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

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

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 July 21, 2008

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

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Sania Fe, Ni	1 8/303	•	office and provide a copy to the District Office.
Pit	, Closed-Loop Systen I Alternative Method			ication
	Permit of a pit, closed-loop sy Closure of a pit, closed-loop s Modification to an existing pe Closure plan only submitted for below-grade tank, or proposed	ystem, below-grade t rmit or an existing permit	ank, or proposed al	Iternative method
Instructions: Please submit one application Please be advised that approval of this re-environment. Nor does approval relieve the	equest does not relieve the operator of lia	bility should operations res	ult in pollution of surface	water, ground water or the
Operator: Burlington Resources Oil & (			OGRID#: <u>14538</u>	
Address: PO Box 4289, Farmington, N	M 87499			
Facility or well name: VALDEZ 7P API Number: 30-039	0-30387	OCD Permit Number	, , , , , , , , , , , , , , , , , , ,	
U/L or Qtr/Qtr: F(SE/NW) Section: Center of Proposed Design: Latitude: Surface Owner: X Federal	28         Township:         28N           36.63378333         °N	Range:	County: 107.2600111	<b>Rio Arriba °W</b> NAD: ☐ 1927 <b>X</b> 1983
X Pit: Subsection F or G of 19.15.17.11 No.     Temporary: Drilling Workover     Permanent Emergency X Cavita     Lined Unlined Liner ty     String-Reinforced     Liner Seams: Welded Factory	tion P&A (Pre-set) rpe: Thickness mi	LLDPE Volume:	HDPE PVC	RCVD JAN 31'13 OIL CONS. DIV. DIST. 3 Otherxwxd
Type of Operation: P&A Dri	notice of in eel Tanks Haul-off Bins Thickness mil	Other		re prior approval of a permit or Other
Below-grade tank: Subsection I of It  Volume: bbl  Tank Construction material:  Secondary containment with leak detection  Visible sidewalls and liner  Liner Type: Thickness	Type of fluid:	ner, 6-inch lift and auto Other	matic overflow shut-o	off
5 Alternative Method: Submittal of an exception request is required	. Exceptions must be submitted t	o the Santa Fe Environ	mental Bureau office	for consideration of approval.

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			
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.	leration of appr	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  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake	∏Yes	□No	
(measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Lites		
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)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	∐NA		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No	
(Applied to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	∐NA		
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)			
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 liquide, drilling fluide and drill outtings)			
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			
The second secon			

16 Wasta Pamayal Clasura For Classel Ioan Systems That Hilling Above Cround S	tool Tanks on Houl off Pins Only (10.15.17.12.D.NMAC)			
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground S Instructions: Please identify the facility or facilities for the disposal of liquids, drilling	ng 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-01-0	0100		
Disposal Facility Name: Basin Disposal Facility	Disposal Facility Permit #: NM-01-005	<u> </u>		
Will any of the proposed closed-loop system operations and associated actives (If yes, please provide the information No	· · · · · · · · · · · · · · · · · · ·	service and		
Required for impacted areas which will not be used for future service and operation.  Soil Backfill and Cover Design Specification - based upon the appropriate requirements of Subs.  Site Reclamation Plan - based upon the appropriate requirements of Subs.	priate requirements of Subsection H of 19.15.17.13 Neection I of 19.15.17.13 NMAC	MAC		
Siting Criteria (Regarding on-site closure methods only: 19.15.17.10 NMA Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. It certain siting criteria may require administrative approval from the appropriate district office of office for consideration of approval. Justifications and/or demonstrations of equivalency are re	Recommendations of acceptable source material are provided below. or may be considered an exception which must be submitted to the Sc			
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 of	btained from nearby wells	Yes No		
Ground water is between 50 and 100 feet below the bottom of the buried w	aste	☐ ☐Yes ☐No		
- NM Office of the State Engineer - iWATERS database search; USGS; Data of		∏N/A		
Ground water is more than 100 feet below the bottom of the buried waste.		☐Yes ☐No		
- NM Office of the State Engineer - iWATERS database search; USGS; Data of	otained from nearby wells	□N/A		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sign (measured from the ordinary high-water mark).	ificant watercourse or lakebed, sinkhole, or playa lake	Yes No		
- Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church i - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	•••	Yes No		
Within 500 horizontal feet of a private, domestic fresh water well or spring that less the purposes, or within 1000 horizontal fee of any other fresh water well or spring, in ex - NM Office of the State Engineer - iWATERS database; Visual inspection (cert Within incorporated municipal boundaries or within a defined municipal fresh water was pursuant to NMSA 1978, Section 3-27-3, as amended.	istence at the time of the initial application. ification) of the proposed site vell field covered under a municipal ordinance adopted	∐Yes ∐No		
<ul> <li>Written confirmation or verification from the municipality; Written approval o</li> <li>Within 500 feet of a wetland</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual ir</li> </ul>		Yes No		
Within the area overlying a subsurface mine.	ispection (certification) of the proposed site	∏Yes ∏No		
- Written confiramtion or verification or map from the NM EMNRD-Mining and	l Mineral Division			
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Topographic map	Mineral Resources; USGS; NM Geological Society;	YesNo		
Within a 100-year floodplain FEMA map		Yes No		
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each by a check mark in the box, that the documents are attached.	ch of the following items must bee attached to the clo	sure plan. Please indicate,		
Siting Criteria Compliance Demonstrations - based upon the approp	riate 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				
X 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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Form C-144 Oil Conservation Division

19 On which Application Continues
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: 1/07/2013  Title: OCD Permit Number:
21 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: 8/16/2010
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 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 compliane 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
24
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): Jamie Goodwin Title: Regulatory Technician
Signature: 131/13
e-mail address: jamie.l.goodwin@conocophillips.com Telephone: 505-326-9784

# Burlington Resources Oil & Gas Company, LP Cavitation Pit for Closed-Loop Locations

### Design:

Burlington Resources Oil & Gas Company, LP 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	ND
TPH	EPA SW-846 418.1	2500	37.2
GRO/DRO	EPA SW-846 8015M	500	ND
Chlorides	EPA 300.1	500	10

#### 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.

Burlington Resources is aware that approval of this plan does not relieve Burlington Resources 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 Cutting	Date Reported:	08-17-10
Laboratory Number:	55571	Date Sampled:	08-16-10
Chain of Custody No:	6754	Date Received:	08-16-10
Sample Matrix:	Soil	Date Extracted:	08-16-10
Preservative:	Cool	Date Analyzed:	08-17-10
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:

Valdez #7P

Analyst



# EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

# **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	08-17-10 QA/QC	Date Reported:	08 <del>-</del> 17-10
Laboratory Number:	55571	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-17-10
Condition:	N/A	Analysis Requested:	TPH

ECal Date ECal RF: C-Cal RF: % Difference Accept Range					
Gasoline Range C5 - C10	08-17-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	08-17-10	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 Gonc: (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 <b>-</b> 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	257	103%	75 - 125%
Diesel Range C10 - C28	ND	250	252	101%	<b>75 - 125%</b>

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 55571-55576** 

Analyst



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	C/L Preset Cutting	Date Reported:	08-17-10
Laboratory Number:	55571	Date Sampled:	08-16 <b>-</b> 10
Chain of Custody:	6754	Date Received:	08-16-10
Sample Matrix:	Soil	Date Analyzed:	08-17-10
Preservative:	Cool	Date Extracted:	08-16-10
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95.7 %
	1,4-difluorobenzene	97.3 %
	Bromochlorobenzene	98.7 %

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:

Valdez #7P

Analyst

Pavious



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0817BBLK QA/QC	Date Reported:	08-17-10
Laboratory Number:	55571	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-17-10
Condition:	N/A	Analysis:	BTEX

Galibration and Detection Limits (ug/L)	I-Cal RF:	C-CallRF; Accept.Rang	%Diff. je.0:15%	Blank Gonc	Detect. Limit
Benzene	8.3627E+005	8.3795E+005	0.2%	ND	0.1
Toluene	9.3497E+005	9.3684E+005	0.2%	ND	0.1
Ethylbenzene	8.6362E+005	8.6535E+005	0.2%	ND	0.1
p,m-Xylene	2.1295E+006	2.1338E+006	0.2%	ND	0.1
o-Xylene	7.6544E+005	7.6697E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg). Sample Duplicate %Diff. Accept Range Detect. Limit					
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	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 Amo	unt Spiked Spik	ed Sample %	6 Recovery	Accept Range
Benzene	ND	50.0	50.1	100%	39 - 150
Toluene	ND	50.0	50.4	101%	46 - 148
Ethylbenzene	ND	50.0	49.2	98.3%	32 - 160
p,m-Xylene	ND	100	100	100%	46 - 148
o-Xylene	ND	50.0	50.2	100%	46 - 148

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 55571-55576, 55548-55550

sť Review



## EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	ConocoPhillips	Project #:	96052-1706
Sample ID:	C/L Preset Cutting	Date Reported:	08-16-10
Laboratory Number:	<b>55</b> 571	Date Sampled:	08-16-10
Chain of Custody No:	6754	Date Received:	08-16-10
Sample Matrix:	Soil	Date Extracted:	08-16-10
Preservative:	Cool	Date Analyzed:	08-16-10
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

37.2

14.9

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:

Valdez #7P

Analyst



## **EPA METHOD 418.1 TOTAL PETROLEUM HYROCARBONS QUALITY ASSURANCE REPORT**

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

08-16-10

Laboratory Number:

08-16-TPH.QA/QC 55515

Date Sampled:

N/A

**TPH** 

Sample Matrix:

Freon-113

Date Analyzed:

08-16-10

Preservative:

N/A

Date Extracted:

Condition:

N/A

Analysis Needed:

08-16-10

Calibration

I-Cal Date

C-Cal Date

I-Cal RF:

C-Cal RF:

% Difference

Accept. Range

07-29-10

08-16-10

1.860

1,770

4.8%

Blank Conc. (mg/Kg)

+/- 10%

**TPH** 

Concentration ND

Detection Limit

14.9

Duplicate Conc. (mg/Kg)

**TPH** 

Sample 1 141

Duplicate 134

% Difference 5.2%

Accept. Range +/- 30%

Sample

Spike Added

Spike Result

% Recovery

Accept Range

Spike Conc. (mg/Kg) **TPH** 

141

2,000

1,790

83.6%

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 55515-55516, 55529, 55551-55554, 55571



#### Chloride

Client: ConocoPhillips Project #: 96052-1706 Sample ID: C/L Preset Cutting 08-17-10 Date Reported: Lab ID#: 55571 Date Sampled: 08-16-10 Sample Matrix: Soil Date Received: 08-16-10 Preservative: Cool Date Analyzed: 08-17-10 Condition: Intact Chain of Custody: 6754

Parameter

Concentration (mg/Kg)

**Total Chloride** 

10

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:

Valdez #7P

Analyst

The VALDEZ 9P was approved for a Closed Loop permit # 3010 on 2-09-2009. Due to COPC change in plans to Air Pre Set. Pre Set application permit # 6639 was submitted and approved on 8/16/2010. According to Cavitation Pit for a Closed Loop Locations 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 cutting being transported, moved or distributed on location). COPC is notifying the NMOCD after the fact. Pre Set was conducted on 8/16/2010 and Environmental Samples are attached to this closure report. In the future COPC will comply with closure procedure #1 via: e-mail of move on date, environmental test samples and will be followed by the Pre Set closure report.

仄hank you,

Jamie Goodwin

ConocoPhillips