District I
1625 N French Dr., Hobbs, NM 88240
District II
130 NW Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

Closed-loop System: Subsection H of 19.15.17.11 NMAC

Alternative Method:

# State of New Mexico Energy Minerals and Natural Resources 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

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

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application		
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 reques	st	
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 invironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or oi		
1		
Operator.         Williams Operating Co, LLC         OGRID #.         120782		
Address PO Box 640 / 721 S Main Aztec, NM 87410		
Facility or well name <u>Jicarilla 93 #12A</u>		
API Number3003929804OCD Permit Number	_	
U/L or Qtr/Qtr L Section 34 Township 27N Range 03W County Rio Arriba		
Center of Proposed Design: Latitude 36° 31' 40 04155" N Longitude 107° 08' 19 14598" W NAD. 1927	☑ 1983	
Surface Owner:  Federal State Private Tribal Trust or Indian Allotment		
Z N Pite. Subscriptor For C of 10.15.17.11.NIMAC		
The Subsection For Golf 13 17 11 NMAC		
Temporary. Drilling & workover	6	
☑ Pit: Subsection F or G of 19 15 17 11 NMAC   Temporary. ☐ Drilling ☑ Workover   ☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A   ☑ Lined ☐ Unlined Liner type. Thickness _20mil ☑ LLDPE ☐ HDPE ☐ PVC ☐ Other   ☐ String-Reinforced   Liner Seams. ☐ Welded ☒ Factory ☐ Other Volume	3	
□ Unlined □ Unlined □ Liner type. Thickness 20 mil □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	213	
☐ String-Reinforced	14	
Liner Seams. Welded Factory Other Volume 20,000 bbl Dimensions Volume 1460 NS. WV 6051 3 x	D <u>z./13,</u>	

intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other ☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other ☐ Othe
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
□ Drying Pad □ Above Ground Steel Tanks □ Haul-off Bins □ Other □ Lined □ Unlined □ Liner type· Thickness □ mil □ LLDPE □ HDPE □ PVC □ Other □ Liner Seams· □ Welded □ Factory □ Other □ Other □ Drying Pad □ Above Ground Steel Tanks □ Haul-off Bins □ Other □ Drying Pad □ Other □ Drying Pad □ Above Ground Steel Tanks □ Haul-off Bins □ Other □ Drying Pad □ Other □ Drying Pad □ Other □ Drying Pad □ Above Ground Steel Tanks □ Haul-off Bins □ Other □ Drying Pad □ Dryin
4 (8 A) 2009 (ii)
Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volumebbl 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
Below-grade tank: Subsection I of 19.15.17.11 NMAC   Volume:

Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval

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

Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain line, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify	hospital,
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	
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 or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 acceptant are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approoffice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	priate district pproval.
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 significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - 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.  (Applies to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
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.  - 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 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 attay hed.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.12 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  Previously Approved Design (attach copy of design) API Number:  or Permit Number:		
12.		
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 Number:		
Previously Approved Operating and Maintenance Plan API Number: (Applies only to closed-loop system that use		
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)		
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 (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		
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 Burial  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 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		

Disposal Facility Permit Number:	
Disposal Facility Permit Number:	
cur on or in areas that will not be used for future ser	vice and operations?
requirements of Subsection H of 19.15.17.13 NMA l of 19.15.17.13 NMAC	С
administrative approval from the appropriate dist Bureau office for consideration of approval. Just	rict office or may be
obtained from nearby wells	☐ Yes ☑ No ☐ NA
obtained from nearby wells	⊠ Yes □ No □ NA
obtained from nearby wells	☐ Yes ☑ No ☐ NA
ificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☑ No
	☐ Yes ☑ No
oring, in existence at the time of initial application.	☐ Yes ☒ No
	☐ Yes ☒ No
inspection (certification) of the proposed site	☐ Yes ⊠ No
and Mineral Division	☐ Yes ☒ No
& Mineral Resources; USGS; NM Geological	☐ Yes ☒ No
	☐ Yes ⊠ No
irements of 19.15.17.10 NMAC Subsection F of 19.15.17.13 NMAC propriate requirements of 19.15.17.11 NMAC d) - based upon the appropriate requirements of 19. 17.13 NMAC irements of Subsection F of 19.15.17.13 NMAC Subsection F of 19.15.17.13 NMAC ill cuttings or in case on-site closure standards cannot of 19.15.17.13 NMAC of 19.15.17.13 NMAC	15.17.11 NMAC
	Steel Tanks or Haul-off Bins Only: (19.15.17.13.11

Operator Application Certification:  I hereby certify that the information submitted with this application is true, accurate	ate and complete to the best of my knowledge and belief.
Name (Print): Michael K. Lane	Title: Sr. EH & S Specialist
Signature:	Date:
e-mail address:myke.lane@williams.com	Telephone: <u>505-634-4219</u>
OCD Approval: Permit Application (including clasure plan) Course Plan OCD Representative Signature:  Deputy Oil & Gas (Inspector, Title: District #3	OCD Permit Number:
21. <u>Closure Report (required within 60 days of closure completion)</u> : Subsection  Instructions: Operators are required to obtain an approved closure plan prior to  The closure report is required to be submitted to the division within 60 days of th  section of the form until an approved closure plan has been obtained and the clo	K of 19.15.17.13 NMAC oimplementing any closure activities and submitting the closure report. the completion of the closure activities. Please do not complete this
22.  Closure Method:  Waste Excavation and Removal ☑ On-Site Closure Method ☐ Alterna ☐ If different from approved plan, please explain.	tive Closure Method   Waste Removal (Closed-loop systems only)
Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please indentify the facility or facilities for where the liquids, drill two facilities were utilized.  Disposal Facility Name:  Disposal Facility Name:  Were the closed-loop system operations and associated activities performed on or  Yes (If yes, please demonstrate compliance to the items below) No  Required for impacted areas which will not be used for future service and operation  Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique	Disposal Facility Permit Number:  Disposal Facility Permit Number:  in areas that will not be used for future service and operations?
25.	
Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure rebelief. I also certify that the closure complies with all applicable closure requirem  Name (Print):Michael K. Lane	
The state of the s	

#### Meador, Tasha

From: johnny@adobecontractorsinc.com

**Sent:** Friday, April 24, 2009 9:12 AM

To: Brandon Powell

Cc: JJ Miller; Lane, Myke; Meador, Tasha

Subject: Williams clean-ups

#### Brandon,

¢

We will finish the clean-up on the Jicarilla 93 #15 today and will start the Jicarilla 93 #12A on Monday. We have also started the Rosa Unit #257A clean-up on the Carson Forest. Please let me know if you have any questions.

#### Thanks,

Johnny Stinson
Gen. Manager/ Adobe Contractors
Office: (505) 232, 1486

Office: (505)632-1486 Mobile: (505)320-6076

johnny@adobecontractorsinc.com

#### Lane, Myke (E&P)

From: johnny@adobecontractorsinc.com

Sent: Friday, April 24, 2009 9:15 AM

To: Bryce Hammond; Gabriel Trujillo; Kurt Sandoval

Cc: Lane, Myke; Meador, Tasha

Subject: Williams clean-ups

We will finish the clean-up on the Jicarilla 93 #15 today and start the Jicarilla 93 #12A on Monday. Please let me know if you have any questions.

Thanks,

Johnny Stinson Gen. Manager/ Adobe Contractors

Office: (505)632-1486 Mobile: (505)320-6076

johnny@adobecontractorsinc.com

### Meador, Tasha

From: johnny@adobecontractorsinc.com

**Sent:** Friday, May 01, 2009 8:39 AM

To: Meador, Tasha; Lane, Myke

Subject: FW: Williams clean-ups

I forgot to copy you guys on this

**From:** johnny@adobecontractorsinc.com [mailto:johnny@adobecontractorsinc.com]

Sent: Friday, May 01, 2009 8:38 AM

To: Brandon Powell

Subject: Williams clean-ups

#### Brandon,

We will finish the clean-up on the Jicarilla 93 #12A today and the Rosa Unit #257A today or Monday We will start the Jaeco 26-3 22#2A early next week. Let me know if you have any questions.

#### Thanks,

Johnny Stinson Gen. Manager/ Adobe Contractors

Office: (505)632-1486 Mobile: (505)320-6076

johnny@adobecontractorsinc.com



#### STATE OF NEW MEXICO:

#### COUNTY OF RIO ARRIBA:

#### RECORDATION NOTICE OF PIT BURIAL

In accordance with Section 19.15.17.13.F.1.f of the NMAC, operator herby provides notice in the public record of an on-site burial of a temporary pit at the following location:

Well Name:	Jicarilla 93 #012A
Latitude (DDD MM.MMM'):	36° 31′ 40.04155
Longitude (DDD MM.MMM'):	107° 08' 19.14598
Unit Letter (1/4, 1/4):	L
Section: _	34
Township:	T27N
Range:	R03W
County: _	RIO ARRIBA
State:	NEW MEXICO

IN WITNESS WHEREOF, this Recordation Notice of Pit Burial has been executed on the date indicated below by the undersigned.

WILLIAMS COMPANIES, INC.

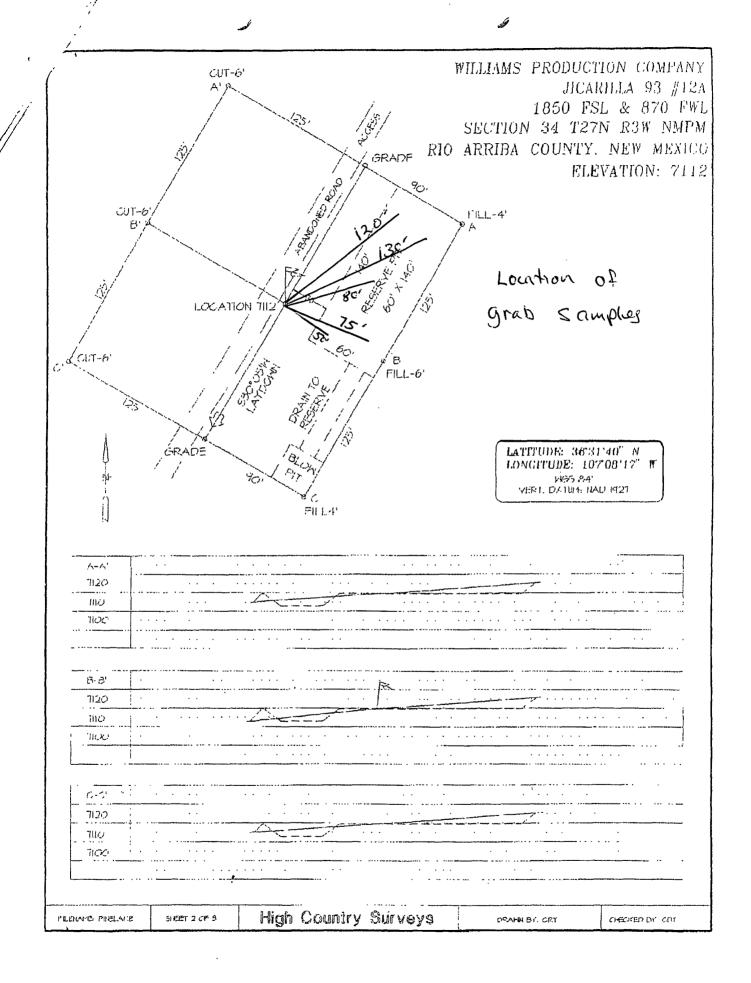
STATE OF NEW MEXICO **COUNTY OF SAN JUAN** 

This document was acknowledged before me on this <u>26</u> day of <u>May</u> by Michael K Lane, EH&S Specialist of WILLIAMS COMPANIES, INC.

Notary Public Signature

My Commission Expires 11/30/2011

NATASHA MEADOR **Notary Name Printed** 





### EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Williams Production	Project #:	04108-0003
Sample ID:	Jic 93 #12A	Date Reported:	05-21-09
Laboratory Number:	50091	Date Sampled:	05-12-09
Chain of Custody No:	7070	Date Received:	05-14-09
Sample Matrix:	Soil	Date Extracted:	05-18-09
Preservative:	Cool	Date Analyzed:	15-19-09
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, UŞEPA, December 1996.

Comments: Pit Closer

Analyst

Review

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



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Williams Production	Project #:	04108-0003
Sample ID:	Jic 93 #12A	Date Reported:	05-21-09
Laboratory Number:	50091	Date Sampled:	05-12-09
Chain of Custody:	7070	Date Received:	05-14-09
Sample Matrix:	Soil	Date Analyzed:	05-19-09
Preservative:	Cool	Date Extracted:	05-18-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	2.0	0.9	
Toluene	1.8	1.0	
Ethylbenzene	2.2	1.0	
p,m-Xylene	4.0	1.2	
o-Xylene	2.6	0.9	
Total BTEX	12.6		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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:

Pit Closer

Analyst

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

Mustum Walters Review

#### EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Williams Production	Project #:	04108-0003
Sample ID:	Jic 93 #12A	Date Reported:	05-21-09
Laboratory Number:	50091	Date Sampled:	05-12-09
Chain of Custody No:	7070	Date Received:	05-14-09
Sample Matrix:	Soil	Date Extracted:	05-18-09
Preservative:	Cool	Date Analyzed:	05-18-09
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

49.1

10.3

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:

Pit Closer.

Analyst



#### Chloride

Client: Williams Production Project #: 04108-0003 Sample ID: Jic 93 #12A Date Reported: 05-21-09 Lab ID#: 50091 Date Sampled: 05-12-09 Sample Matrix: Soil Date Received: 05-14-09 Preservative: Cool Date Analyzed: 05-19-09 Condition: Intact Chain of Custody: 7070

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

15

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:

Pit Closer.

Analyst

Review



### EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

#### **Quality Assurance Report**

Client:	QA/QC		Project #:		N/A
Sample ID:	15-19-09 QA/	QC	Date Reported:		05-21-09
Laboratory Number:	50097		Date Sampled:		N/A
Sample Matrix:	Methylene Chlo	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		15-19-09
Condition:	N/A		Analysis Reques	ted:	TPH
	# #uj.CeliDate.#	the state of the s	17111-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		Accept Range
Gasoline Range C5 - C10	05-07-07	9.6448E+002	9.6486E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0427E+003	1.0431E+003	0.04%	0 - 15%
Blank Conc. (mg/L- mg/kg)		Concentration		Detection Lin	
Gasoline Range C5 - C10		ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND		0.1	
Total Carologii Tiyarooa Sono		110		D.L	
Duplicate@onc (mg/Kg)	Sample - 1	Duplicater	% Difference	Accept Range	
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%	
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%	
		THE SECOND SECOND SECOND			
Spike/Conc. (mg/Kg)	Sample S	Carried Street S	Spike Results	STATE OF THE PARTY	
Gasoline Range C5 - C10	ND	250	244	97.6%	75 - 125%
Diesel Range C10 - C28	ND	250	245	98.0%	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 50047 - 50051, 50090 - 50092, 50095, and 50097.

Analyst



### EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	05-19-BT QA/QC	Date Reported:	05-21-09
Laboratory Number:	50097	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative.	N/A	Date Analyzed:	05-19-09
Condition:	N/A	Analysis:	BTEX

Calibration and Linus (ug/L)	CalRE	C-CaliRF. Accept Ran	%Diff. 16 0 - 15% ***	Blank Gond	), s Detects Limit
Benzene	6.7553E+006	6.7689E+006	0.2%	ND	0.1
Toluene	6.3016E+006	6.3142E+006	0.2%	ND	0.1
Ethylbenzene	5.3676E+006	5.3783E+006	0.2%	ND	0.1
p,m-Xylene	1.4043E+007	1.4071E+007	0.2%	ND	0.1
o-Xylene	5.2234E+006	5.2338E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	íplicater.	% % Diff %	Accept Range	DetectaLimit
Benzene	1.9	1.9	0.0%	0 - 30%	0.9
Toluene	5.6	5.5	1.8%	0 - 30%	1.0
Ethylbenzene	9.1	8.2	9.9%	0 - 30%	1.0
p,m-Xylene	17.8	16.9	5.1%	0 - 30%	1.2
o-Xylene	10.2	9.3	8.8%	0 - 30%	0.9

Spike/Conc. (µg/Kg)	Kiji/Sample, Amo	unt(Spiked # Spik	ed/Sample	%/Recovery	Accept Renge
Benzene	1.9	50.0	50.6	97.5%	39 - 150
Toluene	5.6	50.0	53.2	95.7%	46 - 148
Ethylbenzene	9.1	50.0	54.7	92.6%	32 - 160
p,m-Xylene	17.8	100	113	96.3%	46 - 148
o-Xylene	10.2	50.0	58.8	97.7%	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 50047 - 50052, 50090 - 50092, and 50097.

Analyst



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

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

05-19-09

Laboratory Number:

Date Sampled: Date Analyzed: N/A

Sample Matrix:

Freon-113

05-18-09

Preservative: Condition:

N/A N/A Date Extracted: Analysis Needed: 05-18-09 TPH

Calibration |-Cal Date | C Cal Date | Cal RE | C Cal RE | % Difference | Accept. Range

05-18-TPH.QA/QC 50100

05-01-09

05-18-09

1,620

1.720

6.2%

+/- 10%

TPH

Concentration ND

Detection Limit 10.3

Duplicate Conc. (mg/Kg)

Duplicate % Difference Accept Range

TPH

20.7

23.3

12.6%

+/- 30%

Spike/Conc.(mg/kg): Sample Spike/Added Spike/Result %: Recovery Accept Range **TPH** 

20.7

2,000

1,780

88.1%

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 50080 - 50085, 50090 - 50092 and 50100.

Mustum Males

### CHAIN OF CUSTODY RECORD

Client:	0 1	, 1	Project Name / L	ocation.							и ы												
WILLIPHERS Proc	1 100 Jan	/		~ ) =1 <	Sell								•	ANAL	YSIS /	PAR	AME	rers				•	ŀ
Client Address:			Sampler Name:	<u>- W-</u>	)				-	1	Г	Γ_	Γ	Ι			Γ						-
721 Sma	V 100	'	in Luiv	C'E'n S	מנס				15)	3021	560)												İ
Client Phone No.:	in Him		Client No.:						1 8 p	g	80	tals	5		ď							_	5
Cheft Frome No		)	04108	- 00					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	RIDE				le Cool	Sample Intact
Sample No./ Identification	Sample Date	Sample Time	Lab No.		ample fatrix	No./Volume of Containers			TPH (	втех	VOC (	RCRA	Cation	BCI	TCLP	РАН	TPH (	CHLORIDE				Sample	Samp
JACCO 26-32274 JR 93 HDA Sosatro PC	2 512.9	1 Sign	50090	Soil Solid	Sludge Aqueous	<u> </u>			X	X							X	X				XQ.	Ż
JR 93 HRA	5-12-01	2:157	50091°	Soil Solid	Sludge Aqueous				X	x						,	X	X			Ž	X	X
Rosalvo PC	3-11-09	20071	50092	Soil Solid	Sludge Aqueous				X	X							X	X			1,		x
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																		
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Relinquished by: (Signa	ature)							Receiv	ed by:	(Sigh	ature		5	· · · · · ·		***************************************							
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								yłic															
			5796 US	3 Highwa	y 64 • Farmin	gton, NM 87	401	• 505-6	32-06	15 • la	b@en	viroted	h-inc.	com									

### **CLOSURE REPORT ATTACHMENTS**

93-12A

1	Date & How free standing liquids removed in fo	llowing man		(pit previously frozen )			
	Majority of liquids removed by vacuum truck and hau	led to Basin [	Disposal, Permit # N	M 01-0005			
3	Return receipt sent & received from surface ow	ner:	Copy At	tached			
4	Rig off location on following date:		. 4/17/2	2009			
	Pit covered on following date:		5/11/	2009			
	Reseeding started/scheduled for following date	: _	Spring	2009			
6	Pit liner removed on following date:		5/8/2009				
	Pit liner removed by following company:		Adobe Construc	ction			
	Pit liner removed in following manner:	Cut liner abo	ove mud level by n	nanually			
	and/or mechanically cutting liner. Removed all a	nchored ma	terial.				
	Facility where Pit liner disposed: S.J. I	Regional Lar	ıdfill, NMED Permi	t SWM-052426			
7	Solidification process accomplished in following			e construction			
	used combination of natural drying & mechanica						
	non-waste, earthen material to a consistency that		table. The mixing	ratio nas			
	not exceeded 3 parts non-waste to 1 part pit con	tents.					
8	Five point composite sample provided:	Collected	by Abode for analy	sis at Envirotech			
9	Testing of earth by following company:		Envirote	ch, Inc.			
	Material & method used for solidification, non-w	aste earther	n material:				
	Grading & backfilling area with approximately 4' of soils and earthen materials recovered during site construction, to one foot consisting of salvaged topsoil.						
10	Re-contouring to match surrounding geography	done in follo	owing manner (us	ing BMP's):			
	Reestablish drainage and contours to approxima Conditions of Approval in APD and as specified	-					
11	Sundry (C103) to NMOCD when area 1st seeded:		Pending				
	Seed Mix Used:	Seed mix	specified in Cond	tion of Approval			

#### CLOSURE REPORT ATTACHMENTS

12	Date pit was covered:	5/11/2009								
	Date 1st seeding took place:	Spring foll	Spring following covering of pit							
	Date 2nd seeding took place:	Spring following covering of pit								
	Date 70% coverage of native perennial vegeta	ation accomplished:	То	be Determined ·						
	Date C103 submitted to NMOCD (stating	То	be Detern	nined						
	2 successive vegetative seasons ac	ccomplished)								
13	Company setting steel marker on site:	Adol	oe Constr	uction						
	Date marker set:	Pending								
	Type cmt & depth of cmt to place marker:	2 sx Pre-mixed concrete @ 4' depth								
	Type of marker used: (check one)	X Post Plate X								
	Pertinent information on marker (operator, lease, well name/#, S-T-R-UL):									
	Per Operated Well Information									
	Does marker state it is an onsite pit burial loca	ation?	s once installed							
	Note: Steel markers not required when clo	sure by waste exca	vation &	removal						
Att	ached information (IF Release Occurred):									
**	Sample results from Form C141 (Release No	tification & Corrective	Action)	Attached						
	Date & time release occurred:	NA								
**	C105 (Completion Rpt) w/Applicable Pit Inform	nation	ation Attached							

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#### **Temporary Pit Inspection**

**FACILITY INFORMATION** Facility Name: JICARILL 93 # 12A API #: 30-039-29804 Pit Type: Drilling Workover Cavitation Inspection: 🛛 Daily Weekly Monthly X Yes No If No. Pit Liner intact (no visible tears) Date / Time Reported: Report to EH&S immediately Pit Properly Fenced (no fence on rig side if on site) X Yes No Not Required (if site fully fenced) Pit Slopes intact X Yes No  $\square$  Yes  $\square$  No  $\square$  Not Applicable Adequate freeboard (liquid level 2 vertical feet from berm top) Yes No Free oil or sheen present on pit Yes No Not Applicable Flare Pit free of liquids Comments: Inspector Signature: GLENN GATHINGS Printed Name: GLENN GATHINGS

Record Retention: Submit with Closure

File: EH&S

Title: DRILLING CONSULTANT (T.D.C.I.)

Date: 12/10/2008 Phone: (505) 215-9201

720 So. Main / PO Box 640 Aztec, NM 87410 505-634-4200 / 505-634-4205 fax



### **Temporary Pit Inspection**

FACILITY INFORMATION

Facility Name: JICARILL 93 # 12A	API #: 30-039-29804								
Pit Type: Drilling Workover Cavitation	Inspection: Daily Weekly Monthly								
Pit Liner intact (no visible tears)	X Yes No If No, Date / Time Reported:								
Pit Properly Fenced (no fence on rig side if on site)	Yes No Not Required (if site fully fenced)								
Pit Slopes intact									
Adequate freeboard (liquid level 2 <u>vertical</u> feet from berm top)									
Free oil or sheen present on pit	☐ Yes ☒ No								
Flare Pit free of liquids	Yes No Not Applicable								
Comments:									
Inspector Signature: W.MOCK									
Printed Name: W.MOCK									
Title: DRILLING CONSULTANT (T.D.C.I.)									
Date: 12/11/2008 Phone: (505) 215-9201									

Record Retention: Submit with Closure

File: EH&S

720 So. Main / PO Box 640 Aztec, NM 87410 505-634-4200 / 505-634-4205 fax



### **Temporary Pit Inspection**

**FACILITY INFORMATION** Facility Name: JICARILL 93 # 12A API #: 30-039-29804 Pit Type: Drilling Workover Cavitation Inspection: \( \text{Daily} \) Weekly Monthly Pit Liner intact (no visible tears) Date / Time Reported: Yes No If No. Report to EH&S immediately Yes No Not Required (if site fully fenced) Pit Properly Fenced (no fence on rig side if on site) X Yes No Pit Slopes intact Adequate freeboard (liquid level 2 vertical feet from berm top) Free oil or sheen present on pit ☐ Yes ☒ No Flare Pit free of liquids X Yes No Not Applicable Comments: Inspector Signature: W.MOCK Printed Name: W.MOCK

Record Retention: Submit with Closure

File: EH&S

Title: DRILLING CONSULTANT (T.D.C.I.)

Date: 12/12/2008 Phone: (505) 215-9201

720 So. Main / PO Box 640 Aztec, NM 87410 505-634-4200 / 505-634-4205 fax



#### **Temporary Pit Inspection**

**FACILITY INFORMATION** Facility Name: 93-12 A API #: 30-039-29804 93-12-A Pit Type: X Drilling Workover Cavitation Inspection: Daily (Rig) X Weekly (Tech) X Yes No If No. Pit Liner intact Date / Time Reported: 12-17-08 Report to EH&S immediately X Yes No Not Required (if site fully fenced) Pit Properly Fenced Pit Slopes intact X Yes П No Adequate freeboard X Yes No Not Applicable Free oil or sheen present on pit X Yes No Flare Pit free of liquids Yes X No Not Applicable Comments: Pit has drilling liquids Inspector Signature: Tommy Clements Printed Name: Tommy Clements Title: Tech I

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files

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### **Temporary Pit Inspection**

FACILITY INFORMATION							
Facility Name: 93-12 A	API #: 30-039-29804						
93-12-A							
Pit Type: X Drilling Workover Cavitation	Inspection: Daily (Rig) X Weekly (Tech)						
Pit Liner intact	X Yes No If No, Date / Time Re12-29-08 Report to EH&S immediately						
Pit Properly Fenced	X Yes No Not Required (if site fully fenced)						
Pit Slopes intact	X□ Yes □ No						
Adequate freeboard	X Yes No Not Applicable						
Free oil or sheen present on pit	X Yes No						
Flare Pit free of liquids	☐ Yes X☐ No ☐ Not Applicable						
Comments: Pit has drilling liquids							
Inspector Signature: Tommy Clements							
Printed Name: Tommy Clements							
Title: Tech I							

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files

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### **Temporary Pit Inspection**

FACILITY INFORMATION		
Facility Name: 93-12 A	API #: 30-039-29804	
93-12-A		
Pit Type: X Drilling Workover Cavitation	Inspection: Daily (Rig) X Weekly (Tech)	
Market Company of the		
Pit Liner intact	X Yes No If No, Date / Time 1/28/2009 Report to EH&S immediately	
Pit Properly Fenced	X Yes No Not Required (if site fully fenced)	
Pit Slopes intact	X Yes No	
Adequate freeboard	X Yes No Not Applicable	
Free oil or sheen present on pit	Yes x No	
Flare Pit free of liquids	x Yes No Not Applicable	
Comments:		
Inspector Signature: Tommy Clements		
Printed Name: Tommy Clements		
commy comons		
Title: Tech I		
Date: Phone:		

Record Retention: Submit with Closure

720 So. Main / PO Box 640 Aztec, NM 87410 505-634-4200 / 505-634-4205 fax



### **Temporary Pit Inspection**

**FACILITY INFORMATION** Facility Name: 93-12 A API #: 30-039-29804 93-12-A Pit Type: X☐ Drilling ☐ Workover Cavitation Inspection: Daily (Rig) X Weekly (Tech) Pit Liner intact X☐ Yes ☐ No If No. Date / Time 2/6/2009 Report to EH&S immediately Pit Properly Fenced X Yes No Not Required (if site fully fenced) X Yes No Pit Slopes intact Adequate freeboard X Yes No Not Applicable Free oil or sheen present on pit ☐ Yes x☐ No Flare Pit free of liquids x Yes No Not Applicable Comments: Inspector Signature: Tommy Clements Printed Name: Tommy Clements Title: Tech I

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files

720 So. Main / PO Box 640 Aztec, NM 87410 505-634-4200 / 505-634-4205 fax



### **Temporary Pit Inspection**

**FACILITY INFORMATION** Facility Name: 93-12 A API #: 30-039-29804 93-12-A **Pit Type:** X☐ Drilling ☐ Workover Cavitation Inspection: Daily (Rig) Weekly (Tech) Pit Liner intact X Yes No If No. Date / Time 2/18/2009 Report to EH&S immediately Pit Properly Fenced X Yes No Not Required (if site fully fenced) Pit Slopes intact X Yes No Adequate freeboard X Yes No Not Applicable Free oil or sheen present on pit ☐ Yes x☐ No Flare Pit free of liquids x Yes No Not Applicable Comments: Inspector Signature: Tommy Clements Printed Name: Tommy Clements <u>Titl</u>e: Tech I

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files

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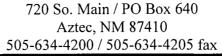
### **Temporary Pit Inspection**

**FACILITY INFORMATION** API #: 30-039-29804 Facility Name: 93-12 A 93-12-A Cavitation Inspection: Daily (Rig) X Weekly (Tech) **Pit Type:** X☐ Drilling ☐ Workover ☐ Pit Liner intact X Yes No If No. Date / Time 2/27/2009 Report to EH&S immediately Pit Properly Fenced X Yes No Not Required (if site fully fenced) Pit Slopes intact X Yes No Adequate freeboard X Yes No Not Applicable Yes x No Free oil or sheen present on pit x Yes No Not Applicable Flare Pit free of liquids Comments: Inspector Signature: Tommy Clements Printed Name: Tommy Clements Title: Tech I

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files





### **Temporary Pit Inspection**

**FACILITY INFORMATION** API #: 30-039-29804 Facility Name: 93-12 A 93-12-A Pit Type: X☐ Drilling ☐ Workover Cavitation Inspection: Daily (Rig) Weekly (Tech) Pit Liner intact X Yes No If No. Date / Time 3/19/2009 Report to EH&S immediately Pit Properly Fenced X Yes No Not Required (if site fully fenced) X Yes No Pit Slopes intact Adequate freeboard X Yes No Not Applicable ☐ Yes x☐ No Free oil or sheen present on pit Flare Pit free of liquids x Yes No Not Applicable Comments: Inspector Signature: Art Alsup Printed Name: Art Alsup Title: Tech I

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files

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### **Temporary Pit Inspection**

FACILITY INFORMATION			
Facility Name: 93-12 A	API #: 30-039-29804		
93-12-A			
Pit Type: X Drilling Workover Cavitation Inspection: Daily (Rig) X Weekly (Tech)			
Pit Liner intact	X Yes No If No, Date / Time 3/28/2009  Report to EH&S immediately		
Pit Properly Fenced	X Yes No Not Required (if site fully fenced)		
Pit Slopes intact	X□ Yes □ No		
Adequate freeboard	X Yes No Not Applicable		
Free oil or sheen present on pit	☐ Yes x☐ No		
Flare Pit free of liquids	x Yes No Not Applicable		
Comments:			
Inspector Signature: Art Alsup			
Printed Name: Art Alsup			
Title: Tech I			
1110. 10011			
Date: Phone	9:		

Record Retention: Submit with Closure

37 SUMMARY OF POROUS cushion used, time tool open	ZONES (Show all important zon n, flowing and shut-in pressures, a	es of porosity and contents thereof and recoveries)	, cored intervals, and all drill-stem, te	sts, including depth interval tested,	38 GEOLOGIC MARKER	S		
FORMATION	TOP	воттом	DESCRIPTION, CONTENTS, ETC		NAME	ТОР		
						NAME	MEASURED DEPTH	TRUE VERTICAL DEPTH
						KIRTLAND	1448'	
						FRUITLAND COAL	3121'	
						PICTURED CLIFFS	3388'	
						CLIFFHOUSE	5167'	
						MENEFEE	5320'	
						POINT LOOKOUT	5681'	
						MANCOS	6060'	
						DAKOTA	7899'	
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### **Temporary Pit Inspection**

**FACILITY INFORMATION** Facility Name: 93-12 A API #: 30-039-29804 93-12-A Pit Type: X Drilling Workover  $\square$ Cavitation Inspection: Daily (Rig) X Weekly (Tech) Pit Liner intact X Yes No If No. Date / Time 4/8/2009 Report to EH&S immediately Pit Properly Fenced X Yes No Not Required (if site fully fenced) Pit Slopes intact X∐ Yes ☐ No Adequate freeboard X Yes No Not Applicable Yes x No Free oil or sheen present on pit Flare Pit free of liquids x ☐ Yes ☐ No ☐ Not Applicable Comments: Inspector Signature: Art Alsup Printed Name: Art Alsup Title: Tech I

Phone:

Record Retention: Submit with Closure

File: EH&S Well Files

720 So. Main / PO Box 640 Aztec, NM 87410 505-634-4200 / 505-634-4205 fax



### **Temporary Pit Inspection**

FACILITY INFORMATION		
Facility Name: 93-12 A	API #: 30-039-29804	
93-12-A		
Pit Type: X Drilling Workover Cavitation	Inspection: Daily (Rig) X Weekly (Tech)	
THE TYPE: ALL Brilling III WORKSTON III COVINGINATI	Inspection: Daily (rig) All Medicy (recti)	
	·	
Pit Liner intact	X   Yes	
Fil Liner inidci	X Yes No If No, Date / Time 4/16/2009  Report to EH&S immediately	
Pit Properly Fenced	X Yes No Not Required (if site fully fenced)	
	All too like the the the thought of the too and the the too and the the too and the too an	
Pit Slopes intact	X□ Yes □ No	
Adequate freeboard	X Yes No Not Applicable	
Free oil or sheen present on pit	☐ Yes x☐ No	
Troc on or shoot proson on ph		
Flare Pit free of liquids	x Yes No Not Applicable	
Comments:		
Joseph and art Cinna artistra and Alas Inc	•	
Inspector Signature: Art Alsup		
Printed Name: Art Alsup		
· ····································		
Title: Tech I		
Date: Phone:		

Record Retention: Submit with Closure

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### **Temporary Pit Inspection**

FACILITY INFORMATION		
Facility Name: 93-12 A	API #: 30-039-29804	
93-12-A		
Pit Type: X Drilling Workover Cavitation	Inspection: Daily (Rig) X Weekly (Tech)	
	map contain a same fings with a same financial same	
Pit Liner intact	X Yes No If No, Date / Time 4/23/2009 Report to EH&S immediately	
Pit Properly Fenced	X Yes No Not Required (if site fully fenced)	
Pit Slopes intact	X□ Yes □ No	
Adequate freeboard	X Yes No Not Applicable	
Free oil or sheen present on pit	☐ Yes x☐ No	
Flare Pit free of liquids	x Yes No Not Applicable	
Comments:		
Inspector Signature: Art Alsup		
Printed Name: Art Alsup		
Title: Tech I		
Date: Phone:		

Record Retention: Submit with Closure

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### **Temporary Pit Inspection**

**FACILITY INFORMATION** 

	API #: 30-039-29804
Facility Name: 93-12 A	AFI #. 30-037-27004
93-12-A	
Pit Type: X Drilling Workover Cavitation	Inspection: Daily (Rig) X Weekly (Tech)
Pit Liner intact	X Yes No If No, Date / Time 5/1/2009 Report to EH&S immediately
Pit Properly Fenced	X Yes No Not Required (if site fully fenced)
Pit Slopes intact	X□ Yes □ No
Adequate freeboard	X Yes No Not Applicable
Free oil or sheen present on pit	Yes x . No
Flare Pit free of liquids	x Yes No Not Applicable
Comments:	
Inspector Signature: Art Alsup	
Printed Name: Art Alsup	
Title: Tech I	
Date: Phone:	

Record Retention: Submit with Closure

In Lieu of Form 3160-4 (July 1992)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

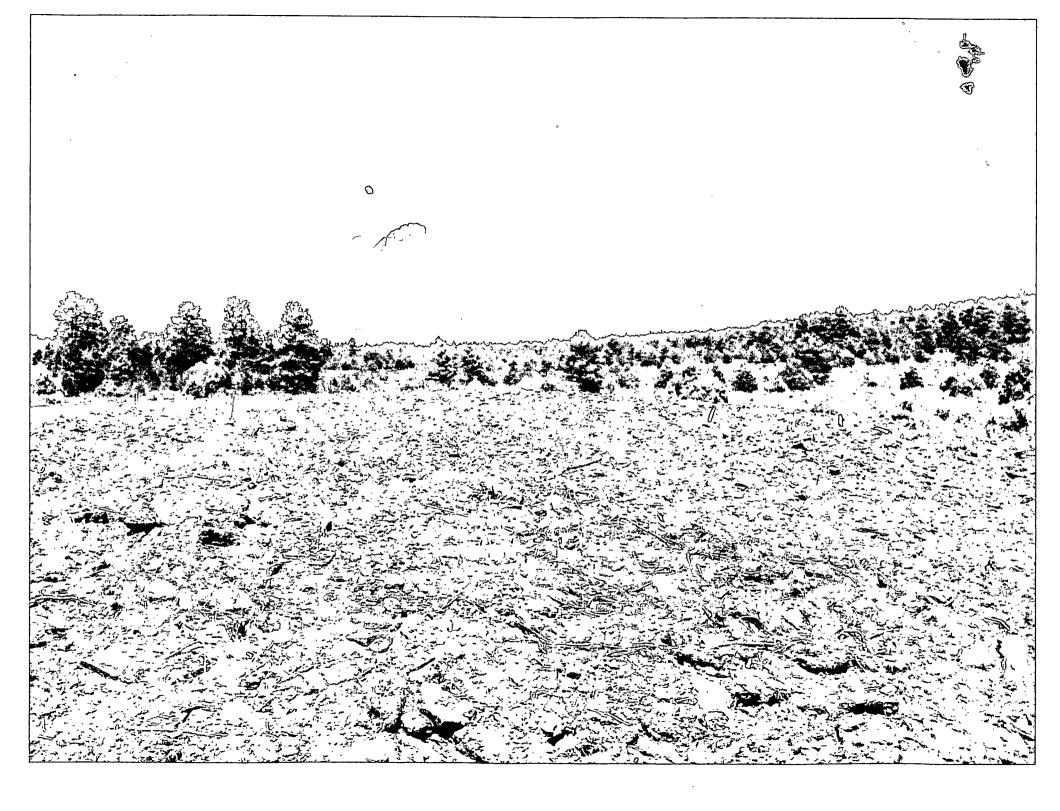
SUBMIT IN DUPLICATE

OMB NO. 1004-0137 Expires. February 28, 1995

FORM APPROVED

(See other instructions on reverse side) 5 LEASE DESIGNATION AND LEASE NO. Jugarilla contract #93

						Jiedi illa contract			
_			COMPLEMENTAL D	nnonm i ND t	0.04	6. IF INDIAN, ALLO			
	WELL COMPL	ETION OR REC	COMPLETION R	EPORT AND L	OG*	Jicarilla Apache 7 UNIT AGREEMEN			
la TYPE	OF WELL FOIL WELL	X GAS WELL	DRY OTHER			/ UNIT AGREEME	NI NAME		
		Ž OAS WELL	DRY OTHER						
	OF COMPLETION IEW WELL WORKS	VER DEEPEN PLU	JG BACK DIFF RESVR	OTHER					
	OF OPERATOR					P. EARM OR LEASE	NAME WELL NO		
2. NAME	OF OPERATOR	WILLIAMS DDC	DUCTION COMPANY	,		8.FARM OR LEASE NAME, WELL NO Jicarilla "93" #12A			
3 ADDR	ESS AND TELEPHONE NO		DOCTION COMPANT			9 API WELL NO			
3 ADDR	ESS AND TELEPHONE N					30-039-29804			
4. LOCA	ATION OF WELL (D		Aztec, NM 87410 (505		-1*		DOOL OR WILDOAT		
	•	70' FWL, Sec 34 (L),	and in accordance with a	iny State requirement	s)"	Blanco Mesa Ve	POOL, OR WILDCAT		
	production interval i		12/N, K3 W			Bianco Mesa ve	rue		
	il depth	eported ocion .							
	•					II SEC, T,R,M,O	R BLOCK AND		
						SURVEY OR AR Sec 34, T27N, R			
				14 PERMIT NO	DATE ISSUED	12 COUNTY OR	13 STATE		
				14 TERRITATIO		Rio Arriba	New Mexico		
15 DATE	16 DATE T.D	17 DATE COMPLETED	(READY TO PRODUCE)	18 ELEVATIONS (DK.	, RKB, RT,GR,ETC )*	19 ELEVATION CA	SINGHEAD		
SPUDDED	REACHED	1-	20-09	711	12' GR				
11-30-08 20 TOTAL DEPTH, I	12-9-08	21 PLUG, BACK T.D.,	MD & TVD	22 IF MULTCOMP ,	23 INTERVALS	ROTARY TOOLS	CABLE TOOLS		
	6' MD	6360' MD	WID & TVD	HOW MANY	DRILLED BY	X	CABLE TOOLS		
24 PRODUCING INT	ERVAL(S) OF THIS COM	PLETION - TOP BOTTOM	M, NAME (MD AND TVD)*	1	1	25 WAS DIRECTION	NAL SURVEY MADE		
	Verde 5553' – 6264		1, 11 m E (1115 / 1115 1 1 15)			25 WAS DIRECTIONAL SURVEY MADE YES			
	AND OTHER LOGS RUN					27 WAS WELL COR	ED		
Aray Induction	n, Gamma Ray-Dens	ity-Neutron, Compens	sated Dual Neutron			NO			
28 CASING REPORT	(Report all strings set in wel	<u> </u>				L			
	IZE/GRADE.	WEIGHT, LB./FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEN	MENTING RECORD	AMOUNT PULLED		
9-5/8	", K-55	36.0#	338'	12-1/4"	200 SX - S	URFACE			
7",	K-55	23.0#	4150'	8-3/4"	450 SX - 22	50' (CBL)			
	<del>'</del>		/		<del>                                     </del>		<u></u>		
20 I Dien Becond		<u> </u>		<u></u>	20 TURNIC RECORD				
29 LINER RECORD SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD SIZE	DEPTH SET (MD)	PACKER SET (MD)		
4-1/2", K-55,		6408'	165 SX - 5400'		2-3/8", 4 7# J-55	6270'			
11 6#	10000	L	(CBL)	as corp direct the	THE OF LEVE AND TO LEGE	1770	L		
31 PERFORATION R	ECORD (Interval, size, and	number)		DEPTH INTERVAL	TURE, CEMENT SQUEEZE, AMOU	UNT AND KIND OF MA	TERIAL USED		
				(MD)	D 1 1 222211	1/201 - 105.0			
CHAIN SSS	50242 T + 1 CC4	0.2001 1		5553' – 5924'	Fraced with 9380# 15	4/30 LiteProp 125 fo	ollowed with 3070# brown		
<u>CEI/MEN.</u> 3333	- 5924'. Total of 64,	0.38 noies		CH/MEN	Sand				
PLO: 5959' - 62	64, Total of 67, 0 34'	'holes		5959' – 6264'	Fraced with 18680#	14/30 Lite prop 125	followed with 3070#		
				PLO	brown sand				
					<u> </u>				
33 PRODUCTION									
DATE OF FIRS	T PRODUCTION	PRODU	CTION METHOD (Flowing, ga	as lift, pumping-size and type	e of pump)	WELL STAT	'US (PRODUCING OR SI)		
						Si	I – waiting tie in		
D. Charles on Manual	maaman	augun ann	DO ODBY FOR FFRM	O# PP1	0.0 1.00	WATER - BBL			
DATE OF TEST	TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL - BBL	GAS - MCF	WATER-BBL	GAS-OIL RATIO		
1-19-09	I 0 hrs	2"	FERIOD						
FLOW TBG PRESS	CASING PRESSURE	CALCID ATTO	24-HOUR RATE	OIL - BBL	GAS – MCF	WATER - BBL	OIL GRAVITY-API (CORR )		
0 oz	CASING PRESSURE	CALCULATEL	24-NUUK KATE	OIL - BBL	1065 p/day	WATER - BBL	OIL GRAVII 1-API (CORK )		
0 02	3 lb				1005 p/day				
34 DISPOSITION OF	GAS (Sold, used for fuel ve	ented, etc.) TO BE SOLD				TEST WITNESSED B	Y Weldon Higgins		
35 LIST OF ATTACH		<del></del>	ONES, WELLBORE DIAG	RAM					
			correct as determined from all as						
Jo a nereby certify that	the roregoing and attached	mormation is complete and	correct as determined from all av	vanable records					
SIGNED			TITLE _[	Orlg COM DATE	1-21-09				



Two Copies				State of New Mexico Energy, Minerals and Natural Resources				Form C-105									
District I 1625 N French Dr , Hobbs, NM 88240				En	ergy,	Minerals and	d Na	atural 1	Res	sources	July 17, 20				July 17, 2008		
District II 1301 W Grand Av			10		O:	l Conservat	tion	Divid	ai a .	<b>n</b>	30-039-29804						
District III 1000 Rio Brazos R	ld Aztec	NM 87410										2. Type of Lease					
District IV 1220 S St. Francis			05	1220 South St. Francis Dr. Santa Fe, NM 87505					STATE FEE X FED/INDIAN  3. State Oil & Gas Lease No. Jicarilla Contract #93								
				RECC		ETION RE				LOG	$\dashv$						
4. Reason for fil		LLTIO	VOIL	INLUC	) V   L	LIIONIC	1 01	NI AI	עט	LOG	+	5. Lease Nam					Marketin T. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
☐ COMPLET	ION DE	DODT (E:II	in hava	. #1 thmo.	. o.b. #21	for State and Ear	aall	لایامه ما			ŀ		Jıc	anlla Apa			
l								• /			-	6. Well Numb	er:				
33; attach this a											r		Jic	arilla "93'	"#12A		
7. Type of Com	pletion:			•							1						
8. Name of Oper						□PLUGBACK	<u> </u>	DIFFER	ENT	RESERVO	IR T	OTHER  9. OGRID	1207	82			
10. Address of O	perator	P.O. BOX	640	AZTE	C, NM	87410						11. Pool name	or W	ildcat .			
		1			· <del></del>	T											
12.Location	Unit Lt	Secti	on	Towns	ship	Range	Lot		_	Feet from th	e	N/S Line	Feet	from the	E/W	Line	County
Surface:			<del></del>				ļ		$\bot$		_						
BH: 13 Date Spudde	4   14	Date T.D. R		1,5	D-4- D:-	Datad		,		24.6	$\perp$	(Deed to Deed			<u> </u>	· · · · · · · · · · · ·	LDVD
13 Date Spudde	a   14. L	Date 1.D. K	eacned	13.1		Released /20/2009			10. L	Date Comple	tea	(Ready to Prod	luce)		T, GR, 6		and RKB,
18. Total Measur	red Depth	of Well		19. F	Plug Bac	k Measured Dep	oth	:	20.	Was Direction	onal	Survey Made?	)	21. Тур	e Electr	ic and Ot	her Logs Run
22 Producing In	terval(s),	of this com	pletion -	Top, Bo	ttom, Na	ame											
					~ . ~					44			**				
23 CASING SI	17 F	I wer	WELD.			ING REC	OR				ng			CORD		4OLD IT	DILLED
CASING SI	ZE	WEIC	HT LB.	/F1.		DEPTH SET			HOL	LE SIZE		CEMENTIN	G KE	CORD	Al	MOUNI	PULLED
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24.		<u> </u>			LINI	ER RECORD				1.	25.	<u> </u>	TIDIN	NG REC	OD D		
SIZE	ТОР		BC	TTOM	LIIV	SACKS CEM	ENT	SCRE	EEN		23. SIZ		_	EPTH SET		PACKI	ER SET
26 Danfanation				1				1	CIT	2 GHOTH F		CTURE CE		TT. COLU		FTTC	
26. Perforation	recora (	intervai, siz	e, and nu	imber)						O, SHOT, F NTERVAL	'R/	ACTURE, CE AMOUNT A					
												1200000					
						4											
28.  Date First Produc	ation		Drodu	tion Mot	had (El	owing, gas lift, p		ODU				Well Status	/Due	J. a.s. Chara	)		
Date First Flour	ction		Floud	tion wet	nou (Fic	owing, gas iiji, pi	umpir	ig - Size	ana	іуре ритр)		Wen status	(Proc	ı. or snuı-	·in)		
Date of Test	Hour	s Tested	l Te	noke Size		Prod'n For		Oıl - I	Rhl		Gae	- MCF	W	ater - Bbl.		l Gas - C	Dil Ratio
Dute of Test	Thous	3 103104		ioke bize		Test Period			DUI	1	Jas	- WICI	1"	ater - Doi.		Gas - C	n Ratio
Flow Tubing	Casi	ng Pressure	Ca	lculated	24-	Oil - Bbl.			as -	MCF		Water - Bbl.		Oil Gra	vity - A	 P1 - <i>(Cor</i> :	r)
Press		ig i ressure		our Rate				١	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	cı	1	vidioi Boi.		011 011	*1ty /t	11 (00)	.,
29. Disposition of	29. Disposition of Gas (Sold, used for fuel, vented, etc.)  30. Test Witnessed By																
•	,																
31. List Attachm	ents																
32. If a temporar	y pit was	used at the	well, att	ach a plat	with th	e location of the	temp	orary pit	t	Attached							
33. If an on-site				-			•										
						Latitude		3040041		Longit	ude	e -107 08191	4598		NAD	1927	X1983
I hereby centi	fy that i	the inform	nation .	shown o	on both	h sides of this	forn	n is tru UEH	ie ai	nd comple			$f \overline{my}$	knowled	lge an	d belief	,
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# WILLIAMS PRODUCTION TEMP PIT CLOSURE REPORT ADDENDUM

#### Jicarilla 93 #12A

Req	‡

	ow free standing liquids removed in follo	
Liquids rem	oved by vacuum truck and hauled to Basin Dis	posal, Permit # NM 01-0005
Return red	ceipt sent & received from surface owne	r: Copy Attached
Rig off loc	ation on following date:	1/20/2009
Pit covere	d on following date:	5/1/2009
`	g started/scheduled for following date: ix to follow BLM/USFS COAs in APD per BLN	Spring/Fall 2009 :FFO/NMOCD MOU dated 5/4/09.
Pit liner re	moved on following date:	4/27/2009
Pit liner re	moved by following company: Ac	obe Construction
anchored m	ove mud level after stabilizationby manually & aterial on date given. Here Pit liner disposed:  S.J. Regional	./or mechanically cutting liner. Removed all  Landfill, NMED Permit SWM-052426
Solidificati	on process accomplished in following m	anner:
non-waste,	, -	mechanical mixing. Pit contents were mixed wit & stable. The mixing ratio has not exceeded 3
Five point	composite sample provided:	Envirotech Results Attached
Testing of	earth by following company:	Envirotech, Inc.
Grading & b	method used for solidification, non-was ackfilling area with approximately 4' of soils n, to one foot consisting of topsoil.	

10 Re-contouring to match surrounding geography done in following manner (using BMP's):

### Jicarilla 93 #12A

Reestablish drainage and contours to approximately match previous topography meeting Conditions of Approval in APD and as specified by Surface Management Agency Inspectors.

	Williams will comply with Surface Management Age referenced well, per BLM:FFO/NMOCD MOU date	·	of the APD for the
2	Date pit was covered:	5/1/2009	
3	Company setting steel marker on site:	Adobe Construction	
	Date marker set:	10/13/2009	
	Type cmt & depth of cmt to place marker:	2 sx Pre-mixed concrete @ 4' de	pth
	Type of marker used: (check one)	Plate	
	Pertinent information on marker (operator, le	ease, well name/#, S-T-R-UL):	
	Williams Production, Jicarilla 93 #12A	, Unit L, Sec. 34; T27N; R3W, in pl	ace burial
tta	ached information :		
	Sample results from Form C141 (Release No	otification & Corrective Action)	Attached
	Date & time release occurred:	N	A

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# **EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons**

<i>t</i>			
Client.	WPX	Project #:	04108-0003
Sample ID:	Blow Pit	Date Reported:	12-15-09
Laboratory Number:	52674	Date Sampled:	12-10-09
Chain of Custody No	8466	Date Received:	12-11-09
Sample Matrix:	Soil	Date Extracted:	12-11-09
Preservative:	Cool	Date Analyzed:	12-14-09
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)	2.4	0.1
Total Petroleum Hydrocarbons	2.4	0.2

ND - Parameter not detected at the stated detection limit.

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

SW-846, USEPA, December 1996

Comments: Jicarilla 93 #12A.

Analyst



## **EPA Method 8015 Modified** Nonhalogenated Volatile Organics **Total Petroleum Hydrocarbons**

#### **Quality Assurance Report**

The state of the s					
Client:	QA/QC		Project #:		N/A
			•		
Sample ID:	12-14-09 QA/C	AC.	Date Reported:		12-15-09
Laboratory Number:	52666		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ide	Date Received:	•	N/A
Preservative:	N/A		Date Analyzed <sup>.</sup>		12-14-09
Condition:	N/A		Analysis Reques	ted:	TPH
	#150allDate	E CALRES	LIGHE AND THE P	% Différence	Accept Range
Gasoline Range C5 - C10	05-07-07	1.0374E+003	1.0378E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0698E+003	1.0702E+003	0.04%	0 - 15%
\$100,000,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000	TANED (1000)				
Blank@onc:((mg/E=mg/Kg))		-Concentration		Detection Lim	<b>L</b>
Blank Gonc (mg/L=mg/Kg)) Gasoline Range C5 - C10		Concentration ND		Defection Lim 0.2	
		MARKET MARKET AND THE PROPERTY OF THE PROPERTY			
Gasoline Range C5 - C10		ND		0.2	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons		ND ND ND		0.2 0.1 0.2	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons  Duplicate/Conc. (mg/Kg)	Sample)	ND ND ND	%Difference	0.2 0.1 0.2 Accept Range	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons		ND ND ND		0.2 0.1 0.2	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons  Duplicate/Conc. (mg/Kg)  Gasoline Range C5 - C10 Diesel Range C10 - C28	Sample 18.1 14.5	ND ND ND Duplicates 16.0 14.4	#2%************************************	0.2 0.1 0.2 Accept Range 0 - 30% 0 - 30%	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons  Puplicate Conc. (mg/Kg) Gasoline Range C5 - C10 Diesel Range C10 - C28  Spike Conc. (mg/Kg)	\$4.5 Sample 18.1 14.5 \$4.5 Sample	ND ND ND Duplicates 16.0 14.4 Spike Added	#Willifferences 11.6% 0.7% SpikeResult	0.2 0.1 0.2 Accept Range 0 - 30% 0 - 30%	Accept Range
Gasoline Range C5 - C10 Diesel Range C10 - C28 Total Petroleum Hydrocarbons  Duplicate/Conc. (mg/Kg)  Gasoline Range C5 - C10 Diesel Range C10 - C28	Sample 18.1 14.5	ND ND ND Duplicates 16.0 14.4	#2%************************************	0.2 0.1 0.2 Accept Range 0 - 30% 0 - 30%	

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 52666 - 52675.



#### **EPA METHOD 8021** AROMATIC VOLATILE ORGANICS

Client.	WPX	Project #.	04108-0003
Sample ID:	Blow Pit	Date Reported:	12-15-09
Laboratory Number	52674	Date Sampled:	12-10-09
Chain of Custody:	8466	Date Received <sup>-</sup>	12-11-09
Sample Matrix.	Soil	Date Analyzed:	12-14-09
Preservative:	Cool	Date Extracted.	12-11-09
Condition:	Intact	Analysis Requested:	BTEX

		Det.	
	Concentration	Limit	
Parameter	(ug/Kg)	(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
1 2000	Fluorobenzene	93.1 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	98.0 %

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.

Jicarilla 93 #12A. Comments:

Analyst



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client.	N/A	Project #:	N/A
Sample ID:	12-14-BTEX QA/QC	Date Reported:	12-15-09
Laboratory Number.	52666	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	. N/A
Preservative.	N/A	Date Analyzed:	12-14-09
Condition:	N/A	Analysis:	BTEX

Galibration and Detection Limits (ug/L)	(FCAIRE)	C'éaliRF# Accept Ranc	-9/dDiffi 10 0 = 1159/6	Blank Gong	Detect
Benzene	1.5771E+006	1.5803E+006	0.2%	ND	0.1
Toluene	1 4639E+006	1.4669E+006	0.2%	ND	0.1
Ethylbenzene	1.3273E+006	1.3299E+006	0.2%	ND	0.1
p,m-Xylene	3.3752E+006	3.3820E+006	0.2%	ND	0.1
o-Xylene	1.2490E+006	1 2515E+006	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample & Di	iplicate	# P&Diff	Accept Range	Deteci/Limit
Benzene	2.4	2.2	8.3%	0 - 30%	0.9
Toluene	17.9	17.4	2.8%	0 - 30%	1.0
Ethylbenzene	9.6	9.4	2.1%	0 - 30%	1.0
p,m-Xylene	264	258	2.1%	0 - 30%	1.2
o-Xylene	118	112	5.3%	0 - 30%	0.9

Spike Conc. (ug/Kg)	And Sample And	ount Spiked & Spik	ed Sample 🥦	% Recovery.	Accept Range
Benzene	2.4	50.0	50.4	96.2%	39 - 150
Toluene	17.9	50.0	64.9	95.6%	46 - 148
Ethylbenzene	9.6	50.0	54.6	91.6%	32 - 160
o,m-Xylene	264	100	355	97.7%	46 - 148
o-Xylene	118	50.0	164	97.5%	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 Delectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 52666 - 52675.

Ré

Analyst



#### **EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS**

Client:	WPX	Project #:	04108-0003
Sample ID:	Blow Pit	Date Reported:	12-15-09
Laboratory Number:	52674	Date Sampled <sup>,</sup>	12-10-09
Chain of Custody No:	8466	Date Received:	12-11-09
Sample Matrix:	Soil	Date Extracted:	<b>12-11-09</b>
Preservative:	Cool	Date Analyzed:	12-11-09
Condition:	Intact	Analysis Needed.	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	12.8	9.0

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:

Jicarilla 93 #12A



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

N/A

N/A

12-15-09

12-11-09

Client: QA/QC Project #: Sample ID: QA/QC 12-11-TPH.QA/QC 52668

Date Reported: Laboratory Number: Date Sampled: 'Sample Matrix: Freon-113 Date Analyzed: Preservative: N/A Date Extracted:

12-11-09 Condition: N/A Analysis Needed: **TPH** 

Calibration I-Cal Date C-Cal Date I-Cal RF: C-Cal RF: % Difference Accept, Range 12-11-09 12-11-09 1,610 1,670 3.7% +/- 10%

Blank Conc. (mg/Kg) Concentration **Detection Limit TPH** ND 9.0

Duplicate Conc. (mg/Kg) Sample Duplicate % Difference Accept. Range **TPH** 103 77.1 25.0% +/- 30%

Spike Conc. (mg/Kg) Sample Spike Added Spike Result % Recovery Accept Range **TPH** 103 2,000 2,500 119% 80 - 120%

ND = Parameter not detected at the stated detection limit.

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

and Waste, USEPA Storet No. 4551, 1978.

Comments: **QA/QC for Samples 52668-52675** 

'Mister on Walters



#### Chloride

Client: WPX Project #: 04108-0003 Sample ID: Blow Pit Date Reported: 12-15-09 Lab ID#: 52674 Date Sampled: 12-10-09 Sample Matrix: Soil Date Received: 12-11-09 Preservative: Cool Date Analyzed: 12-15-09 Condition: Intact Chain of Custody: 8466

Parameter Concentration (mg/Kg)

Total Chloride 110

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: Jicarilla 93 #12A

Analyst

Review

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1625 N. French Dr., Hobbs, NAI 88240

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1361 W. Grand Avenue, Artesia, NAI 35210

District III

1000 Rio Brazo: Rd., Aztac, NMS7410

District IV

1220 S. St. Franci: Dr., Santa Fe, NA 187705

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe. N.V. 87505 Mit # 1937

DIST Fam C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

30-039	<b>PI Numbe</b> - 29	Pool Code 72319  Pool Nation Pool Nation Pool Nation Pool Nation										
Property C	¢de	Property Name 'Well Number JICARILLA 93 12A										
'OGRID N 120782	Ď.	*Operator Name * Shrration WILLIAMS PRODUCTION COMPANY 7112										
					10 Surface	Location						
CLor loc 20. L	Section 34	Township Range Let Idn Feet from the North South line Feet from the 27N 3W 1850 SOUTH 870						Exact Thest time WEST	County RIO ARRIBA			
•			<sup>11</sup> Bo	ottom Ho	le Location I	Different Fron	Surface					
CT. or locus.	Section	Township	Range	Loi Ide	Feet from the	North South fine	Feet from the	East West line				
" Indicated Acres 320 Ac. (W/2)	° Zalan en	Testi "	Consolidation	Code "Or	der No.							

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*	STANDARD UNIT HAS BEEN	APPROVED BY THE	
:6	5277.36		17 OPERATOR CERTIFICATION I handly, correct that the hydrometical committed feature is the end complete to the best of my from ledge and based  Separate
5284,74	34	528q.00	Princed Name Tide and Feast) Affirm  Date  18 SURVEYOR CERTIFICATION
870'			Fromby, certify then the well location shown on this plan was planted from field notes of actual war ups reade by the or under my supervision, and then the same is one another party to the best of my bodief
1850'	5284.84		Algert 18 South Company of the