2256District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W 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

# 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

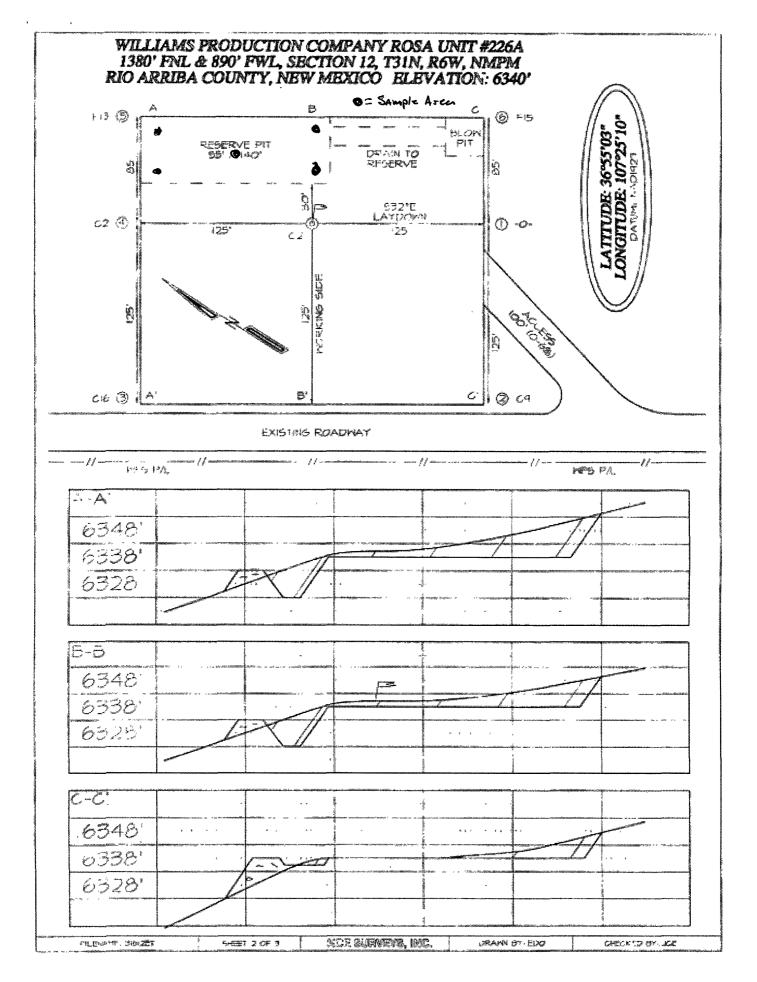
District On	nce
Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan App  Type of action:   Permit of a pit, closed-loop system, below-grade tank, or proposed a	lication
Type of action Permit of a pit, closed-loop system, below-grade tank, or proposed Closure of a pit, closed-loop system, below-grade tank, or proposed Modification to an existing permit Closure plan only submitted for an existing permit below-grade tank, or proposed alternative method	alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-gra	ade tank or alternative request
lease be advised that approval of this request does not relieve the operator of liability should operations result in pollution of invironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental automatical and the control of the co	surface water, ground water or the uthority's rules, regulations or ordinances
Operator WPX Energy Production, LLC OGRID #	120782
Address PO Box 640 / 721 S Main Aztec, NM 87410	
Facility or well name Rosa Unit 226A	
API Number3003927817 OCD Permit Number	
U/L or Qtr/Qtr _ E Section12 Township31N Range6W County	
Center of Proposed Design Latitude 36 91756 Longitude -107 42004	
Surface Owner   Federal   State   Private   Tribal Trust or Indian Allotment	
Temporary  ☐ Drilling  ☐ Workover  ☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  ☐ Lined ☐ Unlined Liner type Thickness20mil  ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other ☐ String-Reinforced  Liner Seams ☐ Welded ☐ Factory ☐ Other Volume 20,000 bbl Dimensions Get fr	
3	
Closed-loop System:       Subsection H of 19 15 17 11 NMAC         Type of Operation       P&A       Drilling a new well       Workover or Drilling (Applies to activities which require printent)         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	
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	
Liner type Thicknessmil	
5 Alternative Method:	

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

Fencing: Subsection D of 19 15 17 11 NMAC (Applies to permanent pits temporary pits, and below-grade tanks)				
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)				
Four foot height, four strands of barbed wire evenly spaced between one and four feet				
Alternate Please specify As per BLM specifications				
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	· · · · · · · · · · · · · · · · · · ·			
9 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 of the Santa Fe Env	office for			
consideration of approval  Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval				
10				
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 accepmaterial are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro	ptable source priate district			
office 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 dryi	pproval.			
above-grade tanks associated with a closed-loop system.	—————			
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	☐ Yes ⊠ No			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	☐ Yes ☒ No			
- Topographic map, Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (Applies to temporary, emergency, or cavitation pits and below-grade tanks)	☐ Yes ☑ No ☐ NA			
- Visual inspection (certification) of the proposed site, Aerial photo, Satellite image				
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (Applies to permanent pits)	☐ Yes ☐ No ☑ NA			
- 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 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	☐ Yes ⊠ No			
adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality, Written approval obtained from the municipality				
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			

Waste Removal Closure For Closed-loop Systems That Utilize Above Groun Instructions: Please identify the facility or facilities for the disposal of liquids, facilities are required.	d Steel Tanks or Haul-off Bins Only: (19 15 17 13 Edilling fluids and drill cuttings. Use attachment if mo	O NMAC) ore than two
Disposal Facility Name	Disposal Facility Permit Number	
Disposal Facility Name Disposal Facility Permit Number		
Will any of the proposed closed-loop system operations and associated activities  Yes (If yes, please provide the information below)  No	<del> </del>	rice and operations?
Required for impacted areas which will not be used for future service and operated.  Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection.  Site Reclamation Plan - based upon the appropriate requirements of Subsection.	ite requirements of Subsection H of 19 15 17 13 NMAC in Lof 19 15 17 13 NMAC	C
Siting Criteria (regarding on-site closure methods only): 19 15 17 10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may requested on exception which must be submitted to the Santa Fe Environment demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC	e closure plan. Recommendations of acceptable sour ire administrative approval from the appropriate distr tal Bureau office for consideration of approval. Justi	ict office or may be
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search, USGS, D	ata obtained from nearby wells	☐ Yes ⊠ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS, D	ata obtained from nearby wells	☐ Yes ⊠ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search, USGS, D	ata obtained from nearby wells	⊠ Yes □ No □ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other s lake (measured from the ordinary high-water mark)  - Topographic map, Visual inspection (certification) of the proposed site	ignificant watercourse or lakebed, sinkhole, or playa	☐ Yes ⊠ No
Within 300 feet from a permanent residence, school, hospital, institution, or chur - Visual inspection (certification) of the proposed site, Aerial photo, Satell		☐ Yes ☒ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that lewatering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database, Visual inspection	spring, in existence at the time of initial application	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fresh was adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality, Written approximation	·	☐ Yes ⊠ No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map, Topographic map, Vis	rual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within the area overlying a subsurface mine - Written confirmation or verification of map from the NM EMNRD-Mini	ng and Mineral Division	☐ Yes ⊠ No
Within an unstable area  - Engineering measures incorporated into the design, NM Bureau of Geold Society, Topographic map	gy & Mineral Resources, USGS; NM Geological	☐ Yes ⊠ No
Within a 100-year floodplain - FEMA map		☐ Yes ⊠ No
On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements  Construction/Design Plan of Burial Trench (if applicable) based upon the Construction/Design Plan of Temporary Pit (for in-place burial of a drying Protocols and Procedures - based upon the appropriate requirements of 19  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsections.	equirements of 19 15 17 10 NMAC of Subsection F of 19 15 17 13 NMAC appropriate requirements of 19 15 17 11 NMAC pad) - based upon the appropriate requirements of 19 15 17 13 NMAC equirements of Subsection F of 19 15 17 13 NMAC of Subsection F of 19 15 17 13 NMAC I drill cuttings or in case on-site closure standards cannot of 19 15 17 13 NMAC on 1 of 19 15 17 13 NMAC	15 17 11 NMAC

19
Operator Application Certification:  Thereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief
Name (Print) Title
Signature Date
e-mail address Telephone
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: 2/23/2012  Title: OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.
☐ Closure Completion Date:11/23/2011
Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)  If different from approved plan, please explain
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.
Disposal Facility Name Disposal Facility Permit Number
Disposal Facility Name Disposal Facility Permit Number
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations  Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique
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 (required for on-site closure) □ Disposal Facility Name and Permit Number □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique □ Site Reclamation (Photo Documentation) □ On-site Closure Location Latitude36 91756 Longitude107 42004 NAD □ 1927 ☑ 1983
Operator Closure Certification:
Operator Closure 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) Ben Mitchell Title Regulatory Specialist
Signature
e-mail address ben mitchell@wpxenergy.com Telephone 505-333-1806



#### Williams Production Co., LLC San Juan Basin: New Mexico Assets

Temporary Pit In-place Closure Report Drilling/Completion and Workover (Groundwater >100 feet bgs)

Well: (Rosa Unit #226A)
API No: 30-039-27817

Location: E-12-T31N-R06W, NMPM

In accordance with Rule 19.15.17 13 NMAC, the following plan describes the general in-place closure requirements of temporary pits on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico This is WPX's standard procedure for all temporary pits to be utilized for the drilling, completion and/or workovers of oil and gas wells operated by WPX. For those temporary pits which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the pit closure on a Closure Report using Division Form C-144. The Report will include the following

- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection reports
- Sampling Results
- Division Form C-105: WELL COMPLETION OR RECOMPLETION REPORT AND LOG
- Copy of Deed Notice filed with the County Clerk (format to meet County requirements)
   <u>A deed notice is not required on state, federal or tribal land according to NMOCD FAQ dated October 30, 2008</u> and posted on the NMOCD website

#### General Plan Requirements

1 All free standing liquids will be removed from the pit at the start of the closure process. Liquids will be removed in a manner that the appropriate District Office approves including, recycled, reused, reclaimed, evaporated, and/or disposed of in a Division-approved facility. Once all free liquids are removed, the sludge will be stabilized by one of the following methods depending on equipment availability: blending with clean stockpiled soils or dewatering using a Bowl Decanter Centrifuge then blending with clean stockpiles soils.

To the extent practical, free liquids were pulled from the reserve pit following the completion rigoff. Haul dates were from 11/18/2011 #002 API # 30-039-3081 Order – SWD-1236)

- 2 The preferred method of closure for all temporary pits will be on-site closure by in-place burial, provided all the criteria in 19 15 17 13 B are met
- On-site burial plan for this location was approved by the Aztec District Office on (8/24/2011
- The surface owner shall be notified of WPX's proposed closure plan using a means that provides proof of notice (i.e. certified mail/return receipt requested)
   Williams notified the SMA of its intent to use a temporary pit and onsite burial in the Surface Use Plan in the well APD. The SMA was notified by email see attached. No return receipt required per BLM:FFO/NMOCD MOU dated 5/4/09
- 4 Within six months of the "rig-off" status occurring WPX will ensure that the temporary pit is covered, recontoured and reseeding in progress.

Drill rig-off10/16/2011 Completion rig-off (11/11/2011). Pit covered (11/23/2011) Pit area along with unused portions of well pad to be interim reclaimed in accordance with Surface Management Agency requirements in APD-COAs and per BLM FFO/NMOCD MOU dated 5/4/09

- 5 Notice of Closure will be given to the Aztec District office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following
  - a Operators Name (WPX)
  - b Well Name and API Number
  - c. Location (USTR)

The Aztec District Office of NMOCD was notified by email using a format acceptable to the District. Copies of the notification from Abode Contractors on 10/28/2011 is attached.

Rosa Un.t 226A

The pit liner shall be removed above "mud level" after stabilization. Removal of the liner will consist of manually or mechanically cutting the liner at the mud level and removing all remaining liner. Care will be taken to remove "all" of the liner (I e. anchored material). All excessive liner will be disposed of at a licensed disposal facility (probably San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426).

The liner to the temporary pit was removed above the "mud level" once stabilized. Removal of the liner consisted of manually cutting the liner and removing all remaining liner material above the "mud level" including the anchor material. All excessive liner was disposed of at the San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426

7. Solidification of the remaining pit contents shall be achieved by mixing non-waste containing, earthen material. The solidification process will be accomplished use a combination of natural drying and mechanical mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed safe and stable. The mixing ratio shall not exceed 3 parts non-waste to 1 part pit contents.

Following removal of free liquids, the pit contents were mixed with non-waste containing, earthen material in order to achieve appropriate solidification and a consistency that was deemed safe and stable. The solidification process was accomplished using a combination of natural drying, and mechanically mixing using a dozer and trackhoe. The mixing ration was approximately 2.5-3 parts native soil to 1 part pit contents. Solidification was completed 11/20/2011

8 A five-point composite sample will be taken of the pit using sampling tools and all samples tested per 19 15.17 13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), all contents will be handled per 19 15 17 13(B)(1)(a) (i.e. dig and haul to a Division-approved facility). Approval to haul will be requested of the Aztec District office prior to initiation.

A five-point composite sampling was taken of the pit area using sampling tools and the sample was tested per 19 15 17 13(B)(1)(b) NMAC. Results are shown in Table 1 and lab reports are

attached.

Table 1. Closure Criteria for Temporary Pits in Non-sensitive Areas with Groundwater >100 bas

Components	Testing Methods	Limits (mg/Kg)	Pit (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2	ND
BTEX	EPA SW-846 Method 8021B or 8260B	50	0132
TPH	EPA SW-846 Method 418 1	2500	266
GRO/DRO	EPA SW-846 Method 8015M (GRO/DRO)	500	ND
Chlorides	EPA SW-846 Method 300 1	500	60

9. Upon completion of solidification and testing, the pit area will be backfilled with non-waste earthen material compacted to native conditions to enable effective revegetation for successful evapotranspiration. A minimum of four feet of cover including replacement of one foot of suitable material to establish vegetation, or the background thickness of topsoil, whichever is greater.

<u>Upon completion of solidification and testing, the pit area was backfilled with non-waste earthen</u> <u>material compacted to native conditions</u>. A minimum of four feet of cover to the extent practical was achieved and the cover included just over a foot of topsoil suitable to establish vegetation.

10 Following cover, the site will be recontoured to meet the Surface Management Agency or surface owner requirements. Re-contouring will attempt to match fit, shape, line form, and texture of the surrounding geography. Re-shaping will include drainage control, prevent ponding, and minimize erosion. Natural drainages will be unimpeded and stormwater Best Management Practices (BMPs) will be used to aid in soil stabilization and protection surface water quality

Following cover, Williams reestablished drainage and contours to approximately match previous topography meeting the Conditions of Approval in the APD and the direction offered by a BLM/USFS inspector. Cover and re-contouring were completed 11/21/2011

- 11. Notification will be sent to the Aztec District office when the reclaimed area is seeded Williams will comply with Surface Management Agency reseeding requirements in the COAs of the APD for the referenced well, per BLM.FFO/NMOCD MOU dated 5/4/09
- 12 WPX shall seed the disturbed areas the first growing season after the pit is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintained that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth.

Page 8 of 9 Rosa Unit 226A

occurs. Note: WPX assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.

Williams will comply with Surface Management Agency reseeding requirements in the COAs of the APD for the referenced well, per BLM FFO/NMOCD MOU dated 5/4/09

13 The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the on site burial upon the abandonment of all wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the on site burial of the temporary pit. The plate will be easily removable and a four-foot tall riser will be threaded into the top of the collar marker and welded around the base with the operations information at the time of all wells on the pad abandoned. The information will include Operator Name, Lease Name, Well Name, and number, USTR, and an indicator that the marker is an onsite pit burial location.

The temporary pit was located with a steel marker meeting the above listed specifications. The marker has the following information welded for future reference: Williams Production, , \$12-T31N-R06W-E, "In Place Burial" (photo attached). Steel marker set 12/14/2011



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

Client:	WPX	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	11-29-11
Laboratory Number:	60442	Date Sampled:	11-23-11
Chain of Custody No:	14012	Date Received:	11-29-11
Sample Matrix:	Soil	Date Extracted:	11-29-11
Preservative:	Cool	Date Analyzed:	11-29-11
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	

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:

Rosa Unit 226A



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

#### **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	11-29-11 QA/QC	Date Reported:	11-29-11
Laboratory Number:	60435	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-29-11
Condition:	N/A	Analysis Requested:	TPH

	I-Çal(Date	I-Cal RF	i¢:€al RF	Difference	Accept Range
Gasoline Range C5 - C10	11-29-11	9.912E+02	9.916E+02	0.04%	0 - 15%
Diesel Range C10 - C28	11-29-11	9.996E+02	1.000E+03	0.04%	0 - 15%

Blank Conc. (mg/L=(mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	0.7	0.2
Diesel Range C10 - C28	0.5	0.1

Duplicate Conc. (mg/Kg)	∴⊹Sample ∵	Duplicate:	: Mifference	Range
Gasoline Range C5 - C10	ND	ND	0.00%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.00%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added:	⊬ ⊭Spike/Result	: % Recovery	t Accept Range
Gasoline Range C5 - C10	ND	250	251	101%	75 - 125%
Diesel Range C10 - C28	ND	250	247	98.8%	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 60435 and 60440-60442



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Parameter		Concentration (ug/Kg)	Limit (ug/Kg)		
				Det.	
			Dilution:		10
Condition:	intact		Analysis Requested:		BTEX
Preservative:	Cool		Date Extracted:		11-29-11
Sample Matrix:	Soil		Date Analyzed:		12-01-11
Chain of Custody.	14012		Date Received:		11-29-11
Laboratory Number:	60442		Date Sampled.		11-23-11
Sample ID;	Reserve Pit		Date Reported:		12-01-11
Client:	WPX		Project #:		04108-0136

Benzene	ND	0.9
Toluene	2.3	1.0
Ethylbenzene	1.6	1.0
p,m-Xylene	6.5	1.2
o-Xylene	4.2	0.9

Total BTEX 13.2

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	89.8 %
	1,4-difluorobenzene	94.8 %
	Bromochlorobenzene	109 %

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:

Rosa Unit 226A

Analyst

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:	N/A		Project #:		N/A		
Sample ID:	1201BBLK QA/Q0		Date Reported.		12-01-11		
Laboratory Number:	60476		Date Sampled:		N/A		
Sample Matrix:	Soil		Date Received:		N/A		
Preservative:	N/A		Date Analyzed:		12-01-11		
Condition:	N/A		Analysis:		BTEX		
			Dilution		10		
Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF Accept Ra	.%Diff nge 0∈.15%	Blank	Detect		
Benzene	2 1763E+007	2.1807E+007	0.2%	ND	0.1		
Toluene	2 2400E+007	2 2445E+007	0.2%	ND	0.1		
Ethylbenzene	1.9814E+007	1.9853E+007	0.2%	ND	0.1		
p,m-Xylene	5.0783E+007	5 0885E+007	0.2%	ND	0.1		
o-Xylene	1.8692E+007	1 8730E+007	0.2%	ND	0.1		
• •			**				

Duplicate Conc. (ug/Kg)	Sample / 4 1/16 Du	plicate 🔠	ૈ,%Diff.∷ું	Accept Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	1.4	1.5	7.1%	0 - 30%	1.0
Ethylbenzene	1.7	1.6	5.9%	0 - 30%	1.0
p,m-Xylene	3.1	3.1	0.0%	0 - 30%	1.2
o-Xylene	3.5	3.5	0.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample of Amo	unt Spiked Spik	ed Sample % %	Recovery	Accept Range
Benzene	ND	500	497	99.3%	39 - 150
Toluene	1.4	500	486	97.0%	46 - 148
Ethylbenzene	1.7	500	493	98.2%	32 - 160
p,m-Xylene	3.1	1000	986	98.3%	46 - 148
o-Xylene	3.5	500	497	98.8%	46 - 148

ND - Parameter not detected at the stated detection limit

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References

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

December 1996

Method 80218, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996

Comments:

QA/QC for Samples 60404-60406, 60415, 60420, 60440-60442 and

-60476-60477



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

Client:	WPX	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	12-07-11
Laboratory Number:	60442	Date Sampled:	11-23-11
Chain of Custody No:	14012	Date Received:	11-29-11
Sample Matrix:	Soil	Date Extracted:	11-29-11
Preservative:	Cool	Date Analyzed:	11-29-11
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

266

18.2

ND = Parameter not detected at the stated detection limit.

References:

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

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Rosa Unit 226A

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



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

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

12-07-11

Laboratory Number:

11-29-TPH.QA/QC 60440

Date Sampled:

N/A

Sample Matrix:

Freon-113

11-29-11

Date Analyzed:

11-29-11

Preservative:

N/A

Date Extracted:

11-29-11

Condition:

N/A

Analysis Needed:

**TPH** 

Calibration

Lecal Date Gecal Date Lecal RF Cecal RF % Difference Accept Range

10-18-11

1,800

1,720

4.4%

+/- 10%

Blank Conc. (mg/Kg)

Concentration

Detection Limit

**TPH** 

**TPH** 

ND

25.2

Duplicate Conc. (mg/Kg **TPH** 

Sample Duplicate % Difference Accept Range 288

288

0.0%

+/- 30%

Spike Conc. (mg/Kg)

Sample, Spike Added, Spike Result, % Recovery Accept Range 288

2,000

2.160

94.4%

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 60440-60442



#### Chloride

Client: WPX Project #: 04108-0136 Sample ID: Reserve Pit Date Reported: 12-05-11 Lab ID#: 60442 Date Sampled: 11-23-11 Sample Matrix: Soil 11-29-11 Date Received: Preservative: Cool Date Analyzed: 11-30-11 Condition: Intact Chain of Custody: 14012

Parameter Concentration (mg/Kg)

**Total Chloride** 

60

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:

Rosa Unit 226A

Analyst

Review

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

14012

# CHAIN OF CUSTODY RECORD

Client: WPX		Pro	Project Name / Location:  Project Name / Location:  ANALYSIS / PARAMETERS							IS												
Email results to:		Sa	mpler Name:		Ship	1/			9015)	18021)	8260)	s			•	-						
Client Phone No	يع.	i i	ent No.: 24108 - C		· /				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P	CO Table 910-1	TPH (418.1)	RIDE				Sample Cool
Sample No./ Identification	Sample Date	Sample Time	Lab No.		/Volume ontainers	Pi HgCl <sub>2</sub>	reservat HCI	ive	тРН (	втех	, 00 00 00 00	RCRA	Cation	ည္ထ	TCLP	50 Te	трн (	CHLORIDE				Samp
Reserve Pit	11/25/11	11:40 An	60413	1	402				V	i							i v			_	)	1 7
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Relinquished by: (Signature)						Recei	ved b	y: (Sie	natu	re)					(		)					
Sample Matrix Soil S Solid Sludge	Aqueous 🗌	Other 🗌																				
☐ Sample(s) dropped off after	hours to sec	ure drop off	area.	3	V	Î [ C	) { (	<b>e</b> €	tory	]										•		
5795 US Highway 64	4 • Farmingto	n, NM 8740	• 505-632-0615 • T	hree Spп	ngs • 65 i	Mercac	io Stre	et, Su	ite 11	5, Du	ırango	o, CC	D 8130	)1 • k	abore	atory	@env	irotec	:h-ınc.	com		

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

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005 Instructions on back

District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rip Brazos Rd , Aztec, NM 87410

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe. NM 87505 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

AMENDED REPORT

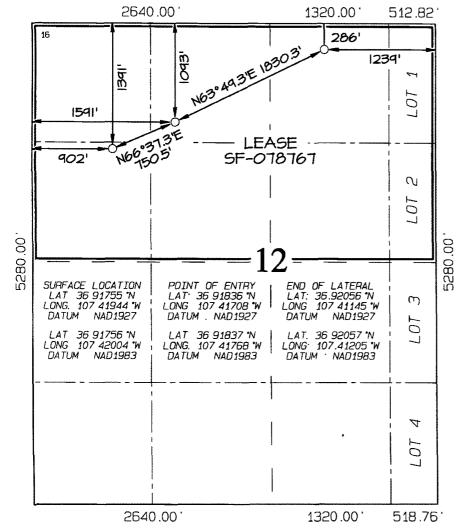
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	*Pool Code	*Pool Name						
	71629	BASIN FRUITLAND COAL						
'Property Code 17033		*Property Name *Well Number ROSA UNIT 226A						
'0GRID No 120782		Operator Name PRODUCTION COMPANY	*Elevation 6336 '					

<sup>10</sup> Surface Location

UL or lot no	5ect10n 12	Township 31N	Range 6W	Lot Idn	Feet from the	Narth/South line NORTH	Feet from the 902	East/West line WEST	County RIO ARRIBA	
	<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County RIO	
В	12	31N	6W		286	NORTH	1239	EAST	ARRIBA	
12 Dedicated Acres	<sup>12</sup> Dedicated Acres 271.17 Acres - (N/2)					<sup>14</sup> Consolidation Code	<sup>15</sup> Order No			
	2/1	1/ ACP	es - (	N/2)						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that this organization either owns a working interest or unleased maneral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division
Signature Date
Printed Name
In SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief Date Revised: OCTOBER 19, 2011 Date of Survey, MAY 7, 2004
Signature and Seal of Professional Surveyor
SECON C. EDWARD OF MEXICO STREET OF
JASON C. EDWARDS

#### Meador, Tasha

From: Sent:

johnny@adobecontractorsinc com Friday, October 28, 2011 8:36 AM Brandon Powell

To:

Cc:

Meador, Tasha, Granillo, Lacey, Lepich, Mark, glenn@adobecontractorsinc.com

Subject:

Williams Clean ups Rosa Unit #226A and 9D

#### Brandon,

We will be ready to start backfilling the pits on the Rosa Unit #226A and 9D. Please let me know if you have any questions

Thank you,

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, October 28, 2011 8.38 AM

To:

Bill Liess, Mark Kelly; Randy Mckee; Robert Switzer; Sherrie Landon

Cc:

Meador, Tasha, Granillo, Lacey

Subject:

Williams Clean ups Rosa Unit #226A and 9D

We will be ready to start backfilling the pits on the Rosa Unit #226A and 9D early next week. Please let me know if you have any questions.

Thank you,

Johnny Stinson

Gen. Manager/ Adobe Contractors

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

johnny@adobecontractorsinc.com

Submit To Appropr Two Copies <u>District I</u> 1625 N French Dr		State of New Mexico Energy, Minerals and Natural Resources							Form C-105 July 17, 2008								
District II 1301 W Grand Ave District III 1000 Rio Brazos Ro District IV		Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505								30-039-27817  2 Type of Lease							
1220 S St Francis Dr   Santa Fe   NM 87505   Santa Fe, NM 87505									5 Lease Name of Unit Agreement Name Rosa								
	URE AT	TACHMEN	Γ (Fill in	n boxes	#1 thro	ough #9, #15 <b>D</b> a	ate Ri	g Relea	ised	and #32 and/ C)	or	6 Well Numl	bei,"	Rosa	Unit #22	26A	
New Well   WORKOVER   DEEPENING   PLUGBA							CK DIFFERENT RESERVOI				OIR	Softe   Side-Track					
10 Address of Op	erator	PO BOX 64	0 A	AZTEC, NM 87410							11 Pool name or Wildcat						
12.Location Surface:	Unit Lti	Section	Т	ownsh	ip	Range	Lot			Feet from the	he	N/S Line	Feet	t from th	e E/W	/ Line	County
BH:  13 Date Spudded	14 Da	ate T D Reacl	ned	15 <u>D</u> a	ite Rig	Released 11/11/11			16	Date Compl	eted	(Ready to Proc	luce)		17 Elev RT. GR		F and RKB,
18 Total Measured Depth of Well 19 Plug Back Measured Depth 20 Was Directional Survey Made?									)			. /	thet Logs Run				
22 Producing Into	erval(s), o	f this complet	10n - Top											1			
23 CASING SIZE WEIGHT LE				CASING RECOR				D (Report all string			ing	gs set in well)  CEMENTING RECORD			AMOUNT PULLED		
											_						
24					LINE	ER RECORD				1	25	7	ומווי	NG RE	CORD		
SIZE	TOP BO			ОМ	LIIVE	SACKS CEMENT				SIZ			DEPTH SET				
26 Perforation	record (in	iterval, size, a	 nd numb	er)						ID, SHOT, INTERVAL	FR	ACTURE, CE					
28							PR	ODL	J <b>C</b> T	ΓΙΟΝ				-			
Date First Produc	tion	P	oduction	n Metho	od (Flo	wing gas lift p					)	Well Status	s (Pro	d or Shi	ıt-ın)		
Date of Test	Hours	Hours Tested C		Choke Size		Prod'n For Test Period		Oil - Bbl		Gas	as - MCF		Water - Bbl		Gas - Oil Ratio		
Flow Tubing Press	Casıng	1	olculated 24- Oil - Bbl Our Rate			Gas - MCF				Water - Bbl Orl Gr			navity - API - (Corr)				
29 Disposition of	,	d used for fue	el vented	etc)				1					30	Test Witi	nessed E	Зу	
31 List Attachme			U .44t-	1-47-												••	
32 If a temporary 33 If an on-site b	* 407	, , , ,,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,			***** 04	A commercial of Management of the	-		II.								
I hereby certif Ben Mitchell		Printed		ovn oi	ı both					ide -107 420 and compl		to the best o	of my		IAD 198 edge a		<u>f</u>
Signature /	En	M					7	Title	Re	gulatory S	Spec	cialist Date	e <u> </u>	1/1/20	212		
E-mail Addres	ss. ben.	mitchell@	wpxene	ergy.c	<u>om</u>												



# **TEMPORARY PIT INSPECTION REPORT**

Well Name		Rosa Unit 226A						API#	30-039-27817 Report # 1				
Location	SW/4 NV	W/4 Sec 12(E), T3	E), T31N, R6W County Rio Arriba			State	NM Rpt Date 10/1/2011						
Date	Report Type	Inspector	Liner Intact Y/N	Fenced Y/N	Slopes Intact Y/N	Adequate Freeboard Y/N	Oil Free Y/N	Flare Pit Liquid Free Y/N	Comment				
10/1/11													
10/3/11													
10/5/11	Daily		Y	Y	Y	Υ	Y	Y	Phone (505)801-0826				
10/6/11	Daily		Υ	Y	Y	Υ	Y	Y	Phone (505)801-0826				
10/7/11	Daily		Y	Y	Y	Y	Y	Y	Phone (505)801-0826				
10/8/11	Daily		Υ	Y	Y	Y	Y	Y	Phone ( 505 ) 801-0826				
10/9/11	Daily		Y	Y	Y	Y	Υ_	Y	Phone (505)801-0826				
10/10/11	Daily		Y	Y	Y	Y	Y	Y	Phone (505)801-0826				
10/11/11	Daily		Y	Y	Y	Y	Y	Y	Phone (505)801-0826				
10/12/11	Daily		Y	Y	Y	Y	Y	Y	Phone (505)801-0826				
10/13/11	Daily		Y	Y		Y	Y	Y	Phone (505)801-0826				
10/14/11	Daily		Y	Y	Y	Y	Y	Y	Phone (505) 801-0826				
10/15/11 10/16/11	Daily Daily		Y	Y	<u>'</u> Y	Y	Y	Y	Phone (505)801-0826 Phone (505)801-0826				
11/1/11	Daily		<del> </del>	!	'	T T	<del> '-</del> -	<del></del>	Phone ( 505 ) 801-0826				
11/2/11	Daily		N	Υ	Y	N	Y	Y	Pit partially reclaimed				
11/3/11	Daily		N	Y	Y	N N	Y	Y	Pit partially reclaimed, until cleanout finished				
11/4/11	Daily		N	Y	Y	N	Y	N	Pit partially reclaimed until cleanout finished				
11/5/11	Daily		N	Y	Y	N	Y	Y	Pit partially reclaimed until cleanout finished				
11/6/11	<del></del>						,						
11/7/11													
11/8/11	Daily		N	Υ	Υ	N	Υ	Y	Pit partially reclaimed, will finish after cleanou				
11/9/11	Daily		N	Υ	Υ	N	Υ	Y	Pit partially reclaimed, finish when clean out com				
11/10/11	Daily		N	Υ	Υ	N	Υ	Υ	Pit partially reclaimed, finish after clean out				
11/11/11	Daily		N	Y	Y	N	Υ	Y	Pit Partially reclaimed, finish after clean out				
11/12/11	Daily		N	Y	Y	N	Y	Y	Pit partially reclaimed, finish after clean out				
10/21/11	Weekly		Υ	у	Y	Y	<u>Y</u> _	Υ					
10/26/11	Weekly		Y	ΥΥ	Y	Y	Y	Y					
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						<del></del> -	<del></del>						
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			20	01-2009 WellE	z Information M	lanagement, LLC Al	rights res	erved ver 111709jc					



计划