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 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

293	Propo	Pit, Consequence Pit, C
9393	Type of action:	

Proposed Alternative Method Permit or Closure Plan Application

of a pit, closed-loop system, below-grade tank, or proposed alternative method

e of a pit, closed-loop system, below-grade tank, or proposed alternative method ication to an existing permit re 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 OGRID #: \_\_\_\_\_120782 Operator WILLIAMS PRODUCTION COMPANY, LLC Address PO Box 640 Aztec, NM 87410 Facility or well name: ROSA UNIT #018B API Number 3003927052 OCD Permit Number. Section 22O Township 31N Range 06W County RIO ARRIBA Latitude: 36 88027999999999 Longitude 107 44777999999999 NAD. 1983 Surface Owner <u>FEDERAL</u> Pit: Subsection F or G of 19 15 17 11 NMAC RCUD JAN 5'12 Temporary Drilling Workover Permanent Emergency Cavitation P&A OIL CONS. DIV. ☐ Lined ☐ Unlined Liner type. Thickness \_\_\_\_\_ mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other String-Reinforced 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: Thickness \_\_\_\_\_mil LLDPE HDPE PVC Other \_\_\_\_\_ **Below-grade tank:** Subsection I of 19 15.17 11 NMAC Volume: 120 bbl Type of fluid. PRODUCED WATER Tank Construction material DBL WALL STEEL 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: Thickness \_\_\_\_\_ mil HDPE PVC Other ☐ 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, 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)				
• • • • • • • • • • • • • • • • • • •				
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 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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate 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 drying above-grade tanks associated with a closed-loop system.	priate district pproval.			
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	☐ Yes ☐ No			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)  - Topographic map, Visual inspection (certification) of the proposed site	Yes No			
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site, Aerial photo, Satellite image	☐ Yes ☐ No ☐ NA			
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			
<ul> <li>Visual inspection (certification) of the proposed site, Aerial photo, Satellite image</li> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>				
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			
<ul> <li>Within an unstable area</li> <li>Engineering measures incorporated into the design, NM Bureau of Geology &amp; Mineral Resources, USGS, NM Geological Society; Topographic map</li> </ul>	Yes No			
Within a 100-year floodplain - FEMA map	☐ Yes ☐ No			

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15 17 9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are
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 19.15.17.11 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 or Permit Number
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   Sitting 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   Quality Control/Quality Assurance Construction and Installation Plan   Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17.12 NMAC   Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan   Gill Field Waste Stream Characterization   Monitoring and Inspection Plan   Erosion Control Plan   Closure Plan - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC
Proposed Closure: 19 15.17 13 NMAC  Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.  Type Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative  Proposed Closure Method Waste Excavation and Removal Waste Removal (Closed-loop systems only)  On-site Closure Method (Only for temporary pits and closed-loop systems)  In-place Burial On-site Trench Burial  Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  ☐ Protocols and Procedures - based upon the appropriate requirements of 19 15 17.13 NMAC  ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC  ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)  ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19 15 17.13 NMAC  ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19 15 17 13 Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.	
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 occur on or in areas that will not be used for future ser Yes (If yes, please provide the information below) No	vice 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 H of 19 15 17 13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15 17 13 NMAC	С
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. Recommendations of acceptable sou provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	rict 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 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 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; Data obtained from nearby wells	☐ Yes ☐ No 図 NA
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
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site, Aerial photo, Satellite image</li> </ul>	☐ 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, 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
On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17 10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19 15.17 11 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19  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  Waste Material Sampling Plan - 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 or in case on-site closure standards cans Soil Cover Design - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC	15 17 11 NMAC

Operator Application Certification:  I hereby certify that the information submitted with this application is	s true, accurate and complete to the best of my knowledge and belief
Name (Print)	Tıtle
Signature	Date
e-mail address:	Telephone
OCD Approval: Permit Application (including closure plan)  OCD Representative Signature:  Title:	Closure Plan (only) OCD Conditions (see attachment)  Approval Date: 1/89/2012  OCD Permit Number:
21	
	plan prior to implementing any closure activities and submitting the closure report. 60 days of the completion of the closure activities. Please do not complete this
	☐ Closure Completion Date:10/20/2011
22.  Closure Method:  Waste Excavation and Removal On-Site Closure Method  If different from approved plan, please explain	☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
	op Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
two facilities were utilized.	liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name	Disposal Facility Permit Number
Disposal Facility Name	
	ormed on or in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service  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 jamark 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 pitch pit	following items must be attached to the closure report. Please indicate, by a check ite closure)
On-site Closure Location. Latitude	Longitude NAD
	his closure report is true, accurate and complete to the best of my knowledge and ure requirements and conditions specified in the approved closure plan
Name (Print) Vanessa Fields	TitleEH&S Coordinator
Signature Drosso Kieldh	12/16/2011
e-mail addressvanessa fields@williams.com	Telephone _505-333-1880

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

Below-Grade Tank Removal Closure Report

Well: (Rosa Unit# 018B)
API No: 30-03927052

Location: N-S22-T31N-R06W, 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)

Aztec District office was notified of Williams E&P intent to close on (10/17/2011). Email attached.

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 Rosa Unit#018B separator and piped all liquids to the 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: Closere Ciriona for Be 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	0.01				
TPH	EPA SW-846 Method 418.1(1)	100	57.8				
Chlorides	EPA SW-846 Method 300.1(1)	250(2)	20				

Table 1: Closure Criteria for BGTs

- (1) Method modified for solid waste.
- $^{(2)}$  If background concentration of Chlorides greater than 250 mg/Kg, then higher concentration will be used for closure.
- 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>Ptt 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 Division-approved 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.

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.

**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

# Fields, Vanessa

From:

Fields, Vanessa

Sent:

Monday, October 17, 2011 3.23 PM

To:

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

Cc:

'Brandon Powell (Brandon Powell@state.nm.us)'; Lane, Myke, Lucero, Christopher, Dean,

Stanley, Lepich, Mark

Subject:

Request for review of pit closure plan for the Rosa Unit#018B

Brad,

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

Well Site	API	FMT	SEC	TWN	RNG
Rosa Unit # 018B	30-03927052	Mesa Verde	022N	31N	

Please contact myself or Myke Lane should you have any questions or concerns.

# Vanessa Fields

Williams.

EH&S Coordinator Williams Production Office: 505-333-1880 Fax: 505-333-1850

Cell: 505-419-6219

vanessa.fields@williams.com

# Fields, Vanessa

From:

Fields, Vanessa

Sent:

Monday, October 17, 2011 3 23 PM

To:

'brad.a jones@state nm us'

Cc:

'Brandon Powell (Brandon Powell@state.nm us)', Lane, Myke; Lucero, Christopher; Dean,

Stanley, Lepich, Mark

Subject:

Request for review of pit closure plan for the Rosa Unit#018B

Brad,

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

Well Site	API	FMT	SEC	TWN	RNG
Rosa Unit # 018B 06W	30-03927052	Mesa Verde	022N	3	1N

Please contact myself or Myke Lane should you have any questions or concerns.

# Vanessa Fields



EH&S Coordinator Williams Production Office: 505-333-1880 Fax: 505-333-1850

Cell: 5

505-419-6219

vanessa.fields@williams.com



Exploration & Freduction FO Box 640 Azico NM 81127 5057624 4219 5057634 4214 fax

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 Ferkins EH&S Specialist

Encl. Williams Production Pit Inventory List (Federal wells)

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

cc Environmental Fire

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

Below Glade Tank Kemoval Closure Flan

In accordance with Rule 19.19.17.13.1MAC, the following plan describes the general closure requirements of below grade tonts (BC-1) on Williams Fradoction Co. LLC (WEX) locations in the San Joan Basin of New Mexica. This is WEX estandard closure procedure for all BC-1s regulated under Rule 19.15.17.1MAC, and operated by WEX. 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 WEX will initiate closure of any 5G3 should any one of these conditions occur.

- The Division requires closure because of imminent danger to tresh water public health or the environment.
- The integrity of the RGT 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.
- WEX chooses to take the BGT out of service due to operational needs. Clasure under these
  conditions will be closed within 60 days of cessation of the BGT superation.
- BC-1s installed prior to time 16, 2008 that do not meet the requirements under 19.15.17.11.1(6).
   RMAC and WEX, hooses not to retrofit or approace. Closure under these conditions will be completed within tive years (by June 16, 2013).

## General Plan Requirements:

- Finer to indicting any BGT Closure except in the case of an emergency. WEX will review country lax Records for the current surface, owner of record. The surface owner of record will be notified of the intent to close the PGT 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.
- Notice of Closure will be given to the Azter District office Letween 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following.
  - a Operators Name (WEX)
  - b. Well Name and All Number
  - c (ocation (USTR))
- All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks temporary fractank ). The well will be temporarily shut in until the rerouting is completed.
- All produced water will be removed from the BC-1 following discharge pipe retouting Froduced water will be disposed at one of the following NMOCD approved facilities depending on the proximity of the BGI 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 AFI 30 039 25465) Middle Mesa SWD #001 (Order SWD 350 0 AFI 30 045 27004) and/or Basin Disposal (Peimit NM 01-0005)

sollar and dudges will be shoveled and roll valuatine a call for disposal at Envirotecti (femiliation per IVM (1) (G))

Who kill of the provide of the disposition of the EC-11 in a closure report. Stee and provide documentation of the disposition of the EC-11 in a closure report. Stee and ends with the recycle of the closure of the provide of the pr

be cleaned without soils or contaminated moderial for disposal as solid waste. Triberglass 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 tanafill operated by Waste Management under NMED Fermit SWM 052426.

- Any equipment associated with the KGI that is no longer required for some other purpose following the closure will be removed from the location.
- 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. Crab 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 BGTs

		idole i elestic tilicita loi trois	
	Components	Testing Methods	Closure Limits (mg/Kg)
;	Benzene	FPA SW 846 Method 8021B or 8260B .	0.2
	BTLX	FPA SW 846 Method 8021B or 8260B	50
ſ	TFH	EFA SW 846 Method 418 1-1	100
!	Chlorides	EPA SW 846 Method 300 11	250%)

Methica incallied for solid worker

If action a concentration of Ottomics greater many to matter ball end one concentration with each resort.

- If the Division analog WEX determine there is a release. WEX will comply with 19.15.3-117.

  JIMAC and 19.15.1.39 NMAC
- 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 reconforced to match the native grade and prevent ponding.
- Let those portions of the former pit are a no longer required for production activities. Why will be seed the disturbed areas the hist growing scason after the pit is covered. Seeding will be accomplished via diffing on the contour whenever practical or by other Division approved methods. Vegetative occessful equal 70% of the native perennial vegetative cover fun imported) consisting of at least three native plant species including at least one grass to the not including nowous weeds and mointained that cover through two successive growing scasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. There if a surface owner agreement requires reseeding or other surface restantion that ac not meet to regetation requirements of 19-15-17-13 TIMMAC then WEA will submit the tray association for Division approval.
- For those portions of the former pit area required for production activities resecting will be done at well abandonment, and following the procedure noted above:

#### Closure Report

ì

All closure activities will include proper accumentation and will be submitted to OCD within 60 days of the PC-1 closure or a Closure February Division Form C 144. The Report will include the tollowing.

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WELLS W/FEDERAL							
SURF MGT	API	FM1	SEC	TWN	RNG	PITTY	E CONSTRUCTION MATERIAL
ROSA UNIT #012A	2000000000000	BLANCO MV / ROSA PC	11.1	2411		001	AND MAND CALL
INCION ONLY WOLLD	3003925900	BASIN DK /	15J	11N	OGVV	PGT	DBL WALL STEEL TIBERGLASS TANK WBANDED 20 mil
ROSA UNIT #012B	3003926555	BLANCO MV	15F	31N	06\V	BG1	HDPF SECONDARY LINER
ROSA UNIT #0120	3003929486	BLANCO MV	15A	41N	0eW	5(2)	SINGLE WALL STELL
							FIBERGLASS TANK W/BANDED 20 mil
ROSA UNIT #013	3003907936	BLANCO MV	31G	31N	05W	BG1	HDPE SECONDARY LINER FIBERGLASS TANK W/BANDED 20 mil
ROSA UNIT #013A	3003926298	BLANC() MV BASIN DK /	31F	31N	05W	FG1	HOP'E SECONDARY LINER
ROSA UNIT #013B COM	3003929834	BLANCO MV	31A	31N	05Vv	PGI	DEL WALL STEEL
ROSA UNIT #014	3003907958	BLANCO MV	23B	31N	06W	BG1	FIBERGLASS TANK w/BANDFD 20-mil HDPE SECONDARY LINER
							FIBERGLASS TANK w/BANDED 20 mil
ROSA UNIT #014A	3003926280	BLANCO MV BASIN DK /	231	31N	ObW	BG1	HDFF SECONDARYLINER
ROSA UNIT #014(.	3003930132	BLANCO MV	2311	31N	06W	BGI	DBI WALL STEEL
ROSA UNIT #015	3003907946	BI ANCO MV	2911	31N	05 <b>V</b> V	BGT	FIBERGLASS TANK W/BANDED 20 mill HDPE SECONDARY LINER
ROSA UNIT #016	3003907963	BLANCO MV	14N	3114	06VV	BGI	FIBERGLASS TANK w/BANDED 20 mill HDPE SECONDARY LINER
							TIBERGLASS TANK w/BANDED 20-mil
ROSA UNIT #U16A	3003925496	BLANCO MV	14(.	31N	OGVV	BG1	HDPE SECONDARY LINER LIBERGLASS TANK w/BANDED 20 mil
ROSA UNIT #016B	3003926218	BLANCO MV	141/1	31N	0644	BGT	HDPE SECONDARY LINER LIBERGLASS TANK w/BANDED 20 mid
ROSA UNIT #017A	3003926272	BLANCO MV	200	31N	05W	BG1	HDPE SECONDARY LINER
ROSA UNIT #017B	3003926971	BASIN DK / BLANCO MV	20J	31N	05W	BG1	FIBERGLASS TANK w/BANDED 20 mill HDPE SECONDARY LINER
		BLANCO MV	2	., ., •		.,.,	FIBERGLASS TANK w/BANDED 20 mil
ROSA UNIT #018	3003907960	ROSA PC	22H	31N	06W	BGT	HDPE SECONDARY LINER
ROSA UNIT #016A	3003925436	BLANCO MV / ROSA PC	220	31N	06W	SGI	DBI WALL STEEL
ROSA UNIT #018B	3003927052	BLANCO MV	220	31N	06W	BGI	DBI WALL STEEL
· ·	3003921002	DI ANCO MV	220	9 H <b>V</b>	WW		FIBERGLASS TANK w/BANDED 20 mil
ROSA UNIT #019	3003907955	BI ANCO MV	24K	31N	06W		HIDPE SECONDARY LINER HIBERGLASS TANK W/BANDED 20 mil
ROSA UNIT #019B	3003926560	BI ANCO MV	241	31N	06W	BGI	HDPE SECONDARY LINER
ROSA UNIT #019C	3003929625	BLANCO MV	241)	31N	06W	BGT	DBI WALL STEEL
ROSA UNIT #019C	3003929625	BLANCO MV	24()	31N	06W	BG1	DBL WALL STEEL
							FIBERGLASS TANK w/BANDED 20 mil
ROSA UNIT #020	3003907969	BLANCO MV	14G	31N	06W		FIBERGLASS TANK W/BANDED 20 mil
ROSA UNIT #020A	3003925495	BLANCO MV	14()	31N	06W	BG1	HDPE SECONDARY LINER
ROSA UNIT #020B	3003926220	BLANCO MV	14A	31N	06W		DBL WALL STEEL
ROSA UNIT #020C	3003926221	BLANCO MV	14J	31N	06W	BG1	FIBERGLASS TANK W/BANDED 20 mil HDPE SECONDARY LINER
ROSA UNIT #021A	3003926121	BL ANCO MV	23C	31N	06W		FIBERGLASS TANK W/BANDED 20-mil HDPE SECONDARY LINER
ROSA LINIT #021B	3003926554	BL ANCO MV	23K	31N	06W	BG1	DBL WALL STEEL
ROSA UNIT #0z!	3003907971	BLANCO MV	18A	31N	05W		FIBERGLASS TANK w/BANDE() 20-mil HDPE SECONDARY LINER



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

Client: WPX Project #: 04108-0136 Sample ID: Rosa #18B Date Reported: 10-28-11 10-26-11 Laboratory Number: 60121 Date Sampled: 12830 10-26-11 Date Received: Chain of Custody No: 10-27-11 Sample Matrix: Soil Date Extracted: Preservative: Cool 10-27-11 Date Analyzed: Condition: 8015 TPH Intact Analysis Requested:

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 #18B



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

# **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	10-27-11 QA/QC	Date Reported:	10-28-11
Laboratory Number:	60120	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-27-11
Condition:	N/A	Analysis Requested:	TPH

	l;CaliDate	/I-Cal REA	G-Cál/RF: 9	6 Difference	Accept Range
Gasoline Range C5 - C10	40843	9.960E+02	9.964E+02	0.04%	0 - 15%
Diesel Range C10 - C28	40843	1.002E+03	1.003E+03	0.04%	0 - 15%

Blank@onc.(mg/L-mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	2.3	0.2
Diesel Range C10 - C28	3.0	0.1

Duplicate Conc. (mg/Kg)	s Sample	Duplicate :	% Difference	Range
Gasoline Range C5 - C10	ND	ND	0.00%	0 - 30%
Diesel Range C10 - C28	32.2	36.3	12.8%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result(	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	252	101%	75 - 125%
Diesel Range C10 - C28	32.2	250	279	98.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

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

Review

Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 60092-60093, 60120 and 60121

5796 US Highway 64, Farmington, NM 87401

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 #:	04108-0136
Sample ID:	Rosa # 18B	Date Reported:	11-01-11
Laboratory Number:	60121	Date Sampled:	10-26-11
Chain of Custody:	12830	Date Received:	10-26-11
Sample Matrix:	Soil	Date Analyzed:	10-31-11
Preservative:	Cool	Date Extracted:	10-27-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
T didilictor	(dg//dg)	(ug/Ng/	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	8.8	1.2	
o-Xylene	5.0	0.9	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	83.2 %
	1,4-difluorobenzene	94.1 %
	Bromochlorobenzene	92.1 %

References<sup>1</sup>

**Total BTEX** 

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

13.8

December 1996.

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

USEPA, December 1996.

Comments:

Rosa #18B

Analyst



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client <sup>.</sup>	N/A	ſ	Project #:	1	N/A
Sample ID:	1031BBLK QA/Q0	C 1	Date Reported:	1	10-31-11
Laboratory Number:	60128	Į	Date Sampled:		N/A
Sample Matrix:	Soil	I	Date Received:	ı	N/A
Preservative:	N/A	į	Date Analyzed:	1	10-31-11
Condition:	N/A		Analysis:		BTEX
		ı	Dilution:	16	0
Calibration (and	2 Section DE	∗.⊮ี่ดีเดอเRE:	% Diff	(Riank	Detect
Calibration and Detection Limits (ug/L)	Ecal RF	G-Cal RF Accept Rang	%Diff; e 0 - 15%	(Blank) Conc.	(Detect
Detection Limits (ug/L)	ECal RF:	Francis 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	%Diff e 0 - 15% 0.2%	Blank	Detect
Detection Limits (ug/L) Benzene	and the second s	Accept Rang		Blank Conc.	Detect Limit
Detection Limits (ug/L) Benzene Toluene	2.5564E+006	Accept: Rang 2.5615E+006	0.2%	Blank Conc.	Detect Limit 0.1
The state of the s	2.5564E+006 2.8320E+006	Accept: Rang 2.5615E+006 2.8377E+006	0.2% 0.2%	Blank Conc ND ND	Detect Limit 0.1 0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	::\%Diff_:	. Accept Range	Detect: Limit
Benzene	71.0	69.5	2.1%	0 - 30%	0.9
Toluene	322	300	6.8%	0 - 30%	1.0
Ethylbenzene	1,460	1,380	5.5%	0 - 30%	1.0
p,m-Xylene	15,000	14,900	0.7%	0 - 30%	1.2
o-Xylene	4,480	4,520	0.9%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample* : Amo	unt Spiked & (Sp	iked Sample %	Recovery	Accept Range
Benzene	71.0	<b>500</b>	607	106%	39 - 150
Toluene	322	500	859	105%	46 - 148
Ethylbenzene	1,460	500	1,940	99.0%	32 - 160
p,m-Xylene	15,000	1000	15,600	97.5%	46 - 148
o-Xylene	4,480	500	4,980	100%	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:** 

AAQC for Samples 60121, 60128, 60134-60136, 60147, 60149 and 60150.



# EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	WPX	Project #:	04108-0136
Sample ID:	Rosa # 18B	Date Reported:	10/28/11
Laboratory Number:	60121	Date Sampled:	10/26/11
Chain of Custody No:	12830	Date Received:	10/26/11
Sample Matrix:	Soil	Date Extracted:	10/27/11
Preservative:	Cool	Date Analyzed:	10/27/11
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

57.8

7.2

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 #18B



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

Client:

**QA/QC** 

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

10/27/11

Laboratory Number:

10-27-TPH.QA/QC 60121

Date Sampled:

N/A

Sample Matrix:

Freon-113

Date Analyzed:

10/27/11

Preservative:

N/A

Date Extracted:

10/27/11

Condition:

N/A

10/18/2011

Analysis Needed:

TPH

Calibration Cical Date Cical Date Cical RE % Difference

10/27/11

1,810

1,720

5.0%

Accept Range +/- 10%

Blank Conc. (mg/Kg)

Concentration ...

Detection Limit

**TPH** 

**TPH** 

ND

7.2

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

Sample Duplicate M Difference Accept Range 57.8

57.8

0.00%

+/- 30%

Spike Conc. (mg/Kg) Sample Spike Added Spike Result % Recovery

57.8

2,000

1,850

89.9%

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 60121



# Chloride

20

Client: **WPX** Project #: 04108-0136 Sample ID: Rosa #18B Date Reported: 10/28/11 Lab ID#: 60121 Date Sampled: 10/26/11 Date Received: 10/26/11 Sample Matrix: Soil Date Analyzed: Preservative: Cool 10/27/11 Chain of Custody: Condition: 12830 Intact

Parameter Concentration (mg/Kg)

Total Chloride

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 #18B

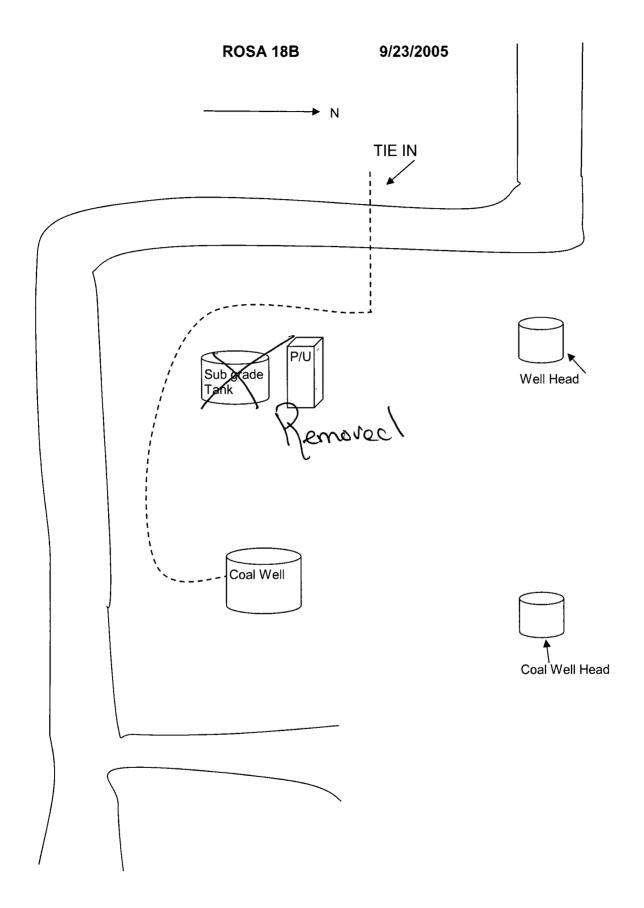
Analyst

# CHAIN OF CUSTODY RECORD

12830

Client: Project Name / Location:						?			ANALYSIS / PARAMETERS														
Client Address		s	ampler Name:	<u> </u>					5)	21)	6								,				
Mufce Co	íme		Cha	`< (	- cero				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	S											
Client Phone No		С	lient No.:		<u> </u>				ğ	Ĕ	B	leta	jė		Ē		F.	ш			İ	8	tact
337-319	· V		041	108	- 01	36			Meth	<u>₩</u>	Met	RCRA 8 Metals	Cation / Anion	!	TCLP with H/P		TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Sample No./	Sample	Sample	Lab No.	8	Sample	No /volume			Į,	Ä	ဥ	Ä	tion	RC:	깃	PAH	Ĕ	일			1	du	dm
Identification	Date	Time			Matrix	of Containers	HgCl, F	ICI	<u> </u>	<u>m</u>	×	Œ.	Ö	ž	1	72	Ë	<u> 5</u>		-		ικ	<u> </u>
Rosa# 18B	10/26	11:00	60121	Solid	Sludge Aqueous	(402			X	×							X	X				4	7
		<u> </u>		Soil Solid	Sludge Aqueous																		
		- <u>-</u> -		Soil	Sludge			+					-					_					
				Solid	Aqueous		$\perp$		<u></u>														
				Soil Solid	Sludge Aqueous																		
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# 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

<b>Components</b>	Testing/Methods	
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-approved 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 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:

- 1. 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.
- 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. 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.

- 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 BGTs

Components	Testing 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

- 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.
- 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 arade.
- 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 Division-approved methods unless notified by the Division of their unacceptability. If a landowner agreement requires reseeding or other surface restoration that do not meet the revegetation requirements of 19.15.17.13. It then WPX will submit the proposed alternative with written documentation that the landowner 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)
- Re-vegetation Application Rate & Seeding techniques
- Photo Documentation of Reclamation

<sup>&</sup>lt;sup>(2)</sup> If background concentration of Chlorides greater than 250 mg/Kg, then higher concentration will be used for closure.

District !
1625 N French Dr , Hobbs, NM 88240
District !!
1301 W Grand Avenue, Artesia, NM 88210
District !!! 1000 Rio Biazos Road, Aztec, NM 87410 District IV 1220 S St Fiancis Dt , 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

Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

			Rele	ease Notific	eation	and Co	orrective A	ction						
						<b>OPERA</b>	ГOR		Initia	al Report		Final Report		
Name of Co	mpany	WILLIAMS	PRODU	CTION, LLC		Contact Vanessa Fields								
Address		P.O. BOX 64	40, AZTI	EC, NM 87410		Telephone No. (505) 333-1880								
Facility Nai	ne Rosa U	nit #018B			] ]	Facility Typ	e Well Site		<del> </del>					
Surface Ow	ner Federa	al		Mineral C	wner				Lease N	Vo.				
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		sa neius@will			'	Conditions 0	πρριοναι			Attached				
Date 12-1	6-2011		Phone:	(505) 333-1880										

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

04-67

						Liner	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
9/3/2008	ROSA UNIT #018B	04-67	Mesa Verde	STEEL	Above	None	No		2'-8"	
30-Sep	ROSA UNIT #018B	04-67	Mesa Verde	STEEL	SGT	None	No		3'-0"	
5/29/2009	Rosa Unit #18B	04-67	Mesa Verde	STEEL	BGT	NO	NO		21	
7/30/2009	Rosa Unit #18B	04-67	Mesa Verde	STEEL	BGT	NO	NO		15	
8/26/2009	Rosa Unit #18B	04-67	Mesa Verde	STEEL	BGT	NO	NO		17	:
9/1/2009	Rosa Unit #18B	04-67	Mesa Verde	STEEL	BGT	NO	NO	17	0	
10/1/2009	Rosa Unit #18B	04-67	Mesa Verde	STEEL	BGT	NO	NO		17	
11/30/2009	Rosa Unit #18B	04-67	Mesa Verde	STEEL	BGT	NO	NO		17	
12/16/2009	Rosa Unit #018B	04-67	Mesa Verde	STEEL	BGT	NO	NO		18	
1/1/2010	Rosa Unit #018b	04-67	Mesa Verde	STEEL	BGT	NO	NO		19	
2/12/2010	Rosa Unit #018b	04-67	Mesa Verde	STEEL	BGT	NO	NO		19	
3/10/2010	Rosa Unit #018B	04-67	Mesa Verde	STEEL	BGT	NO	NO		19	