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

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

Form C-144
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

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

15708

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: LINDRITH B UNIT 8
API Number: 30-039-22422 OCD Permit Number:
U/L or Qtr/Qtr M Section 27 Township 24N Range 3W County: Rio Arriba
Center of Proposed Design: Latitude 36.27674 °N Longitude -107.14980 °W NAD: ☐1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

OIL CONS. DIV DIST. 3
DEC 21 2016

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_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

Proposed Closure: 19.15.17.13 NMAC

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

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method:
- ☒ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method

14.

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

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

15.

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

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

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

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

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

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

17.
Operator Application Certification:

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

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

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

OCD Representative Signature: _____ **Approval Date:** 1/9/2017

Title: Environmental Specialist **OCD Permit Number:** _____

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC * Closure Notification Not Attached

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:** 5/19/2014

20.
Closure Method:

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

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

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

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

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print) Crystal Walker Title: Regulatory Coordinator

Signature: Crystal Walker Date: 12/19/16

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

ConocoPhillips Company
San Juan Basin
Below Grade Tank Closure Report

Lease Name: Lindrith B Unit 8
API No.: 30-39-22422

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:
   i. Operator's name
   ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

   Notification was not found.

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 was not found.

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 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)**

District I
1625 N. French Dr., Hobbs, NM 88240
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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 **ConocoPhillips Company**	Contact **Lindsay Dumas**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 599-4089
Facility Name: **Lindrith B 8**	Facility Type: **Oil**

Surface Owner **Fee**	Mineral Owner **BLM (SF-078913)**	API No.**30-039-22422**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	**27**	**24N**	**03W**	**940'**	**South Line**	**825'**	**West Line**	**Rio Arriba**

Latitude 36.276859 Longitude -107.14959

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **Unknown**	Volume Recovered **0 BBLS**
Source of Release **Below Grade Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **3/13/2014**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
A historic release was discovered during a below grade tank closure on location.

Describe Area Affected and Cleanup Action Taken.*
Excavation was 30' x 40' x 13' Deep. 578 c/yds of soil was transported to TNT Land Farm and 578 c/yds of clean soil was transported from Aztec Machine and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. 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.

Signature: Lindsay Dumas	OIL CONSERVATION DIVISION	
Printed Name: **Lindsay Dumas**	Approved by Environmental Specialist:	
Title: **Field Environmental Specialist**	Approval Date:	Expiration Date:
E-mail Address: **Lindsay.Dumas**@conocophillips.com	Conditions of Approval:	Attached ☐
Date: 10/18/2014 Phone: (505) 599-4089		

* Attach Additional Sheets If Necessary

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

August 18, 2014

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

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

RE: Initial Release Assessment and Final Excavation Report
Lindrith B #8 (South)
Rio Arriba County, New Mexico

Dear Ms. Dumas:

On March 13 and 14 and May 14 and 20, 2014, Animas Environmental Services, LLC (AES) completed a release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Lindrith B #8, located in Rio Arriba County, New Mexico. A historic release was discovered during a below grade tank (BGT) closure at the location. The initial release assessment was completed by AES on March 14, 2014, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on May 20, 2014.

1.0 Site Information

1.1 Location

Site Name – Lindrith B #8
Location – SW¼ SW¼, Section 27, T24N, R3W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.27684 and W107.15009, respectively
Release Location Latitude/Longitude – N36.27674 and W107.14980, respectively
Land Jurisdiction – Private
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, March 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 30 based on the following factors:

- **Depth to Groundwater:** A pit closure report form dated April 1995 for the Lindrith B #8 reported the depth to groundwater at 50 to 99 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:** There are two unnamed washes located approximately 180 feet to the east and west of the location. Both washes flow into the wash in Medio Canyon. (20 points)

1.3 Assessment

AES was initially contacted by Jess Henson, CoP representative, on March 12, 2014, and on March 13, 2014, Stephanie Lynn and Emilee Skyles of AES initiated the release assessment field work. The assessment included collection and field sampling of three soil samples from one test hole at the release area. The test hole was terminated at 12 feet bgs on sandstone.

On March 14, 2014, AES returned to the location to continue release assessment work. The assessment included collection of 12 soil samples from 6 soil borings. Soil borings were terminated between 5 and 8 feet. Based on field sampling results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On May 14, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of five confirmation soil samples from the walls and base of the excavation. The area of the final excavation measured approximately 35 feet by 28 feet by 13 feet in depth. The depth of the excavation was limited due to a confining sandstone layer at about 13 feet bgs. Final confirmation soil samples (SC-6 through SC-9) from the south wall, east wall, west wall and base were collected on May 20, 2014, following application of Quantum Growth™ on May 19, 2014. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 15 soil samples from one test hole and six soil borings (TH-1, SB-1 through SB-6) and 9 composite samples (SC-1 through SC-9) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected

samples were also analyzed for total petroleum hydrocarbons (TPH). Two discrete soil samples (SB-3 and SB-4) collected during the assessment and nine composite samples (SC-1 through SC-9) collected during the excavation clearance 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

Field TPH samples were analyzed 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 a sample chain of custody record. 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:

- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

In addition, soil sample SC-5 was laboratory analyzed for:

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

2.3 Field and Laboratory Analytical Results

On March 13 and 14, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.2 ppm in SB-1 up to 1,785 ppm in TH-1. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-1 to greater than 2,500 mg/kg in TH-1.

On May 14 and 20, 2014, final excavation field screening results for VOCs via OVM ranged from 0.1 ppm in SC-6 up to 28.7 ppm in SC-9. Field TPH concentrations ranged

from 24.4 mg/kg in SC-1 up to 1,250 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Field Sampling VOCs and TPH Results
Lindrith B #8 Initial Release Assessment and Final Excavation (South Excavation)
March and May 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
*NMOCD Action Level**			**100**	**100**
TH-1	3/13/14	7	**454**	**830**
		11	**655**	**>2,500**
		12	**1,785**	**>2,500**
SB-1	3/14/14	2	0.2	NA
		5	18.5	NA
		8	1.5	<20.0
SB-2	3/14/14	3	0.3	NA
		5	10.5	NA
		7.5	38.5	**346**
SB-3	3/14/14	5	19.2	**298**
SB-4	3/14/14	5.5	20.3	NA
		7	17.6	**306**
SB-5	3/14/14	5	9.3	**997**
SB-6	3/14/14	5	19.7	NA
		6	16.4	**523**
SC-1	5/14/14	1 to 13	0.3	24.4
SC-2	5/14/14	1 to 13	1.8	**512**
SC-3	5/14/14	1 to 13	2.1	**285**
SC-4	5/14/14	1 to 13	65.0	**515**
SC-5	5/14/14	13	**231**	**1,250**
SC-6	5/20/14	1 to 13	0.1	**133**
SC-7	5/20/14	1 to 13	0.6	**240**
SC-8	5/20/14	1 to 13	0.3	75.0
SC-9	5/20/14	13	28.7	**550**

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

Laboratory analyses for SB-3 and SB-4 were used to confirm field sampling results of the initial release assessment. TPH concentrations as GRO/DRO were reported in SB-3 with 76 mg/kg and in SB-4 with 80 mg/kg.

Laboratory analyses for SC-1 through SC-9 were used to confirm field sampling results from the final excavation. Benzene and total BTEX concentrations in SC-5 were reported below laboratory detection limits of 0.033 mg/kg and 0.165 mg/kg, respectively. TPH concentrations as GRO/DRO above laboratory detection limits were reported in SC-2 (180 mg/kg), SC-3 (120 mg/kg), SC-4 (220 mg/kg), SC-5 (434.3 mg/kg), SC-7 (94 mg/kg), and SC-9 (620 mg/kg). Results are presented in Table 2 and on Figure 4. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
Lindrith B #8 Initial Release Assessment and Final Excavation (South Excavation)
March and May 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
*NMOCD Action Level**			*10*	*50*	*100*	
SB-3	3/14/14	5	NA	NA	<3.6	76
SB-4	3/14/14	7	NA	NA	<3.0	80
SC-1	5/14/14	1 to 13	NA	NA	<3.3	<9.8
SC-2	5/14/14	1 to 13	NA	NA	<3.4	**180**
SC-3	5/14/14	1 to 13	NA	NA	<3.5	**120**
SC-4	5/14/14	1 to 13	NA	NA	<3.1	**220**
SC-5	5/14/14	13	<0.033	<0.165	**4.3**	**430**
SC-6	5/20/14	1 to 13	NA	NA	<3.4	<9.9
SC-7	5/20/14	1 to 13	NA	NA	<3.5	94
SC-8	5/20/14	1 to 13	NA	NA	<4.9	<10
SC-9	5/20/14	13	NA	NA	<2.9	**620**

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

3.0 Conclusions and Recommendations

On March 13 and 14, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a historic release at the Lindrith B #8. 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 30.

In March 2014, initial assessment field sampling results above the NMOCD action level of 100 ppm VOCs were reported in TH-1, with the highest VOC concentration reported at 1,785 ppm. Field sampling TPH results exceeded the NMOCD action level of 100 mg/kg in six samples (TH-1, SB-2, SB-3, SB-4, SB-5, and SB-6), with the highest concentration reported in TH-1 at greater than 2,500 mg/kg. Laboratory analytical results from SB-3 and SB-4 reported TPH concentrations as GRO/DRO below the NMOCD action level of 100 mg/kg.

On May 14 and May 20, 2014, final excavation of the impacted area was completed. Field sampling results of the excavation extents on May 14, 2014, showed that VOC concentrations were below applicable NMOCD action levels for the walls of the excavation, while the base reported a VOC concentration of 231 ppm. Field TPH concentrations were reported above the applicable NMOCD action level of 100 mg/kg for the walls and base of the excavation, with the exception of SC-1 (north wall) which had a TPH concentration of 24.4 mg/kg. Laboratory analytical results reported benzene and total BTEX concentrations in SC-5 (base) below NMOCD action levels, and TPH concentrations as GRO/DRO were reported above the applicable NMOCD action level in the sidewalls and base, except SC-1 which reported GRO/DRO concentrations less than laboratory detection limits.

Quantum Growth™ was applied to the sidewalls and base of the excavation on May 19, 2014, and additional confirmation samples (SC-6 through SC-9) were collected on May 20, 2014. Field sampling results of the final excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the remaining walls and base of the excavation. Field TPH concentrations were reported above the NMOCD action level in SC-6 (south wall), SC-7 (east wall), and SC-9 (base), and below the NMOCD action level in SC-8 (west wall). Laboratory analytical results reported TPH concentrations as GRO/DRO below the NMOCD action level for the remaining sidewalls (SC-6 through SC-8). The base (SC-9) remained above the NMOCD action level with 620 mg/kg TPH.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Lindrith B #8, benzene, total BTEX, and TPH

concentrations were below the applicable NMOCD action levels for the final sidewalls of the excavation. However, the base of the excavation exceeded applicable NMOCD action levels for TPH with a laboratory analytical concentration of 620 mg/kg. On May 21, 2014, CoP received approval to backfill the excavation from Johnathan Kelly of the NMOCD. No further work is recommended.

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

Sincerely,

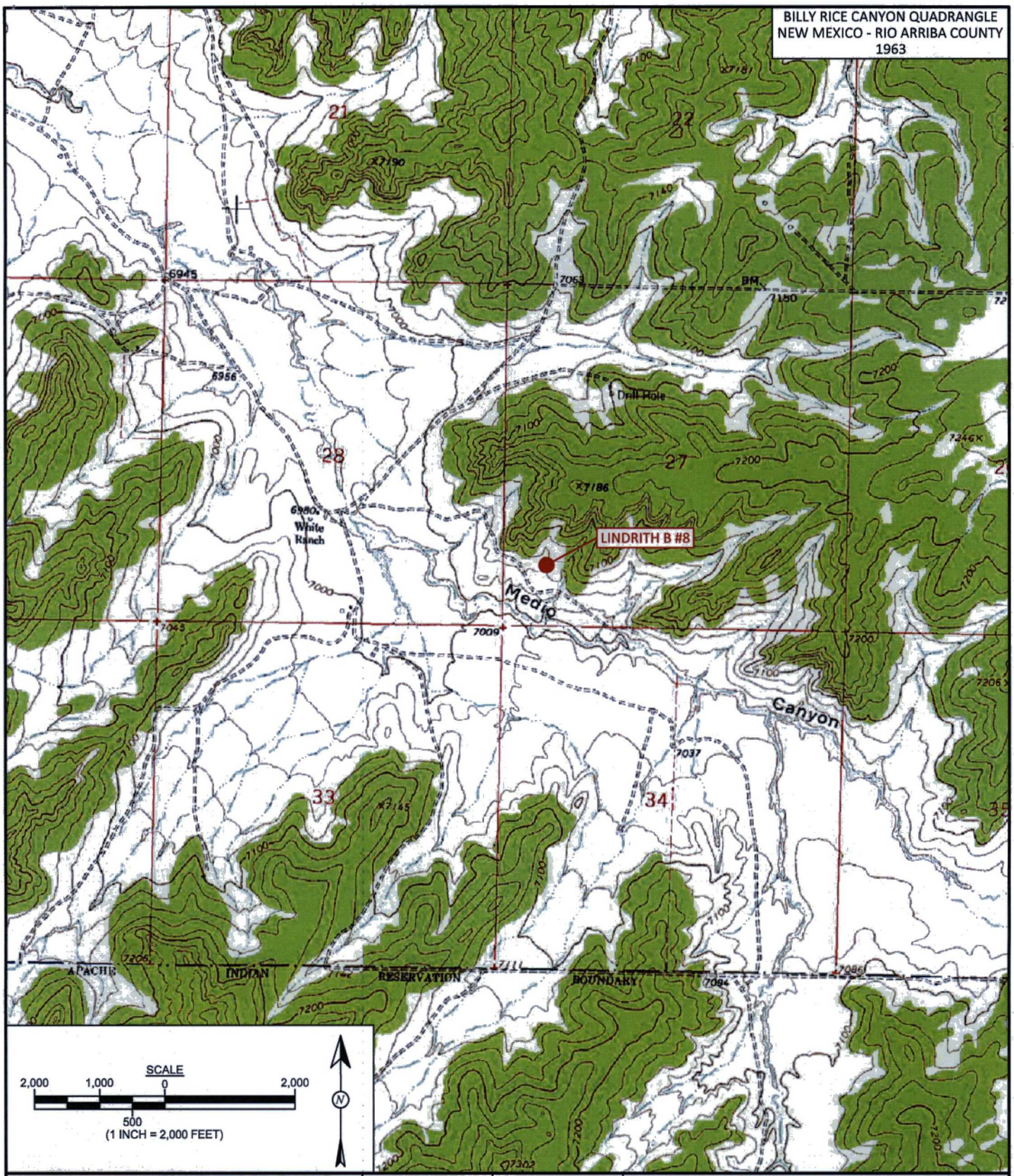
Emilee Skyles
Staff Geologist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, March 2014
Figure 3. Initial Assessment Sample Locations and Results, March 2014
Figure 4. South Excavation Sample Locations and Results, May 2014
AES Field Sampling Report 031314
AES Field Sampling Report 031414
AES Field Sampling Report 051414
AES Field Sampling Report 052014
Hall Laboratory Analytical Report 1403666
Hall Laboratory Analytical Report 1405658
Hall Laboratory Analytical Report 1405665
Hall Laboratory Analytical Report 1405887
Hall Laboratory Analytical Report 1405895

C:\Users\emcnally.AES\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\Lindrith B #8\South Excavation\CoP Lindrith B #8 Release and Final Excavation Report 081814.docx

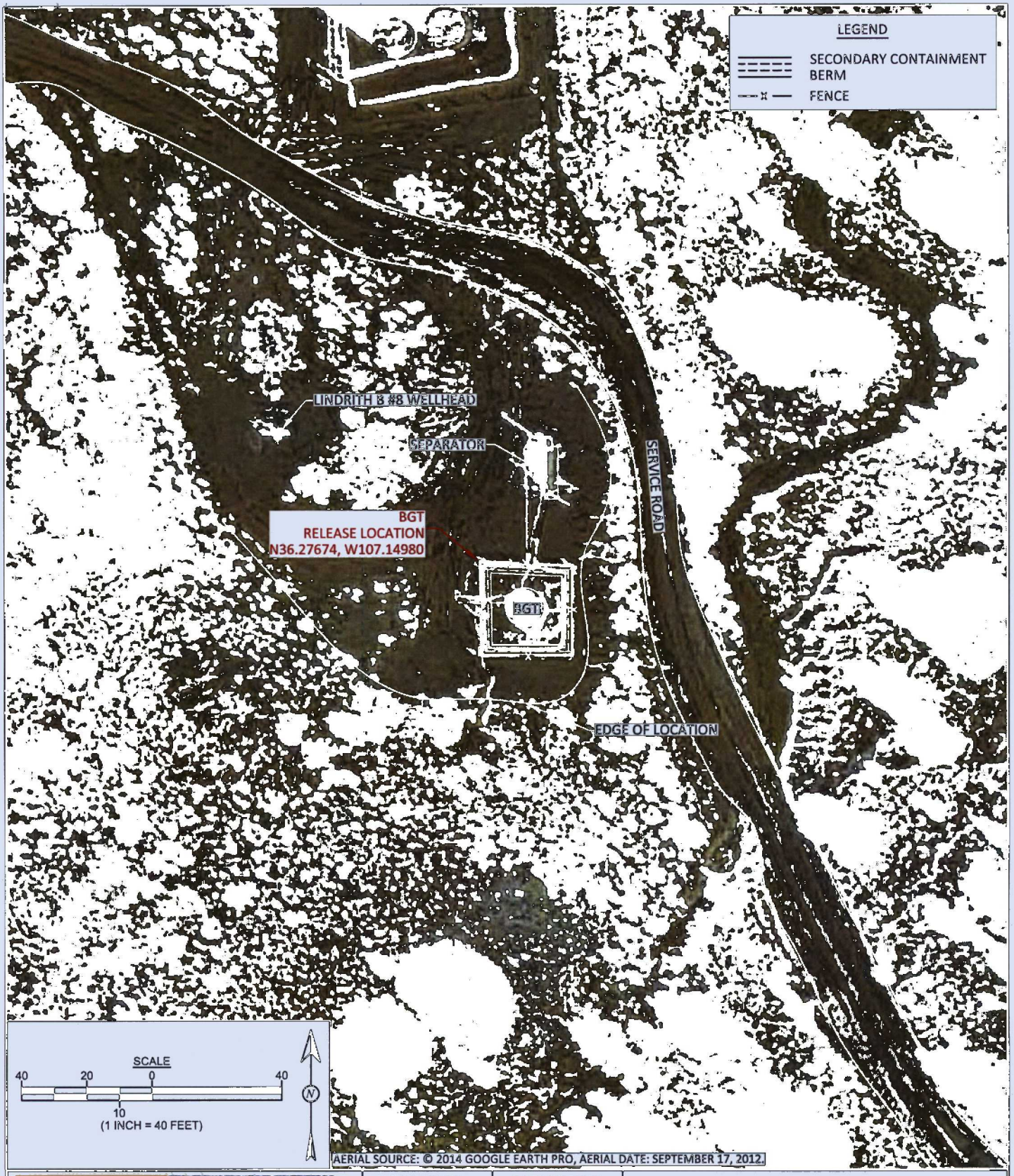


DRAWN BY: S. Glasses	**DATE DRAWN:** March 24, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** June 25, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** June 25, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** June 25, 2014

Animas Environmental Services, LLC

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
LINDRITH B #8
SW¼ SW¼, SECTION 27, T24N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.27684, W107.15009



Animas Environmental Services, LLC

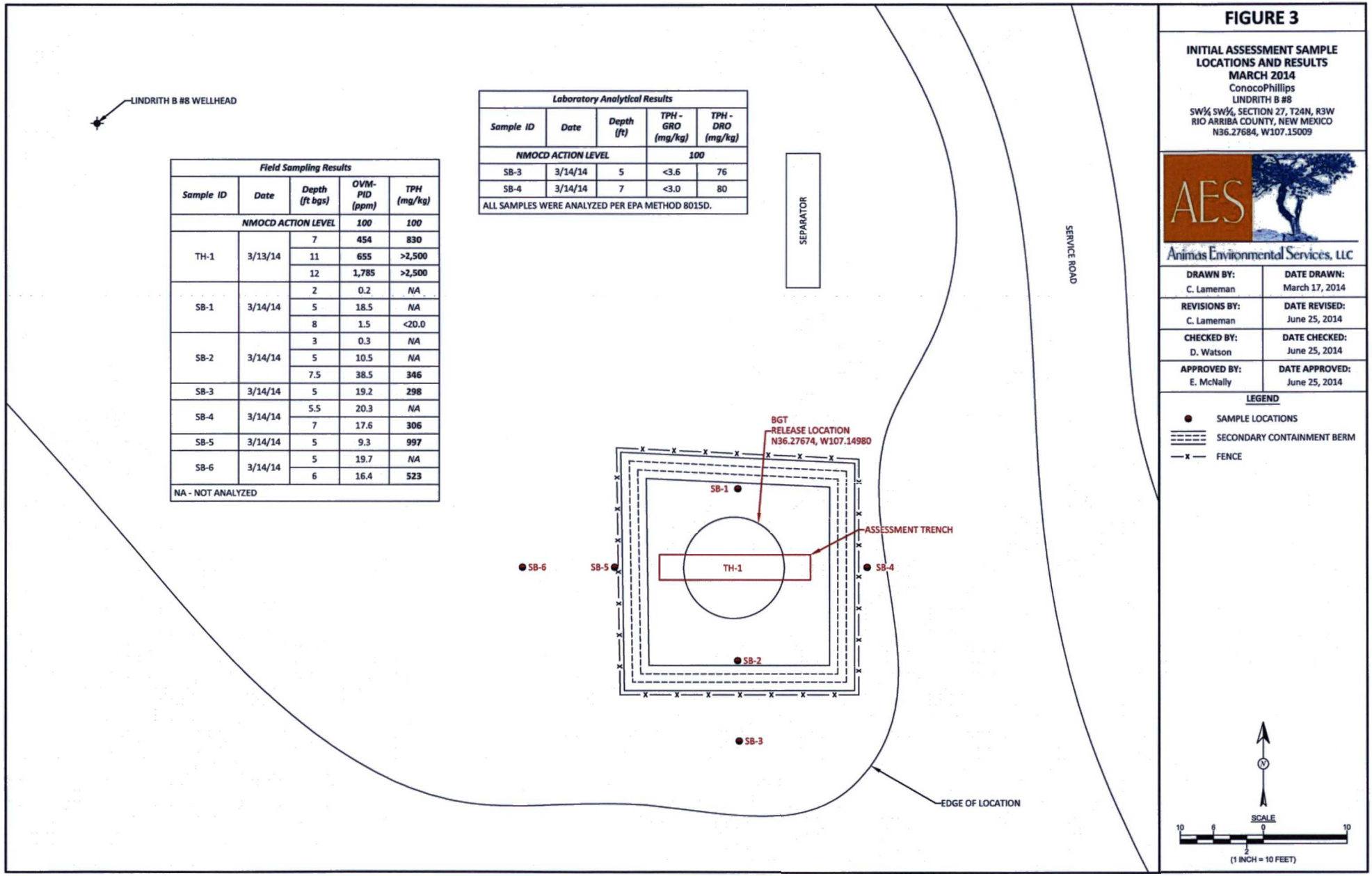
DRAWN BY: S. Glasses	DATE DRAWN: March 25, 2014
REVISIONS BY: C. Lameman	DATE REVISED: June 25, 2014
CHECKED BY: D. Watson	DATE CHECKED: June 25, 2014
APPROVED BY: E. McNally	DATE APPROVED: June 25, 2014

FIGURE 2

AERIAL SITE MAP
MARCH 2014
ConocoPhillips
LINDRITH B #8
SW¼ SW¼, SECTION 27, T24N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.27684, W107.15009

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
MARCH 2014
ConocoPhillips
LINDRITH B #8
SW¼ SW¼, SECTION 27, T24N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.27684, W107.15009



Field Sampling Results				
Sample ID	Date	Depth (ft bgs)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
TH-1	3/13/14	7	454	830
		11	655	>2,500
		12	1,785	>2,500
SB-1	3/14/14	2	0.2	NA
		5	18.5	NA
		8	1.5	<20.0
SB-2	3/14/14	3	0.3	NA
		5	10.5	NA
		7.5	38.5	346
SB-3	3/14/14	5	19.2	298
SB-4	3/14/14	5.5	20.3	NA
		7	17.6	306
SB-5	3/14/14	5	9.3	997
SB-6	3/14/14	5	19.7	NA
		6	16.4	523
NA - NOT ANALYZED				

Laboratory Analytical Results				
Sample ID	Date	Depth (ft)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			100	
SB-3	3/14/14	5	<3.6	76
SB-4	3/14/14	7	<3.0	80
ALL SAMPLES WERE ANALYZED PER EPA METHOD 8015D.				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: March 17, 2014
REVISIONS BY: C. Lameman	DATE REVISED: June 25, 2014
CHECKED BY: D. Watson	DATE CHECKED: June 25, 2014
APPROVED BY: E. McNally	DATE APPROVED: June 25, 2014

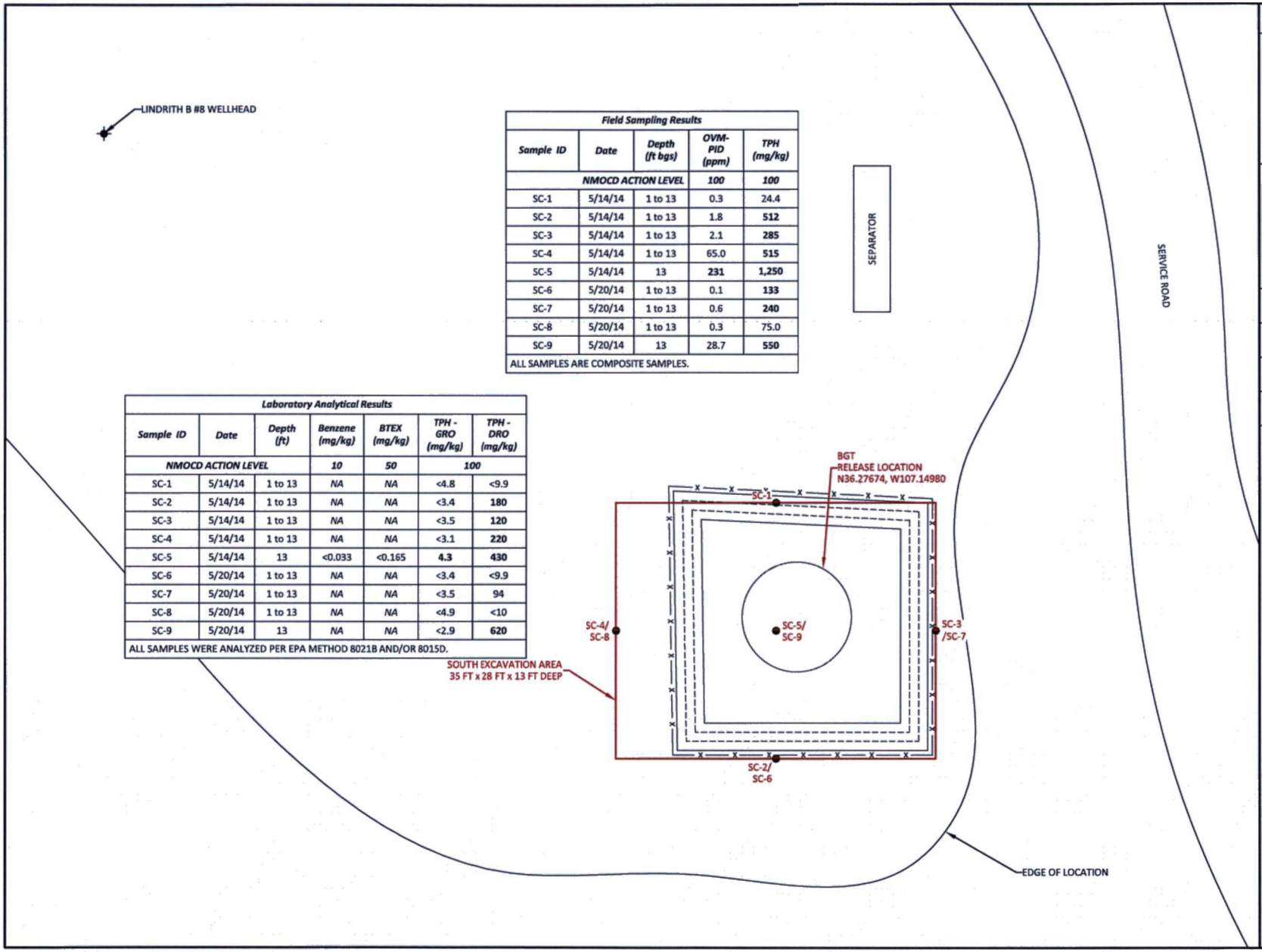
LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- FENCE

SCALE
10 5 0 10
2
(1 INCH = 10 FEET)

FIGURE 4

SOUTH EXCAVATION SAMPLE LOCATIONS AND RESULTS
MAY 2014
ConocoPhillips
LINDRITH B #8
SW¼ SW¼, SECTION 27, T24N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.27684, W107.15009



Field Sampling Results

Sample ID	Date	Depth (ft bgs)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-1	5/14/14	1 to 13	0.3	24.4
SC-2	5/14/14	1 to 13	1.8	512
SC-3	5/14/14	1 to 13	2.1	285
SC-4	5/14/14	1 to 13	65.0	515
SC-5	5/14/14	13	231	1,250
SC-6	5/20/14	1 to 13	0.1	133
SC-7	5/20/14	1 to 13	0.6	240
SC-8	5/20/14	1 to 13	0.3	75.0
SC-9	5/20/14	13	28.7	550

ALL SAMPLES ARE COMPOSITE SAMPLES.

Laboratory Analytical Results

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	100	
SC-1	5/14/14	1 to 13	NA	NA	<4.8	<9.9
SC-2	5/14/14	1 to 13	NA	NA	<3.4	180
SC-3	5/14/14	1 to 13	NA	NA	<3.5	120
SC-4	5/14/14	1 to 13	NA	NA	<3.1	220
SC-5	5/14/14	13	<0.033	<0.165	4.3	430
SC-6	5/20/14	1 to 13	NA	NA	<3.4	<9.9
SC-7	5/20/14	1 to 13	NA	NA	<3.5	94
SC-8	5/20/14	1 to 13	NA	NA	<4.9	<10
SC-9	5/20/14	13	NA	NA	<2.9	620

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND/OR 8015D.

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	June 25, 2014
REVISIONS BY:	**DATE REVISED:**
C. Lameman	June 25, 2014
CHECKED BY:	**DATE CHECKED:**
D. Watson	June 25, 2014
APPROVED BY:	**DATE APPROVED:**
E. McNally	June 25, 2014

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- FENCE

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)

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: Lindrith B #8

Date: 3/13/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 7'	3/13/2014	11:30	454	830	11:52	20.0	1	ES
TH-1 @ 11'	3/13/2014	12:15	655	>2,500	12:30	20.0	1	ES
TH-1 @ 12'	3/13/2014	12:40	1,785	>2,500	13:05	20.0	1	ES

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: Emily Sy L

Report Finalized: 3/13/14

AES Field Sampling Report

Animas Environmental Service
www.animasenvironmenta
624 E. Con
Farmington, NM
505-56
Durango, Co
970-403

Client: ConocoPhillips

Project Location: Lindrith B #8

Date: 3/14/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 2'	3/14/2014	10:45	North	0.2	*Not Analyzed for TPH*				
SB-1 @ 5'	3/14/2014	10:46	North	18.5	*Not Analyzed for TPH*				
SB-1 @ 8'	3/14/2014	10:47	North	1.5	19.3	15:45	20.0	1	ES
SB-2 @ 3'	3/14/2014	10:50	South	0.3	*Not Analyzed for TPH*				
SB-2 @ 5'	3/14/2014	10:51	South	10.5	*Not Analyzed for TPH*				
SB-2 @ 7.5'	3/14/2014	10:52	South	38.5	346	15:49	20.0	1	ES
SB-3 @ 5'	3/14/2014	11:30	South	19.2	298	15:53	20.0	1	ES
SB-4 @ 5.5'	3/14/2014	11:04	East	20.3	*Not Analyzed for TPH*				
SB-4 @ 7'	3/14/2014	11:15	East	17.6	306	15:58	20.0	1	ES
SB-5 @ 5'	3/14/2014	11:45	West	9.3	997	16:15	20.0	1	ES
SB-6 @ 5'	3/14/2014	12:18	West	19.7	*Not Analyzed for TPH*				
SB-6 @6'	3/14/2014	12:30	West	16.4	523	16:10	20.0	1	ES

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:

Report Finalized: 3/14/14

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: Lindrith B #8

Date: 5/14/2014

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-1	5/14/2014	12:30	North Wall	0.3	12:50	24.4	20.0	1	DAW
SC-2	5/14/2014	12:32	South Wall	1.8	12:52	512	20.0	1	DAW
SC-3	5/14/2014	12:34	East Wall	2.1	12:55	285	20.0	1	DAW
SC-4	5/14/2014	12:36	West Wall	65.0	12:57	515	20.0	1	DAW
SC-5	5/14/2014	12:38	Base	231	13:00	1,250	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: Deborah Watson

Report Finalized: 5/14/14

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: Lindrith B #8

Date: 5/20/2014

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	TPH Analysis Time	TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	5/20/2014	12:05	South Wall	0.1	12:27	133	20.0	1	DAW
SC-7	5/20/2014	12:35	East Wall	0.6	12:25	240	20.0	1	DAW
SC-8	5/20/2014	10:55	West Wall	0.3	12:55	75.0	20.0	1	DAW
SC-9	5/20/2014	11:00	Base	28.7	12:57	550	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: Deborah Watson

Report Finalized: 5/20/14

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 18, 2014

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

RE: COP Lindrith B # 8 OrderNo.: 1403666

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/17/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1403666**
Date Reported: **3/18/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COP Lindrith B # 8
Lab ID: 1403666-001

Client Sample ID: ~~SB-E @ 7'~~ SB-4@7' DAW
Collection Date: 3/14/2014 11:45:00 AM
Matrix: MEOH (SOIL) **Received Date:** 3/17/2014 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	80	9.9		mg/Kg	1	3/17/2014 2:42:32 PM	12207
Surr: DNOP	93.8	66-131		%REC	1	3/17/2014 2:42:32 PM	12207
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	3/17/2014 11:09:37 AM	R17360
Surr: BFB	88.3	74.5-129		%REC	1	3/17/2014 11:09:37 AM	R17360

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COP Lindrith B # 8
Lab ID: 1403666-002

Client Sample ID: ~~SB-S-2 @ 5'~~ SB-3@5' DAW
Collection Date: 3/14/2014 12:00:00 PM
Matrix: MEOH (SOIL) **Received Date:** 3/17/2014 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	76	9.9		mg/Kg	1	3/17/2014 3:50:29 PM	12207
Surr: DNOP	92.9	66-131		%REC	1	3/17/2014 3:50:29 PM	12207
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	3/17/2014 11:39:50 AM	R17360
Surr: BFB	84.3	74.5-129		%REC	1	3/17/2014 11:39:50 AM	R17360

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1403666**

18-Mar-14

Client: Animas Environmental
Project: COP Lindrith B # 8

Sample ID **MB-12207**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **12207**	RunNo: **17357**
Prep Date: **3/17/2014**	Analysis Date: **3/17/2014**	SeqNo: **499908** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.4		10.00		84.4	66	131			

Sample ID **LCS-12165**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **12165**	RunNo: **17357**
Prep Date: **3/13/2014**	Analysis Date: **3/17/2014**	SeqNo: **499909** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.000		107	66	131			

Sample ID **LCS-12207**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **12207**	RunNo: **17357**
Prep Date: **3/17/2014**	Analysis Date: **3/17/2014**	SeqNo: **499910** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.7	60.8	145			
Surr: DNOP	4.4		5.000		87.7	66	131			

Sample ID **LCS-12173**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **12173**	RunNo: **17357**
Prep Date: **3/13/2014**	Analysis Date: **3/17/2014**	SeqNo: **500720** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		99.3	66	131			

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#: **1403666**

18-Mar-14

Client: Animas Environmental
Project: COP Lindrith B # 8

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R17360**	RunNo: **17360**
Prep Date:	Analysis Date: **3/17/2014**	SeqNo: **500200** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.1	74.5	129			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R17360**	RunNo: **17360**
Prep Date:	Analysis Date: **3/17/2014**	SeqNo: **500201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.1	71.7	134			
Surr: BFB	950		1000		94.6	74.5	129			

Sample ID **1403666-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB-E @ 7'**	Batch ID: **R17360**	RunNo: **17360**
Prep Date:	Analysis Date: **3/17/2014**	SeqNo: **500203** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	12	3.0	14.78	0	84.0	69.5	145			
Surr: BFB	530		591.4		90.2	74.5	129			

Sample ID **1403666-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SB-E @ 7'**	Batch ID: **R17360**	RunNo: **17360**
Prep Date:	Analysis Date: **3/17/2014**	SeqNo: **500204** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	3.0	14.78	0	85.7	69.5	145	2.07	20	
Surr: BFB	460		591.4		78.5	74.5	129	0	0	

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

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: 1403666 | RcptNo: 1

Received by/date: MB 03/17/14

Logged By: Lindsay Mangin 3/17/2014 10:05:00 AM

Completed By: Lindsay Mangin 3/17/2014 10:56:42 AM

Reviewed By: 03/17/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM

Phone #: 505 564 2281

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other ______

☐ EDD (Type) ______

Turn-Around Time:

☐ Standard ☒ Rush Same-day

Project Name: ↑

Project #: CoP Lindrith B #8

Project Manager: D Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1403666	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
3/14/14	1145	soil	SB-E @ 7'	MeOH kit 4oz	MeOH	-001			X													
3/14/14	1200	soil	SB-S 2 @ 5'	MeOH kit 2oz	MeOH	-002			X													

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
3-17-14	640	Deborah Watson	[signature]	03/17/14	1005
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Bill to ConocoPhillips

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 16, 2014

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

RE: CoP Lindrith B #8 South Excavation OrderNo.: 1405658

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/15/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1405658**
Date Reported: **5/16/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-2
Project: CoP Lindrith B #8 South Excavation
Collection Date: 5/14/2014 12:32:00 PM
Lab ID: 1405658-001
Matrix: MEOH (SOIL)
Received Date: 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	180	9.9		mg/Kg	1	5/16/2014 10:19:49 AM	13180
Surr: DNOP	117	57.9-140		%REC	1	5/16/2014 10:19:49 AM	13180
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	5/15/2014 12:44:29 PM	R18624
Surr: BFB	88.2	80-120		%REC	1	5/15/2014 12:44:29 PM	R18624

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-3
Project: CoP Lindrith B #8 South Excavation
Collection Date: 5/14/2014 12:34:00 PM
Lab ID: 1405658-002
Matrix: MEOH (SOIL)
Received Date: 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	120	9.9		mg/Kg	1	5/16/2014 11:03:27 AM	13180
Surr: DNOP	99.9	57.9-140		%REC	1	5/16/2014 11:03:27 AM	13180
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/15/2014 1:13:00 PM	R18624
Surr: BFB	88.2	80-120		%REC	1	5/15/2014 1:13:00 PM	R18624

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-4
Project: CoP Lindrith B #8 South Excavation
Collection Date: 5/14/2014 12:36:00 PM
Lab ID: 1405658-003
Matrix: MEOH (SOIL)
Received Date: 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	220	10		mg/Kg	1	5/16/2014 11:47:12 AM	13180
Surr: DNOP	96.0	57.9-140		%REC	1	5/16/2014 11:47:12 AM	13180
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	5/15/2014 1:41:42 PM	R18624
Surr: BFB	87.0	80-120		%REC	1	5/15/2014 1:41:42 PM	R18624

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-5
Project: CoP Lindrith B #8 South Excavation
Collection Date: 5/14/2014 12:38:00 PM
Lab ID: 1405658-004
Matrix: MEOH (SOIL)
Received Date: 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	430	10		mg/Kg	1	5/16/2014 12:31:07 PM	13180
Surr: DNOP	101	57.9-140		%REC	1	5/16/2014 12:31:07 PM	13180
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	4.3	3.3		mg/Kg	1	5/15/2014 2:10:21 PM	R18624
Surr: BFB	118	80-120		%REC	1	5/15/2014 2:10:21 PM	R18624
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.033		mg/Kg	1	5/15/2014 2:10:21 PM	R18624
Toluene	ND	0.033		mg/Kg	1	5/15/2014 2:10:21 PM	R18624
Ethylbenzene	ND	0.033		mg/Kg	1	5/15/2014 2:10:21 PM	R18624
Xylenes, Total	ND	0.066		mg/Kg	1	5/15/2014 2:10:21 PM	R18624
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	5/15/2014 2:10:21 PM	R18624

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405658**

16-May-14

Client: Animas Environmental

Project: CoP Lindrith B #8 South Excavation

Sample ID **MB-13155**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13155**			RunNo: **18605**					
Prep Date: **5/13/2014**	Analysis Date: **5/15/2014**			SeqNo: **537633**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		115	57.9	140			

Sample ID **LCS-13155**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13155**			RunNo: **18605**					
Prep Date: **5/13/2014**	Analysis Date: **5/15/2014**			SeqNo: **537661**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.0		5.000		120	57.9	140			

Sample ID **MB-13180**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13180**			RunNo: **18605**					
Prep Date: **5/15/2014**	Analysis Date: **5/15/2014**			SeqNo: **537900**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.7		10.00		96.7	57.9	140			

Sample ID **LCS-13180**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13180**			RunNo: **18605**					
Prep Date: **5/15/2014**	Analysis Date: **5/15/2014**			SeqNo: **537901**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	60.8	145			
Surr: DNOP	5.1		5.000		103	57.9	140			

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#: **1405658**

16-May-14

Client: Animas Environmental

Project: CoP Lindrith B #8 South Excavation

Sample ID **MB-13175 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R18624**	RunNo: **18624**
Prep Date:	Analysis Date: **5/15/2014**	SeqNo: **538752** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	850		1000		85.3	80	120			

Sample ID **LCS-13175 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R18624**	RunNo: **18624**
Prep Date:	Analysis Date: **5/15/2014**	SeqNo: **538753** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	71.7	134			
Surr: BFB	930		1000		93.5	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405658**

16-May-14

Client: Animas Environmental
Project: CoP Lindrith B #8 South Excavation

Sample ID **MB-13175 MK**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R18624**	RunNo: **18624**
Prep Date:	Analysis Date: **5/15/2014**	SeqNo: **538774** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID **LCS-13175 MK**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R18624**	RunNo: **18624**
Prep Date:	Analysis Date: **5/15/2014**	SeqNo: **538775** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.050	1.000	0	119	80	120			
Toluene	1.1	0.050	1.000	0	109	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1405658 RcptNo: 1

Received by/date: CS 05/15/14

Logged By: Michelle Garcia 5/15/2014 10:08:00 AM Michelle Garcia

Completed By: Michelle Garcia 5/15/2014 10:32:42 AM Michelle Garcia

Reviewed By: 05/15/14

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

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

Accreditation ☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: ☐ Standard ☒ Rush Same day

Project Name: CoP Lindrith B #8 South Excavation

Project #:

Project Manager: D Watson

Sampler: DWatson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405058	BTEX + MTBE + TMB (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5-14-14	1232	Soil	SC-2	MeoH Kit 1-4oz	MeoH	-001			X													
5-14-14	1234	Soil	SC-3	MeoH Kit 1-4oz	MeoH	-002			X													
5-14-14	1236	Soil	SC-4	MeoH Kit 1-4oz	MeoH	-003			X													
5-14-14	1238	Soil	SC-5	MeoH Kit 1-4oz	MeoH	-004	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/14/14	1733	Dakota Watson	Christine Walters	5/14/14	1733
5/14/14	1754	Christine Walters	Celina Sena	05/15/14	10:08

Remarks: Bill to ConocoPhillips

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 20, 2014

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

RE: CoP Lindrith B #8 South Excavation OrderNo.: 1405665

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/15/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1405665**
Date Reported: **5/20/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-1
Project: CoP Lindrith B #8 South Excavation
Collection Date: 5/14/2014 12:30:00 PM
Lab ID: 1405665-001
Matrix: SOIL
Received Date: 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/16/2014 11:00:40 PM	13180
Surr: DNOP	105	57.9-140		%REC	1	5/16/2014 11:00:40 PM	13180
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/16/2014 4:56:13 PM	13192
Surr: BFB	87.0	80-120		%REC	1	5/16/2014 4:56:13 PM	13192

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405665**

20-May-14

Client: Animas Environmental

Project: CoP Lindrith B #8 South Excavation

Sample ID **MB-13180**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13180**	RunNo: **18605**
Prep Date: **5/15/2014**	Analysis Date: **5/15/2014**	SeqNo: **537900** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.7		10.00		96.7	57.9	140			

Sample ID **LCS-13180**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13180**	RunNo: **18605**
Prep Date: **5/15/2014**	Analysis Date: **5/15/2014**	SeqNo: **537901** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	60.8	145			
Surr: DNOP	5.1		5.000		103	57.9	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405665**

20-May-14

Client: Animas Environmental

Project: CoP Lindrith B #8 South Excavation

Sample ID **MB-13192**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **13192**	RunNo: **18658**
Prep Date: **5/15/2014**	Analysis Date: **5/16/2014**	SeqNo: **539584** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.4	80	120			

Sample ID **LCS-13192**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **13192**	RunNo: **18658**
Prep Date: **5/15/2014**	Analysis Date: **5/16/2014**	SeqNo: **539585** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.2	71.7	134			
Surr: BFB	970		1000		97.3	80	120			

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		

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: 1405665 RcptNo: 1

Received by/date: CS 05/15/14

Logged By: **Michelle Garcia** 5/15/2014 10:08:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 5/15/2014 11:06:39 AM Michelle Garcia

Reviewed By: 05/15/14

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? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Animas Environmental Services LLC	☒ Standard ☐ Rush
Mailing Address: 624 E Comanche Farmington NM 87401	Project Name: CoP Lindrith B #8 South Excavation
Phone #: 505 564 2281	Project #:
email or Fax#:	Project Manager: D Watson
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)	Sampler: D Watson
Accreditation ☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 1.2°

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405665	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
5-14-14	1230	Soil	SC-1	1-4oz	—	-001			X									

Date:	Time:	Relinquished by:	Received by:	Date	Time	Remarks:
5/14/14	1733	Debra Watson	Christine Walker	5/14/14	1733	Bill to ConocoPhillips
5/14/14	1754	Christine Walker	Celina Sena	05/15/14	10:08	

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 22, 2014

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

RE: CoP Lindrith B #8 OrderNo.: 1405887

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/21/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1405887**
Date Reported: **5/22/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Lindrith B #8
Lab ID: 1405887-001

Client Sample ID: SC-6
Collection Date: 5/20/2014 12:05:00 PM
Matrix: MEOH (SOIL) **Received Date:** 5/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/21/2014 2:41:40 PM	13277
Surr: DNOP	83.8	57.9-140		%REC	1	5/21/2014 2:41:40 PM	13277
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	5/21/2014 12:30:58 PM	R18771
Surr: BFB	96.2	80-120		%REC	1	5/21/2014 12:30:58 PM	R18771

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SC-7
Project: CoP Lindrith B #8
Collection Date: 5/20/2014 12:35:00 PM
Lab ID: 1405887-002
Matrix: MEOH (SOIL)
Received Date: 5/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	94	10		mg/Kg	1	5/21/2014 1:46:12 PM	13277
Surr: DNOP	101	57.9-140		%REC	1	5/21/2014 1:46:12 PM	13277
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	5/21/2014 12:59:31 PM	R18771
Surr: BFB	93.0	80-120		%REC	1	5/21/2014 12:59:31 PM	R18771

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Lindrith B #8
Lab ID: 1405887-003

Client Sample ID: SC-9
Collection Date: 5/20/2014 11:00:00 AM
Matrix: MEOH (SOIL) **Received Date:** 5/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	620	10		mg/Kg	1	5/21/2014 3:17:34 PM	13277
Surr: DNOP	117	57.9-140		%REC	1	5/21/2014 3:17:34 PM	13277
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	5/21/2014 1:28:12 PM	R18771
Surr: BFB	115	80-120		%REC	1	5/21/2014 1:28:12 PM	R18771

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405887**

22-May-14

Client: Animas Environmental
Project: CoP Lindrith B #8

Sample ID **LCS-13258**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13258**			RunNo: **18749**					
Prep Date: **5/20/2014**	Analysis Date: **5/21/2014**			SeqNo: **541686**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.5	57.9	140			

Sample ID **LCS-13277**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13277**			RunNo: **18749**					
Prep Date: **5/21/2014**	Analysis Date: **5/21/2014**			SeqNo: **541687**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.7	60.8	145			
Surr: DNOP	4.7		5.000		94.5	57.9	140			

Sample ID **MB-13258**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13258**			RunNo: **18749**					
Prep Date: **5/20/2014**	Analysis Date: **5/21/2014**			SeqNo: **541688**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		97.6	57.9	140			

Sample ID **MB-13277**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13277**			RunNo: **18749**					
Prep Date: **5/21/2014**	Analysis Date: **5/21/2014**			SeqNo: **541689**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.1		10.00		81.5	57.9	140			

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#: **1405887**

22-May-14

Client: Animas Environmental

Project: CoP Lindrith B #8

Sample ID	**MB-13266 MK**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**R18771**		RunNo:	**18771**				
Prep Date:		Analysis Date:	**5/21/2014**		SeqNo:	**542189**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		86.5	80	120			

Sample ID	**LCS-13266 MK**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**R18771**		RunNo:	**18771**				
Prep Date:		Analysis Date:	**5/21/2014**		SeqNo:	**542190**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.1	71.7	134			
Surr: BFB	1000		1000		100	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1405887 | RcptNo: 1

Received by/date: CS 05/21/14

Logged By: Lindsay Mangin 5/21/2014 10:00:00 AM

Completed By: Lindsay Mangin 5/21/2014 10:15:44 AM

Reviewed By: IO 05/21/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush same day

Project Name: CDP Lindrith B #8

Project #:

Project Manager: D. Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405357	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5-20-14	1205	Soil	SC-6	1-4oz Mason Jar	— MeOH	-001			X													
5-20-14	1235	Soil	SC-7	1-4oz Mason Jar	— MeOH	-002			X													
5-20-14	1100	Soil	SC-9	1-4oz Mason Jar	— MeOH	-003			X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/20/14	16.45	Deborah Watson	Christine Walker	5/20/14	1645
5/20/14	1710	Christine Walker	Celina Sena	05/21/14	10:00

Remarks: Bill to ConocoPhillips

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

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Website: www.hallenvironmental.com

May 23, 2014

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

RE: CoP Lindrith B #8 OrderNo.: 1405895

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/21/2014 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1405895**
Date Reported: **5/23/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Lindrith B #8
Lab ID: 1405895-001 **Matrix:** SOIL

Client Sample ID: SC-8
Collection Date: 5/20/2014 10:55:00 AM
Received Date: 5/21/2014 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/22/2014 10:23:50 AM	13277
Surr: DNOP	101	57.9-140		%REC	1	5/22/2014 10:23:50 AM	13277
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/22/2014 4:04:35 PM	13281
Surr: BFB	85.2	80-120		%REC	1	5/22/2014 4:04:35 PM	13281

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.
RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405895**

23-May-14

Client: Animas Environmental
Project: CoP Lindrith B #8

Sample ID **LCS-13277**	SampType: **LCS**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **13277**			RunNo: **18749**					
Prep Date: **5/21/2014**	Analysis Date: **5/21/2014**			SeqNo: **541687**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.7	60.8	145			
Surr: DNOP	4.7		5.000		94.5	57.9	140			

Sample ID **MB-13277**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **13277**			RunNo: **18749**					
Prep Date: **5/21/2014**	Analysis Date: **5/21/2014**			SeqNo: **541689**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	8.1		10.00		81.5	57.9	140			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1405895**

23-May-14

Client: Animas Environmental
Project: CoP Lindrith B #8

Sample ID **MB-13281**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **13281**	RunNo: **18795**
Prep Date: **5/21/2014**	Analysis Date: **5/22/2014**	SeqNo: **543156** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	830		1000		83.0	80	120			

Sample ID **LCS-13281**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **13281**	RunNo: **18795**
Prep Date: **5/21/2014**	Analysis Date: **5/22/2014**	SeqNo: **543158** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.4	71.7	134			
Surr: BFB	910		1000		90.7	80	120			

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

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: 1405895 | RcptNo: 1

Received by/date: CS 05/21/14

Logged By: Lindsay Mangin 5/21/2014 10:00:00 AM

Completed By: Lindsay Mangin 5/21/2014 10:56:26 AM

Reviewed By: 05/21/14

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CoP Lindrith B #8

Project #:

Project Manager: D. Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1405595	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
5-20-14	1055	soil	SC-8	1-4oz jar	—	-001			X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/20/14	1645	Deborah Watson	Christa Waeler	5/20/14	1645
5/20/14	1710	Christa Waeler	Celina Sena	05/21/14	10:00

Remarks: Bill to ConocoPhillips

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.


ConocoPhillips Company
LINDRITH B UNIT 8
NMSF-078914
API NO. 30 039-22422
SW/SW, 940' FSL & 825' FWL
SEC.27 T024N R003W NMPM
RIO ARRIBA COUNTY, NM ELEV 7052
LAT:36° 16' 37" LONG:107° 09' 01"
EMERGENCY NUMBER (505) 324-5170
NO SMOKING
NO TRESPASSING