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

15878

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

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

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

1

Operator ConocoPhillips Company OGRID # 217817

Address PO BOX 4289, Farmington, NM 87499

OIL CONS DIV DIST 3

MAR 29 2017

Facility or well name SAN JUAN 28 7 UNIT 71

API Number 30 039 07244 OCD Permit Number

U/L or Qtr/Qtr L Section 34 Township 28N Range 7W County Rio Arriba

Center of Proposed Design Latitude 36 61533 N Longitude 107 56601 W NAD ☐1927 ☒ 1983

Surface Owner ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2

☐ **Pit** Subsection F G or J of 19 15 17 11 NMAC

* 72 hour notification not provided

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

27

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 Denise Title Environmental Specialist **Approval Date** 3/30/2017

OCD Permit Number _____

19

Closure Report (required within 60 days of closure completion) 19 15 17 13 NMAC

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

☒ **Closure Completion Date** 5/30/2013

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 3/28/17

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

ConocoPhillips Company
San Juan Basin
Below Grade Tank Closure Report

Lease Name San Juan 28-7 Unit 71
API No 30 039 07244

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 **(Missing)**

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

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 in accordance with 19 15 29 NMAC

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 E 30th St , Farmington NM 87402**	Telephone No **505 326 9786**
Facility Name **San Juan 28 7 Unit 71**	Facility Type **Natural Gas Well**

Surface Owner **Federal**	Mineral Owner **Federal**	API No **30039072440000**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	**34**	**28N**	**07W**	**1840**	**South**	**1150**	**East**	**Rio Arriba**

Latitude 36 615612 Longitude 107 56526

NATURE OF RELEASE

Type of Release **Unknown**	Volume of Release **Unknown**	Volume Recovered **100 yds**
Source of Release **Below Grade Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **05 30 2013**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES To Whom? **N/A**	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES Volume Impacting the Watercourse	

If a Watercourse was Impacted Describe Fully *

N/A

Describe Cause of Problem and Remedial Action Taken *

Below Grade Tank Closure Activities

Describe Area Affected and Cleanup Action Taken *

Historical impacted soil was found during the BGT closure for the subject well The excavation was 21' x 16' x 8' in depth and 100 yds of contaminated soil was transported to IEI land farm and 100 yds of clean soil was backfilled 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	OIL CONSERVATION DIVISION
Printed Name **Lisa M Hunter**	Approved by Environmental Specialist
Title **Field Environmental Specialist**	Approval Date 3/20/14 Expiration Date
E mail Address **Lisa Hunter@cop com**	Conditions of Approval NAK1323157135 Attached ☐
Date **08 05 13** Phone **505 326 9786**	

* 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

July 24 2013

Lisa Hunter
ConocoPhillips
San Juan Business Unit
Office 214 4
5525 Hwy 64
Farmington New Mexico 87401

Via electronic mail to SJBUE Team@ConocoPhillips com

RE Below Grade Tank Closure and Final Excavation Report
San Juan 28 7 #71
Rio Arriba County, New Mexico

Dear Ms Hunter

On May 30 2013 Animas Environmental Services LLC (AES) completed below grade tank (BGT) closure sampling and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 28 7 #71 located in Rio Arriba County New Mexico A historical release was discovered during BGT closure sampling at the location and the final excavation was completed by contractors while AES was on location on May 30 2013

1 0 Site Information

1 1 Location

Site Name – San Juan 28 7 #71
Legal Description – NW¼ SW¼ Section 34 T28N R7W Rio Arriba County New Mexico
Well Latitude/Longitude – N36 61562 and W107 56590 respectively
BGT Latitude/Longitude – N36 61533 and W107 56601 respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1 Topographic Site Location Map
Figure 2 Aerial Site Map May 2013

1 2 NMOCD Ranking

Prior to site work the New Mexico Oil Conservation Division (NMOCD) database was reviewed and a Pit Remediation and Closure Report dated February 2000 for the San Juan 28 7 #71 reported the depth to groundwater as greater than 100 feet below

ground surface (bgs) The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells and no registered water wells were reported to be located within 1 000 feet of the location Additionally Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (http //ford nmt edu/react/project html) were accessed to aid in the identification of downgradient surface water

Once on site AES personnel further 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 bgs based on an elevation differential of greater than 100 feet between the location and Carrizo Canyon An unnamed wash which discharges to Carrizo Canyon is located approximately 55 feet south of the location Based on this information the location was assessed a ranking score of 20

1 3 Assessments

AES was initially contacted by Doyle Clark CoP representative on May 29 2013 and on May 30 2013 Deborah Watson and Jesse Christopherson of AES mobilized to the location AES personnel collected six soil samples from below the BGT liner Four samples were collected from the perimeter of the BGT footprint one sample was collected from the center of the BGT footprint and one sample (SC 1) was composited from the four perimeter samples and one center sample Sample locations are shown on Figure 2

Based on the field screening results from the BGT assessment AES recommended an area of excavation and provided excavation guidance while onsite on May 30 2013 AES personnel collected a total of five confirmation soil samples (SC 2 through SC 6) from the walls and base of the excavation The final excavation measured approximately 21 feet by 16 feet by 8 feet in depth Sample locations and final excavation extents are presented on Figure 3

2 0 Soil Sampling

On May 30 2013 AES personnel conducted field screening and collected five soil samples (S 1 through S 5) and one 5 point composite (SC 1) from below the BGT Soil samples were collected from approximately 0 5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH) Soil sample SC 1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis In addition AES personnel collected five 5 point

composite (SC 2 through SC 6) soil samples from the sidewalls and base of the final excavation for confirmation field screening of VOCs and TPH

2 1 Field Screening

2 1 1 Volatile Organic Compounds

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

2 1 2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for TPH per USEPA Method 418 1 using a Buck Scientific Model HC 404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck) A 3 point calibration was completed prior to conducting soil analyses Field analytical protocol followed AES s *Standard Operating Procedure Field Analysis Total Petroleum Hydrocarbons per EPA Method 418 1*

2 1 3 Chlorides

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

2 2 Laboratory Analyses

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

- Benzene toluene ethylbenzene and xylene (BTEX) per U S Environmental Protection Agency (USEPA) Method 8021B and
- Chloride per USEPA Method 300 0

2 3 Field and Laboratory Analytical Results

BGT closure field screening readings for VOCs via OVM ranged from 0 1 ppm in S 1 up to 340 ppm in S 5 Field TPH concentrations ranged from 86 5 mg/kg in S 3 to 1 120 mg/kg in S 5 The field chloride concentration in SC 1 was 60 mg/kg

Final excavation field screening results for VOCs via OVM concentrations ranged from 0 0 ppm in SC 5 to 2 3 ppm in SC 6 Field TPH concentrations ranged from 44 2 mg/kg in

SC 3 up to 87 8 mg/kg in SC 4 Field screening results are summarized in Table 1 and presented on Figure 2 The AES Field Screening Report is attached

Table 1 Soil Field Screening VOCs TPH and Chloride Results
San Juan 28 7 #71 BGT Closure and Final Excavation May 2013

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action Level* (NMAC 19 15 17 13E)			***100***	***100***	***250***
S 1	5/30/13	0 5	0 1	87 2	NA
S 2	5/30/13	0 5	0 2	**135**	NA
S 3	5/30/13	0 5	0 2	86 5	NA
S 4	5/30/13	0 5	0 2	**312**	NA
S 5	5/30/13	0 5	340	**1,120**	NA
SC 1	5/30/13	0 5	28 6	NA	60
SC 2	5/30/13	1 to 8	0 1	70 0	NA
SC 3	5/30/13	1 to 8	0 3	44 2	NA
SC 4	5/30/13	1 to 8	0 4	87 8	NA
SC 5	5/30/13	1 to 8	0 0	64 7	NA
SC 6	5/30/13	8	2 3	71 1	NA

NA not analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks Spills and Releases* (August 1993) and *NMAC 19 15 17 13E*

Laboratory analytical results reported benzene and total BTEX concentrations in SC 1 as less than 0 046 mg/kg and less than 0 23 mg/kg respectively The laboratory chloride concentration was reported at 35 mg/kg Laboratory analytical results are summarized in Table 2 and included on Figure 2 Laboratory analytical reports are attached

Table 2 Soil Laboratory Analytical Results
San Juan 28 7 #71 BGT Closure and Final Excavation May 2013

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level (NMAC 19 15 17 13E)			***0 2***	***50***	***100***		***250***
SC 1	5/30/13	0 5	<0 046	<0 23	NA	NA	35

NA not analyzed

3 0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19 15 17 13E Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in three samples S 2 (135 mg/kg) S 4 (312 mg/kg) and S 5 (1 120 mg/kg) However benzene and total BTEX concentrations in SC 1 were below the NMOCD action levels of 0 2 mg/kg and 50 mg/kg respectively Chloride concentrations in SC 1 were below the NMOCD action level of 250 mg/kg

Based on field screening results during the BGT closure assessment a release was confirmed at the San Juan 28 7 #71 and AES provided excavation guidance while onsite Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks Spills and Releases* (August 1993) and the site was assigned a ranking of 20 Field screening results for VOCs via OVM were below the NMOCD action level of 100 ppm in each confirmation sample with the highest concentration of 2 3 ppm reported in SC 6 Field TPH concentrations were also reported below the NMOCD action level of 100 mg/kg in each sample collected from the base and walls of the final excavation with the highest concentration reported in SC 4 (87 8 mg/kg)

Based on excavation of petroleum hydrocarbon impacted soils field screening and laboratory analytical results for benzene total BTEX TPH and chlorides no further work is recommended at the San Juan 28 7 #71 If you have any questions about this report or site conditions please do not hesitate to contact Deborah Watson at (505) 564 2281

Sincerely

Landrea R Cupps

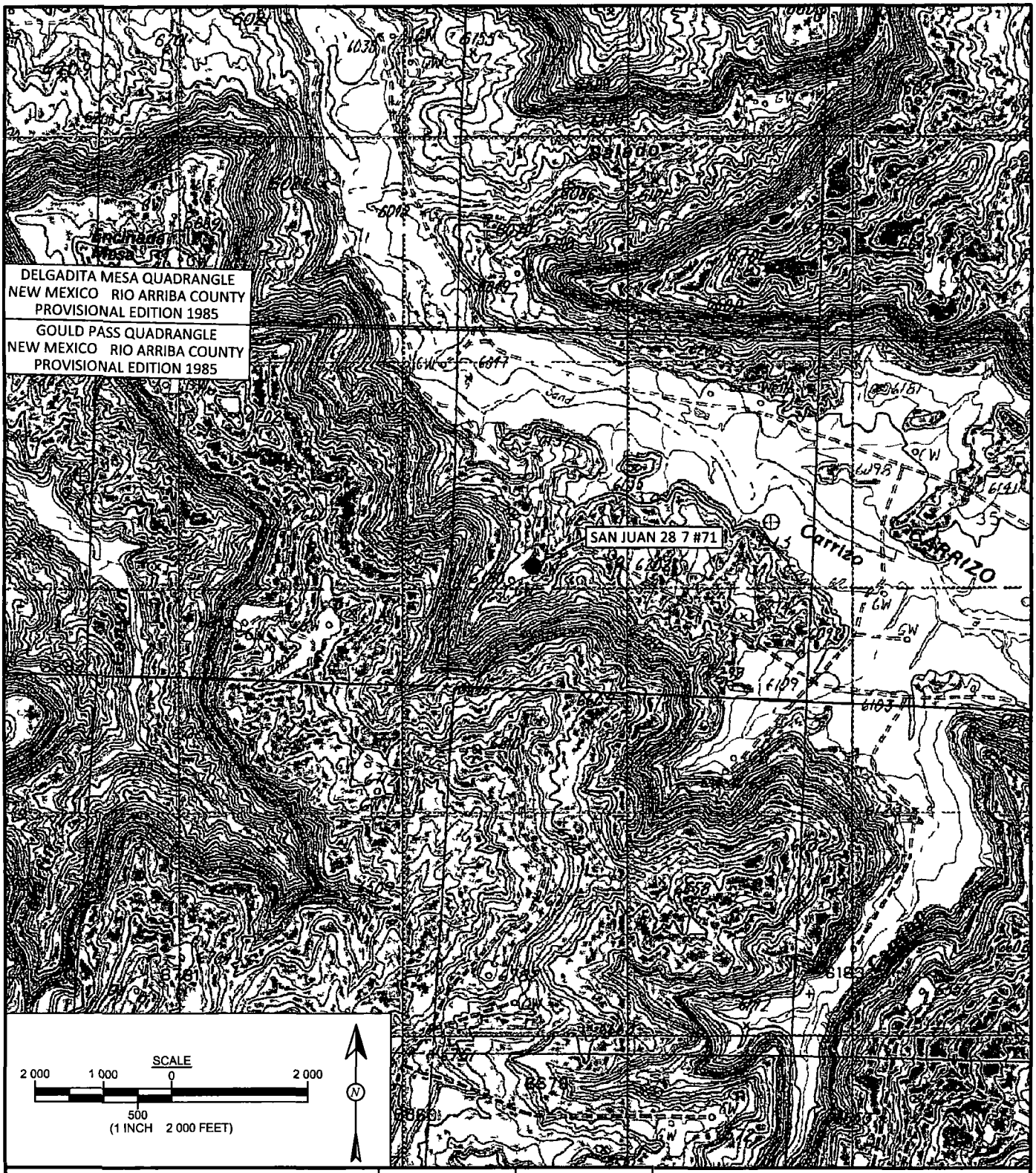
Landrea Cupps
Environmental Scientist

Elizabeth McNally P E

Attachments

Figure 1 Topographic Site Location Map
Figure 2 Aerial Site Map May 2013
Figure 3 Final Excavation Sample Locations and Results May 2013
AES Field Screening Report 053013
Hall Analytical Report 1306008

R \Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 28 7 #71\CoP San Juan 28 7 #71 BGT Closure and Final Excavation Report 072413 docx



AES

Animas Environmental Services LLC

DRAWN BY	DATE DRAWN
C Lameman	June 4 2013
REVISIONS BY	**DATE REVISED**
C Lameman	June 4 2013
CHECKED BY	**DATE CHECKED**
D Watson	June 4 2013
APPROVED BY	**DATE APPROVED**
E McNally	June 4 2013

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
SAN JUAN 28 7 #71
NW¼ SW¼ SECTION 34 T28N R7W
RIO ARRIBA COUNTY NEW MEXICO
N36 61562 W107 56590

LEGEND

● SAMPLE LOCATIONS

Field Screening Results

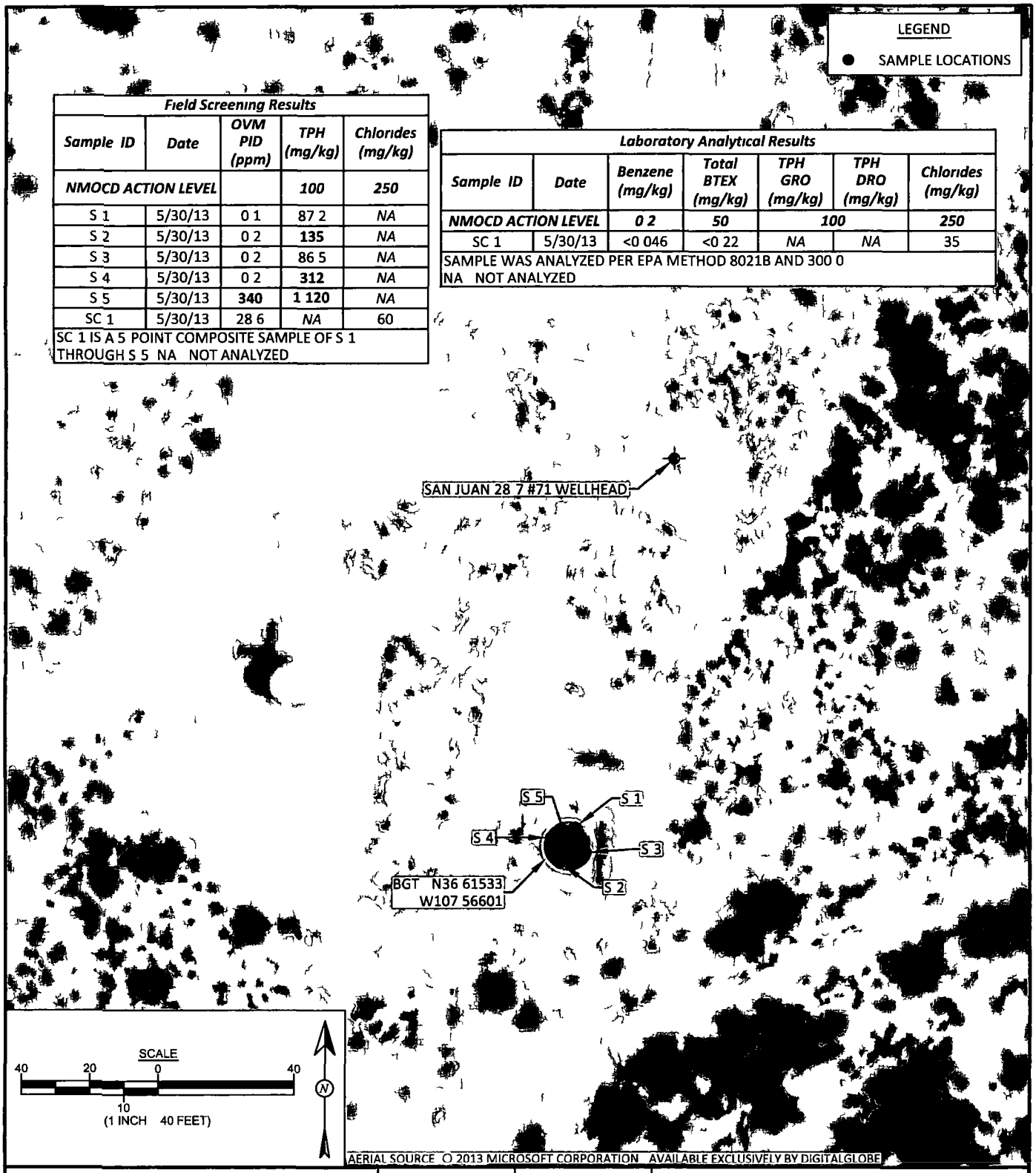
Sample ID	Date	OVM PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			100	250
S 1	5/30/13	0 1	87 2	NA
S 2	5/30/13	0 2	135	NA
S 3	5/30/13	0 2	86 5	NA
S 4	5/30/13	0 2	312	NA
S 5	5/30/13	340	1 120	NA
SC 1	5/30/13	28 6	NA	60

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

Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0 2	50	100		250
SC 1	5/30/13	<0 046	<0 22	NA	NA	35

SAMPLE WAS ANALYZED PER EPA METHOD 8021B AND 300 0
NA NOT ANALYZED



Animas Environmental Services LLC

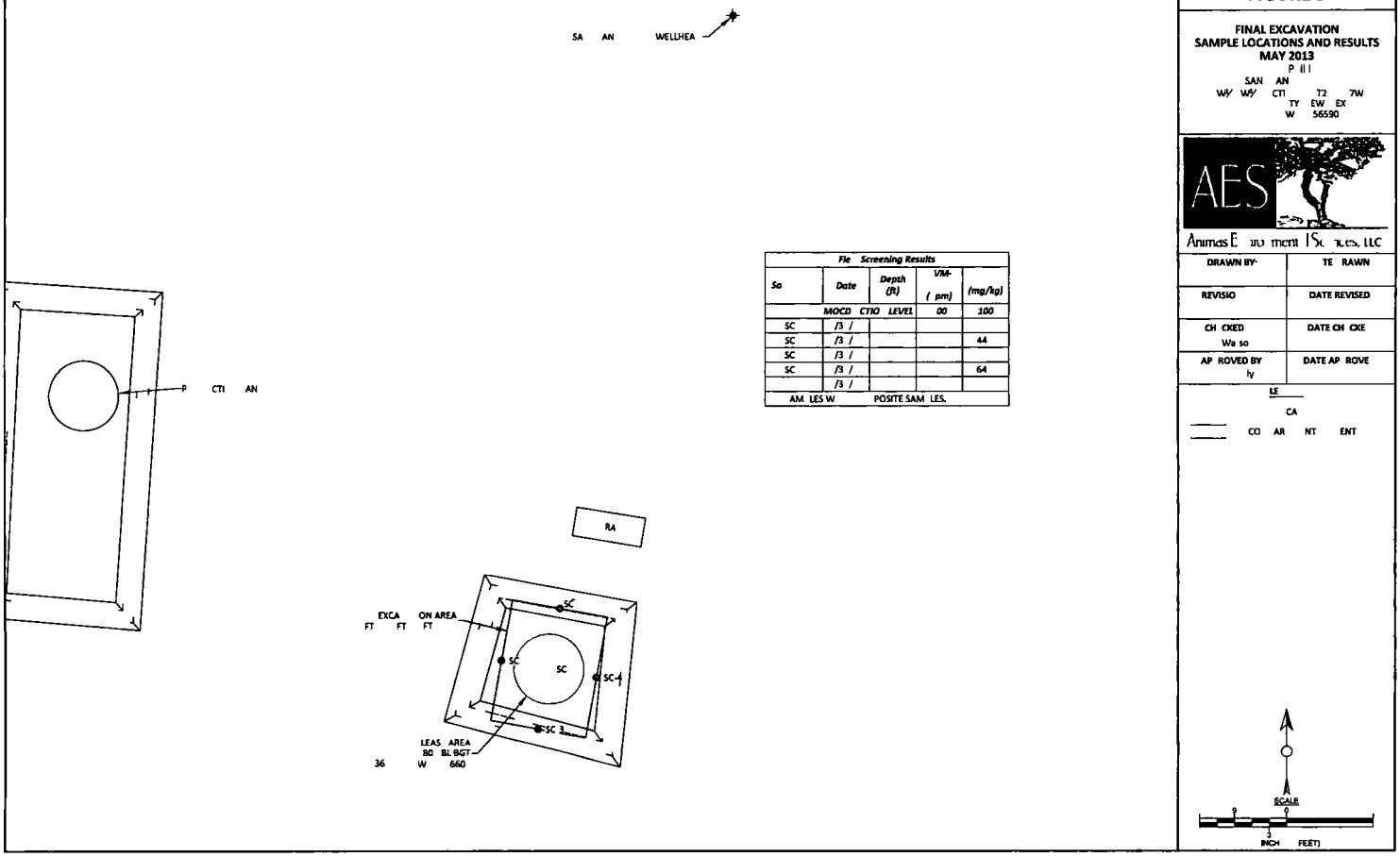
DRAWN BY: C Lameman	DATE DRAWN: June 4 2013
REVISIONS BY: C Lameman	DATE REVISED: June 4 2013
CHECKED BY: D Watson	DATE CHECKED: June 4 2013
APPROVED BY: E McNally	DATE APPROVED: June 4 2013

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
MAY 2013
ConocoPhillips
SAN JUAN 28 7 #71
NW¼ SW¼ SECTION 34 T28N R7W
RIO ARRIBA COUNTY NEW MEXICO
N36 61562 W107 56590

FIGURE 3

FINAL EXCAVATION
SAMPLE LOCATIONS AND RESULTS
MAY 2013
P III
SAN AN
W/ W/ CTI T2 7W
TY EW EX
W 56590



Fie Screening Results				
Sa	Date	Depth (ft)	VM- (pm)	(mg/kg)
	MOCD CTIO LEVEL		00	100
SC	/3 /			
SC	/3 /			44
SC	/3 /			
SC	/3 /			64
	/3 /			
AM LES W		POSITE SAM LES.		

DRAWN BY-	TE RAWN
REVISIO	DATE REVISED
CH CKED Wa so	DATE CH CKE
AP ROVED BY Iy	DATE AP ROVE

LE
CA
CO AR NT ENT

SCALE
0
3
INCH FEET)

Animas E ıo ment ISc ıkes, LLC

AES Field Screening Report

Animas Environmental Services LLC
www.animasenvironmental.com
624 E Coma h
Fa mingto NM 87401
505 564-2281
Du a g Colo ado
970 403 3084

Client ConocoPhillips

Project Location San Juan 28 7 #71

Date 5/30/2013

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	5/30/2013	10 20	BGT North	0 1	NA	11 08	87 2	20 0	1	DAW
S 2	5/30/2013	10 22	BGT South	0 2	NA	11 15	135	20 0	1	DAW
S 3	5/30/2013	10 23	BGT East	0 2	NA	11 21	86 5	20 0	1	DAW
S 4	5/30/2013	10 24	BGT West	0 2	NA	11 23	312	20 0	1	DAW
S 5	5/30/2013	10 25	BGT Center	340	NA	11 26	1 120	20 0	1	DAW
SC 1	5/30/2013	10 35	BGT Composite	28 6	60	*Not Analyzed for TPH*				
SC 2	5/30/2013	13 30	North Wall	0 1	NA	13 56	70 0	20 0	1	DAW
SC 3	5/30/2013	13 50	South Wall	0 3	NA	15 05	44 2	20 0	1	DAW
SC-4	5/30/2013	13 18	East Wall	0 4	NA	14 06	87 8	20 0	1	DAW
SC 5	5/30/2013	13 13	West Wall	0 0	NA	14 10	64 7	20 0	1	DAW
SC 6	5/30/2013	13 07	Excavation Base	2 3	NA	14 14	71 1	20 0	1	DAW

ND Not Detected at the Reporting Limit
NA Not Analyzed
DF Dilution Factor
Field TPH concentrations recorded may be below PQL

Total Petroleum Hydrocarbons USEPA 418 1

Analyst Deborah Watson

Report Finalized 05/30/13

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

June 07 2013

Debbie Watson

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

RE COP San Juan 28 7 #71 OrderNo 1306008

Dear Debbie Watson

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/1/2013 for the analyses presented in the following report

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

Sincerely

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1306008**
Date Reported **6/7/2013**

Hall Environmental Analysis Laboratory, Inc

CLIENT Animas Environmental
Project COP San Juan 28 7 #71
Lab ID 1306008 001 **Matrix** SOIL

Client Sample ID SC 1
Collection Date 5/30/2013 10 35 00 AM
Received Date 6/1/2013 11 00 00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B VOLATILES						Analyst **NSB**	
Benzene	ND	0 046		mg/Kg	1	6/5/2013 12 05 03 AM	7716
Toluene	ND	0 046		mg/Kg	1	6/5/2013 12 05 03 AM	7716
Ethylbenzene	ND	0 046		mg/Kg	1	6/5/2013 12 05 03 AM	7716
Xylenes Total	ND	0 092		mg/Kg	1	6/5/2013 12 05 03 AM	7716
Surr 4 Bromofluorobenzene	102	80 120		% REC	1	6/5/2013 12 05 03 AM	7716
EPA METHOD 300 0 ANIONS						Analyst **JRR**	
Chloride	35	15		mg/Kg	10	6/5/2013 7 38 13 PM	7759

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 for VOA and TOC only
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc

WO# **1306008**

07 Jun 13

Client Animas Environmental
Project COP San Juan 28 7 #71

Sample ID	MB 7759	SampType	MBLK	TestCode	EPA Method 300 0 Anions					
Client ID	PBS	Batch ID	7759	RunNo	11115					
Prep Date	6/5/2013	Analysis Date	6/5/2013	SeqNo	314517	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	% REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1 5								

Sample ID	LCS 7759	SampType	LCS	TestCode	EPA Method 300 0 Anions					
Client ID	LCSS	Batch ID	7759	RunNo	11115					
Prep Date	6/5/2013	Analysis Date	6/5/2013	SeqNo	314518	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	% REC	LowLimit	HighLimit	% RPD	RPDLimit	Qual
Chloride	14	1 5	15 00	0	92 6	90	110			

Sample ID	1305C03 001BMS	SampType	MS	TestCode	EPA Method 300 0 Anions					
Client ID	BatchQC	Batch ID	7759	RunNo	11115					
Prep Date	6/5/2013	Analysis Date	6/5/2013	SeqNo	314520	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	% REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	7 5	15 00	2 229	81 9	58 8	109			

Sample ID	1305C03 001BMSD	SampType	MSD	TestCode	EPA Method 300 0 Anions					
Client ID	BatchQC	Batch ID	7759	RunNo	11115					
Prep Date	6/5/2013	Analysis Date	6/5/2013	SeqNo	314521	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	% REC	LowLimit	HighLimit	% RPD	RPDLimit	Qual
Chloride	14	7 5	15 00	2 229	81 3	58 8	109	0 591	20	

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 for VOA and TOC only
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc

WO# **1306008**

07 Jun 13

Client Animas Environmental
Project COP San Juan 28 7 #71

Sample ID	MB 7716	SampType	MBLK	TestCode	EPA Method 8021B Volatiles					
Client ID	PBS	Batch ID	7716	RunNo	11057					
Prep Date	6/3/2013	Analysis Date	6/4/2013	SeqNo	313419	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		99 9	80	120			

Sample ID	LCS 7716	SampType	LCS	TestCode	EPA Method 8021B Volatiles					
Client ID	LCSS	Batch ID	7716	RunNo	11057					
Prep Date	6/3/2013	Analysis Date	6/4/2013	SeqNo	313420	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1 0	0 050	1 000	0	104	80	120			
Toluene	1 0	0 050	1 000	0	104	80	120			
Ethylbenzene	1 0	0 050	1 000	0	104	80	120			
Xylenes Total	3 1	0 10	3 000	0	104	80	120			
Surr 4 Bromofluorobenzene	1 1		1 000		107	80	120			

Sample ID	1305C20 001AMS	SampType	MS	TestCode	EPA Method 8021B Volatiles					
Client ID	BatchQC	Batch ID	7716	RunNo	11057					
Prep Date	6/3/2013	Analysis Date	6/4/2013	SeqNo	313427	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1 0	0 047	0 9443	0 01037	107	67 2	113			
Toluene	1 0	0 047	0 9443	0 01610	108	62 1	116			
Ethylbenzene	1 0	0 047	0 9443	0	108	67 9	127			
Xylenes Total	3 1	0 094	2 833	0 01470	108	60 6	134			
Surr 4 Bromofluorobenzene	1 0		0 9443		106	80	120			

Sample ID	1305C20 001AMSD	SampType	MSD	TestCode	EPA Method 8021B Volatiles					
Client ID	BatchQC	Batch ID	7716	RunNo	11057					
Prep Date	6/3/2013	Analysis Date	6/4/2013	SeqNo	313428	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1 1	0 047	0 9443	0 01037	110	67 2	113	3 18	14 3	
Toluene	1 1	0 047	0 9443	0 01610	111	62 1	116	2 64	15 9	
Ethylbenzene	1 1	0 047	0 9443	0	113	67 9	127	4 47	14 4	
Xylenes Total	3 2	0 094	2 833	0 01470	112	60 6	134	4 00	12 6	
Surr 4 Bromofluorobenzene	1 0		0 9443		106	80	120	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 for VOA and TOC only
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE
Albuquerque NM 87109
TEL 505 345 3975 FAX 505 345-410
Website www hallenvironmental com

Sample Log-In Check List

Client Name Animas Environmental Work Order Number 1306008 RcptNo 1

Received by/date AF 06/01/13

Logged By Anne Thorne 6/1/2013 11 00 00 AM Anne Thorne

Completed By Anne Thorne 6/3/2013 Anne Thorne

Reviewed By 6/03/13

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?	Couner		

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	4 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

Project Name: CoP San Juan 28-7 #71

Project #:

Project Manager: D Watson

Sampler: D Watson

On Ice: Yes No

Sample Temperature:

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. 1306003	BTEX + [redacted] (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAHs (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCBs	8260B (VOA)	8270 (Semi VOA)	300.0 Chlorides				A, R, bbles (Y or N)
5/30/13	1035	Soil	SC-1	4oz	—	-001	X											X				

Analysis Request

Date	Time	Relinquished by	Received by	Date	Time
5/31/13	1052	Deborah Watson	Chrystie Wade	5/31/13	1052
5/31/13	1135	Christie Walker		6/1/13	11:00

Remarks: Bill to ConocoPhillips
WO 10349277
ach code T110
User Pamale
Area 23
Supervisor Mick Ferrari
ordered by Doyle Clark

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.