

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 NMOC District Office.  
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOC District Office.

14307 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

OIL CONS. DIV DIST. 3  
APR 12 2016

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

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

1.  
Operator: ConocoPhillips Company OGRID #: 217817  
Address: PO BOX 4289, Farmington, NM 87499  
Facility or well name: State Gas Com A 1  
API Number: 30-045-10062 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr N Section 36 Township 31N Range 12W County: San Juan  
Center of Proposed Design: Latitude 36.851852 °N Longitude -108.053721 °W NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

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

3.  
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: 120 bbl Type of fluid: Produced Water  
Tank Construction material: Metal  
☐ Secondary containment with leak detection ☒ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other \_\_\_\_\_  
Liner type: Thickness \_\_\_\_\_ mil ☐ HDPE ☐ PVC ☒ Other UNSPECIFIED

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

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

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6.

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

☐ Screen ☐ Netting ☐ Other \_\_\_\_\_

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

7.

**Signs:** Subsection C of 19.15.17.11 NMAC

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

☐ Signed in compliance with 19.15.16.8 NMAC

8.

**Variances and Exceptions:**

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

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

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

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

9.

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

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

**General siting**

**Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.**

- ☐ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells

☐ Yes ☐ No

☒ NA

**Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.**

NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No

☒ NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

☐ Yes ☐ No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area. **(Does not apply to below grade tanks)**

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**

- FEMA map

☐ Yes ☐ No

**Below Grade Tanks**

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).

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

☐ Yes ☒ No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;

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

☐ Yes ☒ No

**Temporary Pit using Low Chloride Drilling Fluid** (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.

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

☐ Yes ☐ No



Within 100 feet of a wetland.

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

☐ Yes ☐ No

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

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 300 feet of a wetland.

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

☐ Yes ☐ No

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

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 500 feet of a wetland.

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

☐ Yes ☐ No

10.

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

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

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

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

11.

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

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

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

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



12.

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

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  
☐ Climatological Factors Assessment  
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Quality Control/Quality Assurance Construction and Installation Plan  
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
☐ Nuisance or Hazardous Odors, including H<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. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <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). - 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. - 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. - 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. 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

☐ Yes ☐ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes ☐ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

16.

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

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

17.

**Operator Application Certification:**

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

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

18.

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

OCD Representative Signature: \_\_\_\_\_ Approval Date: 4/13/2016

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: 1/31/14

20.

**Closure Method:**

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

21.

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

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

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



**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: 4/11/16

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



**ConocoPhillips Company**  
**San Juan Basin**  
**Below Grade Tank Closure Report**

**Lease Name: State Gas Com A 1**  
**API No.: 30-045-10062**

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



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 COPC or the division determines that a release has occurred, then COPC 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 COPC 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:
- Operator's name
  - Location by Unit Letter, Section, Township, and Range. Well name and API number.

**Notification is attached.**

9. The surface owner shall be notified of COPC'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 is attached.**

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 place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

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

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



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

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 **(Attached)**



## **Walker, Crystal**

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**From:** Journey, Denise D  
**Sent:** Thursday, January 09, 2014 7:03 AM  
**To:** Powell, Brandon, EMNRD; Kelly, Jonathan, EMNRD  
**Subject:** STATE GAS COM A 1 / 30-045-10062 72 HOUR NOTIFICATION

**Subject:** 72 HOUR NOTIFICATION OF BGT CLOSURE

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

**Well Name:** STATE GAS COM A 1

**API#:** 30-045-10062

**Location:** Unit "N", Sec. 36, T31N, R12W

**Footages:** 1090' FSL & 1650' FWL

**Operator:** ConocoPhillips Company

**Surface Owner:** State

Denise Journey  
Regulatory Technician  
ConocoPhillips Company  
505-326-9556  
Denise.Journey@conocophillips.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 Company</b>	Contact <b>Crystal Tafoya</b>	
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 326-9837</b>	
Facility Name: <b>State Gas Com A 1</b>	Facility Type: <b>Gas Well</b>	
Surface Owner <b>State</b>	Mineral Owner <b>State (E-3150)</b>	API No. <b>30-045-10062</b>

**LOCATION OF RELEASE**

Unit Letter <b>N</b>	Section <b>36</b>	Township <b>31N</b>	Range <b>12W</b>	Feet from the <b>1090</b>	North/South Line <b>South</b>	Feet from the <b>1650</b>	East/West Line <b>West</b>	County <b>San Juan</b>
-------------------------	----------------------	------------------------	---------------------	------------------------------	----------------------------------	------------------------------	-------------------------------	---------------------------

Latitude 36.85164 Longitude -108.05347

**NATURE OF RELEASE**

Type of Release <b>Produced Fluids</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>360 cubic yds.</b>
Source of Release <b>Below Grade Tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>January 29, 2014</b>
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.	

OIL CONS. DIV DIST. 3  
MAY 15 2014


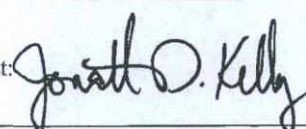
If a Watercourse was Impacted, Describe Fully.\*  
N/A

Describe Cause of Problem and Remedial Action Taken.\*  
**Below Grade Tank Closure Activities**

Describe Area Affected and Cleanup Action Taken.\*  
The below grade tank sample results were above regulatory standards by USEPA method 418.1 for TPH confirming a release. The excavation was 35' x 31' x 9' and 360 cubic yards of soil was transported to a third party landfarm. Excavation and confirmation sampling occurred. Analytical results for TPH, BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The final report is attached for review.

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

**OIL CONSERVATION DIVISION**

Signature: 	Approved by Environmental Specialist: 	
Printed Name: <b>Crystal Tafoya</b>	Approval Date: <b>9/4/2014</b>	Expiration Date:
Title: <b>Field Environmental Specialist</b>	Conditions of Approval: <b>C-141 Closure permit needs to be filed for indicated BGT closure.</b>	
E-mail Address: <b>crystal.tafoya@conocophillips.com</b>	Attached <input type="checkbox"/>	
Date: <b>5/12/2014</b>	Phone: <b>(505) 326-9837</b>	

\* Attach Additional Sheets If Necessary

NJK1424739881





Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

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

Durango, Colorado  
970-403-3084

April 28, 2014

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

*Via electronic mail to:*

[SJBUE-Team@ConocoPhillips.com](mailto:SJBUE-Team@ConocoPhillips.com)

**RE: Below Grade Tank Closure and Final Excavation Report  
State Gas Com A #1  
San Juan County, New Mexico**

Dear Ms. Tafoya:

On January 29 and 30, 2014, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) State Gas Com A #1, located in San Juan County, New Mexico. A historical release was discovered during BGT closure sampling at the location, and the final excavation of contaminated soils was completed by contractors while AES was on location on January 30, 2014.

---

## 1.0 Site Information

### 1.1 Location

Site Name – State Gas Com A #1

Location – SE¼ SW¼, Section 36, T31N, R12W, San Juan County, New Mexico

Well Head Latitude/Longitude – N36.85164 and W108.05347, respectively

Release Location Latitude/Longitude – N36.85186 and W108.05363, respectively

Land Jurisdiction – State of New Mexico

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, January 2014

## 1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (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 0 based on the following factors:

- **Depth to Groundwater:** A groundwater well (SJ 03309) located approximately 1,700 feet southwest of the location and at a lower elevation reported the depth to groundwater at 210 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** Barton Arroyo is located approximately 2,800 feet west of the location, and Kochis Arroyo is located approximately 2,900 feet east of the location. (0 points)

## 1.3 Assessment

AES was initially contacted by Dan Rudder of CoP on January 28, 2014, and on January 29, 2014, Heather Woods and Emilee Skyles of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample (SC-1) was composited from the four perimeter samples and one center sample. Sample locations are shown on Figure 2.

Based on the field screening results from the BGT assessment, a release was confirmed at the location. AES recommended an area of excavation and provided excavation guidance while onsite on January 29, 2014.

On January 30, 2014, AES returned to the location to collect confirmation soil samples from the walls and base of the final excavation. AES personnel collected five confirmation soil samples (SC-2 through SC-6) from the walls and base of the excavation. The area of the final excavation was approximately 35 feet by 31 feet by 9 feet in depth. Sample locations and final excavation extents are presented on Figure 3.

---

## 2.0 Soil Sampling

On January 29, 2014, AES personnel collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and analysis of total petroleum hydrocarbon (TPH). Composite



sample SC-1 was field sampled for VOCs, TPH, and chloride and was submitted for confirmation laboratory analysis.

In addition, AES personnel collected five 5-point composite (SC-2 through SC-6) soil samples from the walls and base of the final excavation for confirmation field sampling of VOCs and TPH on January 30, 2014. Composite samples SC-2, SC-4, and SC-5 were also submitted for confirmation laboratory analysis.

## **2.1 Field Sampling**

### **2.1.1 Volatile Organic Compounds**

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

### **2.1.2 Total Petroleum Hydrocarbons**

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

### **2.1.3 Chlorides**

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

## **2.2 Laboratory Analyses**

The soil samples (SC-1, SC-2, SC-4, and SC-5) 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. All soil samples were laboratory analyzed for:

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

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

- Chlorides per USEPA Method 300.0.

### 2.3 Field and Laboratory Analytical Results

On January 29, 2014, BGT closure field screening results for VOCs via OVM showed concentrations ranging from 46.1 ppm in the S-2 up to 963 ppm in S-5. Field TPH concentrations were reported at 4,260 mg/kg in S-1 and 5,000 mg/kg in SC-1.

On January 30, 2014, final excavation field screening results for VOCs via OVM ranged from 82.9 ppm in SC-3 up to 658 ppm in SC-5. Field TPH concentrations ranged from 449 mg/kg in SC-3 up to 2,660 mg/kg in SC-5. Results are included below in Table 1 and on Figures 2 and 3. The AES Field Sampling Reports are attached.

Table 1. Soil Field Sampling VOCs, TPH, and Chloride Results  
State Gas Com A #1 BGT Closure and Final Excavation  
January 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>TPH 418.1 (mg/kg)</i>	<i>Field Chlorides (mg/kg)</i>
<b>NMOCD Action Level* (NMAC 19.15.17.13E)</b>			<b>100*</b>	<b>100/5,000*</b>	<b>250</b>
S-1	1/29/14	0.5	536	4,260	NA
S-2	1/29/14	0.5	46.1	NA	NA
S-3	1/29/14	0.5	770	NA	NA
S-4	1/29/14	0.5	784	NA	NA
S-5	1/29/14	0.5	963	NA	NA
SC-1	1/29/14	0.5	480	5,000	60
SC-2	1/30/14	1 to 9	389	1,100	NA
SC-3	1/30/14	1 to 9	82.9	449	NA
SC-4	1/30/14	1 to 9	429	2,110	NA
SC-5	1/30/14	9	658	2,660	NA
SC-6	1/30/14	1 to 9	92.1	722	NA

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 analyses for SC-1 were used to confirm BGT closure sampling results. Laboratory analytical results reported benzene and total BTEX concentrations at 0.065 mg/kg and 4.32 mg/kg, respectively. The laboratory chloride concentration was reported at 38 mg/kg.



Laboratory analyses for SC-2, SC-4, and SC-5 were used to confirm field sampling results from the final excavation extents. Benzene concentrations were reported below laboratory detection limits in all samples. Total BTEX concentrations ranged from 1.68 mg/kg in SC-2 up to 10.71 mg/kg in SC-5. Results are summarized in Table 2 and included on Figures 2 and 3. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, and Chlorides  
State Gas Com A #1 BGT Closure and Final Excavation  
January 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>Chlorides (mg/kg)</i>
<b>NMOCD Action Level* (NMAC 19.15.17.13E)</b>			<b>0.2/10*</b>	<b>50</b>	<b>250</b>
SC-1	1/29/14	0.5	0.065	4.32	38
SC-2	1/30/14	1 to 9	<0.18	1.68	NA
SC-4	1/30/14	1 to 9	<0.32	2.99	NA
SC-5	1/30/14	9	<0.17	10.71	NA

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

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in two samples, S-1 (4,260 mg/kg) and SC-1 (5,000 mg/kg). However, benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations in SC-1 were below the NMOCD action level of 250 mg/kg.

Based on field sampling results from the BGT closure assessment, a release was confirmed at the State Gas Com A #1, and AES provided excavation guidance while onsite on January 29, 2014. 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 0.

Excavation of the petroleum contaminated soils was completed on January 30, 2014. Field screening results for VOCs via OVM were above the NMOCD action level of 100 ppm VOCs in SC-2 (389 ppm), SC-4 (429 ppm), and SC-5 (658 ppm). However, laboratory

analytical results from January 30, 2014, reported benzene and total BTEX concentrations in SC-2, SC-4, and SC-5 below NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. Field TPH concentrations were reported below the NMOCD action level of 5,000 mg/kg in each sample collected from the base and sidewalls of the final excavation, with the highest concentration reported in SC-5 with 2,660 mg/kg. The area of the final excavation was approximately 35 feet by 31 feet by 9 feet in depth.

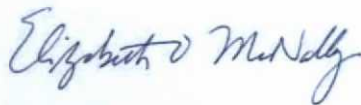
Based on final field and laboratory analytical results of the excavation of petroleum contaminated soils at the State Gas Com A #1, VOCs, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the final sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,



David J. Reese  
Environmental Scientist



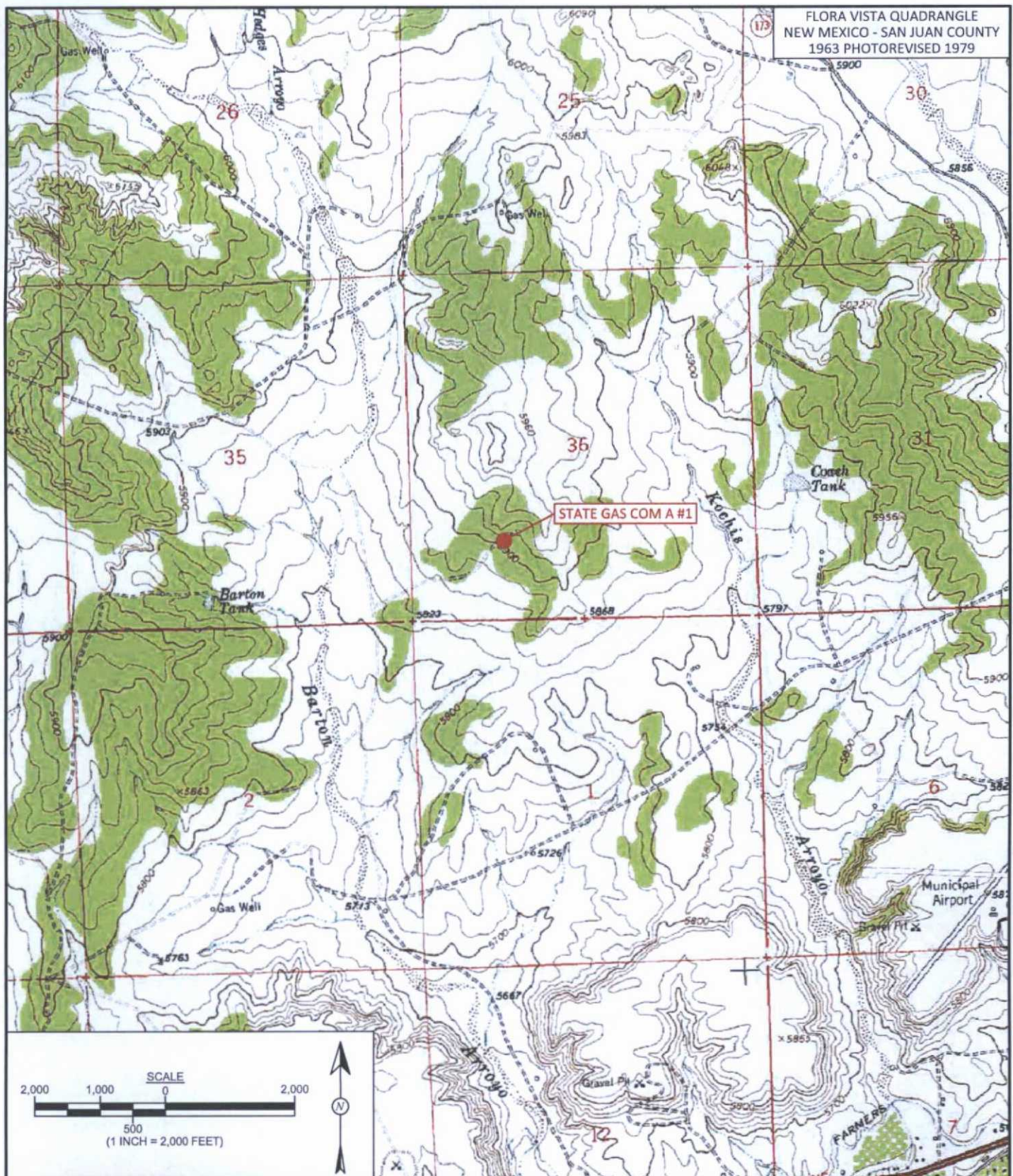
Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map with BGT Closure, January 2014
- Figure 3. Final Excavation Sample Locations and Results, January 2014
- AES Field Sampling Report 012914
- AES Field Sampling Report 013014
- Hall Laboratory Analytical Report 1401C16
- Hall Laboratory Analytical Report 1401C21

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EM\2014 Projects\ConocoPhillips\State Gas Com A#1\State Gas Com A #1 BGT Closure and Final  
Excavation Report 042814.docx





DRAWN BY:  
S. Glasses

DATE DRAWN:  
February 4, 2014

REVISIONS BY:  
C. Lameman

DATE REVISED:  
April 21, 2014

CHECKED BY:  
D. Watson

DATE CHECKED:  
April 21, 2014

APPROVED BY:  
E. McNally

DATE APPROVED:  
April 21, 2014

## FIGURE 1

### TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips  
STATE GAS COM A #1  
SE¼ SW¼, SECTION 36, T31N, R12W  
SAN JUAN COUNTY, NEW MEXICO  
N36.85164, W108.05347



**LEGEND**

● SAMPLE LOCATIONS

**Field Sampling Results**

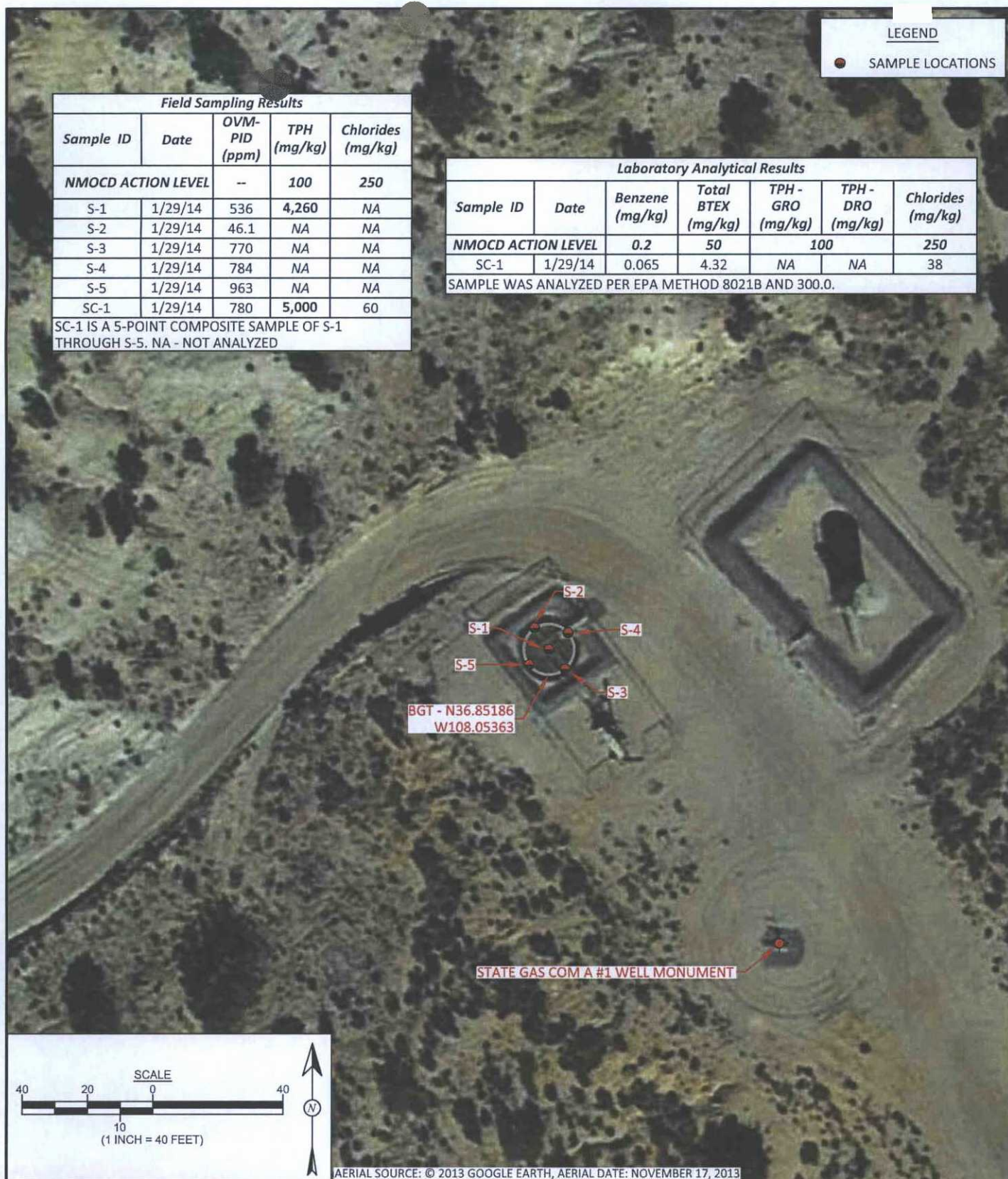
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
<b>NMOCD ACTION LEVEL</b>		--	100	250
S-1	1/29/14	536	4,260	NA
S-2	1/29/14	46.1	NA	NA
S-3	1/29/14	770	NA	NA
S-4	1/29/14	784	NA	NA
S-5	1/29/14	963	NA	NA
SC-1	1/29/14	780	5,000	60

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

**Laboratory Analytical Results**

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
<b>NMOCD ACTION LEVEL</b>		0.2	50	100		250
SC-1	1/29/14	0.065	4.32	NA	NA	38

SAMPLE WAS ANALYZED PER EPA METHOD 8021B AND 300.0.



**FIGURE 2**

**AERIAL SITE MAP  
BELOW GRADE TANK CLOSURE  
JANUARY 2014**  
ConocoPhillips  
STATE GAS COM A #1  
SE¼ SW¼, SECTION 36, T31N, R12W  
SAN JUAN COUNTY, NEW MEXICO  
N36.85164, W108.05347

**DRAWN BY:**  
S. Glasses

**DATE DRAWN:**  
February 4, 2014

**REVISIONS BY:**  
C. Lameman

**DATE REVISED:**  
April 21, 2014

**CHECKED BY:**  
D. Watson

**DATE CHECKED:**  
April 21, 2014

**APPROVED BY:**  
E. McNally

**DATE APPROVED:**  
April 21, 2014





**FIGURE 3**

**FINAL EXCAVATION SAMPLE  
LOCATIONS AND RESULTS  
JANUARY 2014**  
ConocoPhillips  
STATE GAS COM A #1  
SE¼ SW¼, SECTION 36, T31N, R12W  
SAN JUAN COUNTY, NEW MEXICO  
N36.85164, W108.05347

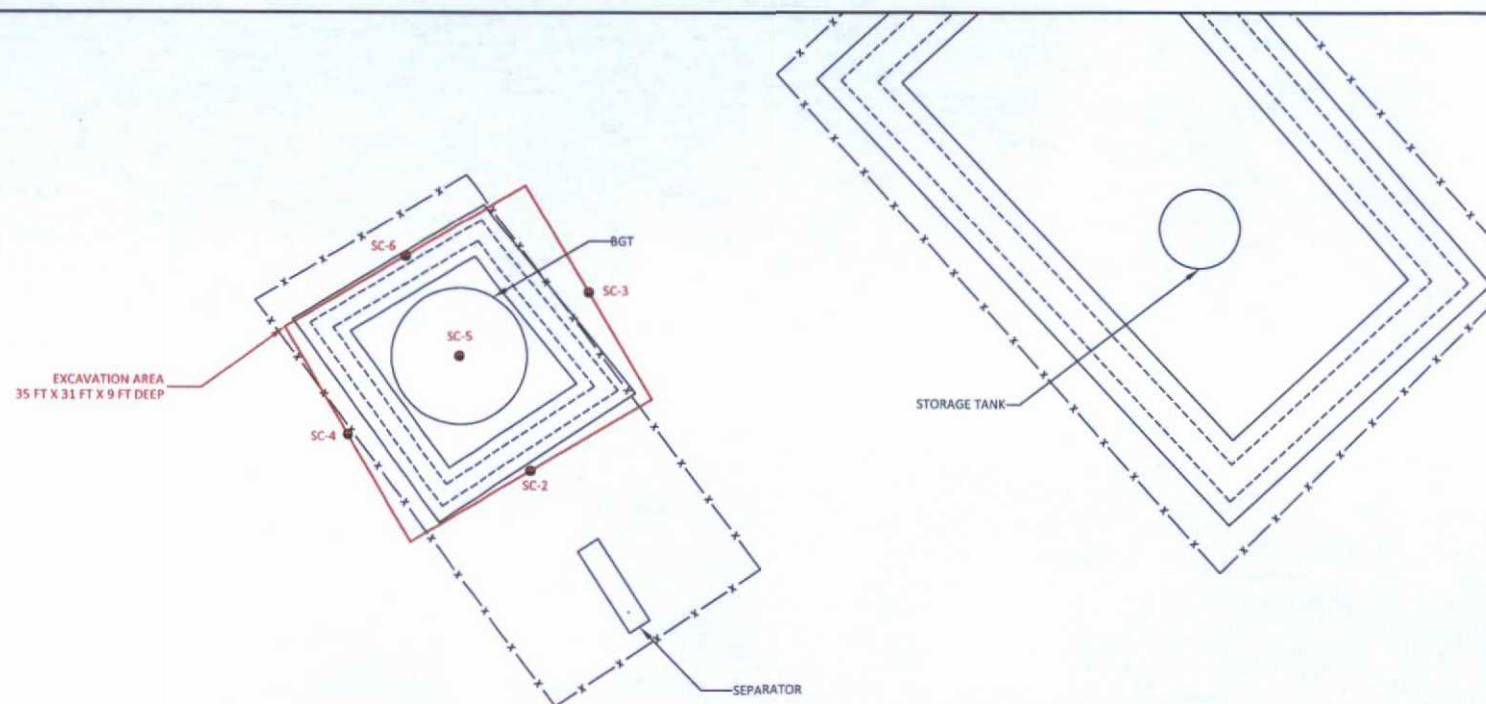


Animas Environmental Services, LLC

<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> February 4, 2014
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> February 4, 2014
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> February 4, 2014
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> February 4, 2014

**LEGEND**

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- x- FENCE



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>100</b>	<b>5,000</b>
SC-2	1/30/14	1 to 9	389	1,100
SC-3	1/30/14	1 to 9	82.9	449
SC-4	1/30/14	1 to 9	429	2,110
SC-5	1/30/14	9	658	2,660
SC-6	1/30/14	1 to 9	92.1	722

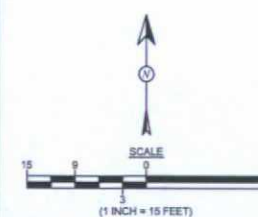
SAMPLES SC-2 THROUGH SC-6 WERE COMPOSITE SAMPLES.

Laboratory Analytical Results				
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)
<b>NMOC ACTION LEVEL</b>			<b>10</b>	<b>50</b>
SC-2	1/30/14	1 to 9	<0.18	1.68
SC-4	1/30/14	1 to 9	<0.32	2.99
SC-5	1/30/14	9	<0.17	10.71

ALL SAMPLES WERE ANALYZED PER EPA METHOD 80218.

STATE GAS COM A #1 WELL MONUMENT

SERVICE ROAD



# AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: State Gas Com A #1

Date: 1/29/2014

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	1/29/2014	11:52	Center	536	NA	12:20	4,263	200	10	HMW
S-2	1/29/2014	12:25	North	46.1	NA	Not Analyzed for TPH				
S-3	1/29/2014	12:26	South	770	NA	Not Analyzed for TPH				
S-4	1/29/2014	12:27	East	784	NA	Not Analyzed for TPH				
S-5	1/29/2014	12:28	West	963	NA	Not Analyzed for TPH				
SC-1	1/29/2014	12:30	Composite	480	60	13:01	5,000	200	10	HMW

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

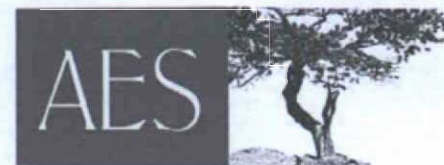
Field Chloride - Quantab Chloride Titrators or Drop Count  
Titration with Silver Nitrate

Analyst:

*Heather M. Woods*



# AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

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

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: State Gas Com A #1

Date: 1/30/2014

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-2	1/30/2014	13:50	South	389	14:41	1,102	20.0	1	DAW
SC-3	1/30/2014	14:00	East	82.9	14:47	449	20.0	1	DAW
SC-4	1/30/2014	14:05	West	429	14:50	2,111	20.0	1	DAW
SC-5	1/30/2014	14:10	Base	658	14:53	2,662	200	10	DAW
SC-6	1/30/2014	13:45	North	92.1	14:38	722	20.0	1	DAW

DF Dilution Factor  
NA Not Analyzed  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.  
Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Debrah Wata*



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)

February 06, 2014

Debbie Watson

Animas Environmental

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: COP State Gas Com A #1

OrderNo.: 1401C16

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/30/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](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  
**Project:** COP State Gas Com A #1  
**Lab ID:** 1401C16-001

**Matrix:** SOIL

**Client Sample ID:** SC-1  
**Collection Date:** 1/29/2014 12:30:00 PM  
**Received Date:** 1/30/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>JMP</b>
Benzene	0.065	0.047		mg/Kg	1	2/4/2014 11:24:44 AM	11541
Toluene	0.10	0.047		mg/Kg	1	2/4/2014 11:24:44 AM	11541
Ethylbenzene	0.25	0.047		mg/Kg	1	2/4/2014 11:24:44 AM	11541
Xylenes, Total	3.9	0.094		mg/Kg	1	2/4/2014 11:24:44 AM	11541
Surr: 4-Bromofluorobenzene	135	80-120	S	%REC	1	2/4/2014 11:24:44 AM	11541
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JRR</b>
Chloride	38	30		mg/Kg	20	2/4/2014 12:22:57 PM	11554

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

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401C16

06-Feb-14

Client: Animas Environmental  
Project: COP State Gas Com A #1

Sample ID	MB-11554	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	11554	RunNo:	16541					
Prep Date:	2/4/2014	Analysis Date:	2/4/2014	SeqNo:	476212	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-11554	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	11554	RunNo:	16541					
Prep Date:	2/4/2014	Analysis Date:	2/4/2014	SeqNo:	476213	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
O RSD is greater than RSDlimit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
P Sample pH greater than 2.  
RL Reporting Detection Limit



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401C16

06-Feb-14

Client: Animas Environmental  
Project: COP State Gas Com A #1

Sample ID	MB-11541		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	11541		RunNo:	16527			
Prep Date:	2/3/2014		Analysis Date:	2/4/2014		SeqNo:	475824		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		91.9	80	120			

Sample ID	LCS-11541		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	11541		RunNo:	16527			
Prep Date:	2/3/2014		Analysis Date:	2/4/2014		SeqNo:	475825		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	111	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		96.3	80	120			

Sample ID	1401C16-001AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	SC-1		Batch ID:	11541		RunNo:	16527			
Prep Date:	2/3/2014		Analysis Date:	2/4/2014		SeqNo:	475827		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.4	0.048	0.9551	0.06513	135	67.4	135			S
Toluene	1.4	0.048	0.9551	0.1000	132	72.6	135			
Ethylbenzene	1.6	0.048	0.9551	0.2453	139	69.4	143			
Xylenes, Total	7.5	0.096	2.865	3.888	126	70.8	144			
Surr: 4-Bromofluorobenzene	1.3		0.9551		137	80	120			S

Sample ID	1401C16-001AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	SC-1		Batch ID:	11541		RunNo:	16527			
Prep Date:	2/3/2014		Analysis Date:	2/4/2014		SeqNo:	475828		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.4	0.048	0.9542	0.06513	138	67.4	135	1.59	20	S
Toluene	1.4	0.048	0.9542	0.1000	136	72.6	135	2.61	20	S
Ethylbenzene	1.6	0.048	0.9542	0.2453	143	69.4	143	2.40	20	S
Xylenes, Total	7.6	0.095	2.863	3.888	131	70.8	144	1.57	20	
Surr: 4-Bromofluorobenzene	1.3		0.9542		137	80	120	0	0	S

## Qualifiers:

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



Hall Environmental Analysis Laboratory  
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: 1401C16

RcptNo: 1

Received by/date:

umg 01/30/14

Logged By: Ashley Gallegos

1/30/2014 10:00:00 AM

Ag

Completed By: Ashley Gallegos

1/30/2014 7:42:02 PM

Ag

Reviewed By:

[Signature]

02/03/14

### 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?

Client

### Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$

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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	1.5	Good	Yes			



Client: ANIMAS ENVIRONMENTAL SERVICES, LLC	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush
Mailing Address: 624 E. COMANCHE FARMINGTON, NM 87401	Project Name: COP STATE GAS COM A#1
Phone #: 505-564-2281	Project #:
email or Fax#:	Project Manager: D. WATSON
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	
Accreditation <input type="checkbox"/> NELAP <input type="checkbox"/> Other _____	Sampler: E. SKYLES
<input type="checkbox"/> EDD (Type) _____	<input checked="" type="checkbox"/> In Ice <input type="checkbox"/> Yes <input type="checkbox"/> No
	Sample Temperature: 15

Date:	Time:	Relinquished by:	Received by:	Date	Time
30/14	136	E-189	Master White	30/14	136
Date:	Time:	Relinquished by:	Received by:	Date	Time
30/14	648	ChA White	Master White	01/30/14	1000

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





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

February 03, 2014

Debbie Watson

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

RE: COP State Gas Com A #1

OrderNo.: 1401C21

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/31/2014 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](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,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1401C21

Date Reported: 2/3/2014

CLIENT: Animas Environmental

Client Sample ID: SC-2

Project: COP State Gas Com A #1

Collection Date: 1/30/2014 1:50:00 PM

Lab ID: 1401C21-001

Matrix: MEOH (SOIL)

Received Date: 1/31/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: JMP
Benzene	ND	0.18		mg/Kg	5	1/31/2014 12:03:10 PM	R16424
Toluene	ND	0.18		mg/Kg	5	1/31/2014 12:03:10 PM	R16424
Ethylbenzene	0.28	0.18		mg/Kg	5	1/31/2014 12:03:10 PM	R16424
Xylenes, Total	1.4	0.35		mg/Kg	5	1/31/2014 12:03:10 PM	R16424
Surr: 4-Bromofluorobenzene	105	80-120		%REC	5	1/31/2014 12:03:10 PM	R16424

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

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental  
**Project:** COP State Gas Com A #1  
**Lab ID:** 1401C21-002

**Client Sample ID:** SC-4  
**Collection Date:** 1/30/2014 2:05:00 PM  
**Received Date:** 1/31/2014 10:10:00 AM

**Matrix:** MEOH (SOIL)

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>JMP</b>
Benzene	ND	0.32		mg/Kg	10	1/31/2014 12:31:43 PM	R16424
Toluene	ND	0.32		mg/Kg	10	1/31/2014 12:31:43 PM	R16424
Ethylbenzene	0.69	0.32		mg/Kg	10	1/31/2014 12:31:43 PM	R16424
Xylenes, Total	2.3	0.64		mg/Kg	10	1/31/2014 12:31:43 PM	R16424
Surr: 4-Bromofluorobenzene	96.2	80-120		%REC	10	1/31/2014 12:31:43 PM	R16424

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

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1401C21

Date Reported: 2/3/2014

**CLIENT:** Animas Environmental

**Client Sample ID:** SC-5

**Project:** COP State Gas Com A #1

**Collection Date:** 1/30/2014 2:10:00 PM

**Lab ID:** 1401C21-003

**Matrix:** MEOH (SOIL)

**Received Date:** 1/31/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>JMP</b>
Benzene	ND	0.17		mg/Kg	5	1/31/2014 1:00:14 PM	R16424
Toluene	0.51	0.17		mg/Kg	5	1/31/2014 1:00:14 PM	R16424
Ethylbenzene	1.0	0.17		mg/Kg	5	1/31/2014 1:00:14 PM	R16424
Xylenes, Total	9.2	0.33		mg/Kg	5	1/31/2014 1:00:14 PM	R16424
Surr: 4-Bromofluorobenzene	106	80-120		%REC	5	1/31/2014 1:00:14 PM	R16424

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

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1401C21

03-Feb-14

Client: Animas Environmental  
Project: COP State Gas Com A #1

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	R16424	RunNo:	16424					
Prep Date:		Analysis Date:	1/31/2014	SeqNo:	474014	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	R16424	RunNo:	16424					
Prep Date:		Analysis Date:	1/31/2014	SeqNo:	474015	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.1	0.050	1.000	0	107	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.7	80	120			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
E Value above quantitation range  
J Analyte detected below quantitation limits  
O RSD is greater than RSDlimit  
R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
P Sample pH greater than 2 for VOA and TOC only.  
RL Reporting Detection Limit



# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1401C21

RcptNo: 1

Received by/date:

Logged By:

Ashley Gallegos

1/31/2014 10:10:00 AM

Completed By:

Ashley Gallegos

1/31/2014 10:22:09 AM

Reviewed By:

## 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☐

No ☐

No VOA Vials ☒

11. Were any sample containers received broken?

Yes ☐

No ☒

12. Does paperwork match bottle labels?

(Note discrepancies on chain of custody)

Yes ☒

No ☐

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?

(If no, notify customer for authorization.)

Yes ☒

No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

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

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

## Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

## 18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

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



