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 Office.

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# <u>Pit, Closed-Loop System, Below-Grade Tank, or</u> <u>Proposed Alternative Method Permit or Closure Plan Application</u>

Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
1.
Operator:WILLIAMS PRODUCTION COMPANY, LLC OGRID #:120782
Address: PO Box 640 Aztec, NM 87410
Facility or well name: Rosa Unit # 013A
API Number: 30-03926298 OCD Permit Number:
Section F31 Township 31N Range 05W County Rio Arriba
Latitude: 36.85919 Longitude -107.40494 NAD: 1983 Surface Owner: Federal
2.
Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary:  Drilling  Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lincd ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
3.
Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of
intent)
□ Drying Pad □ Above Ground Steel Tanks □ Haul-off Bins □ Other □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
Liner Seams: Welded Factory Other Other
Liner Seams: Welded Factory Other  4.
Below-grade tank: Subsection I of 19.15.17.11 NMAC
✓ Below-grade tank:       Subsection I of 19.15.17.11 NMAC         Volume:       120bbl         Tank Construction material:       FIBERGLASS TANK w/BANDED 20-MIL HDPE SECONDARY LINER
Tank Construction material: FIBERGLASS TANK w/BANDED 20-MIL HDPE SECONDARY LINER
✓ Below-grade tank: Subsection I of 19.15.17.11 NMAC   Volume: 120bbl bbl Type of fluid: Produced Water   Tank Construction material: FIBERGLASS TANK w/BANDED 20-MIL HDPE SECONDARY LINER   ✓ Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off   ✓ Visible sidewalls and liner Visible sidewalls only Other
Secondary containment with leak detection
Liner type: Thickness mil
5.
Alternative Method:

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, institution or church)	hospital.
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify	
7.  Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)	
8. <u>Signs:</u> 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 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 accematerial 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.	opriate district approval.
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	Yes No
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	☐ Yes ☐ No ☐ NA
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	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ 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

Tempora Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 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 and 19.15.17.13 NMAC
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)
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 19.15.17.11 NMAC   Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan   Emergency Response Plan   Oil Field Waste Stream Characterization   Monitoring and Inspection Plan   Erosion Control Plan   Erosion Control Plan   Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.19 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 Burcau 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 G of 19.15.17.13 NMAC

Waste Rémoval Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul- Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and dri facilities are required.				
Disposal Facility Name: Disposal Facility Permit Number:				
osal Facility Name: Disposal Facility Permit Number:				
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that  Yes (If yes, please provide the information below)  No	will not be used for future servi	ice and operations?		
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMA Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMA	<b>A</b> 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 closure plan. Recom provided below. Requests regarding changes to certain siting criteria may require administrative approximately considered an exception which must be submitted to the Santa Fe Environmental Bureau office for condemonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	oval from the appropriate distri	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; Data obtained from nearby	y 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; Data obtained from nearby	y wells	<ul><li>☐ Yes ☑ No</li><li>☐ NA</li></ul>		
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby	y wells	☐ Yes ☐ No ☑ NA		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse of lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	or lakebed, sinkhole, or playa	☐ Yes ⊠ No		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the tin  Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	ne of initial application.	☐ Yes ⊠ No		
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at a NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database; Visual inspection (certification) of the private of the State Engineer - iWATERS database in the State	the time of initial application.	☐ Yes ⊠ No		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered u 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 (certifica		☐ Yes ⊠ No		
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	1	☐ Yes ⊠ No		
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resource Society; Topographic map</li> </ul>	s; 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 the following items must by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17 Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15 Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirement Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMA Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMA Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMA	.10 NMAC 5.17.13 NMAC ts of 19.15.17.11 NMAC appropriate requirements of 19.13 on F of 19.15.17.13 NMAC 5.17.13 NMAC on-site closure standards canno AC	5.17.11 NMAC		

Operator Application Certification:  I hereby certify that the information submitted with this application	is true, accurate and complete to the best of my knowl	edge and belief.
Name (Print): Title:		
Signature:	Date:	
e-mail address: Telephone:		
OCD Approval: Permit Application (including closure plan)	☐ OCD Conditions (see atta	achment)
OCD Representative Signature:	Approval Date	e: <u>10/18/2011</u>
Title: Compliance Office	OCD Permit Number:	
21. <u>Closure Report (required within 60 days of closure completion):</u> Instructions: Operators are required to obtain an approved closur  The closure report is required to be submitted to the division within section of the form until an approved closure plan has been obtain	re plan prior to implementing any closure activities and not be activities on the completion of the closure activities. It	
S.J. Regional landfill, NMED Permit SWM-052426	☐ Closure Completion Date:10/2	4/10
22.  Closure Method:  Waste Excavation and Removal ☑ On-Site Closure Method  If different from approved plan, please explain.	☐ Alternative Closure Method ☐ Waste Remov	al (Closed-loop systems only)
Closure Report Regarding Waste Removal Closure For Closed-Instructions: Please indentify the facility or facilities for where the two facilities were utilized.  Disposal Facility Name:  Disposal Facility Name:  Were the closed-loop system operations and associated activities per  Yes (If yes, please demonstrate compliance to the items below Required for impacted areas which will not be used for future service  Site Reclamation (Photo Documentation)	Disposal Facility Permit Number:  Disposal Facility Permit Number:  Disposal Facility Permit Number:  rformed on or in areas that will not be used for future so  v) \( \sum \) No	ed. Use attachment if more than
Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique		
Closure Report Attachment Checklist: Instructions: Each of the 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-Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)  On-site Closure Location: Latitude	site closure)	rt. Please indicate, by a check  AD:   1927   1983
25. Operator Closure Certification:		
I hereby certify that the information and attachments submitted with belief. I also certify that the closure complies with all applicable clo	this closure report is true, accurate and complete to the sure requirements and conditions specified in the appro	e best of my knowledge and oved closure plan.
Name (Print): Vanessa Fields	Title:EH&S Coordinator	
Signature: Onesse Company	Date:12/6/10	
e-mail address:vanessa.ficlds@williams.com	Telephone:505-634-4209	``.

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

Below-Grade Tank Removal Closure Report

Well:

(Rosa Unit#013A) 30-03926298

API No:

Location: F-S31-T31N-R05W, NMPM



In accordance with Rule 19.15.17.13 NMAC, the following report describes the general closure of the referenced below-grade tanks (BGT) on Williams Production Co, LLC (WPX) location in the San Juan Basin of New Mexico. The closure follows this WPX's standard closure procedure for all BGTs regulated under Rule 19.15.17 NMAC and operated by WPX. For those closures which do not conform to the standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

#### **Closure Conditions and Timing:**

Pursuant to 19.15.17.13 (A) NMAC, WPX will initiate closure of any BGT should any one of these conditions occur:

- The Division requires closure because of imminent danger to fresh water, public health or the environment.
- The integrity of the BGT fails. Notification will be within 48 hours to the Division and closure will be schedule as specified in 19.15.17.12 (A) (5) NMAC.
- WPX chooses to take the BGT out-of-service due to operational needs. Closure
  under these conditions will be initiated within 60 days of cessation of the BGT's
  operation.
- BGTs installed prior to June 16, 2008 that do not meet the requirements under 19.15.17.11.1(6) NMAC and WPX chooses not to retrofit or upgrade. Closure under these conditions will be completed within five years (by June 16, 2013).

#### **General Plan Requirements:**

Prior to initiating any BGT Closure except in the case of an emergency, WPX will
review County Tax Records for the current landowner of record. The landowner of
record will be notified of the intent to closure the BGT by certified mail and a copy of
this notification will be included in the closure report. In the case of an emergency,
the landowner of record will be notified as soon as practical.

Williams notified the SMA of its intent to clean close the BGT via Certified Mail on March 10, 2009 see attached. No return receipt required per BLM:FFO/NMOCD MOU dated 5/4/09.

- 2. 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)

<u>Aztec District office was notified of Williams E&P intent to close on (10/15/2010). Email attached.</u>

3. All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary frac tank, ...). The well will be temporarily shut-in until the rerouting is completed.

<u>Williams closed the BGT used by the separator and piped all liquids to the Rosa Unit#013A Produced Water Storage Tank.</u>

4. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed at one of the following NMOCD approved facilities depending on the proximity of the BGT site: Rosa Unit SWD #1 (Order: SWD-916, API: 30-039-27055), Rosa Unit #94 (Order: SWD-3RP-1003-0, API: 30-039-23035), Jillson Fed. SWD #001 (Order: R10168/R10168A, API: 30-039-25465), Middle Mesa SWD #001 (Order: SWD-350-0, API: 30-045-27004) and/or Basin Disposal (Permit: NM-01-0005).

<u>Produced water in the BGT prior to closures was removed by vacuum truck and hauled to the Rosa Unit disposal wells listed.</u>

5. Solids and sludges will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011).

No solids or sludge required removal prior to excavation and removal of the tank.

6. Williams will obtain prior approval from NMOCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liners materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of paragraph 1 subsection D or 19.15.9.712 NMAC. Disposal will be at a licensed disposal facility, presently San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426.

The fiberglass tank and plastic liner was disposed of at the San Juan Regional Landfill.

- 7. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure will be removed from the location.

  The fiberglass tank and plastic liner were removed offsite. All other piping and equipment remains in use. See attached photo.
- 8. Following removal of the tank and any liner material, a five-point composite sample will be taken of the excavation and tested per 19.15.17.13(E)(4) NMAC as identified in Table 1. Grab samples will be collected from any area that is wet, discolored or showing other evidence of a release. Results will be report to the Division following receipt from the lab on Form C-141.

Table 1	: C	losure	Criteria	for	<b>BGTs</b>
1000		103010	CITICITA	101	$\nu \sim 13$

Components	Testing Methods	Closure Limits (mg/Kg)	Sample Results (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2	ND
BTEX	EPA SW-846 Method 8021B or 8260B	50	ND
TPH	EPA SW-846 Method 418.1(1)	100	113
Chlorides	EPA SW-846 Method 300.1(1)	250(2)	20

<sup>(1)</sup> Method modified for solid waste.

- $^{(2)}$  If background concentration of Chlorides greater than 250 mg/Kg, then higher concentration will be used for closure.
- 9. If the Division and/or Williams determine there is a release, Williams will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC.

#### No release detected.

10. Upon completion of the tank removal, and any necessary soil remediation, the excavation will be backfilled with non-waste earthen material compacted to native and covered with a minimum of one foot of top soil or background thickness. The surface will be recontoured to match the native grade.

<u>Pit area backfilled with clean earthen material following sample results. No contaminated soil taken off site.</u> Backfill compacted to avoid settling and pit area remains in use for production operations.

\* 11. For those portions of the former pit area no longer required for production activities, WPX will 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 occurs. Note: WPX assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) APD are Divisionapproved methods unless notified by the Division of their unacceptability. If a landowner agreement requires reseeding or other surface restoration that does not meet the revegetation requirements of 19.15.17.13., I then WPX will submit the proposed alternative with written documentation that the landowner agrees to the alternative, for Division approval.

<u>Pit area along with unused portions of well pad interim reclaimed and following P&A entire location to be reclaimed and recontoured in accordance with Surface Management Agency requirements in APD-COAs and per BLM:FFO/NMOCD MOU dated 5/4/09.</u>

**12.** For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above. See above notes.

#### **Closure Report:**

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

- Proof of Closure Notice (surface owner & NMOCD)
- Backfilling & Cover Installation
- Site Diagram with coordinates
- Available Inspection reports

- Confirmation Sampling Analytical Results
- Disposal Facility Name(s) and Permit Number(s)
- Re-vegetation Application Rate & Seeding techniques
- Photo Documentation of Reclamation



Explanation & Production FO Box 640 Azicc NM 81137 505/6:24 4719 505/634 4214 fox

March 10, 2009

Mr Mark Kelly Bureau of Land Management Farmington Field Office 1235 La Plata Hwy. Farmington, NM 87401

Sent via Certified Mail

RE Notification of Production Pit Closure
Rule 19 15 17 13 NMAC
Production Pits associated Natural Gas Development
Operated by Williams Production Co. LLC

Pursuant to Rule 19 15 17 13 NMAC, this correspondence is to notify the Bureau of Land Management. Farmington Field Office, of Williams Production LLC's (Williams') intent to clean close all production pits on the attached list of wells operated with the District in San Juan County and Rio Arriba County, New Mexico. Closure will follow the plan included with this correspondence.

Thank you for your consideration. If there are any questions or additional information is requested, please contact me at (505) 634-4209.

Respectfully submitted.

Holly C #erkins EH&S Specialist

Encl: Williams Production Pit Inventory List (Federal wells)

San Juan Basin - New Mexico Assets: Below-Grade Tank Closure Plan

cc Environmental File

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

Production Pit: Below-Grade Tank Closure Plan

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of below-grade tanks (BGT) on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard procedure for all out-of-service BGTs used to store produced liquids during production operations at gas wells operated by WPX.

For those closures 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:

- Plot Plan (Pit Diagram)
- Available Inspection reports

- Sampling Results
- Waste disposal documentation

#### General Plan Requirements:

- 1. All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary frac tank ...). The well will be temporarily shut in until the rerouting is completed.
- 2. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed of by injection at one of the Williams Production Rosa Unit Salt Water Disposal wells: Rosa SWD #1 (API: 30-039-27055) I-23-31N-06W Permit SWD-916 or Rosa Unit #94 (API: 30-039-23035) K-16-31N-05W, Permit SWD-758.
- 3. Notice of Closure will be given to the landowner or SMA, and 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)
- 4. The BGT and all associated materials will be removed, and recycled, reused, or disposed, of in a Division-approved facility. All materials that can not be recycled or reused will be treated a solid waste and will be disposed of at a licensed disposal facility (probably San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426).
- 5. Following removal of the tank and any liner material, a five-point composite sample will be taken of the excavation and tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), a release will be reported following Rule 116 and impacted soils will be excavated and hauled to Envirotech Landfarm near Bloomfield, NM (NMOCD Permit NM-01-0011). Approval to haul will be requested of the Aztec District office prior to initiation.

Table 1: Closure Criteria for BGTs

Components	Testing Methods:	Glosure/limits(mg/kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2
BTEX	EPA SW-846 Method 8021B or 8260B	50
TPH	EPA SW-846 Method 8015 M(Full Range)*	100
	or Method 418.1	
Chlorides	EPA SW-846 Method 300.1	250

<sup>\*</sup> Preferred method

- 6. Upon completion of the tank removal and any necessary soil remediation, the excavation will be backfilled with non-waste earthen material compacted to native and covered with a minimum of one foot of top soil. The surface will be re-contoured to match the native grade.
- 7. For those portions of the former pit area no longer required for production activities, WPX will 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 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-appröved methods unless notified by the Division of their unacceptability.
- 8. For those portions of the former pit area required for production activities, re-seeding will be done at well abandonment, and following the procedure noted above.

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

Below-Grade Tank Removal Closure Plan

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general closure requirements of below-grade tanks (BGT) on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard closure procedure for all BGTs regulated under Rule 19.15.17 NMAC and operated by WPX. For those closures which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

#### Closure Conditions and Timing:

Pursuant to 19.15.17.13 (A) NMAC, WPX will initiate closure of any BGT should any one of these conditions occur:

- The Division requires closure because of imminent danger to fresh water, public health or the environment.
- The integrity of the BGT fails. Notification will be within 48 hours to the Division and closure will be schedule as specified in 19.15.17.12 (A)(5) NMAC.
- WPX chooses to take the BGT out-of-service due to operational needs. Closure under these conditions will be closed within 60 days of cessation of the BGT's operation.
- BGTs installed prior to June 16, 2008 that do not meet the requirements under 19.15.17.11.1(6) NMAC and WPX chooses not to retrofit or upgrade. Closure under these conditions will be completed within five years (by June 16, 2013).

#### **General Plan Requirements:**

- 1. Prior to initiating any BGT Closure except in the case of an emergency, WPX will review County Tax Records for the current surface owner of record. The surface owner of record will be notified of the intent to closure the BGT by certified mail and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner of record will be notified as soon as practical.
- 2. 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)
- 3. All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary frac tank, ...). The well will be temporarily shutin until the rerouting is completed.
- 4. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed at one of the following NMOCD approved facilities depending on the proximity of the BGT site: Rosa Unit SWD #1 (Order: SWD-916, API: 30-039-27055), Rosa Unit #94 (Order: SWD-3RP-1003-0, API: 30-039-23035), Jillson Fed. SWD #001 (Order: R10168/R10168A, API: 30-039-25465), Middle Mesa SWD #001 (Order: SWD-350-0, API: 30-045-27004) and/or Basin Disposal (Permit: NM-01-0005).
- 5. Solids and sludges will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011).
- 6. WPX will obtain prior approval from NMOCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liners materials will be cleaned without soils or contaminated material for disposal as

- solid waste. Fiberglass tanks and liner materials will meet the conditions of paragraph 1 subsection D of 19.15.9.712 NMAC. Disposal will be at a licensed disposal facility, presently San Juan Regional Landfill operated by Waste Management under NMED Permit SWM-052426.
- 7. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure will be removed from the location.
- 8. Following removal of the tank and any liner material, a five-point composite sample will be taken of the excavation and tested per 19.15.17.13(E)(4) NMAC as identified in Table 1. Grab samples will be collected from any area that is wet, discolored or showing other evidence of a release. Results will be report to the Division following receipt from the lab on Form C-141.

Table 1:	Closure	Criteria	for RGTs

A STATE OF THE STA		The form the second
Components	Jesting Methods	Closure Limits (mg/kg)
Benzene	EPA SW-846 Method 8021B or 8260B	·· 0.2
BTEX	EPA SW-846 Method 8021B or 8260B	50
TPH	EPA SW-846 Method 418.1(1)	100
Chlorides	EPA SW-846 Method 300.1(1)	250 <sup>(2)</sup>

<sup>(1)</sup> Method modified for solid waste.

- (2) If background concentration of Chlorides greater than 250 mg/Kg, then higher concentration will be used for closure.
- 9. If the Division and/or WPX determine there is a release, WPX will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC.
- 10. Upon completion of the tank removal, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot of top soil or background thickness whichever is greater and to existing grade. The surface will be recontoured to match the native grade and prevent ponding.
- 11. For those portions of the former pit area no longer required for production activities, WPX will 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 occurs. Note: If a surface owner agreement requires reseeding or other surface restoration that do not meet the revegetation requirements of 19.15.17.13.1 NMAC then WPX will submit the proposed alternative with written documentation that the surface owner agrees to the alternative, for Division approval.
- 12. For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

#### **Closure Report:**

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

- Proof of Closure Notice (surface owner & NMOCD)
- Backfilling & Cover Installation
- Site Diagram with coordinates
- Available Inspection reports

- Confirmation Sampling Analytical
  Results
- Disposal Facility Name(s) and Permit Number(s)
- Application Rate & Seeding techniques
- Photo Documentation of Reclamation

04-52

Rosa Unit # 013A

							eak detec	tion	Pit	
Date	WellName	Run	Formation	Construction	SGT. BGT, Above	Plastic liner, Double Wall Steel, Bottom Plastic Liner	Y/N	level	level	Comments / Repairs needed
Sep-08	ROSA UNIT #013A	04-52					Y	1/2"	3'	
Эер-оо	ROSA UNIT	0.02					'	1/2	J	
Oct-08	#013A	04-52	M∨	fiberglass	BGT	NO	YES	0"	3' 3"	
Nov-08	ROSA UNIT #013A	04-52	M∨	fiberglass	BGT	NO	YES	0"	3'10"	
Dec-08	ROSA UNIT #013A	04-52	M∨	fiberglass	BGT	NO	YES			
Jan-09	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0"	4' 2"	
Feb-09	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES			
3/31/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0"	3"	
4/1/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0"	3' 2"	
5/1/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0"	5'	
6/1/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	,		
7/1/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES			
8/1/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0"	2'8"	
9/21/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	0'11"	

10/14/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	1'7"	
11/4/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	2'3"	
12/29/2009	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	1'3"	
1/25/2010	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	2'1"	
2/25/2010	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	3'0"	
3/26/2010	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	4'0"	
4/25/2010	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	-		
5/27/2010	ROSA UNIT #013A	04-52	MV	fiberglass	BGT	NO	YES	0	2'6"	
6/23/2010	ROSA UNIT #013A	04-52	MV	FIBERGLASS	BGT	NO	YES	0	0'9"	

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District 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

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back

Form C-141

side of form

Revised October 10, 2003

Santa Fe, NM 87505

Release Notification and Corrective Action

						OPERA'	ΓOR		Initi	al Report	$\boxtimes$	Final Report
Name of Co	ompany <b>V</b>	Villiams Pro	oductio	n		Contact M		ane				
Address P						Telephone l						
		#013A (AP	l: 30-03	9-26298)		Facility Typ						
Surface Ow	mer BLM			Mineral Ov	vner	BLM			Lease 1	No.		
Daria o O N	7.0. <b>-2.</b> 111											
	LOCATION OF RELEASE											
Unit Letter <b>F</b>	Section 31	Township 31 N	Range 05W	Feet from the	North/	South Line	Feet from t	he Eas	t/West Line	County Rio Arrib	)a	
			La	atitude 36 859	19	Longitude	-107.404	494				
	Latitude36.85919Longitude107.40494  NATURE OF RELEASE											
Type of Rele	ase Dissolv	ved Phase Hy	drocarbo	ns in Produced W	ater	Volume of	Release UN	١K	Volume l	Recovered		
Source of Re	lease Belo	w-grade Ta	nk			Date and H	lour of Occur	rence		Hour of Disc BGT Close		
Was Immedi	ate Notice G		V [7]	N= 57 N=+ D==		If YES, To						
D 11/1 0	Marta Cara		Yes	No 🛛 Not Rec	uirea	Date and H	n Powell-N	IMOCD	(email)			
By Whom?												
Was a Water	course Reach	ned?	Yes 🔯	No		If YES, Vo	lume Impact	ing the Wa	atercourse.			
		acted, Describ					_					
Describe Cau	ise of Proble	m and Remedi	ial Action	Taken.								
Lab results	from BGT c	losure indica	ted histo	ric release occur	red ca	ausing minor	soil contam	ination o	ver Rule 19	.15.17.13 cld	sure s	standards.
				of tank removal.								
				ction required. Pi								
results and			ditio at	ottori required. Ti	arca	reciaii nea re	mowing app	10104 11	. Olooure i ii	an. Compos	nto our	iipio
			odian Tale			<del></del>						
Describe Are	a Affected a	nd Cleanup Ad	ction Take	en.	Cin	- Cdiai			Dankina	Coore		٦
⊢	Donah ta Casa	Criteria		100/6-4		Site Condition			Ranking Score			4
I ⊢⊸	Depth to Grou Wellhead Prot			>=100 (Catr	ioaic -	->=300ft BGS) 0					4	
l —	Surface Water			>1000 ft			_	0	<del></del>			-
l —	Total Ranking	Войу		>1000 it				0				-{
<u> </u> -	TOTAL NATIKING	Lab		-		Results Remediation Action Level				-		
<u> </u>	Benzene (ppb)			<0.9		Results		10,000			-	
_	BTEX (ppb)	·		8.9				50,000				i i
	TPH by EPA - 4	418.1 (ppm)		113				5000				1
	Cl (ppm)			20	-					*-		1
		formation give	en above	is true and comple	te to th	e best of my	knowledge a	nd underst	and that nurs	uant to NMO	CD ru	les and
				d/or file certain rel								
				of a C-141 report								
				investigate and ren								
				ance of a C-141 re								
		s and/or regula		ance of a C 141 10	por uc	jes not reneve	the operator	or respon	isionity for C	omphanee wi	ur uny	Other
	or recar raw.	o unaror regun	icions.				OIL CC	MICED	VATION	DIVISIO	NT.	
	//						OIL CC	MOEK	VALION	DIVISIO	<u>. N</u>	
Signature:			$^{\prime}$ $>$									1
			<b>.</b>	D:-+-:								
Printed Name: Michael K. Lane				Approved by 1		rvisor:						
Title: SJB EH&S Specialist			l A	Approval Date: Expiration		Expiration l	Date:					
<del></del>	· · · · · · · · · · · · · · · · · · ·		<b></b>		1							
E-mail Addre	ss: myke.k	aneewiliam	s.com		$\dashv$	Conditions of Approval: Attached						
Date: 12/7	10		Phone:	(505) 330-319	8							

<sup>\*</sup> Attach Additional Sheets If Necessary

#### Lane, Myke

From:

Lane, Myke

Sent:

Tuesday, December 07, 2010 3:59 PM

To:

'Powell, Brandon, EMNRD' Basye, Matt; Meador, Tasha

Cc: Subject:

Rosa #013A - Release Notice

#### Brandon:

Soil contamination above the current Pit Rule 19.15.17.13E closure levels for TPH has been detected based on a review of the lab results and during the removal of the below grade tank at the following well location.

Rosa Unit #013A

30-039-26298 31F-T31N-R05W NMPM

Rio Arriba Co

Reclamation will be done in accordance with the closure plan and NMOCD Guidelines for Remediation of Leaks, Spills & Releases. Please let us know if there are any questions.

Michael K. (Myke) Lane, PE EH&S Team Leader - San Juan Basin Operations 721 S. Main/PO Box 640, Aztec, NM 87410 (505) 634-4219(off); -4205(fax); 330-3198(cell)

<sup>&</sup>quot;The problems we face cannot be resolved at the same level of thinking as that which gave rise to them!"---shared with me by Brent Hale



# EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	11 <b>-</b> 01-10
Chain of Custody No:	10652	Date Received:	11-02-10
Sample Matrix:	Soil	Date Extracted:	11-03-10
Preservative:	Cool	Date Analyzed:	11-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	NĐ	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 #13A BGT

Analyst

Review

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



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

### **Quality Assurance Report**

Client: Sample ID; Laboratory Number:	QA/QC 11-03-10 QA/QC 56362	Project #: Date Reported: Date Sampled:	N/A · 11-03-10 N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-03-10
Condition:	N/A	Analysis Requested:	TPH

10 PM	∃eCal Date	- I⊧Cal RF:	© Call RF	% Difference:	Accept Range
Gasoline Range C5 - C10	11-03-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	11-03-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%

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

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample .	Spike/Added	Spike Result	% Recovery	Accept, Range
Gasoline Range C5 - C10	ND	250	242	96.8%	75 - 125%
Diesel Range C10 - C28	ND	250	261	104%	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 56361-56362, 56380

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:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	11-01-10
Chain of Custody:	10652	Date Received:	11-02-10
Sample Matrix:	Solid	Date Analyzed:	11-03-10
Preservative:	Cool	Date Extracted:	11-03-10
Condition:	· Intact	Analysis Requested:	BTEX
		Dilution:	10

	D. C.	, ,
	Concentration	Det. Limit
Parameter	(ug/Kg)	(ug/Kg)
Benzene	ND	0.9

Benzene	ND	0.9
Toluene	1.3	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	4.5	1.2
o-Xylene	3.1	0.9
-		

**Total BTEX** 8.9

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.6 %
	1,4-difluorobenzene	98.7 %
	Bromochlorobenzene	102 %

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 #13A BGT



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

Client:	N/A		Project #:		N/A	
Sample ID:	1103BBLK QA/Q0	C	Date Reported:		11-03-10	
Laboratory Number:	56362		Date Sampled:		N/A	
Sample Matrix:	Soil		Date Received:		N/A	
Preservative:	N/A		Date Analyzed:		11-03-10	
Condition:	N/A		Analysis:	ysis: BTEX		
			Dilution:		10	
Calibration and	I-CallRF	C-Cal RF:	%Diff	Blank	Detect.	
Calibration and Detection Limits (ug/L)		C-Cal RF: Accept, Rang		Blank Conc	Detect Limit	
Detection Limits (ug/L)						
Detection Limits (ug/L). Benzene		Accept. Rang	je 0 - 15%	Conc	Limit	
	4.6844E+005	Accept, Rand	je 0 - 15% 0.2%	Conc ND	Ŀimit 0.1	
Detection:Limits (ug/L). Benzene Toluene	4.6844E+005 5.3862E+005	Accept. Ranc 4.6938E+005 5.3970E+005	ge:0:=15% 0.2% 0.2%	Conc ND ND	©imit 0.1 0.1	

Duplicate Gonc (ug/Kg)	Sample Du	plicate	%Diff.	Accept Range	Detect: Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	1.3	1.0	23.1%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	4.5	4.2	6.7%	0 - 30%	1.2
o-Xylene	3.1	3.2	3.2%	0 - 30%	0.9

Spike:Conc. (ug/Kg)	Sample Amo	ount Spiked / Spi	ked Sample = %	Recovery #	Accept Range
Benzene	ND	500	507	101%	39 - 150
Toluene	1.3	500	507	101%	46 - 148
Ethylbenzene	ND	500	503	101%	32 - 160
p,m-Xylene	4.5	1000	1,010	101%	46 - 148
o-Xylene	3.1	500	499	99.2%	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 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 56361-56362, 56380

Client:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	11-01-10
Chain of Custody No:	10652	Date Received:	11-02-10
Sample Matrix:	Soil	Date Extracted:	11-03-10
Preservative:	Cool	Date Analyzed:	11-03-10
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

113

11.0

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:

Rosa #13A BGT



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

Client:

QA/QC

Project #:

N/A

Sample ID: Laboratory Number: QA/QC

Date Reported:

11-03-10 N/A

Sample Matrix:

11-03-TPH.QA/QC 56362 Freon-113

Date Sampled: Date Analyzed:

11-03-10

Preservative:

N/A N/A Date Extracted: Analysis Needed: 11-03-10 TPH

Calibration

Condition:

I-Cal Date

C-Cal Date

i-Cal RF: C-Cal RF:

% Difference Accept. Range

10-28-10 11-03-10 1,610

1,610

0.0%

+/- 10%

Blank Conc. (mg/Kg)

Concentration

Detection Limit

**TPH** 

ND

11.0

Duplicate Conc. (mg/Kg)

Sample

Duplicate

% Difference Accept. Range

TPH

**TPH** 

113

123

8.6%

+/- 30%

Spike Conc. (mg/Kg)

Sample 113

Spike Added Spike Result % Recovery 2,000

1,840

87.1%

Accept Range 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 56362, 56372-56376



#### Chloride

Client:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Lab ID#:	56362	Date Sampled:	11-01-10
Sample Matrix:	Soil	Date Received:	11-02 <b>-</b> 10
Preservative:	Cool	Date Analyzed:	11-03-10
Condition:	Intact	Chain of Custody:	10652

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

20

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 #13A BGT

# CHAIN OF CUSTODY RECORD

10652

Client:			Project Name /	Location	•				T					ΑΝΙΛΙ	veie	/ DAD	^ ^ A	TERS					
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## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	11-01-10
Chain of Custody No:	10652	Date Received:	11-02-10
Sample Matrix:	Soil	Date Extracted:	11 <b>-</b> 03-10
Preservative:	Cool	Date Analyzed:	11-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limít (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 #13A BGT

Analyst

Review



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

## **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	11-03-10 QA/QC	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-03-10
Condition:	N/A	Analysis Requested:	TPH

	Feat Date	I≟Cal RF:	©-CallRF	% Difference:	Accept Range
Gasoline Range C5 - C10	11-03-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	11-03-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/Lmg/Kg)	Concentration	Detection: Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	- Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	242	96.8%	75 - 125%
Diesel Range C10 - C28	ND	250	261	104%	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 56361-56362, 56380



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

Client:	WPX	Project #:	04108-0137
Ciletic.	WEX	Project #.	04100-0137
Sample ID:	BGT	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	11-01-10
Chain of Custody:	10652	Date Received:	11-02-10
Sample Matrix:	Solid	Date Analyzed:	11-03-10
Preservative:	Cool	Date Extracted:	11-03-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	1.3	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	4.5	1.2	
o-Xylene	3.1	0.9	
Total BTEX	8.9		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.6 %
	1,4-difluorobenzene	98.7 %
	Bromochlorobenzene	102 %

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 #13A BGT



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	1103BBLK QA/QC	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-03-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	J-CaliRF:	©:€al RF; Accept Rang		Blank Conc	Detect. L'imit
Benzene	4.6844E+005	4.6938E+005	0.2%	ND	0.1
Toluene	5.3862E+005	5.3970E+005	0.2%	ND	0.1
Ethylbenzene	4.8997E+005	4.9095E+005	0.2%	ND	0.1
p,m-Xylene	1.1523E+006	1.1547E+006	0.2%	ND	0.1
o-Xylene	4.4066E+005	4.4154E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample Du	plicate	%Diff.	Accept Range	Defect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	1.3	1.0	23.1%	. 0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	4.5	4.2	6.7%	0 - 30%	1.2
o-Xylene	3.1	3.2	3.2%	0 - 30%	0.9

Spike/Conc.:(ug/Kg)	Sample: Amo	ount Spiked Spi	ked Sample // %	Recovery	Accept Range
Benzene	ND	500	507	101%	39 - 150
Toluene	1.3	500	507	101%	46 - 148
Ethylbenzene	ND	500	503	101%	32 - 160
p,m-Xylene	4.5	1000	1,010	101%	46 - 148
o-Xylene	3.1	500	499	99.2%	46 - 148

ND - Parameter not detected at the stated detection limit.

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

Comments:

QA/QC for Samples 56361-56362, 56380

Analyst

Review



Client:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Laboratory Number:	56362	Date Sampled:	11-01-10
Chain of Custody No:	10652	Date Received:	11-02-10
Sample Matrix:	Soil	Date Extracted:	11-03-10
Preservative:	Cool	Date Analyzed:	11-03-10
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

113

11.0

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:

Rosa #13A BGT



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

Client:

QA/QC

Project #:

N/A

Sample ID:

**QA/QC** 

Date Reported:

11-03-10

Laboratory Number:

11-03-TPH.QA/QC 56362

Date Sampled:

N/A

Sample Matrix:

Freon-113

Date Analyzed:

11-03-10

Preservative: Condition:

N/A N/A Date Extracted: Analysis Needed: 11-03-10 TPH

Calibration:

I-Cal Date 10-28-10

C-Cal Date 11-03-10

i-Cal RF: 1.610 C-Cal RF: % Difference 1,610

0.0%

Accept. Range +/- 10%

Blank Conc. (mg/Kg)

Concentration

Detection Limit

**TPH** 

11.0

Duplicate Conc. (mg/Kg)

**TPH** 

Sample 113

Duplicate 123

8.6%

% Difference Accept. Range +/- 30%

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

113

2,000

1.840

87.1%

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 56362, 56372-56376



#### Chloride

Client:	WPX	Project #:	04108-0137
Sample ID:	BGT	Date Reported:	11-03-10
Lab ID#:	56362	Date Sampled:	11-01-10
Sample Matrix:	Soil	Date Received:	11-02-10
Preservative:	Cool	Date Analyzed:	11-03-10
Condition:	Intact	Chain of Custody:	10652

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

20

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 #13A BGT

# CHAIN OF CUSTODY RECORD

10652

Client: Project Name / Location:							ANALYSIS / PARAMETERS																
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5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

#### Fields, Vanessa

From:

Fields, Vanessa

Sent:

Friday, October 15, 2010 12:35 PM

To:

'brad.a.jones@state.nm.us'

Cc:

Lane, Myke; 'Powell, Brandon, EMNRD'; Knight, Russell; Sprague, Douglas

Subject:

Request for review of pit closure per Rosa 162A, 166 and Rosa 013A

#### Brad,

We need to take the following below grade tank out of service, and we would like to close the existing BGTs. We request your review and approval to allow closure.

	WELLSITE	API	FMT	SEC	TWN
0.	Rosa Unit # 162A 5W	3003926122	BLANCO MV	30 J	31N
0:	Rosa Unit # 166 5W	3003926275	BLANCO MV	30A	31N
0:	Rosa Unit # 013A	3003926298	BLANCO MV	31F -	31N

Please contact myself or Myke Lane if there are any problems or you request additional information. Thank you for your consideration

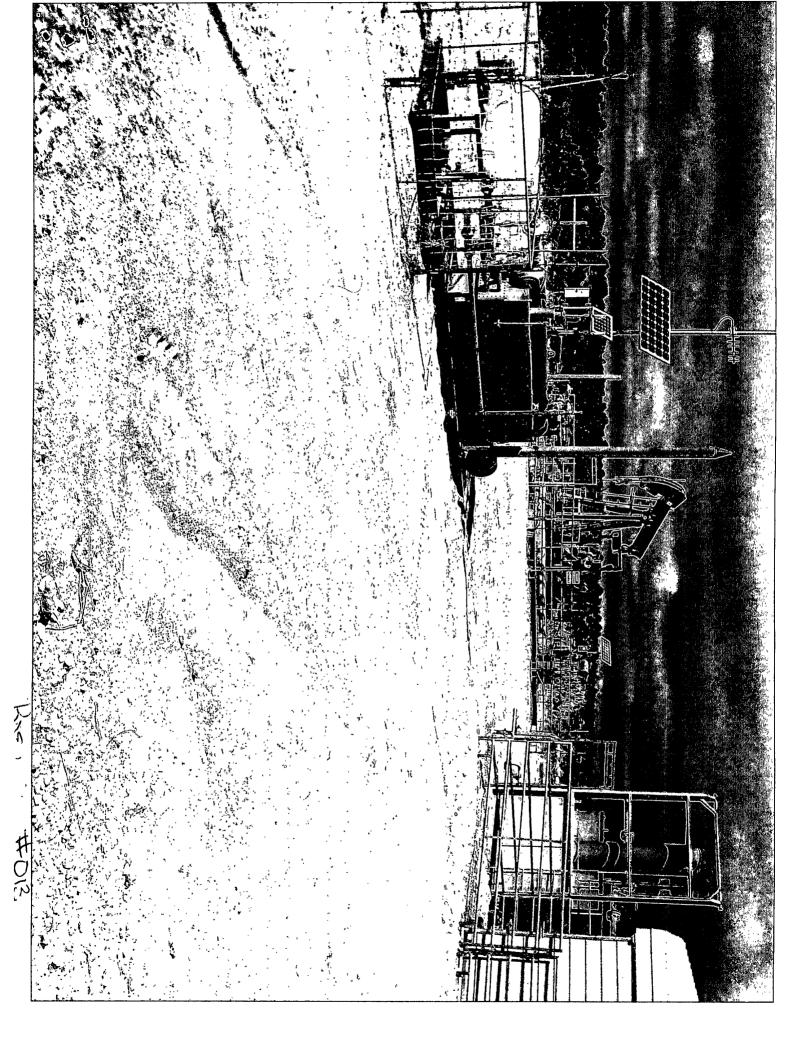
Thank you,

# Vanessa fields

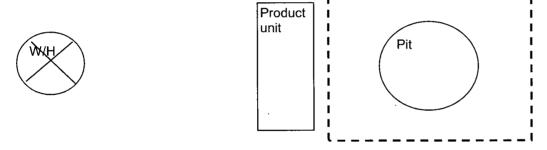
EH&S Coordinator Williams Exploration and Production 721 S. Main Aztec, NM 87410 office: 505-634-4200

fax: 505-634-4205

vanessa.fields@williams.com







ROAD