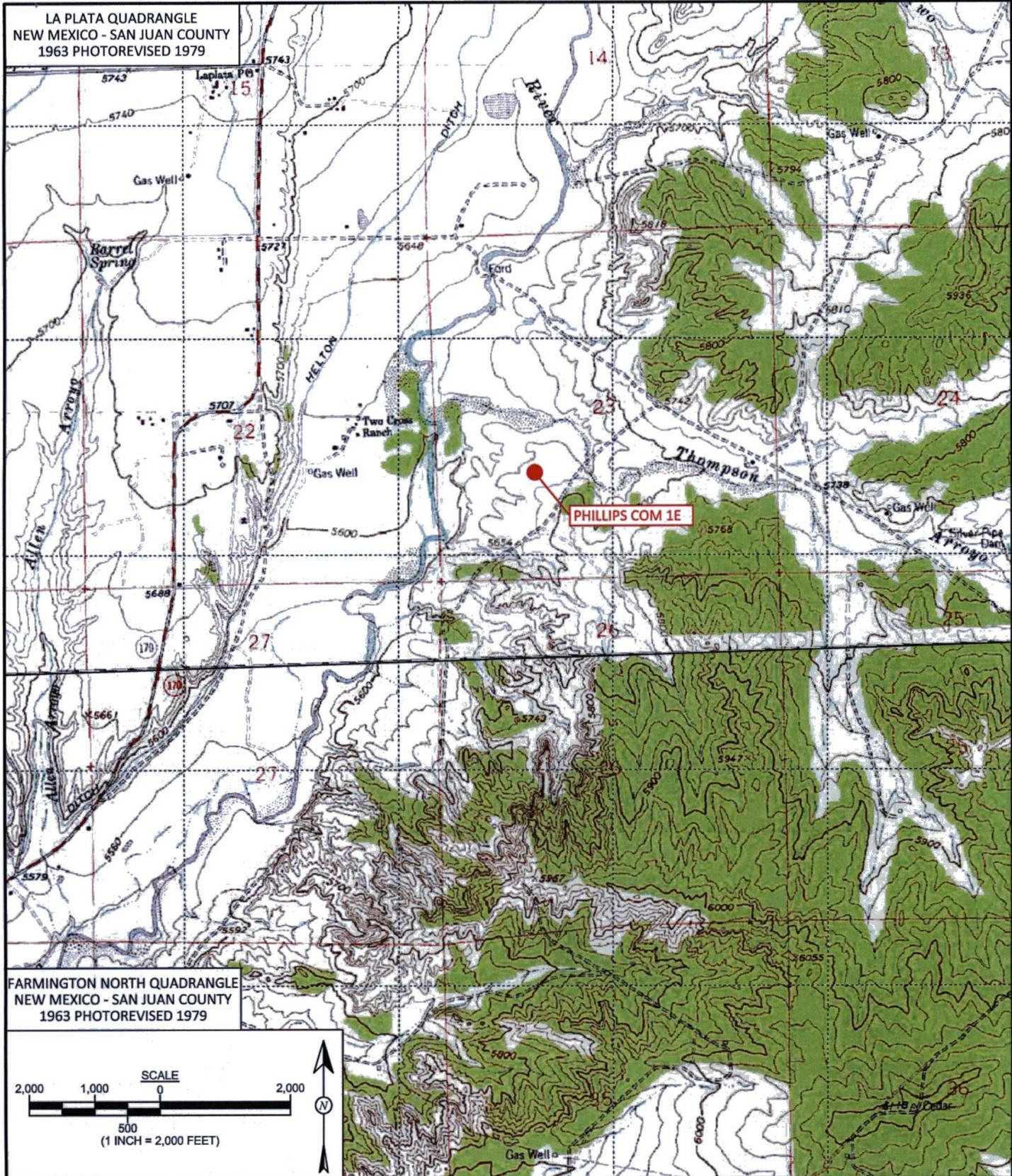


Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, March 2016
- Figure 3. Release Assessment Sample Locations and Results, March and April 2016
- Figure 4. Final Excavation Sample Locations and Results, September 2016
- AES Field Sampling Report 041816
- AES Field Sampling Report 092016
- Hall Laboratory Analytical Report 1603707
- Hall Laboratory Analytical Report 1609C05
- Hall Laboratory Analytical Report 1609B51

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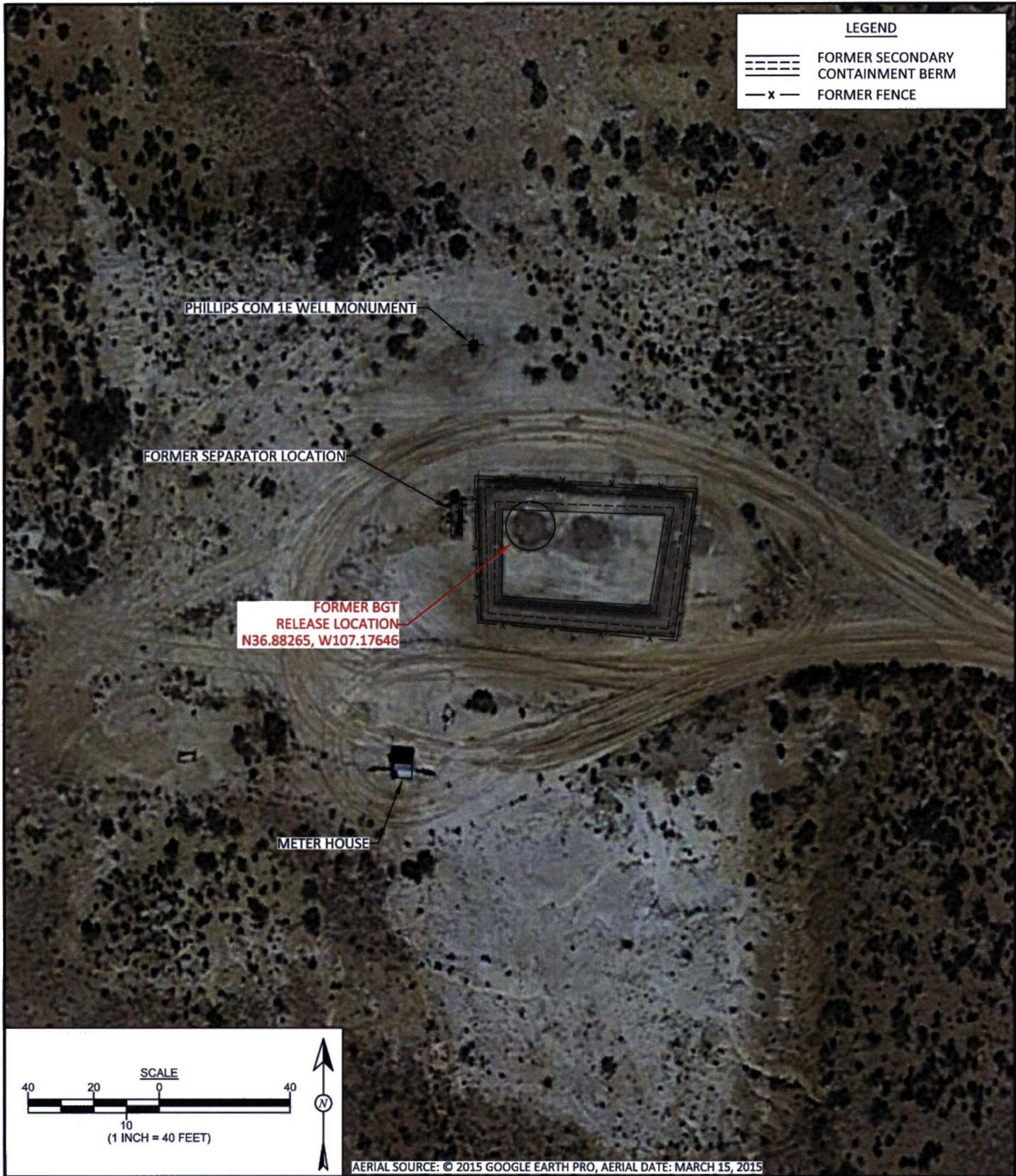


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<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> April 28, 2016
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> April 28, 2016
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> October 28, 2016
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 28, 2016

**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
ConocoPhillips  
PHILLIPS COM 1E  
NE¼ SW¼, SECTION 23, T31N , R13W  
SAN JUAN COUNTY, NEW MEXICO  
N36.88279, W108.17654

LEGEND	
	FORMER SECONDARY CONTAINMENT BERM
	FORMER FENCE

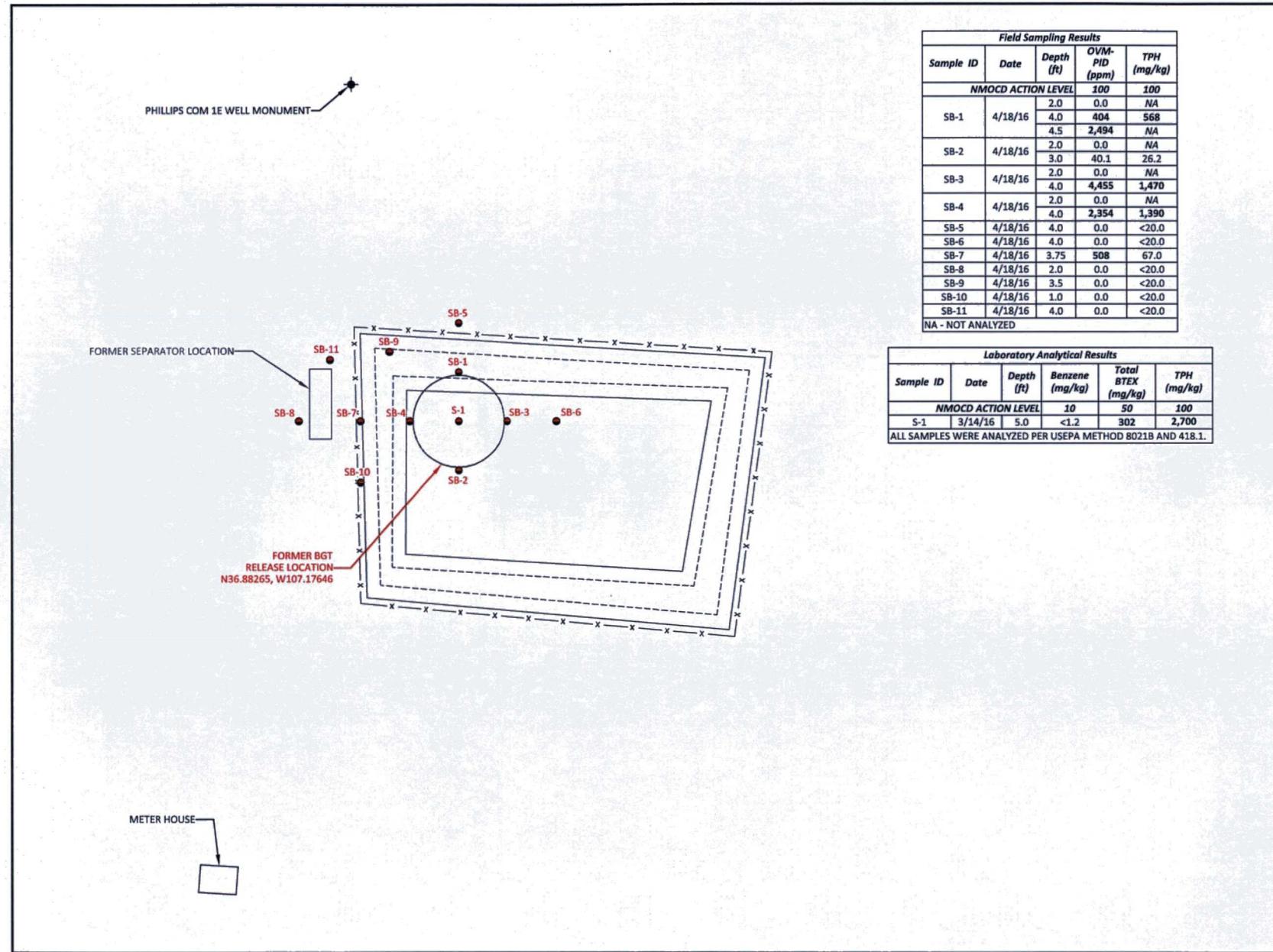



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<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> October 28, 2016
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 28, 2016

**FIGURE 2**

**AERIAL SITE MAP  
MARCH 2016**  
ConocoPhillips  
PHILLIPS COM 1E  
NE $\frac{1}{4}$  SW $\frac{1}{4}$ , SECTION 23, T31N, R13W  
SAN JUAN COUNTY, NEW MEXICO  
N36.88279, W108.17654



**Field Sampling Results**

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>				
			<b>100</b>	<b>100</b>
SB-1	4/18/16	2.0	0.0	NA
		4.0	404	568
		4.5	2,494	NA
SB-2	4/18/16	2.0	0.0	NA
		3.0	40.1	26.2
		4.0	4,455	1,470
SB-3	4/18/16	2.0	0.0	NA
		4.0	2,354	1,390
		4.0	0.0	<20.0
SB-4	4/18/16	2.0	0.0	NA
		4.0	0.0	<20.0
		4.0	0.0	<20.0
SB-5	4/18/16	2.0	0.0	NA
		3.75	508	67.0
		4.0	0.0	<20.0
SB-6	4/18/16	2.0	0.0	<20.0
		3.5	0.0	<20.0
		4.0	0.0	<20.0
SB-7	4/18/16	1.0	0.0	<20.0
		4.0	0.0	<20.0
		4.0	0.0	<20.0
SB-8	4/18/16	1.0	0.0	<20.0
		4.0	0.0	<20.0
		4.0	0.0	<20.0
SB-9	4/18/16	2.0	0.0	<20.0
		4.0	0.0	<20.0
		4.0	0.0	<20.0
SB-10	4/18/16	1.0	0.0	<20.0
		4.0	0.0	<20.0
		4.0	0.0	<20.0
SB-11	4/18/16	2.0	0.0	<20.0
		4.0	0.0	<20.0
		4.0	0.0	<20.0

NA - NOT ANALYZED

**Laboratory Analytical Results**

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>					
			<b>10</b>	<b>50</b>	<b>100</b>
S-1	3/14/16	5.0	<1.2	302	2,700

ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 418.1.

**FIGURE 3**

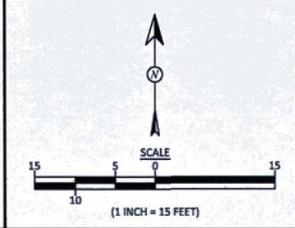
**RELEASE ASSESSMENT  
SAMPLE LOCATIONS AND RESULTS  
MARCH AND APRIL 2016**  
 ConocoPhillips  
 PHILLIPS COM 1E  
 NE¼ SW¼, SECTION 23, T31N, R13W  
 SAN JUAN COUNTY, NEW MEXICO  
 N36.88279, W108.17654



<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> April 18, 2016
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> October 28, 2016
<b>CHECKED BY:</b> E. Skyles	<b>DATE CHECKED:</b> October 28, 2016
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> October 28, 2016

**LEGEND**

- SOIL BORING LOCATIONS



**FIGURE 4**

**FINAL EXCAVATION CLEARANCE  
SAMPLE LOCATIONS AND RESULTS  
SEPTEMBER 2016**

ConocoPhillips  
PHILLIPS COM 1E  
NE¼ SW¼, SECTION 23, T31N, R13W  
SAN JUAN COUNTY, NEW MEXICO  
N36.88279, W108.17654



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**DRAWN BY:** S. Glasses  
**DATE DRAWN:** October 6, 2016

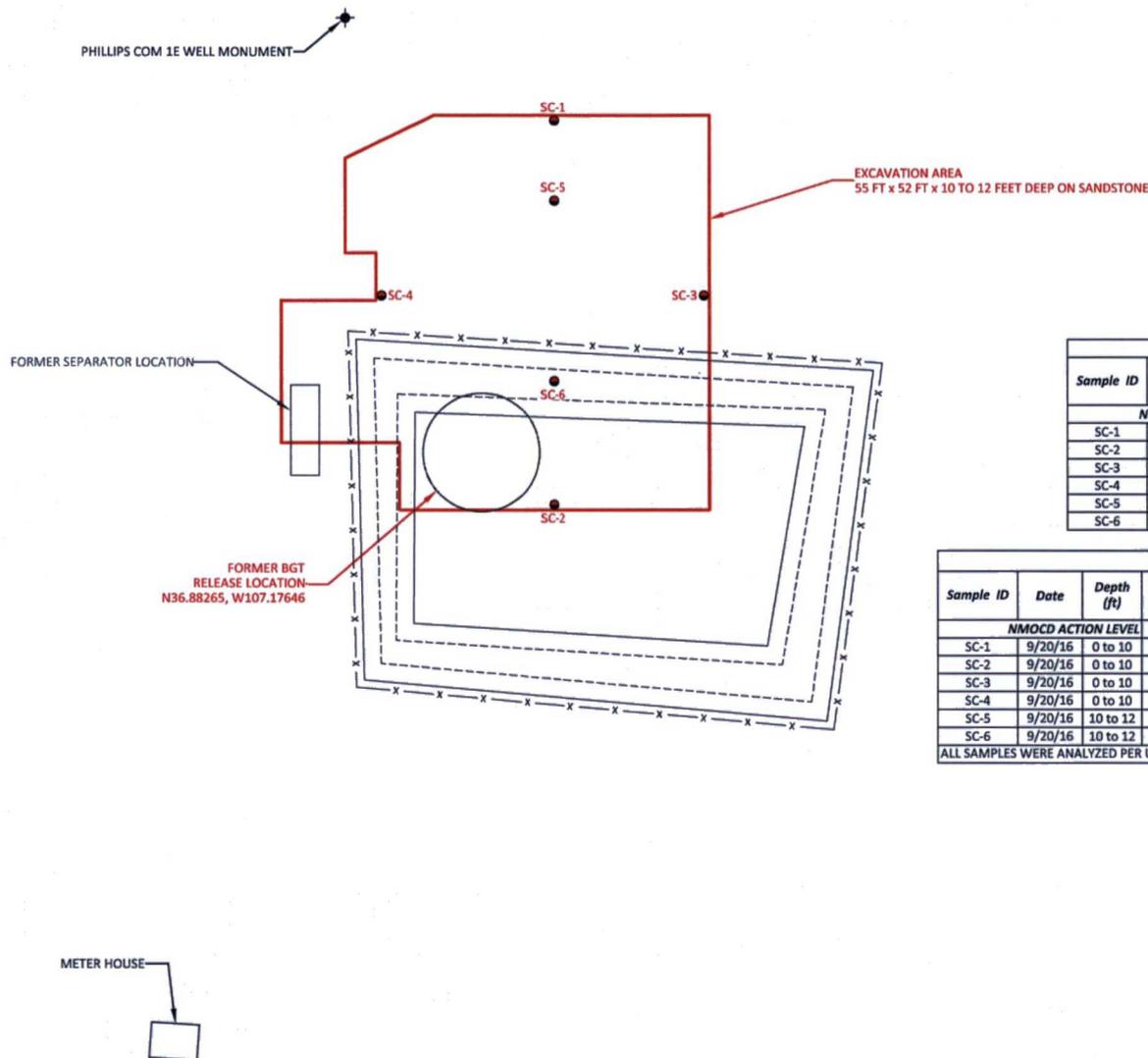
**REVISIONS BY:** C. Lameman  
**DATE REVISED:** October 28, 2016

**CHECKED BY:** E. Skyles  
**DATE CHECKED:** October 28, 2016

**APPROVED BY:** E. McNally  
**DATE APPROVED:** October 28, 2016

**LEGEND**

● SAMPLE COMPOSITE LOCATIONS



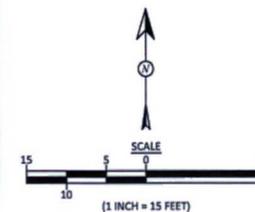
**Field Sampling Results**

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	
<b>NMOC ACTION LEVEL</b>				<b>100</b>	<b>100</b>
SC-1	9/20/16	0 to 10	19.2	<20.0	
SC-2	9/20/16	0 to 10	21.7	<20.0	
SC-3	9/20/16	0 to 10	139	<20.0	
SC-4	9/20/16	0 to 10	3.3	<20.0	
SC-5	9/20/16	10 to 12	22.0	<20.0	
SC-6	9/20/16	10 to 12	2.8	<20.0	

**Laboratory Analytical Results**

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)	Chlorides (mg/kg)
<b>NMOC ACTION LEVEL</b>				<b>10</b>	<b>50</b>	<b>100</b>		<b>250</b>
SC-1	9/20/16	0 to 10	<0.023	<0.206	<4.6	<9.3	<46	110
SC-2	9/20/16	0 to 10	<0.024	<0.22	<4.9	<9.8	<49	<30
SC-3	9/20/16	0 to 10	<0.018	<0.165	<3.7	<9.9	<50	98
SC-4	9/20/16	0 to 10	<0.024	<0.219	<4.9	<9.9	<50	<30
SC-5	9/20/16	10 to 12	<0.025	<0.225	<5.0	<9.5	<47	96
SC-6	9/20/16	10 to 12	<0.025	<0.225	<5.0	12	<46	<30

ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8260B, 8015D, AND 300.0.



# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: Phillips Com 1E

Date: 4/18/2016

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 2'	4/18/2016	9:22	0.0	Not Analyzed for TPH				
SB-1 @ 4'	4/18/2016	9:25	404	568	9:41	20.0	1	SHG
SB-1 @ 4.5'	4/18/2016	9:32	2,494	Not Analyzed for TPH				
SB-2 @ 2'	4/18/2016	9:42	0.0	Not Analyzed for TPH				
SB-2 @ 3'	4/18/2016	9:54	40	26.2	10:30	20.0	1	SHG
SB-3 @ 2'	4/18/2016	10:02	0.0	Not Analyzed for TPH				
SB-3 @ 4'	4/18/2016	10:07	4,455	1,470	10:35	20.0	1	SHG
SB-4 @ 2'	4/18/2016	10:19	0.0	Not Analyzed for TPH				
SB-4 @ 4'	4/18/2016	10:23	2,354	1,390	10:38	20.0	1	SHG
SB-5 @ 4'	4/18/2016	10:56	0.0	13.2	11:11	20.0	1	SHG
SB-6 @ 4'	4/18/2016	11:04	0.0	9.9	11:15	20.0	1	SHG
SB-7 @ 3.75'	4/18/2016	11:25	508	67.0	11:32	20.0	1	SHG
SB-8 @ 2'	4/18/2016	11:36	0.0	<20.0	11:54	20.0	1	SHG

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-9 @ 3.5'	4/18/2016	11:45	0.0	<20.0	11:59	20.0	1	SHG
SB-10 @ 1'	4/18/2016	11:54	0.0	<20.0	12:13	20.0	1	SHG
SB-11 @ 4'	4/18/2016	12:46	0.0	<20.0	13:01	20.0	1	SHG

DF Dilution Factor  
NA Not Analyzed  
PQL Practical Quantitation Limit

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:



# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: Phillips Com 1E

Date: 9/20/2016

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	9/20/2016	11:03	North Wall	19.2	0.0	11:49	20.0	1	SHG
SC-2	9/20/2016	10:34	South Wall	21.7	0.0	11:53	20.0	1	SHG
SC-3	9/20/2016	10:40	East Wall	139	14.2	11:56	20.0	1	SHG
SC-4	9/20/2016	11:12	West Wall	3.3	0.0	12:00	20.0	1	SHG
SC-5	9/20/2016	10:55	North Base	22.0	10.9	12:03	20.0	1	SHG
SC-6	9/20/2016	10:28	South Base	2.8	9.2	12:08	20.0	1	SHG

DF Dilution Factor  
 NA Not Analyzed  
 PQL Practical Quantitation Limit

\*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analy:



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

March 23, 2016

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

RE: COPC PHILLIPS COM 1E

OrderNo.: 1603707

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/15/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
 Lab Order 1603707  
 Date Reported: 3/23/2016

**CLIENT:** Animas Environmental **Client Sample ID:** S-1  
**Project:** COPC PHILLIPS COM 1E **Collection Date:** 3/14/2016 10:16:00 AM  
**Lab ID:** 1603707-001 **Matrix:** SOIL **Received Date:** 3/15/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>TOM</b>
Petroleum Hydrocarbons, TR	2700	200		mg/Kg	10	3/18/2016	24299
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	3/21/2016 11:06:08 PM	24365
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.2		mg/Kg	50	3/16/2016 8:47:15 AM	24254
Toluene	7.6	2.4		mg/Kg	50	3/16/2016 8:47:15 AM	24254
Ethylbenzene	24	2.4		mg/Kg	50	3/16/2016 8:47:15 AM	24254
Xylenes, Total	270	4.7		mg/Kg	50	3/16/2016 8:47:15 AM	24254
Surr: 4-Bromofluorobenzene	134	80-120	S	%Rec	50	3/16/2016 8:47:15 AM	24254

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603707

23-Mar-16

**Client:** Animas Environmental  
**Project:** COPC PHILLIPS COM 1E

Sample ID	<b>MB-24365</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>24365</b>	RunNo:	<b>32963</b>					
Prep Date:	<b>3/21/2016</b>	Analysis Date:	<b>3/21/2016</b>	SeqNo:	<b>1011048</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-24365</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>24365</b>	RunNo:	<b>32963</b>					
Prep Date:	<b>3/21/2016</b>	Analysis Date:	<b>3/21/2016</b>	SeqNo:	<b>1011049</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1603707

23-Mar-16

**Client:** Animas Environmental  
**Project:** COPC PHILLIPS COM 1E

Sample ID	<b>MB-24299</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 418.1: TPH</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>24299</b>	RunNo:	<b>32887</b>					
Prep Date:	<b>3/17/2016</b>	Analysis Date:	<b>3/18/2016</b>	SeqNo:	<b>1008187</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	<b>LCS-24299</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 418.1: TPH</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>24299</b>	RunNo:	<b>32887</b>					
Prep Date:	<b>3/17/2016</b>	Analysis Date:	<b>3/18/2016</b>	SeqNo:	<b>1008188</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	97	20	100.0	0	96.8	83.4	127			

Sample ID	<b>LCSD-24299</b>	SampType:	<b>LCSD</b>	TestCode:	<b>EPA Method 418.1: TPH</b>					
Client ID:	<b>LCSS02</b>	Batch ID:	<b>24299</b>	RunNo:	<b>32887</b>					
Prep Date:	<b>3/17/2016</b>	Analysis Date:	<b>3/18/2016</b>	SeqNo:	<b>1008189</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	83.4	127	4.29	20	

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1603707

23-Mar-16

**Client:** Animas Environmental  
**Project:** COPC PHILLIPS COM 1E

Sample ID	<b>MB-24254</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>24254</b>	RunNo:	<b>32841</b>					
Prep Date:	<b>3/15/2016</b>	Analysis Date:	<b>3/16/2016</b>	SeqNo:	<b>1006591</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID	<b>LCS-24254</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>24254</b>	RunNo:	<b>32841</b>					
Prep Date:	<b>3/15/2016</b>	Analysis Date:	<b>3/16/2016</b>	SeqNo:	<b>1006592</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	<b>1603706-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>24254</b>	RunNo:	<b>32841</b>					
Prep Date:	<b>3/15/2016</b>	Analysis Date:	<b>3/16/2016</b>	SeqNo:	<b>1006594</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9551	0	101	71.5	122			
Toluene	0.96	0.048	0.9551	0	101	71.2	123			
Ethylbenzene	1.0	0.048	0.9551	0	107	75.2	130			
Xylenes, Total	3.1	0.096	2.865	0	109	72.4	131			
Surr: 4-Bromofluorobenzene	1.1		0.9551		117	80	120			

Sample ID	<b>1603706-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>24254</b>	RunNo:	<b>32841</b>					
Prep Date:	<b>3/15/2016</b>	Analysis Date:	<b>3/16/2016</b>	SeqNo:	<b>1006595</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9785	0	104	71.5	122	5.32	20	
Toluene	0.98	0.049	0.9785	0	100	71.2	123	2.16	20	
Ethylbenzene	1.0	0.049	0.9785	0	104	75.2	130	0.738	20	
Xylenes, Total	3.1	0.098	2.935	0	104	72.4	131	2.15	20	
Surr: 4-Bromofluorobenzene	1.2		0.9785		120	80	120	0	0	S

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



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

# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1603707

RcptNo: 1

Received by/date:

*Handwritten initials* 03/15/14

Logged By: Lindsay Mangin

3/15/2016 8:00:00 AM

*Handwritten signature*

Completed By: Lindsay Mangin

3/15/2016 8:54:24 AM

*Handwritten signature*

Reviewed By:

*Handwritten initials* 03/15/14

### Chain of Custody

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

### Log In

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Yes			





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

September 30, 2016

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

RE: COPC Phillips Com 1E

OrderNo.: 1609C05

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/21/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental **Client Sample ID:** SC-1  
**Project:** COPC Phillips Com 1E **Collection Date:** 9/20/2016 11:03:00 AM  
**Lab ID:** 1609C05-001 **Matrix:** SOIL **Received Date:** 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	110	30		mg/Kg	20	9/27/2016 11:03:20 AM	27740
Analyst: <b>MRA</b>							
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/27/2016 1:23:12 PM	27685
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/27/2016 1:23:12 PM	27685
Surr: DNOP	86.9	70-130		%Rec	1	9/27/2016 1:23:12 PM	27685
Analyst: <b>TOM</b>							
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/23/2016 10:06:41 AM	27657
Surr: BFB	81.2	68.3-144		%Rec	1	9/23/2016 10:06:41 AM	27657
Analyst: <b>NSB</b>							
<b>EPA METHOD 8021B: VOLATILES</b>							
Benzene	ND	0.023		mg/Kg	1	9/23/2016 10:06:41 AM	27657
Toluene	ND	0.046		mg/Kg	1	9/23/2016 10:06:41 AM	27657
Ethylbenzene	ND	0.046		mg/Kg	1	9/23/2016 10:06:41 AM	27657
Xylenes, Total	ND	0.091		mg/Kg	1	9/23/2016 10:06:41 AM	27657
Surr: 4-Bromofluorobenzene	91.8	80-120		%Rec	1	9/23/2016 10:06:41 AM	27657

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.**

**Analytical Report**  
 Lab Order 1609C05  
 Date Reported: 9/30/2016

**CLIENT:** Animas Environmental **Client Sample ID:** SC-2  
**Project:** COPC Phillips Com 1E **Collection Date:** 9/20/2016 10:34:00 AM  
**Lab ID:** 1609C05-002 **Matrix:** SOIL **Received Date:** 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	9/27/2016 11:40:34 AM	27740
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/27/2016 2:46:35 PM	27685
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/27/2016 2:46:35 PM	27685
Surr: DNOP	84.0	70-130		%Rec	1	9/27/2016 2:46:35 PM	27685
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/23/2016 10:30:08 AM	27657
Surr: BFB	80.0	68.3-144		%Rec	1	9/23/2016 10:30:08 AM	27657
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/23/2016 10:30:08 AM	27657
Toluene	ND	0.049		mg/Kg	1	9/23/2016 10:30:08 AM	27657
Ethylbenzene	ND	0.049		mg/Kg	1	9/23/2016 10:30:08 AM	27657
Xylenes, Total	ND	0.098		mg/Kg	1	9/23/2016 10:30:08 AM	27657
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	9/23/2016 10:30:08 AM	27657

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: COPC Phillips Com 1E

Collection Date: 9/20/2016 11:12:00 AM

Lab ID: 1609C05-003

Matrix: SOIL

Received Date: 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	9/27/2016 11:52:59 AM	27740
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/27/2016 3:14:30 PM	27685
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/27/2016 3:14:30 PM	27685
Surr: DNOP	86.2	70-130		%Rec	1	9/27/2016 3:14:30 PM	27685
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/23/2016 10:53:40 AM	27657
Surr: BFB	81.1	68.3-144		%Rec	1	9/23/2016 10:53:40 AM	27657
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	9/23/2016 10:53:40 AM	27657
Toluene	ND	0.049		mg/Kg	1	9/23/2016 10:53:40 AM	27657
Ethylbenzene	ND	0.049		mg/Kg	1	9/23/2016 10:53:40 AM	27657
Xylenes, Total	ND	0.097		mg/Kg	1	9/23/2016 10:53:40 AM	27657
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	9/23/2016 10:53:40 AM	27657

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental

Client Sample ID: SC-5

Project: COPC Phillips Com 1E

Collection Date: 9/20/2016 10:55:00 AM

Lab ID: 1609C05-004

Matrix: SOIL

Received Date: 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	96	30		mg/Kg	20	9/27/2016 12:05:24 PM	27740
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/27/2016 3:42:45 PM	27685
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/27/2016 3:42:45 PM	27685
Surr: DNOP	78.6	70-130		%Rec	1	9/27/2016 3:42:45 PM	27685
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/23/2016 11:17:12 AM	27657
Surr: BFB	81.2	68.3-144		%Rec	1	9/23/2016 11:17:12 AM	27657
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/23/2016 11:17:12 AM	27657
Toluene	ND	0.050		mg/Kg	1	9/23/2016 11:17:12 AM	27657
Ethylbenzene	ND	0.050		mg/Kg	1	9/23/2016 11:17:12 AM	27657
Xylenes, Total	ND	0.10		mg/Kg	1	9/23/2016 11:17:12 AM	27657
Surr: 4-Bromofluorobenzene	90.5	80-120		%Rec	1	9/23/2016 11:17:12 AM	27657

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Animas Environmental **Client Sample ID:** SC-6  
**Project:** COPC Phillips Com 1E **Collection Date:** 9/20/2016 10:28:00 AM  
**Lab ID:** 1609C05-005 **Matrix:** SOIL **Received Date:** 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	9/27/2016 12:17:48 PM	27740
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	12	9.3		mg/Kg	1	9/27/2016 4:10:35 PM	27685
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/27/2016 4:10:35 PM	27685
Surr: DNOP	83.7	70-130		%Rec	1	9/27/2016 4:10:35 PM	27685
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/23/2016 11:40:43 AM	27657
Surr: BFB	79.6	68.3-144		%Rec	1	9/23/2016 11:40:43 AM	27657
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/23/2016 11:40:43 AM	27657
Toluene	ND	0.050		mg/Kg	1	9/23/2016 11:40:43 AM	27657
Ethylbenzene	ND	0.050		mg/Kg	1	9/23/2016 11:40:43 AM	27657
Xylenes, Total	ND	0.10		mg/Kg	1	9/23/2016 11:40:43 AM	27657
Surr: 4-Bromofluorobenzene	88.9	80-120		%Rec	1	9/23/2016 11:40:43 AM	27657

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

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
R	RPD outside accepted recovery limits	RL Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609C05

30-Sep-16

**Client:** Animas Environmental

**Project:** COPC Phillips Com 1E

Sample ID	<b>MB-27740</b>	SampType:	<b>mblk</b>	TestCode:	<b>EPA Method 300.0: Anions</b>						
Client ID:	<b>PBS</b>	Batch ID:	<b>27740</b>	RunNo:	<b>37523</b>						
Prep Date:	<b>9/27/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1167041</b>	Units:	<b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	<b>LCS-27740</b>	SampType:	<b>lcs</b>	TestCode:	<b>EPA Method 300.0: Anions</b>						
Client ID:	<b>LCSS</b>	Batch ID:	<b>27740</b>	RunNo:	<b>37523</b>						
Prep Date:	<b>9/27/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1167042</b>	Units:	<b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	93.4	90	110				

Sample ID	<b>1609C05-001AMSD</b>	SampType:	<b>msd</b>	TestCode:	<b>EPA Method 300.0: Anions</b>						
Client ID:	<b>SC-1</b>	Batch ID:	<b>27740</b>	RunNo:	<b>37523</b>						
Prep Date:	<b>9/27/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1167046</b>	Units:	<b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	130	30	15.00	111.6	146	70.8	119	16.4	20	S	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1609C05

30-Sep-16

**Client:** Animas Environmental

**Project:** COPC Phillips Com 1E

Sample ID	<b>1609C05-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-1</b>	Batch ID:	<b>27685</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166204</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	49.80	0	101	33.9	141			
Surr: DNOP	4.4		4.980		89.1	70	130			

Sample ID	<b>1609C05-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-1</b>	Batch ID:	<b>27685</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166205</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.5	47.66	0	103	33.9	141	1.61	20	
Surr: DNOP	4.4		4.766		91.4	70	130	0	0	

Sample ID	<b>LCS-27685</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27685</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166208</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.7	62.6	124			
Surr: DNOP	4.5		5.000		90.9	70	130			

Sample ID	<b>MB-27685</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27685</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166209</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.1	70	130			

Sample ID	<b>MB-27707</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27707</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166802</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		87.3	70	130			

Sample ID	<b>LCS-27707</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27707</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166803</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609C05

30-Sep-16

Client: Animas Environmental

Project: COPC Phillips Com 1E

Sample ID	<b>LCS-27707</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27707</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/26/2016</b>	Analysis Date:	<b>9/27/2016</b>	SeqNo:	<b>1166803</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		98.9	70	130			

Sample ID	<b>MB-27738</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27738</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/27/2016</b>	Analysis Date:	<b>9/28/2016</b>	SeqNo:	<b>1167146</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		87.1	70	130			

Sample ID	<b>LCS-27738</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27738</b>	RunNo:	<b>37494</b>					
Prep Date:	<b>9/27/2016</b>	Analysis Date:	<b>9/28/2016</b>	SeqNo:	<b>1167147</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.2	70	130			

Sample ID	<b>LCS-27783</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27783</b>	RunNo:	<b>37554</b>					
Prep Date:	<b>9/29/2016</b>	Analysis Date:	<b>9/29/2016</b>	SeqNo:	<b>1168526</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.4	70	130			

Sample ID	<b>MB-27783</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27783</b>	RunNo:	<b>37554</b>					
Prep Date:	<b>9/29/2016</b>	Analysis Date:	<b>9/29/2016</b>	SeqNo:	<b>1168527</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		100	70	130			

## Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609C05

30-Sep-16

Client: Animas Environmental

Project: COPC Phillips Com 1E

Sample ID <b>MB-27657</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>27657</b>	RunNo: <b>37456</b>								
Prep Date: <b>9/22/2016</b>	Analysis Date: <b>9/23/2016</b>	SeqNo: <b>1164347</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	780		1000		78.2	68.3	144			

Sample ID <b>LCS-27657</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>27657</b>	RunNo: <b>37456</b>								
Prep Date: <b>9/22/2016</b>	Analysis Date: <b>9/23/2016</b>	SeqNo: <b>1164348</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	74.6	123			
Surr: BFB	880		1000		87.6	68.3	144			

Sample ID <b>1609C05-005AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SC-6</b>	Batch ID: <b>27657</b>	RunNo: <b>37456</b>								
Prep Date: <b>9/22/2016</b>	Analysis Date: <b>9/23/2016</b>	SeqNo: <b>1164355</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	114	59.3	143			
Surr: BFB	920		1000		91.6	68.3	144			

Sample ID <b>1609C05-005AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SC-6</b>	Batch ID: <b>27657</b>	RunNo: <b>37456</b>								
Prep Date: <b>9/22/2016</b>	Analysis Date: <b>9/23/2016</b>	SeqNo: <b>1164356</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.8	24.02	0	125	59.3	143	5.23	20	
Surr: BFB	860		960.6		89.9	68.3	144	0	0	

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609C05

30-Sep-16

Client: Animas Environmental

Project: COPC Phillips Com 1E

Sample ID	<b>MB-27657</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27657</b>	RunNo:	<b>37456</b>					
Prep Date:	<b>9/22/2016</b>	Analysis Date:	<b>9/23/2016</b>	SeqNo:	<b>1164360</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	80	120			

Sample ID	<b>LCS-27657</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27657</b>	RunNo:	<b>37456</b>					
Prep Date:	<b>9/22/2016</b>	Analysis Date:	<b>9/23/2016</b>	SeqNo:	<b>1164361</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.5	75.3	123			
Toluene	0.96	0.050	1.000	0	96.4	80	124			
Ethylbenzene	0.96	0.050	1.000	0	96.3	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	95.3	83.9	122			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.1	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



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

# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1609C05

RcptNo: 1

Received by/date:	LM	09/21/16	
Logged By:	Michelle Garcia	9/21/2016 7:45:00 AM	Michelle Garcia
Completed By:	Michelle Garcia	9/21/2016 3:44:34 PM	Michelle Garcia
Reviewed By:	aj	09/22/16	

### Chain of Custody

- Custody seals intact on sample bottles? Yes  No  Not Present
- Is Chain of Custody complete? Yes  No  Not Present
- How was the sample delivered? Courier

### Log In

- Was an attempt made to cool the samples? Yes  No  NA
- Were all samples received at a temperature of >0° C to 6.0° C? Yes  No  NA
- Sample(s) in proper container(s)? Yes  No
- Sufficient sample volume for indicated test(s)? Yes  No
- Are samples (except VOA and ONG) properly preserved? Yes  No
- Was preservative added to bottles? Yes  No  NA
- VOA vials have zero headspace? Yes  No  No VOA Vials
- Were any sample containers received broken? Yes  No
- Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No
- Are matrices correctly identified on Chain of Custody? Yes  No
- Is it clear what analyses were requested? Yes  No
- Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No

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

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

- Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			





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

September 23, 2016

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

RE: COPC Phillips COM 1E

OrderNo.: 1609B51

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/21/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Animas Environmental Client Sample ID: SC-3  
 Project: COPC Phillips COM 1E Collection Date: 9/20/2016 10:40:00 AM  
 Lab ID: 1609B51-001 Matrix: MEOH (SOIL) Received Date: 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b> Analyst: <b>MAB</b>							
Petroleum Hydrocarbons, TR	22	19		mg/Kg	1	9/21/2016 12:00:00 PM	27625
<b>EPA METHOD 300.0: ANIONS</b> Analyst: <b>LGT</b>							
Chloride	98	30		mg/Kg	20	9/21/2016 11:18:38 AM	27630
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b> Analyst: <b>AG</b>							
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/21/2016 12:53:45 PM	M37365
Surr: BFB	101	70-130		%Rec	1	9/21/2016 12:53:45 PM	M37365
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b> Analyst: <b>TOM</b>							
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/22/2016 9:33:36 AM	27651
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/22/2016 9:33:36 AM	27651
Surr: DNOP	97.4	70-130		%Rec	1	9/22/2016 9:33:36 AM	27651
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b> Analyst: <b>AG</b>							
Benzene	ND	0.018		mg/Kg	1	9/21/2016 12:53:45 PM	S37365
Toluene	ND	0.037		mg/Kg	1	9/21/2016 12:53:45 PM	S37365
Ethylbenzene	ND	0.037		mg/Kg	1	9/21/2016 12:53:45 PM	S37365
Xylenes, Total	ND	0.073		mg/Kg	1	9/21/2016 12:53:45 PM	S37365
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%Rec	1	9/21/2016 12:53:45 PM	S37365
Surr: 4-Bromofluorobenzene	88.3	70-130		%Rec	1	9/21/2016 12:53:45 PM	S37365
Surr: Dibromofluoromethane	112	70-130		%Rec	1	9/21/2016 12:53:45 PM	S37365
Surr: Toluene-d8	97.0	70-130		%Rec	1	9/21/2016 12:53:45 PM	S37365

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609B51

23-Sep-16

**Client:** Animas Environmental  
**Project:** COPC Phillips COM 1E

Sample ID	<b>MB-27630</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27630</b>	RunNo:	<b>37376</b>					
Prep Date:	<b>9/21/2016</b>	Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1161518</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-27630</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27630</b>	RunNo:	<b>37376</b>					
Prep Date:	<b>9/21/2016</b>	Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1161520</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1609B51  
23-Sep-16

**Client:** Animas Environmental  
**Project:** COPC Phillips COM 1E

Sample ID	<b>MB-27625</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 418.1: TPH</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27625</b>	RunNo:	<b>37367</b>					
Prep Date:	<b>9/21/2016</b>	Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1160961</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	<b>LCS-27625</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 418.1: TPH</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27625</b>	RunNo:	<b>37367</b>					
Prep Date:	<b>9/21/2016</b>	Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1160962</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	109	80.7	121			

Sample ID	<b>LCSD-27625</b>	SampType:	<b>LCSD</b>	TestCode:	<b>EPA Method 418.1: TPH</b>					
Client ID:	<b>LCSS02</b>	Batch ID:	<b>27625</b>	RunNo:	<b>37367</b>					
Prep Date:	<b>9/21/2016</b>	Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1160963</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	110	80.7	121	1.26	20	

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1609B51  
23-Sep-16

**Client:** Animas Environmental  
**Project:** COPC Phillips COM 1E

Sample ID	<b>LCS-27651</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>27651</b>	RunNo:	<b>37383</b>					
Prep Date:	<b>9/22/2016</b>	Analysis Date:	<b>9/22/2016</b>	SeqNo:	<b>1161862</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.1	62.6	124			
Surr: DNOP	4.2		5.000		84.8	70	130			

Sample ID	<b>MB-27651</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>27651</b>	RunNo:	<b>37383</b>					
Prep Date:	<b>9/22/2016</b>	Analysis Date:	<b>9/22/2016</b>	SeqNo:	<b>1161863</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.3	70	130			

Sample ID	<b>1609B51-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-3</b>	Batch ID:	<b>27651</b>	RunNo:	<b>37383</b>					
Prep Date:	<b>9/22/2016</b>	Analysis Date:	<b>9/22/2016</b>	SeqNo:	<b>1161866</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.9	49.46	4.608	96.4	33.9	141			
Surr: DNOP	4.7		4.946		94.3	70	130			

Sample ID	<b>1609B51-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-3</b>	Batch ID:	<b>27651</b>	RunNo:	<b>37383</b>					
Prep Date:	<b>9/22/2016</b>	Analysis Date:	<b>9/22/2016</b>	SeqNo:	<b>1161873</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.2	46.00	4.608	94.2	33.9	141	8.59	20	
Surr: DNOP	4.3		4.600		93.3	70	130	0	0	

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1609B51

23-Sep-16

**Client:** Animas Environmental  
**Project:** COPC Phillips COM 1E

Sample ID	<b>100ng lcs</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8260B: Volatiles Short List</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>S37365</b>	RunNo:	<b>37365</b>					
Prep Date:		Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1160917</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	70	130			
Toluene	0.93	0.050	1.000	0	92.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.7	70	130			
Surr: Toluene-d8	0.49		0.5000		98.0	70	130			

Sample ID	<b>rb</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8260B: Volatiles Short List</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>S37365</b>	RunNo:	<b>37365</b>					
Prep Date:		Analysis Date:	<b>9/21/2016</b>	SeqNo:	<b>1160918</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.1	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.6	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1609B51  
23-Sep-16

**Client:** Animas Environmental  
**Project:** COPC Phillips COM 1E

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>M37365</b>	RunNo: <b>37365</b>								
Prep Date:	Analysis Date: <b>9/21/2016</b>	SeqNo: <b>1160923</b>						Units: <b>mg/Kg</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.2	62.9	123			
Surr: BFB	500		500.0		100	70	130			

Sample ID: <b>rb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>M37365</b>	RunNo: <b>37365</b>								
Prep Date:	Analysis Date: <b>9/21/2016</b>	SeqNo: <b>1160924</b>						Units: <b>mg/Kg</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.3	70	130			

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**Sample Log-In Check List**

Client Name: Animas Environmental

Work Order Number: 1609B51

RcptNo: 1

Received by/date: [Signature] 09/21/16

Logged By: **Lindsay Mangin** 9/21/2016 7:45:00 AM [Signature]

Completed By: **Lindsay Mangin** 9/21/2016 8:38:17 AM [Signature]

Reviewed By: [Signature] 09/21/16

**Chain of Custody**

- 1. Custody seals intact on sample bottles? Yes  No  Not Present
- 2. Is Chain of Custody complete? Yes  No  Not Present
- 3. How was the sample delivered? Courier

**Log In**

- 4. Was an attempt made to cool the samples? Yes  No  NA
- 5. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 6. Sample(s) in proper container(s)? Yes  No
- 7. Sufficient sample volume for indicated test(s)? Yes  No
- 8. Are samples (except VOA and ONG) properly preserved? Yes  No
- 9. Was preservative added to bottles? Yes  No  NA
- 10. VOA vials have zero headspace? Yes  No  No VOA Vials
- 11. Were any sample containers received broken? Yes  No
- 12. Does paperwork match bottle labels? Yes  No   
(Note discrepancies on chain of custody)
- 13. Are matrices correctly identified on Chain of Custody? Yes  No
- 14. Is it clear what analyses were requested? Yes  No
- 15. Were all holding times able to be met? Yes  No   
(If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

17. Additional remarks:

**18. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

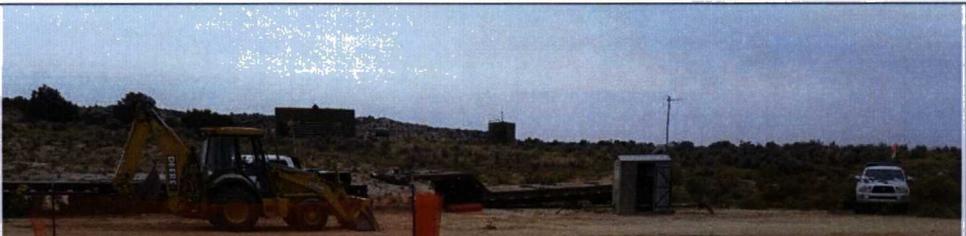


Photo #1	
Client: ConocoPhillips	
Project Name: Phillips COM 1E  San Juan County, NM	
Date Photo Taken: March 14, 2016	
BGT GPS and Location: 36.88274, -108.17583  NE¼ SW¼, Section 23, T31N, R13W	
Taken by: Emilee Skyles, AES	
Subject: BGT sampling, March 2016 Description: Facing E, overview of entire location.	

Photo #2	
Client: ConocoPhillips	
Project Name: Phillips COM 1E  San Juan County, NM	
Date Photo Taken: March 14, 2016	
BGT GPS and Location: 36.88264, -108.17645  NE¼ SW¼, Section 23, T31N, R13W	
Taken by: Emilee Skyles, AES	
Subject: BGT sampling, March 2016 Description: Facing S, sample location.	

Photo #3	
Client: ConocoPhillips	
Project Name: Phillips COM 1E  San Juan County, NM	
Date Photo Taken: April 18, 2016	
BGT GPS and Location: 36.88274, -108.17583  NE¼ SW¼, Section 23, T31N, R13W	
Taken by: Corwin Lameman, AES	

Client: ConocoPhillips		
Project Name: Phillips COM 1E  San Juan County, NM		
Date Photo Taken: September 20, 2016		
BGT GPS and Location: 36.88274, -108.17583  NE¼ SW¼, Section 23, T31N, R13W		
Taken by: Sam Glasses, AES		Subject: Excavation Clearance, September 2016  Description: Facing N Wall, overview of entire location.

Photo #55	
Client: ConocoPhillips	

Project Name: Phillips COM 1E  San Juan County, NM	
Date Photo Taken: September 20, 2016	
BGT GPS and Location: 36.88264, -108.17645  NE¼ SW¼, Section 23, T31N, R13W	
Taken by: Sam Glasses, AES	Subject: Excavation Clearance, September 2016 Description: Facing S Wall, sample location.

Photo #66		
Client: ConocoPhillips		
Project Name: Phillips COM 1E  San Juan County, NM		
Date Photo Taken: September 20, 2016		
BGT GPS and Location: 36.88274, -108.17583  NE¼ SW¼, Section 23, T31N, R13W		
Taken by: Sam Glasses, AES		Subject: Excavation Clearance, September 2016 Description: Facing E Wall, overview of entire location.

Photo #77	
Client: ConocoPhillips	

Project Name: Phillips COM 1E	
San Juan County, NM	
Date Photo Taken: September 20, 2016	
BGT GPS and Location: 36.88264, -108.17645	
NE¼ SW¼, Section 23, T31N, R13W	
Taken by: Sam Glasses, AES	Subject: Excavation Clearance, September 2016
	Description: Facing W Wall, sample location.