

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 April 3, 2017

**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  
 BGT SOUTH  Modification to an existing permit/or registration  
 Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

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

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

1.  
Operator: Hilcorp Energy Company OGRID #: 372171  
 Address: 382 Road 3100 Aztec, NM 87410  
 Facility or well name: San Juan 28-7 Unit 56 – BGT 1 (South Tank)  
 API Number: 30-039-07401 OCD Permit Number: \_\_\_\_\_  
 U/L or Qtr/Qtr M Section 13 Township 28N Range 7W County: Rio Arriba  
 Center of Proposed Design: Latitude 36.65649 Longitude -107.52982 NAD27  
 Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

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

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

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

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

6.  
**Netting:** Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)  
 Screen  Netting  Other \_\_\_\_\_  
 Monthly inspections (If netting or screening is not physically feasible)

7.  
**Signs:** Subsection C of 19.15.17.11 NMAC  
 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  
 Signed in compliance with 19.15.16.8 NMAC

8.  
**Variations and Exceptions:**  
 Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  
**Please check a box if one or more of the following is requested, if not leave blank:**  
 Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.  
 Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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

<b><u>General siting</u></b>	
<b><u>Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.</u></b> - <input type="checkbox"/> NM Office of the State Engineer - iWATERS database search; <input type="checkbox"/> USGS; <input type="checkbox"/> Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
<b><u>Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.</u></b> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. <b>(Does not apply to below grade tanks)</b> - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. <b>(Does not apply to below grade tanks)</b> - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. <b>(Does not apply to below grade tanks)</b> - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. <b>(Does not apply to below grade tanks)</b> - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b><u>Below Grade Tanks</u></b>	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b><u>Temporary Pit using Low Chloride Drilling Fluid</u></b> (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No

Within 100 feet of a wetland.  
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes  No

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

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  
 - Topographic map; Visual inspection (certification) of the proposed site  Yes  No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Yes  No

Within 500 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  
 - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Yes  No

Within 300 feet of a wetland.  
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes  No

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

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  
 - Topographic map; Visual inspection (certification) of the proposed site  Yes  No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  Yes  No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.  
 - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site  Yes  No

Within 500 feet of a wetland.  
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  Yes  No

10.  
**Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC  
*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

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

11.  
**Multi-Well Fluid Management Pit Checklist:** Subsection B of 19.15.17.9 NMAC  
*Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.*

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

12.

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

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

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

**Proposed Closure:** 19.15.17.13 NMAC

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

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

14.

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

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

15.

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

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

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

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

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

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

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

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

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

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

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

**OCD Representative Signature:** CR Whitehead **Approval Date:** October 21, 2021

**Title:** Environmental Specialist **OCD Permit Number:** BGT SOUTH

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

**Closure Completion Date:** 8/27/2012

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 \_\_\_\_\_ Longitude \_\_\_\_\_ 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): Kandis Roland Title: Operations/Regulatory Technician – Sr

Signature: Kandis Roland Date: 10/19/2021

e-mail address: kroland@hilcorp.com Telephone: (713) 757-5246

**Hilcorp Energy Company  
San Juan Basin  
Below Grade Tank Closure Report**

**Lease Name: San Juan 28-7 Unit 56 BGT 1**

**API No.: 30-039-07401**

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. HILCORP 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, HILCORP 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. HILCORP 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. HILCORP 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 HILCORP 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. HILCORP will test the soils beneath the below-grade tank to determine whether a release has occurred. HILCORP 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. Hilcorp shall notify the division of its results on form C-141.

10/19/2021

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

**A release was not 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 HILCORP shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.

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

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

**Notification is attached.**

9. The surface owner shall be notified of HILCORP'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/email, return receipt requested.

**Record Clean-up: BGT was closed in 2012 by COP but a C-144 closure was never filed. See attached email to OCD.**

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

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

11. HILCORP 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. Hilcorp will repeat seeding or planting will be continued until successful vegetative growth occurs.

10/19/2021

**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)**

10/19/2021

## Kandis Roland

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**From:** Whitehead, Christopher , EMNRD <Chris.Whitehead@state.nm.us>  
**Sent:** Monday, October 18, 2021 2:44 PM  
**To:** Kandis Roland  
**Cc:** Mandi Walker  
**Subject:** RE: [EXTERNAL] FW: SAN JUAN 28-7 UNIT 56 - INC

It does not appear that I responded to this inquiry. Yes please do submit the closure report along with a newly completed C-144B Closure form.

**Christopher Whitehead** • Environmental Specialist  
Environmental Bureau • EMNRD - OCD

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**From:** Kandis Roland <kroland@hilcorp.com>  
**Sent:** Friday, October 15, 2021 10:01 AM  
**To:** Whitehead, Christopher , EMNRD <Chris.Whitehead@state.nm.us>  
**Cc:** Kandis Roland <kroland@hilcorp.com>; Mandi Walker <mwalker@hilcorp.com>  
**Subject:** [EXTERNAL] FW: SAN JUAN 28-7 UNIT 56 - INC

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Chris,

Another record clean-up. This well has 2 BGT permits on OCD website, 1 filed in 2016 and another filed in 2008 (links below). BGT tank to the south was closed out in 2012 but a C-144 BGT Closure report was never filed. Attached is the sample report from the closure in 2012. Can I use this sample report to file the C-144B BGT Closure permit for the Southern Tank?

[https://ocdimage.emnrd.state.nm.us/Imaging/FileStore/aztec/wf/20160517/3003907401\\_05\\_16\\_2016\\_09\\_26\\_55.pdf](https://ocdimage.emnrd.state.nm.us/Imaging/FileStore/aztec/wf/20160517/3003907401_05_16_2016_09_26_55.pdf)  
[https://ocdimage.emnrd.state.nm.us/Imaging/FileStore/santafe/wf/320439/30039074010000\\_38\\_wf.pdf](https://ocdimage.emnrd.state.nm.us/Imaging/FileStore/santafe/wf/320439/30039074010000_38_wf.pdf)

Thanks,

Kandis Roland  
HILCORP ENERGY  
San Juan East/South Regulatory  
713.757.5246  
[kroland@hilcorp.com](mailto:kroland@hilcorp.com)

---

**From:** Kandis Roland  
**Sent:** Tuesday, January 26, 2021 12:15 PM  
**To:** Ryan Frost <[rfrost@hilcorp.com](mailto:rfrost@hilcorp.com)>; Mark McKnight <[mmcknight@hilcorp.com](mailto:mmcknight@hilcorp.com)>; Trey Sullivan <[tsullivan@hilcorp.com](mailto:tsullivan@hilcorp.com)>; Clara Cardoza <[ccardoza@hilcorp.com](mailto:ccardoza@hilcorp.com)>  
**Cc:** Kandis Roland <[kroland@hilcorp.com](mailto:kroland@hilcorp.com)>; Cheryl Weston <[cweston@hilcorp.com](mailto:cweston@hilcorp.com)>  
**Subject:** SAN JUAN 28-7 UNIT 56 - INC

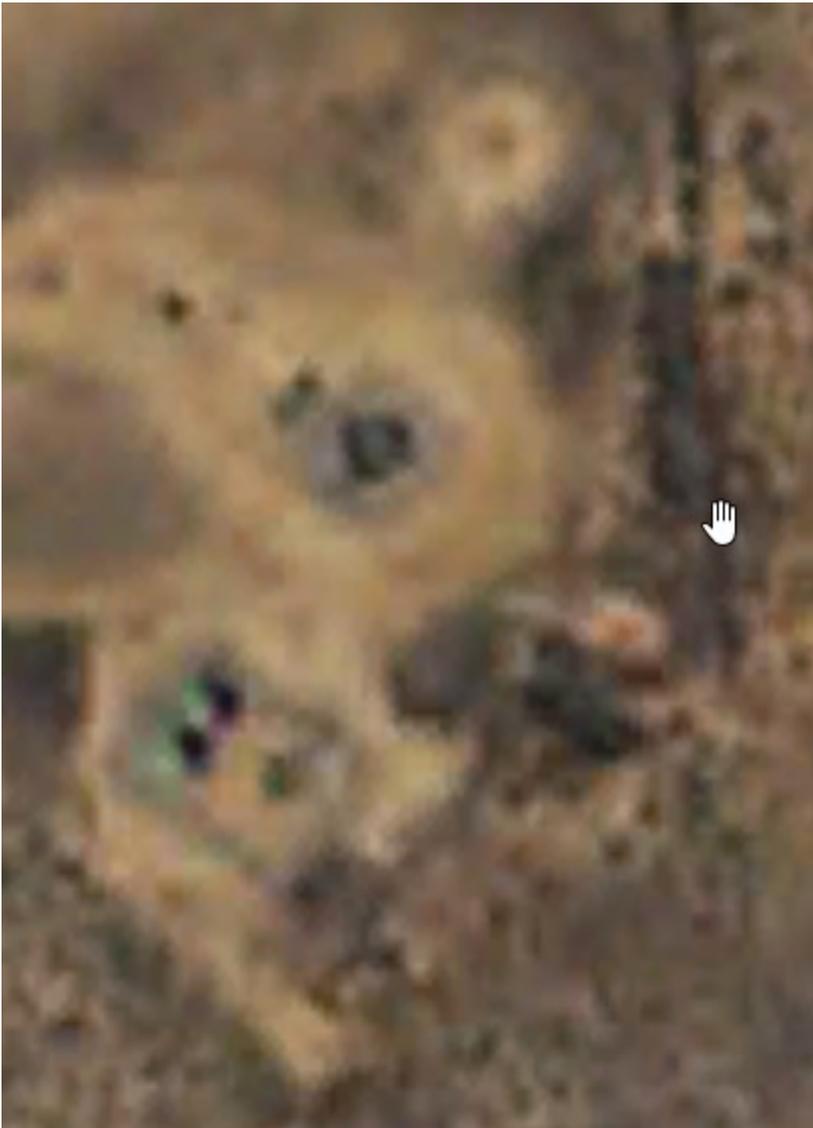
All – This location has 2 BGT permits. The current view shows that there is only 1 BGT on location. The 2009 view looks like there could have been a second BGT on location.

Clara – Will you check to see if there is any record of a BGT closure on your end.

Current View



2011 View



<b>Today's Date:</b>	1/26/2021				
<b>Well Name:</b>	SAN JUAN 28-7 UNIT 56	<b>Location:</b>	Sec: 13	Twn: 028N	Rng: 007
<b>API Number:</b>	30.039.07401	<b>Footage:</b>	980' FSL & 1000' FWL		
<b>Operator:</b>	Hilcorp Energy Company	<b>Area/Run/MSO:</b>	10	1007	Greg Vald
<b>Meter #:</b>	71-409-01		<b>Pipeline:</b>	ENT	
<b>INC Number:</b>	Verbal.JK.110220	<b>Agency:</b>	OCD	<b>Inspector:</b>	Jonathan K
<b>Type of INC:</b>	Verbal	<b>Photos Required:</b>	<b>Yes</b>	<b>Due Date:</b>	
<b>Issue of Concern:</b>	Well file has 2 C-144 below grade tank registrations in well file, only 1 bgt on location.				

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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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	Hilcorp Energy Company	OGRID	372171
Contact Name	Kandis Roland	Contact Telephone	(713) 757-5246
Contact email	kroland@hilcorp.com	Incident #	(assigned by OCD)
Contact mailing address	382 Road 3100 Aztec NM 87410		

### Location of Release Source

Latitude 36.65649 Longitude -107.52982  
*(NAD 27 in decimal degrees to 5 decimal places)*

Site Name	San Juan 28-7 Unit 56 BGT 1 (South Tank)	Site Type	Gas Well
Date Release Discovered	N/A	API# (if applicable)	30-039-07401

Unit Letter	Section	Township	Range	County
M	13	28N	7W	Rio Arriba

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

No release was encountered during the BGT Closure.

State of New Mexico  
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  Not Required	

### Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:   
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: <u>Kandis Roland</u> Title: <u>Operations/Regulatory Technician – Sr.</u> Signature: <u>Kandis Roland</u> Date: <u>10/19/2021</u> email: <u>kroland@hilcorp.com</u> Telephone: <u>(713) 757-5246</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____



Animas Environmental Services, LLC

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

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

Durango, Colorado  
970-403-3274

August 27, 2012

Ashley Maxwell  
ConocoPhillips  
San Juan Business Unit  
Office 216-2  
5525 Hwy 64  
Farmington, New Mexico 87401

**RE: Below Grade Tank Closure Report  
San Juan 28-7 #56  
Rio Arriba County, New Mexico**

Dear Ms. Maxwell:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (CoP) San Juan 28-7 #56, located in Rio Arriba County, New Mexico. Tank removal was completed by CoP contractors while AES was on site.

---

## 1.0 Site Information

### 1.1 Location

Site Name – San Juan 28-7 #56

Legal Description - SW $\frac{1}{4}$  SW $\frac{1}{4}$ , Section 13, T28N, R7W, Rio Arriba County, New Mexico

Well Latitude/Longitude - N36.65672 and W107.53050, respectively

BGT Latitude/Longitude - N36.65634 and W107.53065, respectively

Land Jurisdiction - Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, July 2012

### 1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and no prior ranking information was located. Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells are located within 1,000 feet of the location. Once on site, AES personnel furthered assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet below ground surface

Ashley Maxwell  
SJ 28-7 #56 BGT Closure Report  
August 27, 2012  
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(bgs), and the location is not within a well-head protection area. Distance to the nearest surface water, Adams Canyon, is located 4,400 feet to the east. The site location has been assigned a ranking score of 0 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

### 1.3 BGT Closure Assessment

AES was initially contacted by Doyle Clark, CoP representative, on July 18, 2012, and on July 19, 2012, Kelsey Christiansen and Heather Woods of AES met with a CoP representative at the location.

AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample.

---

## 2.0 Soil Sampling

On July 19, 2012, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples S-1 through S-5 were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH). Soil sample SC-1 was also field screened for chlorides and submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

### 2.1 Field Screening

#### 2.1.1 Volatile Organic Compounds

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

#### 2.1.2 Total Petroleum Hydrocarbons

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

Ashley Maxwell  
 SJ 28-7 #56 BGT Closure Report  
 August 27, 2012  
 Page 3 of 5

### 2.1.3 Chlorides

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

## 2.2 Laboratory Analyses

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

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;
- Total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B;
- Chloride per USEPA Method 300.0.

## 2.3 Field and Laboratory Analytical Results

Field screening for VOCs via OVM showed readings ranging from 0.0 ppm in S-4 up to 29.2 ppm in S-5. The field TPH concentrations ranged from 50.4 mg/kg in S-3 up to 104 mg/kg in S-2. Field chloride concentration was 100 mg/kg in SC-1. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results  
 SJ 28-7 #56 BGT Closure, July 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth below BGT (ft)</i>	<i>VOCs OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Field Chlorides (mg/kg)</i>
<b>NMOCDA Action Level (NMAC 19.15.17.13E)</b>			<b>--</b>	<b>100</b>	<b>250</b>
S-1	07/19/12	0.5	1.5	87.3	NA
S-2	07/19/12	0.5	0.6	<b>104</b>	NA
S-3	07/19/12	0.5	2.6	50.4	NA
S-4	07/19/12	0.5	0.0	50.8	NA
S-5	07/19/12	0.5	29.2	76.4	NA
SC-1	07/19/12	0.5	0.9	NA	100

NA = not analyzed

Ashley Maxwell  
 SJ 28-7 #56 BGT Closure Report  
 August 27, 2012  
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Laboratory analytical results showed that the benzene and total BTEX concentrations in SC-1 were less than 0.050 mg/kg and less than 0.25 mg/kg, respectively. TPH concentrations were reported below the laboratory detection limits of 5.0 mg/kg GRO and 9.8 mg/kg DRO. The laboratory chloride concentration was below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results, SJ 28-7 #56 BGT Closure, July 2012

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Depth (ft)</i>	<i>Benzene (mg/kg)</i>	<i>BTEX (mg/kg)</i>	<i>TPH-GRO (mg/kg)</i>	<i>TPH-DRO (mg/kg)</i>	<i>Chlorides (mg/kg)</i>
<b>NMOCD Action Level (NMAC 19.15.17.13E)</b>			<b>0.2</b>	<b>50</b>	<b>100</b>		<b>250</b>
SC-1	07/19/12	0.5	<0.050	<0.25	<5.0	<9.8	<30

### 3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Benzene and total BTEX concentrations in SC-1 were below the laboratory detection limits of 0.050 mg/kg and 0.25 mg/kg, respectively. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in one sample, S-2 with 104 mg/kg. However, laboratory results for TPH as GRO/DRO in SC-1 did not exceed the NMOCD threshold of 100 mg/kg. The chloride concentration for SC-1 was below the laboratory detection limit of 30 mg/kg. Based on field screening and laboratory analytical results for benzene, BTEX, TPH, and chlorides, no further work is recommended.

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

Sincerely,



Kelsey Christiansen  
 Environmental Scientist/Technologist

Ashley Maxwell  
SJ 28-7 #56 BGT Closure Report  
August 27, 2012  
Page 5 of 5

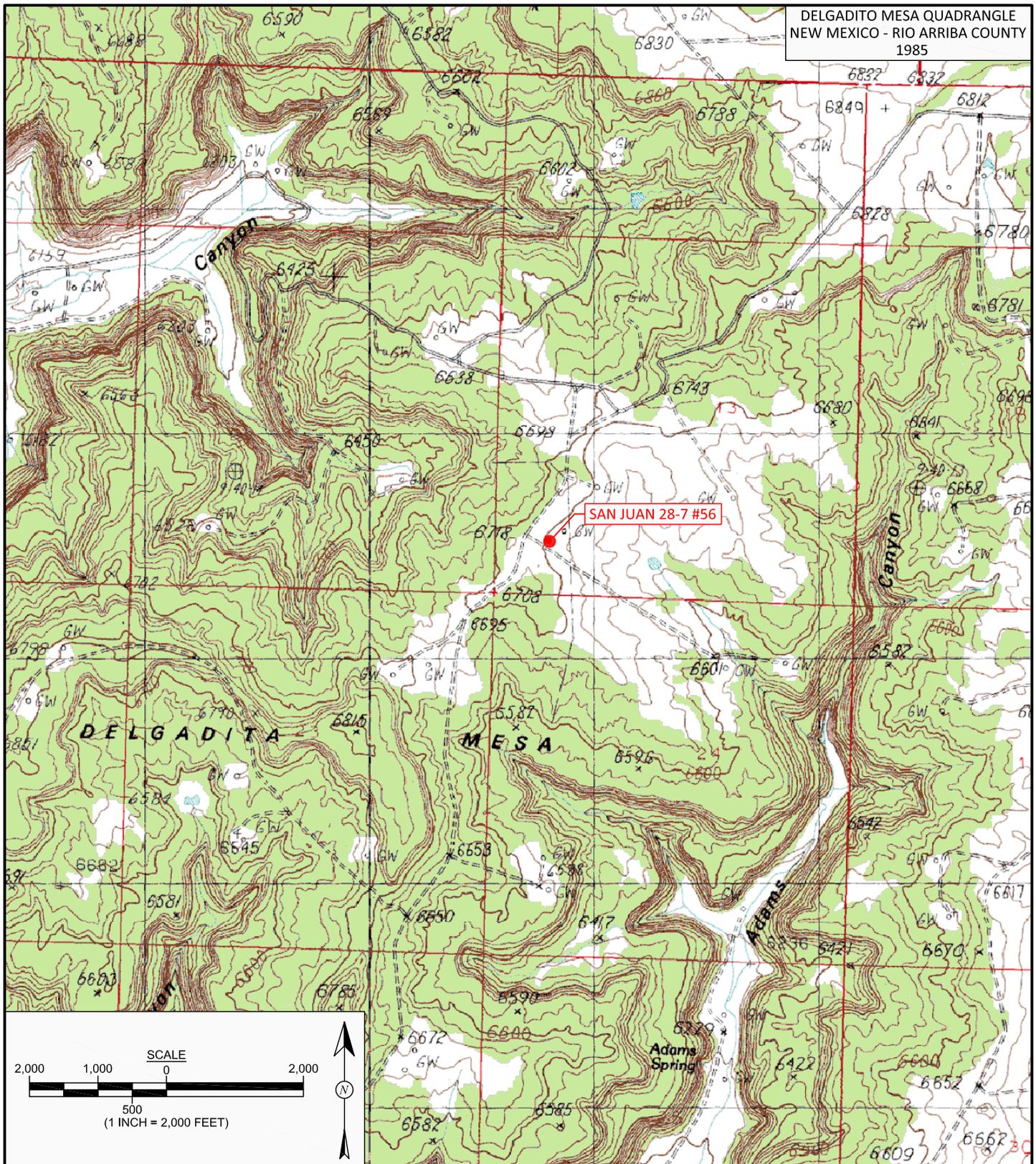


Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, July 2012
- AES Field Screening Report 071912
- Hall Analytical Report 1207901

S:\Animas 2000\2012 Projects\Conoco Phillips\SJ 28-7 #56\SJ 28-7 #56 BGT Closure Report 082712.docx



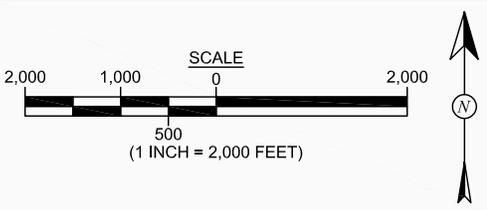
DELGADITO MESA QUADRANGLE  
NEW MEXICO - RIO ARRIBA COUNTY  
1985

SAN JUAN 28-7 #56

DELGADITA

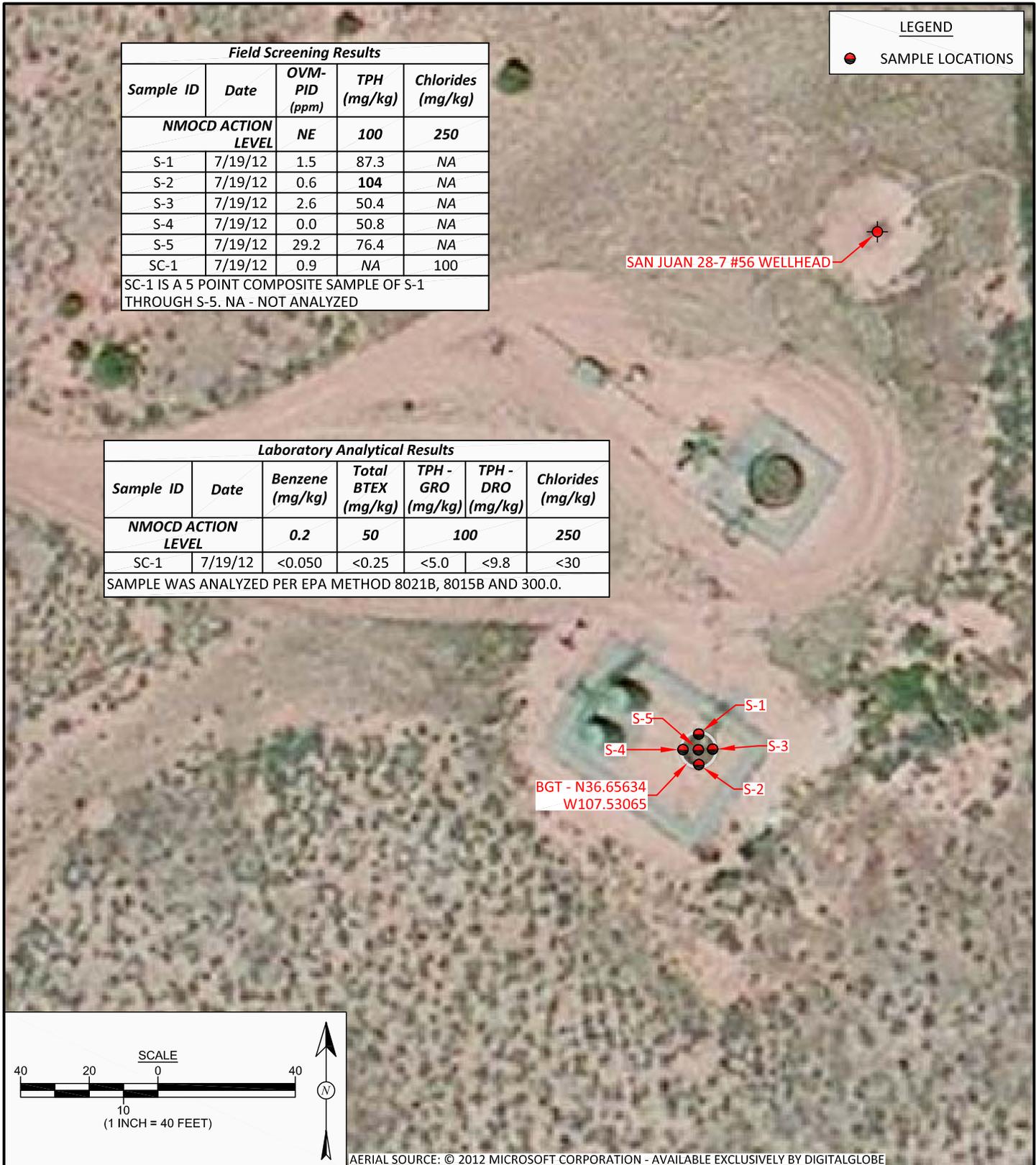
MESA

Adams Spring



<b>DRAWN BY:</b> K. Christiansen	<b>DATE DRAWN:</b> July 19, 2012
<b>REVISIONS BY:</b> K. Christiansen	<b>DATE REVISED:</b> July 19, 2012
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> August 3, 2012
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> August 3, 2012

**FIGURE 1**  
**TOPOGRAPHIC SITE LOCATION MAP**  
ConocoPhillips  
SAN JUAN 28-7 #56  
RIO ARRIBA COUNTY, NEW MEXICO  
SW $\frac{1}{4}$  SW $\frac{1}{4}$ , SECTION 13, T28N, R7W  
N36.65672, W107.53050



	<b>DRAWN BY:</b> C. Lameman	<b>DATE DRAWN:</b> August 3, 2012	<h2 style="text-align: center;">FIGURE 2</h2> <p style="text-align: center;"><b>AERIAL SITE MAP BELOW GRADE TANK CLOSURE JULY 2012</b></p> <p style="text-align: center;">ConocoPhillips SAN JUAN 28-7 #56 RIO ARRIBA COUNTY, NEW MEXICO SW<math>\frac{1}{4}</math> SW<math>\frac{1}{4}</math>, SECTION 13, T28N, R7W N36.65672, W107.53050</p>
	<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> August 3, 2012	
	<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> August 3, 2012	
	<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> August 3, 2012	

## AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche  
Farmington, NM 87401  
505-564-2281Durango, Colorado  
970-403-3274

Client: ConocoPhillips

Project Location: SJ 28-7 #56

Date: 7/19/2012

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	7/19/2012	9:50	North	1.5	NA	11:07	87.3	20.0	1	HW
S-2	7/19/2012	9:54	East	0.6	NA	11:12	104	20.0	1	HW
S-3	7/19/2012	9:58	South	2.6	NA	11:18	50.4	20.0	1	HW
S-4	7/19/2012	10:01	West	0.0	NA	11:21	50.8	20.0	1	HW
S-5	7/19/2012	10:03	Center	29.2	NA	11:25	76.4	20.0	1	HW
SC-1	7/19/2012	10:12	Composite	0.9	100	Laboratory Analyzed for BTEX (8021) and chlorides (300.0)				

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

\*Field TPH concentrations recorded may be below PQL.

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:



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

July 24, 2012

Debbie Watson

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

RE: COP San Juan 28-7 #56

OrderNo.: 1207901

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. 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. 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.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1207901

Date Reported: 7/24/2012

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-1

Project: COP San Juan 28-7 #56

Collection Date: 7/19/2012 10:12:00 AM

Lab ID: 1207901-001

Matrix: MEOH (SOIL)

Received Date: 7/20/2012 9:57:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b>						Analyst: <b>JMP</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	7/20/2012 11:04:24 AM
Surr: DNOP	118	77.6-140		%REC	1	7/20/2012 11:04:24 AM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/20/2012 11:40:52 AM
Surr: BFB	101	69.7-121		%REC	1	7/20/2012 11:40:52 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	1	7/20/2012 11:40:52 AM
Toluene	ND	0.050		mg/Kg	1	7/20/2012 11:40:52 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/20/2012 11:40:52 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/20/2012 11:40:52 AM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	7/20/2012 11:40:52 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>BRM</b>
Chloride	ND	30		mg/Kg	20	7/20/2012 11:33:59 AM

**Qualifiers:** \*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 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  
 RL Reporting Detection Limit  
 U Samples with CalcVal < MDL

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1207901

24-Jul-12

**Client:** Animas Environmental Services**Project:** COP San Juan 28-7 #56

Sample ID	<b>MB-2927</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>2927</b>	RunNo:	<b>4192</b>					
Prep Date:	<b>7/20/2012</b>	Analysis Date:	<b>7/20/2012</b>	SeqNo:	<b>120122</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	<b>LCS-2927</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>2927</b>	RunNo:	<b>4192</b>					
Prep Date:	<b>7/20/2012</b>	Analysis Date:	<b>7/20/2012</b>	SeqNo:	<b>120123</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.6	90	110			

Sample ID	<b>1207859-001AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>2927</b>	RunNo:	<b>4192</b>					
Prep Date:	<b>7/20/2012</b>	Analysis Date:	<b>7/20/2012</b>	SeqNo:	<b>120126</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	18	1.5	15.00	2.972	98.9	64.4	117			

Sample ID	<b>1207859-001AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 300.0: Anions</b>					
Client ID:	<b>BatchQC</b>	Batch ID:	<b>2927</b>	RunNo:	<b>4192</b>					
Prep Date:	<b>7/20/2012</b>	Analysis Date:	<b>7/20/2012</b>	SeqNo:	<b>120127</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	17	1.5	15.00	2.972	96.3	64.4	117	2.21	20	

**Qualifiers:**

\*/X Value exceeds Maximum Contaminant Level.  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 R RPD 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  
 RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1207901

24-Jul-12

**Client:** Animas Environmental Services

**Project:** COP San Juan 28-7 #56

Sample ID <b>MB-2911</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>2911</b>		RunNo: <b>4133</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/19/2012</b>		SeqNo: <b>118627</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		114	77.6	140			

Sample ID <b>LCS-2911</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2911</b>		RunNo: <b>4133</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/19/2012</b>		SeqNo: <b>118783</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.1	52.6	130			
Surr: DNOP	4.6		5.000		91.0	77.6	140			

Sample ID <b>1207748-001CMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>2911</b>		RunNo: <b>4172</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/20/2012</b>		SeqNo: <b>120061</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.8	49.21	33.03	73.8	57.2	146			
Surr: DNOP	4.7		4.921		95.0	77.6	140			

Sample ID <b>1207748-001CMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015B: Diesel Range Organics</b>							
Client ID: <b>BatchQC</b>	Batch ID: <b>2911</b>		RunNo: <b>4172</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/20/2012</b>		SeqNo: <b>120062</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	75	10	50.15	33.03	83.6	57.2	146	7.81	24.5	
Surr: DNOP	4.7		5.015		94.2	77.6	140	0	0	

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1207901

24-Jul-12

**Client:** Animas Environmental Services

**Project:** COP San Juan 28-7 #56

Sample ID <b>MB-2915</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015B: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>2915</b>		RunNo: <b>4189</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/21/2012</b>		SeqNo: <b>121067</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		99.7	69.7	121			

Sample ID <b>LCS-2915</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015B: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2915</b>		RunNo: <b>4189</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/21/2012</b>		SeqNo: <b>121068</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	85	115			
Surr: BFB	1000		1000		104	69.7	121			

**Qualifiers:**

- \*X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD 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
- RL Reporting Detection Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1207901

24-Jul-12

**Client:** Animas Environmental Services

**Project:** COP San Juan 28-7 #56

Sample ID <b>MB-2915</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>2915</b>		RunNo: <b>4189</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/21/2012</b>		SeqNo: <b>121132</b>		Units: <b>mg/Kg</b>					
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	1.1		1.000		110	80	120			

Sample ID <b>LCS-2915</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>2915</b>		RunNo: <b>4189</b>							
Prep Date: <b>7/19/2012</b>	Analysis Date: <b>7/21/2012</b>		SeqNo: <b>121133</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.050	1.000	0	97.6	76.3	117			
Toluene	0.98	0.050	1.000	0	98.4	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.9	77	116			
Xylenes, Total	3.0	0.10	3.000	0	100	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

**Qualifiers:**

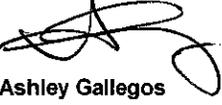
- |  |  |
|--|--|
| *X Value exceeds Maximum Contaminant Level.  | B Analyte detected in the associated Method Blank    |
| E Value above quantitation range             | H Holding times for preparation or analysis exceeded |
| J Analyte detected below quantitation limits | ND Not Detected at the Reporting Limit               |
| R RPD outside accepted recovery limits       | RL Reporting Detection Limit                         |



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87105  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **Animas Environmental** Work Order Number: **1207901**

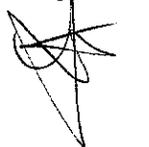
Received by/date: 

**07/20/12**  
 7/20/2012 9:57:00 AM

Logged By: **Ashley Gallegos**

Completed By: **Ashley Gallegos**

7/20/2012 10:02:07 AM 

Reviewed By: 

**07/20/12**

**Chain of Custody**

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

**Log In**

- 4. Coolers are present? (see 19. for cooler specific information) Yes  No  NA
- 5. Was an attempt made to cool the samples? Yes  No  NA
- 6. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA
- 7. Sample(s) in proper container(s)? Yes  No
- 8. Sufficient sample volume for indicated test(s)? Yes  No
- 9. Are samples (except VOA and ONG) properly preserved? Yes  No
- 10. Was preservative added to bottles? Yes  No  NA
- 11. VOA vials have zero headspace? Yes  No  No VOA Vials
- 12. Were any sample containers received broken? Yes  No
- 13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes  No  # of preserved bottles checked for pH:
- 14. Are matrices correctly identified on Chain of Custody? Yes  No  (<2 or >12 unless noted)
- 15. Is it clear what analyses were requested? Yes  No  Adjusted?
- 16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes  No  Checked by:

**Special Handling (if applicable)**

- 17. 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: \_\_\_\_\_

18. Additional remarks:

**Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes			



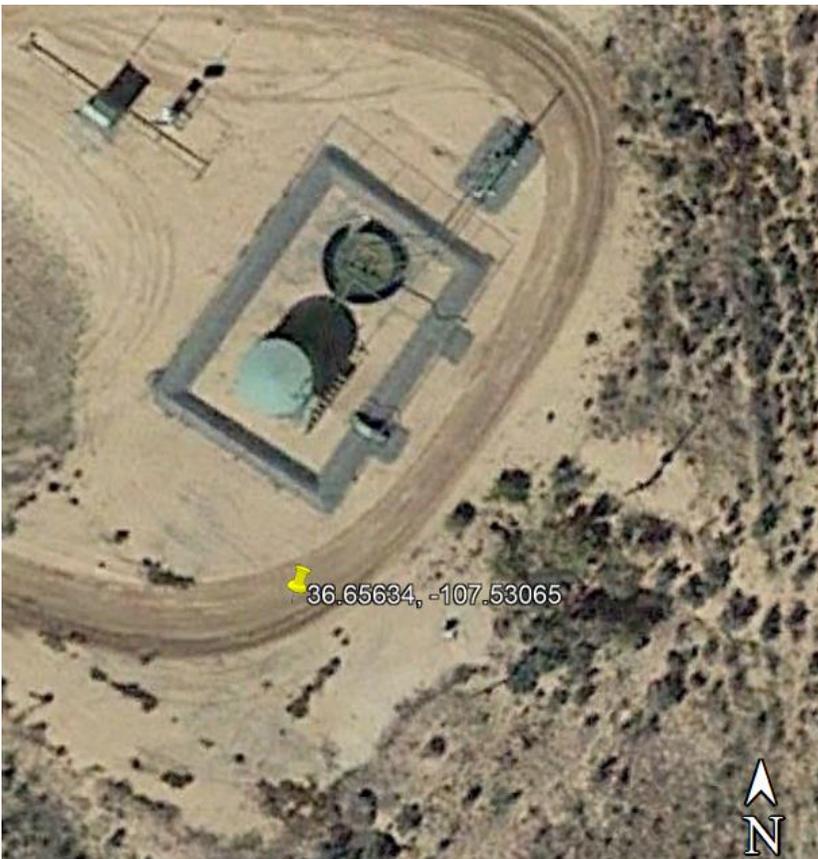
San Juan 28-7 Unit 56 – BGT 1 (South Tank)  
30-039-07401

Record Clean-up: BGT was closed and sampled but the C-144 BGT closure was never filed. Location has been backfilled and reclaimed. Below is a before and after aerial of the location.

2011 Aerial



Current Aerial



**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
 Action 56709

**CONDITIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 56709
	Action Type: [C-144] Below Grade Tank Plan (C-144B)

**CONDITIONS**

Created By	Condition	Condition Date
cwhitehead	None	10/21/2021