District I

1625 N French Dr , Hobbs, NM 88240

District II

1301 W. Grand Ave , Artesia, NM 88210

District III

1000 Pro Brozos Pd. Aztec NM 87410

State of New Mexico Energy Minerals and Natural Resources

Department Oil Conservation Division 1220 South St. Francis Dr. Form C-144 July 21, 2008

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

1220 S St. Francis Dr., Santa Fe, NM 87505	Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.
Pit, Closed-Loop System, Below-Grade	
Proposed Alternative Method Permit or Closu	re Plan Application
Type of action: Permit of a pit, closed-loop system, below-grade tan	k, or proposed alternative method
Closure of a pit, closed-loop system, below-grade ta	nk, or proposed alternative method
Modification to an existing permit	
Closure plan only submitted for an existing permitte below-grade tank, or proposed alternative method	d or non-permitted pit, closed-loop system,
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop s	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	
environment Nor does approval relieve the operator of its responsibility to comply with any other applicable gove	ernmental authority's rules, regulations or ordinances.
Operator: ConocoPhillips Company C	OGRID#: 217817
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: SAN JUAN 32-7 UNIT 17B	
API Number: 30-045-35131 OCD Permit Number:	
U/L or Qtr/Qtr: A(NE/NE) Section: 17 Township: 31N Range: 7V	W County: San Juan
Center of Proposed Design: Latitude: 36.90449 °N Longitude: 1	107.588329 °W NAD: 1927 X 1983
Surface Owner: Federal State X Private Tribal Trust or Indian	Allotment
String-Reinforced	bbl Dimensions Lx Wx D
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 ac notice of intent) Drying Pad Above Ground Steel Tanks Haul-off Bins Other	PE PVD Other RECEIVED
Lined Unlined Liner type: Thickness mil LLDPE HD Liner Seams: Welded Factory Other	PVD Other RECEIVED
Lined Unlined Liner type: Thickness mil LLDPE HD Liner Seams: Welded Factory Other	PE PVD Other RECEIVED OIL CONS. DIV. DISI 3
Lined Unlined Liner type: Thickness mil LLDPE HD Liner Seams: Welded Factory Other Below-grade tank: Subsection 1 of 19.15.17.11 NMAC Volume: bbl Type of fluid.	OIL CONS. DIV. DISI. 3

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Oil Conservation Division

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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				
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)				
Signs: Subsection C of 19 15 17 11 NMAC 12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers X Signed in compliance with 19.15.3.103 NMAC				
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: X Administrative approval(s). Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration pit for Pre-set) Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	deration of app	roval.		
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.				
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes	No		
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). - 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.	Yes	No		
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□ NA			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applied to permanent pits)	Yes NA	No		
 Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 500 horizonal 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. 	Yes	No		
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.				
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 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	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		

Temporary Pits, Emergency Pits and Below-grade Tanks Permit Application Attachment ChecklistSubsection 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
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
13
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 (I) 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
14
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 X 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)
15
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

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16 Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:(19 15 17.13 D N	MAC)			
Instructions Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more th				
facilities are required. Disposal Facility Name: Envirotech / JFJ Landfarm % IEI Disposal Facility Permit # NM-01-0011 / Ni	M-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 nbe used for Yes (If yes, please provide the information No	future service and			
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 19.15.1 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	7.13 NMAC			
17				
Siting Criteria (Regarding on-site closure methods only: 19.15.17.10 NMAC Instructions Each stitug criteria requires a demonstration of compliance in the closure plan Recommendations of acceptable source material are provide certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted 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 - 1WATERS database search, USGS: Data obtained from nearby wells	Yes No			
Ground water is between 50 and 100 feet below the bottom of the buried waste	☐Yes ☐No			
- NM Office of the State Engineer - tWATERS database search; USGS; Data obtained from nearby wells	N/A □			
Ground water is more than 100 feet below the bottom of the buried waste.	Yes No			
- NM Office of the State Engineer - 1WATERS database search, USGS; Data obtained from nearby wells	∏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				
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			
- Visual inspection (continuation) of the proposed site, Nertal photo, saletine image	□Yes □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 fee 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	g			
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	d Yes No			
Within 500 feet of a wetland	Yes No			
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site				
Within the area overlying a subsurface mine.	Yes No			
- Written confirantion or verification or map from the NM EMNRD-Mining and Mineral Division Within an unstable area.	∏Yes ∏No			
- Engineering measures incorporated into the design, NM Bureau of Geology & Mineral Resources; USGS, NM Geological Society;				
Topographic map Within a 100-year floodplain FEMA map	Yes No			
18				
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must bee attached to by a check mark in the box, that the documents are attached.	the closure plan. Please indicate,			
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				
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 [V] Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 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				
X Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC				
X 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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19 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: Approval Date: 2/06/2012 Title: OCD Permit Number:
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: 7/6/2010
22
Closure Method: Waste Excavation and Removal On-site Closure Method X Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain.
23 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 Faculity Name: Disposal Faculity 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 complilane to the items below)
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
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: Longitude NAD 1927 1983
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is ture, 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): Staff Regulatory Technician
Signature: Date: 9910
c-mail address: marie e jaramillo@condcophillips com Telephone: 505-326-9865

ConocoPhillips Company Cavitation Pit for Closed-Loop Locations

Design:

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

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	32.4
TPH	EPA SW-846 418.1	2500	172
GRO/DRO	EPA SW-846 8015M	500	ND
Chlorides	EPA 300.1	500	50

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.

DIST. 3

DATE: 2/01/12

WELL NAME: SAN JUAN 32-7 UNIT 17B

API# 30-045-35131 PERMIT #: 6929

MISSING DATA: ANALYTICAL RESULTS W/DETAILED REPORT

COPY OF CLOSURE NOTIFICATION – NOT NEEDED CL

ATTACHED: ANALYTICAL RESULTS W/DETAILED REPORT

ConocoPhillips Company Cavitation Pit for Closed-Loop Locations

Design:

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.

	to the second of		
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	32.4
TPH	EPA SW-846,418.1	2500	1.72
GRO/DRO	EPA SW-846 8015M	500	ND
Chlorides	EPA 300.1	500	50

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.



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	C/L Preset Cuttings	Date Reported:	07-08-10
Laboratory Number:	55028	Date Sampled:	07-06-10
Chain of Custody No:	6752	Date Received:	07-06-10
Sample Matrix:	Soil	Date Extracted:	07-07-10
Preservative:	Cool	Date Analyzed:	07-07-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments: San Juan 32-7 #17B

Analyst

Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	07-07-10 QA/0	QC	Date Reported:		07-08-10
Laboratory Number:	55009		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		07-07-10
Condition:	N/A		Analysis Reque		TPH
	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept, Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		Concentration		Detection Limit	
Gasoline Range C5 - C10		ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND		0.2	
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range	
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%	
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%	
Spike Conc. (mg/Kg)	Samala	Spike Added	Snika Banult	% Danayanı	Assent Banca
• • • • • • • • • • • • • • • • • • • •	Sample		Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	254	101%	75 - 125%
Diesel Range C10 - C28	ND	250	253	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 55009-55010; 55024-55028; 55039; 55054-55055

Analyst

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	C/L Preset Cuttings	Date Reported:	07-08-10
Laboratory Number:	55028	Date Sampled:	07-06-10
Chain of Custody:	6752	Date Received:	07-06-10
Sample Matrix:	Soil	Date Analyzed:	07-08-10
Preservative:	Cool	Date Extracted:	07-07-10
Condition:	Not Intact-not headspace free	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	21.4	1.0	
Ethylbenzene	4.7	1.0	
p,m-Xylene	2.2	1.2	
o-Xylene	4.1	0.9	
Total BTEX	32.4		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
`	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846,

USEPA, December 1996.

Comments: San Juan 32-7 #17B

Analyst



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	N/A 0708BBL2 QA/QC 55024 Soil N/A N/A		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis:		N/A 07-08-10 N/A N/A 07-08-10 BTEX
Calibration and	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect.
Detection Limits (ug/L)		Accept. Ran	ge 0 - 15%	Conc	Limit
Benzene	6.3532E+005	6.3660E+005	0.2%	ND	0.1
Toluene	6,1136E+005	6 1258E+005	0.2%	ND	0.1
Ethylbenzene	5,5719E+005	5,5831E+005	0.2%	ND	0.1
p,m-Xylene	1.3034E+006	1.3060E+006	0.2%	ND	0.1
o-Xylene	4.7764E+005	4.7860E+005	0.2%	ND	0.1
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	5.6	7.0	25.0%	0 - 30%	0.9
Toluene	4.7	4.6	2.1%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	5.6	50.0	50.7	91.1%	39 - 150
Toluene	4.7	50.0	50.0	91.4%	46 - 148
Ethylbenzene	ND	50.0	50.6	101%	32 - 160
p,m-Xylene	ND	100	97.2	97.2%	46 - 148
o-Xylene	ND	50.0	50.2	100%	46 - 148
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ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 55009-55010, 55024- 55026; 55028; 55054-55055; 55039

Analyst Re



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	C/L Preset Cuttings	Date Reported:	07-08-10
Laboratory Number:	55028	Date Sampled:	07-06-10
Chain of Custody No:	6752	Date Received:	07-06-10
Sample Matrix:	Soil	Date Extracted:	07-08-10
Preservative:	Cool	Date Analyzed:	07-08-10
Condition:	Intact	Analysis Needed:	TPH-418.1

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons 172 19.2

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments:

San Juan 32-7 #17B

Analyst



EPA METHOD 418.1 TOTAL PETROLEUM HYROCARBONS QUALITY ASSURANCE REPORT

N/A

N/A

07-08-10

Client:QA/QCProject #:Sample ID:QA/QCDate Reported:Laboratory Number:07-08-TPH.QA/QC 55028Date Sampled:Sample Matrix:Freon-113Date Analyzed:

Sample Matrix:Freon-113Date Analyzed:07-08-10Preservative:N/ADate Extracted:07-08-10Condition:N/AAnalysis Needed:TPH

Blank Conc. (mg/Kg) Concentration Detection Limit TPH ND 19.2

Duplicate Conc. (mg/Kg)SampleDuplicate% DifferenceAccept. RangeTPH17215510.0%+/- 30%

Spike Conc. (mg/Kg)SampleSpike AddedSpike Result% RecoveryAccept RangeTPH1722,0002,610120%80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water

and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 55028; 55024-55026; 55041-55043; 55054; 55056-55057

Analyst



Chloride

Client: ConocoPhillips Project #: 96052-1706 Sample ID: C/L Preset Cuttings Date Reported: 07-08-10 Lab ID#: 55028 Date Sampled: 07-06-10 Sample Matrix: Soil Date Received: 07-06-10 Preservative: Cool Date Analyzed: 07-08-10 Condition: Intact Chain of Custody: 6752

Parameter

Concentration (mg/Kg)

Total Chloride

50

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

San Juan 32-7 #17B

Analyst