

District I  
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
July 21, 2008

District II  
1301 W. Grand Ave., Artesia, NM 88210

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

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

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

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

11 878

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

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

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

1  
Operator: ConocoPhillips Company OGRID#: 217817  
Address: PO Box 4289, Farmington, NM 87499  
Facility or well name: San Juan 29-6 Unit 101N  
API Number: 30-039-30721 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr: H(SE/NE) Section: 36 Township 29N Range: 6W County: RIO ARRIBA  
Center of Proposed Design: Latitude: 36.68222 °N Longitude: 107.40836 °W NAD:  ###  1983  
Surface Owner:  Federal  State  Private  Tribal Trust or Indian Allotment

2  
 **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary:  Drilling  Workover  
 Permanent  Emergency  Cavitation  P&A (Pre-set)  
 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 \_\_\_\_\_

OIL CONS. DIV DIST. 3  
MAY 09 2014

3  
 **Closed-loop System:** Subsection H of 19.15.17.11 NMAC  
Type of Operation:  P&A  Drilling a new well  Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)  
 Drying Pad  Above Ground Steel Tanks  Haul-off Bins  Other \_\_\_\_\_  
 Lined  Unlined Liner type: Thickness \_\_\_\_\_ mil  LLDPE  HDPE  PVD  Other \_\_\_\_\_  
Liner Seams:  Welded  Factory  Other \_\_\_\_\_

4  
 **Below-grade tank:** Subsection I of 19.15.17.11 NMAC  
Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_  
Tank Construction material: \_\_\_\_\_  
 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 \_\_\_\_\_

5  
 **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

17

6  
**Fencing:** Subsection D of 19.15.17.11 NMAC (*Applies to permanent pit, 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 \_\_\_\_\_

7  
**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*)

8  
**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 19.15.3.103 NMAC

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**Administrative Approvals 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:  
 Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration of approval. (Cavitation pit for Pre-set)  
 Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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**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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.*

<b>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</b> - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).</b> - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</b> <i>(Applies to temporary, emergency, or cavitation pits and below-grade tanks)</i> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
<b>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</b> <i>(Applied to permanent pits)</i> - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
<b>Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.</b> - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>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> - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Within 500 feet of a wetland.</b> - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Within the area overlying a subsurface mine.</b> - Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Within an unstable area.</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
<b>Within a 100-year floodplain</b> - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

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**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
- 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 \_\_\_\_\_ or Permit \_\_\_\_\_

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**Closed-loop Systems 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.

- Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- Siting Criteria Compliance Demonstrations (only for on-site closure) - 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 \_\_\_\_\_
- Previously Approved Operating and Maintenance Plan                      API \_\_\_\_\_

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**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 H2S, 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

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**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  Closed-loop System
- 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
- Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

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**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 F 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 I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

**Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)

*Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.*

Disposal Facility Name: Envirotech / JFJ Landfarm % IEI Disposal Facility Permit #: NM-01-0011 / NM-01-0010B

Disposal Facility Name: Basin Disposal Facility Disposal Facility Permit #: NM-01-005

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and  
 Yes (If yes, please provide the information)  No

*Required for impacted areas which will not be used for future service and operations:*

- Soil Backfill and Cover Design Specification - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

**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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.*

Ground water is less than 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"/> N/A
Ground water is between 50 and 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"/> N/A
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"/> N/A
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	<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 <input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet 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; 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 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 500 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 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

**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 F of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 Subsection F of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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**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: \_\_\_\_\_

#

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 5/21/2014

Title: Compliance Officer OCD Permit Number: \_\_\_\_\_

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**Closure Report (required within 60 days of closure completion):** Subsection K of 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: \_\_\_\_\_ 12/13/2009

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**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.

#

**Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?

Yes (If yes, please demonstrate compliance to the items below)  No

Required for impacted areas which will not be used for future service and operations:

- Site Reclamation (Photo Documentation)
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique

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**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)
- Plot Plan (for on-site closures and temporary pits)
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (if applicable)
- 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: 36.68222 Longitude: 107.40836 NAD  1927  1983

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**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): Kenny Davis Title: Staff Regulatory Technician

Signature: [Signature] Date: 5/8/2014

e-mail address: kenny.r.davis@conocophillips.com Telephone: 505-599-4045

Please Note: The subject well originally was not tested when the preset pit was closed. At the request of the NMOCD, witnessed sampling was recently conducted of the area. The sample results are enclosed.



## Analytical Report

### Report Summary

Client: ConocoPhillips

Chain Of Custody Number: 16947

Samples Received: 4/30/2014 1:05:00PM

Job Number: 96052-1706

Work Order: P404126

Project Name/Location: SJ 29-6 #101N

Entire Report Reviewed By:

A handwritten signature in black ink, appearing to read "Tim Cain", is written over a horizontal line.

Date: 5/7/14

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.



ConocoPhillips PO Box 2200 Bartlesville OK, 74005	Project Name: SJ 29-6 #101N Project Number: 96052-1706 Project Manager: Kenny R Davis	Reported: 07-May-14 11:08
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### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Preset Closure	P404126-01A	Soil	04/28/14	04/30/14	Glass Jar, 4 oz.

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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fr (800) 362-1879





ConocoPhillips PO Box 2200 Bartlesville OK, 74005	Project Name: SJ 29-6 #101N Project Number: 96052-1706 Project Manager: Kenny R Davis	Reported: 07-May-14 11:08
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**Preset Closure  
P404126-01 (Solid)**

Analyte	Result	Reporting			Batch	Prepared	Analyzed	Method	Notes
		Limit	Units	Dilution					
<b>Volatile Organics by EPA 8021</b>									
Benzene	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8021B	
Surrogate: Bromochlorobenzene		98.0 %		80-120	1418017	05/01/14	05/05/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		88.7 %		80-120	1418017	05/01/14	05/05/14	EPA 8021B	
<b>Nonhalogenated Organics by 8015</b>									
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg	1	1418017	05/01/14	05/05/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1418018	05/01/14	05/05/14	EPA 8015D	
<b>Total Petroleum Hydrocarbons by 418.1</b>									
Total Petroleum Hydrocarbons	ND	19.9	mg/kg	1	1418034	05/01/14	05/01/14	EPA 418.1	
<b>Cation/Anion Analysis</b>									
Chloride	13.1	9.88	mg/kg	1	1418032	05/01/14	05/01/14	EPA 300.0	

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5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (970) 259-0615 Fx (800) 362-1879





ConocoPhillips PO Box 2200 Bartlesville OK, 74005	Project Name: SI 29-6 #101N Project Number: 96052-1706 Project Manager: Kenny R Davis	Reported: 07-May-14 11:08
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**Volatile Organics by EPA 8021 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1418017 - Purge and Trap EPA 5030A**

**Blank (1418017-BLK1)**

Prepared: 30-Apr-14 Analyzed: 01-May-14

Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: 1,3-Dichlorobenzene	49.4		ug/L	50.0		98.7	80-120			
Surrogate: Bromochlorobenzene	51.2		"	50.0		102	80-120			

**Duplicate (1418017-DUP1)**

Source: P404092-01

Prepared: 30-Apr-14 Analyzed: 01-May-14

Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.05	"		ND				30	
o-Xylene	ND	0.05	"		ND				30	
Surrogate: 1,3-Dichlorobenzene	45.5		ug/L	50.0		90.9	80-120			
Surrogate: Bromochlorobenzene	46.4		"	50.0		92.8	80-120			

**Matrix Spike (1418017-MS1)**

Source: P404092-01

Prepared: 30-Apr-14 Analyzed: 01-May-14

Benzene	47.1		ug/L	50.0	ND	94.3	39-150			
Toluene	46.7		"	50.0	ND	93.3	46-148			
Ethylbenzene	46.4		"	50.0	ND	92.8	32-160			
p,m-Xylene	93.4		"	100	ND	93.4	46-148			
o-Xylene	47.4		"	50.0	ND	94.7	46-148			
Surrogate: 1,3-Dichlorobenzene	47.1		"	50.0		94.1	80-120			
Surrogate: Bromochlorobenzene	48.0		"	50.0		95.9	80-120			

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ConocoPhillips PO Box 2200 Bartlesville OK, 74005	Project Name: SJ 29-6 #101N Project Number: 96052-1706 Project Manager: Kenny R Davis	Reported: 07-May-14 11:08
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**Nonhalogenated Organics by 8015 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1418017 - Purge and Trap EPA 5030A**

<b>Blank (1418017-BLK1)</b>		Prepared: 30-Apr-14 Analyzed: 01-May-14								
Gasoline Range Organics (C6-C10)	ND	4.98	mg/kg							
<b>Duplicate (1418017-DUP1)</b>		Source: P404092-01 Prepared: 30-Apr-14 Analyzed: 01-May-14								
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg		ND				30	
<b>Matrix Spike (1418017-MS1)</b>		Source: P404092-01 Prepared: 30-Apr-14 Analyzed: 01-May-14								
Gasoline Range Organics (C6-C10)	0.45		mg/L	0.450	ND	101	75-125			

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ConocoPhillips PO Box 2200 Bartlesville OK, 74005	Project Name: SJ 29-6 #101N Project Number: 96052-1706 Project Manager: Kenny R Davis	Reported: 07-May-14 11:08
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**Nonhalogenated Organics by 8015 - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1418018 - DRO Extraction EPA 3550C**

<b>Blank (1418018-BLK1)</b>		Prepared: 30-Apr-14 Analyzed: 01-May-14								
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg							
<b>Duplicate (1418018-DUP1)</b>		Source: P404092-01 Prepared: 30-Apr-14 Analyzed: 02-May-14								
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg		ND				30	
<b>Matrix Spike (1418018-MS1)</b>		Source: P404092-01 Prepared: 30-Apr-14 Analyzed: 02-May-14								
Diesel Range Organics (C10-C28)	211		mg/L	250	21.0	76.0	75-125			

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ConocoPhillips PO Box 2200 Bartlesville OK, 74005	Project Name: SI 29-6 #101N Project Number: 96052-1706 Project Manager: Kenny R Davis	Reported: 07-May-14 11:08
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**Total Petroleum Hydrocarbons by 418.1 - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1418034 - 418 Freon Extraction**

<b>Blank (1418034-BLK1)</b>				Prepared & Analyzed: 01-May-14						
Total Petroleum Hydrocarbons	ND	20.0	mg/kg							
<b>Duplicate (1418034-DUP1)</b>				Source: P404125-01 Prepared & Analyzed: 01-May-14						
Total Petroleum Hydrocarbons	24.0	20.0	mg/kg		28.0			15.3	30	
<b>Matrix Spike (1418034-MS1)</b>				Source: P404125-01 Prepared & Analyzed: 01-May-14						
Total Petroleum Hydrocarbons	1800	20.0	mg/kg	2020	28.0	87.5	80-120			

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**Cation/Anion Analysis - Quality Control**  
**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1418032 - Anion Extraction EPA 300.0**

<b>Blank (1418032-BLK1)</b>				Prepared & Analyzed: 01-May-14						
Chloride	ND	9.98	mg/kg							
<b>LCS (1418032-BS1)</b>				Prepared & Analyzed: 01-May-14						
Chloride	482	9.87	mg/kg	493		97.7	90-110			
<b>Matrix Spike (1418032-MS1)</b>				Source: P404123-01		Prepared & Analyzed: 01-May-14				
Chloride	502	9.91	mg/kg	496	ND	101	80-120			
<b>Matrix Spike Dup (1418032-MSD1)</b>				Source: P404123-01		Prepared & Analyzed: 01-May-14				
Chloride	502	9.94	mg/kg	497	ND	101	80-120	0.0426	20	

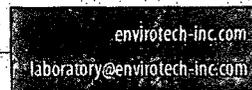
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ConocoPhillips  
PO Box 2200  
Bartlesville OK, 74005

Project Name: SJ 29-6 #101N  
Project Number: 96052-1706  
Project Manager: Kenny R Davis

**Reported:**  
07-May-14 11:08

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

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laboratory@envirotech-inc.com

# CHAIN OF CUSTODY RECORD

16947

Client: <b>CONOCO PHILLIPS</b>			Project Name / Location: <b>SJ 29-C #101N</b>			ANALYSIS / PARAMETERS													
Email results to: <b>KENNY.R.DAVIS@CONOCOPHILLIPS.COM</b>			Sampler Name: <b>JARED CHAVEZ</b>			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact		
Client Phone No.: <b>(505) 599-4045</b>			Client No.: <b>96052-1706</b>																
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative		TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE	Sample Cool	Sample Intact	
					HNO <sub>3</sub>	HCl													
<b>PRESET CLOSURE</b>	<b>4/28/14</b>	<b>11:15 AM</b>	<b>PH04126-01</b>	<b>1-4oz</b>			✓	✓							✓	✓	✓	✓	
Relinquished by: (Signature) <i>[Signature]</i>				Date	Time	Received by: (Signature) <i>[Signature]</i>				Date	Time								
				<b>4/30/14</b>	<b>13:05</b>					<b>4/30/14</b>	<b>13:05</b>								
Relinquished by: (Signature) <i>[Signature]</i>				Received by: (Signature) <i>[Signature]</i>															
Sample Matrix Soil <input type="checkbox"/> Solid <input type="checkbox"/> Sludge <input type="checkbox"/> Aqueous <input type="checkbox"/> Other <input type="checkbox"/>																			
<input type="checkbox"/> Sample(s) dropped off after hours to secure drop off area.																			


**envirotech** *AM00012997*  
 Analytical Laboratory

21.9

## ConocoPhillips Company Cavitation Pit for Closed-Loop Locations

**Design: SJ 29-6 Unit 101N**

ConocoPhillips Company will use a cavitation pit plan when the surface casing will be pre-set on closed-loop locations. The drill cuttings will be stockpiled on the surface.

### Operations and Maintenance:

The cavitation pit will be operated and maintained as follows:

1. Only Fresh water and air will be used in the drilling of the surface casing.
2. The Cement used will be: Neat Cement with no additives.
3. All of the fluids will be removed within 48hrs after drilling.
4. A representative five point composite sample will be taken of the drill cuttings, after the setting of the surface casing is complete, using sampling tools and all samples will be tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the testing criteria is not met, all contents will be dug and hauled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e.

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	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500

5. The NMOCD will be notified via email of the test results of the cavitation surface as follows:

Components	Tests Method	Limit (mg/Kg)	Results
Benzene	EPA SW-846 8021B or 8260B	0.2	ND
BTEX	EPA SW-846 8021B or 8260B	50	ND
TPH	EPA SW-846 418.1	2500	19.9
GRO/DRO	EPA SW-846 8015M	500	ND
Chlorides	EPA 300.1	500	13.1

### Closure Plan:

1. The NMOCD will be notified of the sample results and the intent to start the closure process 3-7 days prior to the drill cuttings being transported, moved, or distributed on location.
2. In the event the criteria are not met, all solids and liquids will be removed and disposed of at Envirotech (Permit #NM-01-0011) and/or Basin Disposal Facility (Permit #NM-01-005) and/or JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B).
3. Testing results will be submitted with the Closure Report of the well locations Closed-Loop Permit on Form C-144.

**ConocoPhillips is aware that approval of this plan does not relieve ConocoPhillips of liability should operations result in pollution of surface water, ground water, or the environment. Nor does approval relieve ConocoPhillips of its responsibility to comply with any other applicable governmental authority's rules and regulations.**