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

### State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division

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

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

Pit, Closed-Loop System, Below-Grade Tank, or							
Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application  Time of action.   Permit of a pit alosed loop system, below, grade tank, or proposed alternative method.							
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.							
OperatorWILLIAMS PRODUCTION COMPANY, LLC OGRID #120782							
Address PO Box 640 Aztec, NM 87410							
Facility or well name: COX CANYON UNIT #201							
API Number 3004527750 OCD Permit Number							
Section 16B Township 32N Range 11W County SAN JUAN							
Latitude 36.98939 Longitude 107.98944 NAD 1983 Surface Owner STATE							
2							
Pit: Subsection F or G of 19 15 17 11 NMAC							
Temporary. Drilling Workover RCVD DEC 16 '10							
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐							
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other							
☐ String-Reinforced							
Liner Seams							
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							
Below-grade tank: Subsection I of 19 15 17 11 NMAC							
Volume:120 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							
Liner type Thickness mil							
5							
Alternative Method:							
Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval							

6	
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	
Netting: Subsection E of 19 15 17 11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen Netting Other	
Monthly inspections (If netting or screening is not physically feasible)	
8	
Signs: Subsection C of 19 15 17 11 NMAC	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☐ Signed in compliance with 19.15.3.103 NMAC	
9,	- "
Administrative Approvals and Exceptions:	
Justifications and/or demonstrations of equivalency are required Please refer to 19 15 17 NMAC for guidance Please check a box if one or more of the following is requested, if not leave blank:	
Administrative approval(s) Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau	office for
consideration of approval	
Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	
10 Sixing Criteria (recording normitting), 10.15.17.10 NMAC	
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 acceptance.	otable source
material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro-	
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a	
Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dryi above-grade tanks associated with a closed-loop system.	ing paus or
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank	☐ Yes ☐ No
- NM Office of the State Engineer - iWATERS database search, USGS; Data obtained from nearby wells	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa	∐ Yes ∐ No
lake (measured from the ordinary high-water mark).  - Topographic map, Visual inspection (certification) of the proposed site	İ
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application	☐ Yes ☐ No
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□ NA □
- Visual inspection (certification) of the proposed site; Aerial photo, Satellite image	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application	☐ Yes ☐ No ☐ NA
<ul> <li>(Applies to permanent pits)</li> <li>Visual inspection (certification) of the proposed site, Aerial photo, Satellite image</li> </ul>	I NA
	☐ 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 - 1WATERS database search, Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality, Written approval obtained from the municipality	
- Whiteh commission of vermeation from the municipanty, written approval obtained from the municipanty	
Within 500 feet of a wetland	☐ Yes ☐ No
- US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (certification) of the proposed site	
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</li> </ul>	Yes No
Society; Topographic map	
Within a 100-year floodplain	☐ Yes ☐ No
- FEMA map	

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  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  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  Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan  Erosion Control Plan  Closure Plan - based upon the appropriate requirements of Subsection C of 19 15.17.9 NMAC and 19.15.17.13 NMAC
Proposed Closure: 19.15 17 13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative  Proposed Closure Method Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal Closure Plan Checklist: (19.15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  ☐ Protocols and Procedures - based upon the appropriate requirements of 19 15 17 13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC ☐ Site Reclamation 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 Instructions: Please indentify the facility or facilities for the disposal of liquids, 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 of Yes (If yes, please provide the information below) No	•	rice and operations?
Required for impacted areas which will not be used for future service and operatio  Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection  Site Reclamation Plan - based upon the appropriate requirements of Subsection	e requirements of Subsection H of 19 15 17 13 NMAC L of 19.15.17 13 NMAC	C
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may require considered an exception which must be submitted to the Santa Fe Environmenta demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC.	re administrative approval from the appropriate disti I Bureau office for consideration of approval.  Justi	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, Dat	a 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	a 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, Dat	a obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sig- lake (measured from the ordinary high-water mark)  - Topographic map, Visual inspection (certification) of the proposed site	mificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site, Aerial photo, Satellite	• •	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that les watering purposes, or within 1000 horizontal feet of any other fresh water well or see NM Office of the State Engineer - iWATERS database; Visual inspection	spring, in existence at the time of initial application	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water adopted pursuant to NMSA 1978, Section 3-27-3, as amended  - Written confirmation or verification from the municipality, Written approx	·	☐ Yes ☐ No
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map, Visu	al 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	g and Mineral Division	☐ Yes ☐ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geolog Society, Topographic map</li> </ul>	y & Mineral Resources, USGS, NM Geological	☐ Yes ☐ No
Within a 100-year floodplain - FEMA map		☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15 17 13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying protocols and Procedures - based upon the appropriate requirements of 19 1.  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Confirmation Plan - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	quirements of 19 15 17 10 NMAC f Subsection F of 19 15 17 13 NMAC ppropriate requirements of 19.15.17.11 NMAC pad) - based upon the appropriate requirements of 19 5 17 13 NMAC quirements of Subsection F of 19.15.17.13 NMAC Subsection F of 19 15.17 13 NMAC drill cuttings or in case on-site closure standards cann H of 19.15 17 13 NMAC	15 17.11 NMAC

19 • Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief
Name (Print) Title:
Signature Date_
e-mail address: Telephone
OCD Approval: Permit Application (including closure plan) Soure Plan (only). OCD Conditions (see attachment)  OCD Representative Signature: Approval Date: S/15/2011  Title: OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date:10/1/10
22
Closure Method:  ☐ Waste Excavation and Removal ☑ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only) ☐ If different from approved plan, please explain
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.  Disposal Facility Name Disposal Facility Permit Number
Disposal Facility Name Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations  Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique
<sup>24</sup> <u>Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check</u>
mark in the box, that the documents are attached.    Proof of Closure Notice (surface owner and division)   Proof of Deed Notice (required for on-site closure)   Plot Plan (for on-site closures and temporary pits)   Confirmation Sampling Analytical Results (if applicable)   Waste Material Sampling Analytical Results (required for on-site closure)   Disposal Facility Name and Permit Number   Soil Backfilling and Cover Installation   Re-vegetation Application Rates and Seeding Technique   Site Reclamation (Photo Documentation)   On-site Closure Location. Latitude
25 Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Name (Print)
Signature
a mail addresse — vanassa fialds@uulliama aam — Talanhana — 505 634 4200

District I-, 1625 N French Di , Hobbs, NM 88240 District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Biazos Road, Aztec, NM 87410 District IV 1220 S St Francis Di , 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

Revised October 10, 2003

Form C-141

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

Release Notification and Corrective Action											
						<b>OPERA</b>	ΓOR		al Report		Final Report
Name of Co	ompany_			CTION, LLC			Vanessa Fields				
Address P.O BOX 640, AZTEC, NM 87410							No. (505) 634-	-4209			
Facility Name Cox Canyon #201						Facility Typ	e Well Site				
Surface Ow	ner: Stat	e		Mineral C	wner:			Lease N	lo.		
				LOCA	TIO	N OF REI	EASE				
Unit Letter	Section	Township	Range	Feet from the		/South Line	Feet from the	East/West Line	County		
D	16	2201	1137								
В		32N	11W	<u> </u>							
		La	atitude	36.98939N_		Longitude_	107.98944\	<b>N</b>			
				NAT	<b>URE</b>	OF REL	EASE				
		lease Occurred				Volume of		Volume I			
Source of Re Was Immedi		C2				Date and F	lour of Occurrence	e Date and	Hour of Disc	overy	
was milieui	ate Notice		Yes [	] No 🛛 Not Re	equired	11 1 ES, 10	W BOIII /				
By Whom?	*					Date and H	lour				
Was a Water	course Rea		_	-	_		lume Impacting t	the Watercourse			
		L	Yes 🗵	No							
If a Waterco	urse was It	npacted, Descr	ibe Fully '	* N/A							
		olem and Reme	dial Actio	n Taken.*							
No action red	quired		·								
	1.00										
Describe Are	ea Affected	l and Cleanup A	Action Tak	ken *							
N/A											
I hereby cert	ify that the	unformation a	wen above	a te true and comp	lete to t	the best of my	knowledge and u	inderstand that pure	cuant to NMC	<u> </u>	rules and
								ctive actions for rel			
public health	or the env	uronment The	acceptant	ce of a C-141 repo	ort by th	ne NMOCD m	arked as "Final R	eport" does not rel	ieve the opera	ator o	f liability
								eat to ground wate			
		addition, NMC aws and/or regi		otance of a C-141	report o	loes not reliev	e the operator of	responsibility for c	omphance w	ith an	y other
A A	, or tocar in	aws and Griege	114119113.				OIL CON	SERVATION	DIVISIO	N	
(	h				1		<u>oil coir</u>	<u>DERCEPTION</u>	BITTOTO		
Signature \		(43)0		>							
Printed Name: Vanessa Fields  Approved by District Supervisor.											
Title EH&S	S Coordina	tor				Approval Da	e	Expiration	Expiration Date.		
		ssa,fields@will	iams com			Conditions of			Attached		

Phone. (505) 634-4209

Date. 12-13-10

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



Exploration & Production PO Box 640 Aztec, NM 81137 505/634-4219 505/634-4214 Fax

March 10, 2009

Mr. Bob Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe. NM 87505

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 New Mexico Oil Conservation Division of Williams Production LLC's (Williams') intent to clean close all production pits on State lands in San Juan County, New Mexico. Closure will follow the plan included with this correspondence.

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

Respectfully submitted.

Holly C. Perkins **EH&S Specialist** 

Encl: Williams Production Pit Inventory (Tribal 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

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 close 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 shut in 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. Liner 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 BGTs

<b>Components</b>	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 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 (unimpacted) 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 re-vegetation requirements of 19.15.17.13.I 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

 $<sup>^{(2)}</sup>$  If background concentration of Chlorides greater than 250 mg/Kg, then higher concentration will be used for closure.

## 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.I(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 BGTs

Components	Sesting Methods	Closure timits (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(2)

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

- 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

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

### 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	Nesing Methods 1	Glosuredimis (mo/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)* or Method 418.1	100
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

Production Pit: Fiberglass Below-Grade Tank

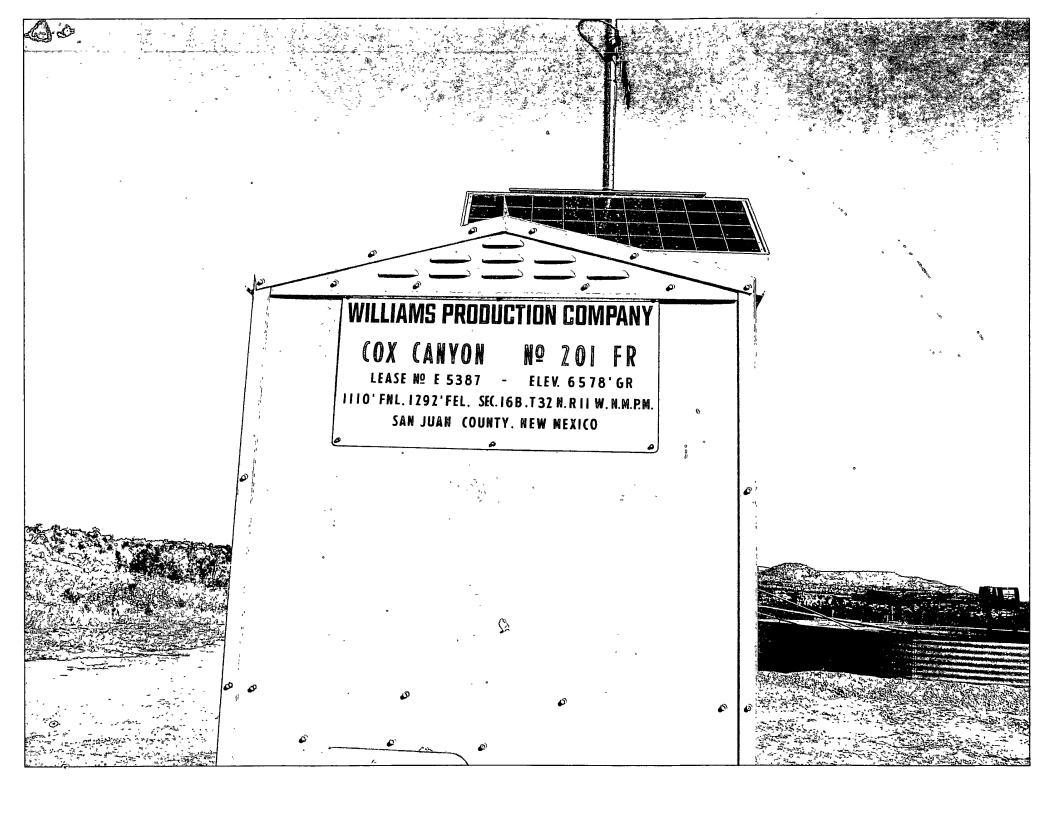
Although these tanks have performed well to protect the public health, welfare and environment, in accordance with Rule 19.15.17.13.A (4) NMAC, Williams will removed all BGTs constructed of fiberglass by June 16, 2013. These tanks do not meet the construction/design standards specified in 19.15.17.11 (1-4). The following plans describes the general design and construction (D&C) and Operations and Maintenance (O&M)of these production pits used on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico.

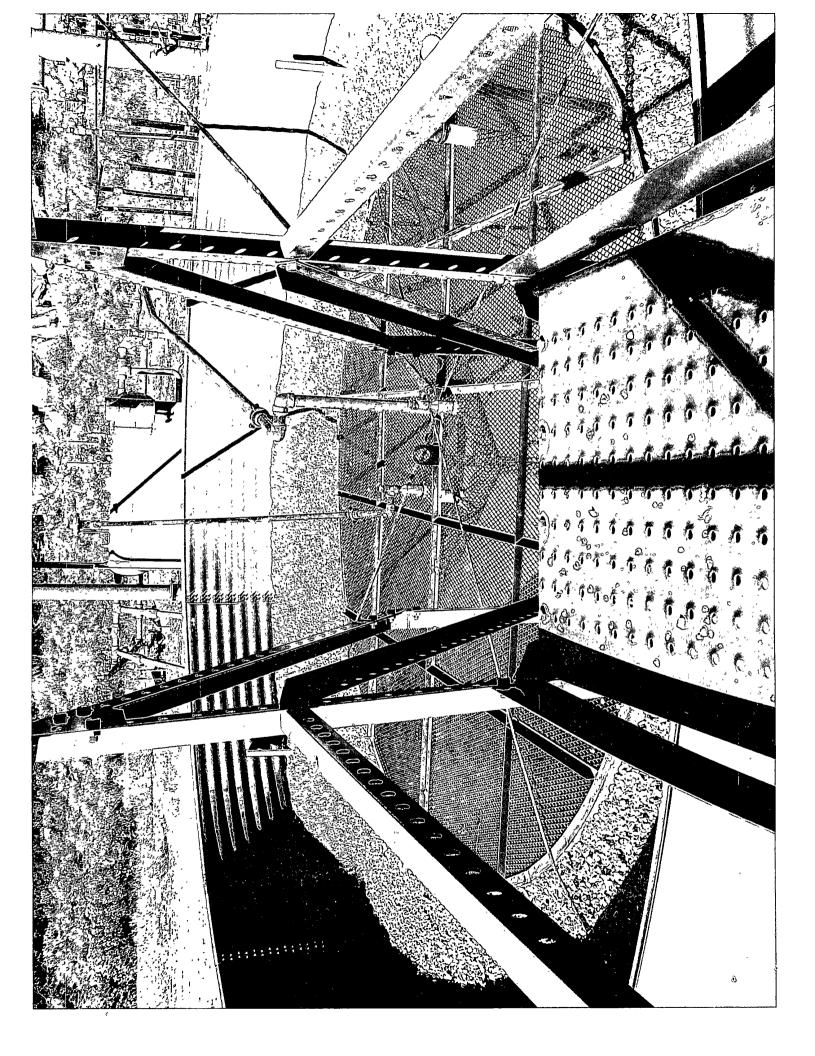
### Design and Construction Plan

The pit is located as close as possible to the well and associated production/process equipment to minimize surface disturbance. The excavation bottom and sidewalls were compacted prior to installation of the pit. The BGT consisted of single-wall fiberglass tank following appropriate API and industry codes, placed in a 20-mil High-Strength Polyethylene resin (Permeability Rating – 0.041 USPerms), and the liner banded to the tanks. A 2" Sch-40 PVC riser was placed between the tank and liner as a leak-detection inspection port. See the attached Schematic and liner spec sheet. The pit is protected from runon by the construction of a compacted earthen berm. Fencing is constructed to protect livestock/wildlife as specified by the federal Surface Management Agency or, if not federal land/minerals requirements. WPX posts a well sign in accordance with the federal Surface Management Agency and rule 19.15.3.103.

### Operations and Maintenance Plan

- 1. WPX only allows produced liquids meeting the RCRA exemption for O&G wastes to be stored in the SGT. WPX will not discharge or store any hazardous waste as defined under RCRA 40CFR 261 and 19.15.1.7.W(3) NMAC in any temporary pit. Produced water is disposed by evaporation or transport any of the following NMOCD approved facilities depending on the well location: Basin-Disposal, Inc in Bloomfield, New Mexico (Permit # NM-01-005), Williams Rosa SWD#1 (Permit # SWD-916), Williams Rosa #94 (Permit # SWD-758), Burlington Resources Jillson SWD#1 (Permit #R10168A), or other NMOCD approved water disposal facilities. WPX maintains sufficient freeboard for to prevent overtopping. Discharges to the pit will be shutoff if the liquid level does not provided sufficient free-board and liquid removal can not be scheduled in a timely manner. Any oil or hydrocarbon collecting on the pit is removed. Saleable condensate is returned to the sales tank. Slop oil from compression is recycled with Safety Kleen, Farmington, NM or Hydropure, Aztec, NM (No Permit Required).
- 2. If the tank integrity is compromised:
  - a. All discharges will be shut off to the pit.
  - b. All liquids will be removed as soon as possible but no more that within 24 hours of discovery
  - c. WPX will notify and report to NMOCD as follows:
  - i. If the release is less than 25 bbls, the Aztec District Office by phone or email within 48-hours of discovery and repair.
  - ii. If the release is suspected to be greater than 25 bbls, the Aztec District Office and the Environmental Bureau Chief by phone for immediate verbal notification pursuant to 19.15.3.116.B (1)(d).
  - d. Written Spill/Release reports will be submitted on Form C-141 per 19.15.3.116.C NMAC within 15 days to the Aztec District Office.
- 3. Berms around the perimeter of the pit, shall be maintained as protection from run-on.
- 4. WPX will inspect the BGT pit monthly. Electronic copies of the inspections will be kept at the WPX San Juan Basin office for a minimum of five years following completion. Copies of the inspections will be available to NMOCD upon request.





04-43

Cox Canyon #201

						Liner	Leak detection		Pit	
Date	WellName	Run	Formation	Construction	SGT. BGT, Above	Plastic liner, Double Wall Steel, Bottom Plastic Liner	Y/N	level	level	Comments / Repairs needed
	COX									
8/29/2008	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Y	0"	8"	
0/20/2000	CANYON		Fruitland		<u> </u>					
Sep-08	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	8"	
10/31/2008	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Υ	0"	6"	
10/31/2008	CANYON	04-43	Fruitland	TIBEROLAGO		140	T	0	0	
12/1/2008	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	6"	
1/1/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Y	0"	6"	
2/1/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Υ			
3/31/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Υ	0"	6"	
4/1/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Υ			
5/29/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Y	0"	5"	
6/30/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Υ	0"	5"	
7/1/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Y	0"	5"	
8/1/2009	CANYON UNIT #201	04-43	Fruitland Coal	FIBERGLASS	BGT	NO	Y	0"	5"	

	CANYON		Fruitland							
9/1/2009	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	5"	
	CANYON		Fruitland							
10/1/2009	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	5"	
	CANYON		Fruitland							
11/1/2009	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Y	0"	5"	
	CANYON		Fruitland							
12/1/2009	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	8"	
	CANYON		Fruitland							
1/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	8"	
	CANYON		Fruitland			_				
2/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	8"	
	CANYON		Fruitland							
3/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	10"	
	CANYON		Fruitland							
4/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ			
	CANYON		Fruitland							
5/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	10"	
	CANYON		Fruitland							
6/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	24"	
	CANYON		Fruitland							
7/1/2010	UNIT #201	04-43	Coal	FIBERGLASS	BGT	NO	Υ	0"	27"	



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

Client:	WPX	Project #:	04108-0136
Sample ID:	CC #201	Date Reported:	10-04-10
Laboratory Number:	56024	Date Sampled:	09-30-10
Chain of Custody No:	10437	Date Received:	10-01-10
Sample Matrix:	Soil	Date Extracted:	10-01-10
Preservative:	Cool	Date Analyzed:	10-04-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

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:

Cox Canyon #201

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 8015 Modified** Nonhalogenated Volatile Organics **Total Petroleum Hydrocarbons**

### **Quality Assurance Report**

0 - 30%

0 - 30%

Client:	QA/QC		Project #:		N/A
Sample ID:	10-04-10 QA/0	<b>S</b> C	Date Reported:		10-04-10
Laboratory Number:	56021		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		10-04-10
Condition:	N/A		Analysis Reques	ted:	TPH
Zamana da Para da Barana da Para da Pa	. 40al Date	l-Cal/RF:	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	10-04-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	10-04-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		- Concentration		Detection Lin	iit
Gasoline Range C5 - C10		ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND			
	5 - S	Series		A. 6 - 8 - 8	<b>2763</b>
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Rang	e

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept: Range
Gasoline Range C5 - C10	164	250	418	101%	75 - 125%
Diesel Range C10 - C28	20.0	250	271	100%	75 - 125%

162

20.7

1.6%

3.5%

ND - Parameter not detected at the stated detection limit.

References:

Gasoline Range C5 - C10

Diesel Range C10 - C28

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

SW-846, USEPA, December 1996.

164

20.0

Comments:

QA/QC for Samples 56021-56028

Analyst

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:	CC # 201	Date Reported:	10-04-10
Laboratory Number:	56024	Date Sampled:	09-30-10
Chain of Custody:	10437	Date Received:	10-01-10
Sample Matrix:	Soil	Date Analyzed:	10-04-10
Preservative:	Cool	Date Extracted:	10-01-10
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

	Dilution.	IV	
		Det.	
	Concentration	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	ND	1.2
o-Xylene	1.1	0.9

**Total BTEX** 2.4

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.5 %
	1,4-difluorobenzene	98.4 %
	Bromochlorobenzene	101 %

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:

Cox Canyon #201



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

Client:	N/A	Project #:	N/A
Sample ID:	1004Bblk QA/QC	Date Reported:	10-04-10
Laboratory Number:	56021	Date Sampled:	N/A
Sample Matrix	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-04-10
Condition:	N/A	Analysis:	BTEX
		Dilution:	10
Calibration and	I-Cal RF : C-Ca	iliRF: %Diff. BI	ank Detect:
Detection Limits (ug/L)			
The state of the s			

	 				and the second s	122.00
Benzene	4.9549E+005	4.9649E+005	0.2%	ND	0.1	
Toluene	5.6518E+005	5.6631E+005	0.2%	ND	0.1	
Ethylbenzene	5.2664E+005	5.2769E+005	0.2%	ND	0.1	
p,m-Xylene	1.2813E+006	1.2839E+006	0.2%	ND	0.1	
o-Xylene	4.7740E+005	4.7836E+005	0.2%	ND	0.1	
0-Aylene	4.77406+005	4.78302+005	U.Z7 <sub>0</sub>	ND	0.1	

Duplicate Gonc (ug/Kg)	Sample	Duplicate	%Dlff	Accept Range	Detect, Limit
Benzene	12.8	12.6	1.6%	0 - 30%	0.9
Toluene	53.5	53.3	0.4%	0 - 30%	1.0
Ethylbenzene	440	442	0.4%	0 - 30%	1.0
p,m-Xylene	16,000	15,800	1.3%	0 - 30%	1.2
o-Xylene	211	228	8.0%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample Amo	ount Spiked Sp	iked Sample  %	Recovery	:Accept Range
Benzene	12.8	500	512	100%	39 - 150
Toluene	53.5	500	554	100%	46 - 148
Ethylbenzene	440	500	957	102%	32 - 160
p,m-Xylene	16,000	1000	16,500	97.1%	46 - 148
o-Xylene	211	500	677	95.2%	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,

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 56021-56027

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

Client:	WPX	Project #:	04108-0136
Sample ID:	CC #201	Date Reported:	10-04-10
Laboratory Number:	56024	Date Sampled:	09-30-10
Chain of Custody No:	10437	Date Received:	10-01-10
Sample Matrix:	Soil	Date Extracted:	10-04-10
Preservative:	Cool	Date Analyzed:	10-04-10
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

9.2

5.3

ND = Parameter not detected at the stated detection limit.

References:

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

and Waste, USEPA Storet No. 4551, 1978.

Comments:

Cox Canyon #201



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

Client:

QA/QC

Project #:

N/A

Sample ID:

**QA/QC** 

Date Reported:

10-04-10

Laboratory Number:

10-04-TPH.QA/QC 56023

Date Sampled:

N/A

Sample Matrix:

Freon-113

Date Analyzed:

10-04-10

Preservative:

N/A

Date Extracted:

10-04-10

Condition:

N/A

Analysis Needed:

TPH

Calibration

I-Cal Date 09-30-10 C-Cal Date 10-04-10

I-Cal RF: 1,650 C-Cal RF:

% Difference 1,700 3.1% Accept. Range +/- 10%

Blank Conc. (mg/Kg)

Concentration

**Detection Limit** 

TPH

ND

5.3

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

**TPH** 

Sample 51.5

**Duplicate** 46.2

% Difference 10.3%

Accept. Range +/- 30%

Spike Conc. (mg/Kg)

Sample Spike Added Spike Result % Recovery Accept Range

TPH

51.5

2.000

1,700

82.9%

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 56023-56027



### Chloride

Client:	WPX	Project #:	04108-0136			
Sample ID:	CC #201	Date Reported:	10-04-10			
Lab ID#:	56024	Date Sampled:	09-30-10			
Sample Matrix:	Soil	Date Received:	10-01-10			
Preservative:	Cool	Date Analyzed:	10-04-10			
Condition:	Intact	Chain of Custody:	10437			

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

30

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:

Cox Canyon #201

# CHAIN OF CUSTODY RECORD

Client:		P	Project Name / Location:					ANALYSIS / PARAMETERS														
WPX			Sampler Name:  Sample						<del>y.</del>	···········												
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634-421	9		lient No.:	8 -	0136				TPH (Method 8015)	₹	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
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### Williams Production Co., LLC San Juan Basin: New Mexico Assets

Below-Grade Tank Removal Closure Report

Well:

(Cox Canyon #201)

API No: 30-04527750

Location: O-S16B-T32N-R11W, 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.I(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.

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 (10/01/2010). 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.

Williams closed the BGT used by the Cox Canyon #201 separator and piped all liquids to the Produced Water Storage Tank.

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. Closure Ciliena for b	GIS	
Components	Testing Methods	Closure Limits (mg/Kg)	Sample Results
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	33.2
Chlorides	EPA SW-846 Method 300 1(1)	250(2)	5

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
- 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 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