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

Liner Seams: Welded Factory Other

Alternative Method:

# State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

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

Pit, Closed-Loop System, Below-Grade Tank, or					
Proposed Alternative Method Permit or Closure Plan Application					
Proposed Alternative Method Permit or Closure Plan Application  Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method					
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-gro	ade 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 environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental acceptance.					
i. Operator: WPX Energy Production, LLC OGRID #:	120782				
Address: PO Box 640 / 721 S Main Aztec, NM 87410					
Facility or well name: Rosa Unit 383					
API Number:30-039-29367 OCD Permit Number:					
U/L or Qtr/Qtr P Section 29 Township 31N Range 4W County:	Río Arriba				
Center of Proposed Design: Latitude 36.86621N Longitude -107.27305W	NAD: □1927 🖾 1983				
Surface Owner:  Federal State Private Tribal Trust or Indian Allotment					
2.  ⊠ Pit: Subsection F or G of 19.15.17.11 NMAC	RCVD FEB 22'12				
Temporary: 🛛 Drilling 🖾 Workover	OIL CONS. DIV.				
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A					
☐ Lined ☐ Unlined Liner type. Thickness <u>20</u> mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other	DIST. 3				
Liner Scams: Welded Factory Other Volume: 20,000 bbl Dimension	ons: L 140' x W 70' x D 12'				
3.  Closed-loop System: Subsection H of 19.15.17.11 NMAC					
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require printent)	ior approval of a permit or notice of				
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other					
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other					

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

Page 1 of 9 Rosa Unit 383

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)  Four foot height, four strands of barbed wire evenly spaced between one and four feet  Alternate. Please specify As per BLM specifications	hospītāl.	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen Netting Other  Monthly inspections (If netting or screening is not physically feasible)		
8.  Signs: Subsection C of 19.15.17.11 NMAC  ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  ☐ Signed in compliance with 19.15.3.103 NMAC		
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau of 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 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	
Within an unstable area.  - Engineering measures incorporated into the design; NM Burcau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ⊠ No	
Within a 100-year floodplain.	☐ 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 19.15.17.12 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17 9 NMAC and 19.15.17 13 NMAC 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:   (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   Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC   Quality Control/Quality Assurance Construction and Installation Plan   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15 17.11 NMAC   Nuisance or Hazardous Odors, including 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

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			
Will any of the proposed closed-loop system operations and associated activities of Yes (If yes, please provide the information below) No	ecur on or in areas that will not be used for future serv	vice and operations?	
Required for impacted areas which will not be used for future service and operation  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 1.1 of 19.15.17.13 NMAC	2	
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 requi 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 distr 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; Database search; USG	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; Database search;	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; Database search, US	a obtained from nearby wells	∑ Yes  No  No  NA	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other siglake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	gnificant watercourse or lakebed, sinkhole, or playa	☐ Yes ⊠ No	
Within 300 feet from a permanent residence, school, hospital, institution, or churcl - Visual inspection (certification) of the proposed site; Aerial photo; Satellit		☐ 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 - 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 wat 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	
Within an unstable area - Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map	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 Proof of Surface Owner Notice - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the a 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 Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection 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  ad) - based upon the appropriate requirements of 19.15.17.13 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 cannot H of 19.15.17.13 NMAC  1 of 19 15 17.13 NMAC	15	

19. Operator Application Cortification
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:
20.  OCD Approval: Permit Application (including closure plan) \( \text{\text{Closure Plan (only)}} \) OCD Conditions (see attachment)  OCD Representative Signature: \( \text{\text{2/23/2012}} \)
Title: Compliance Officer 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:10/212011
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.
23.  Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.
Disposal Facility Name: Disposal Facility Permit Number:
Disposal Facility Name: Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations  Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique
24.  Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and division)  Proof of Deed Notice (required for on-site closure)  Plot Plan (for on-site closures and temporary pits)  Confirmation Sampling Analytical Results (if applicable)  Waste Material Sampling Analytical Results (required for on-site closure)  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation
Son-backfining and ever instantation     Re-vegetation Application Rates and Seeding Technique     Site Reclamation (Photo Documentation)     On-site Closure Location: Latitude36.86621 Longitude _107.27305 NAD: □1927 ⋈ 1983
Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude36.86621 Longitude _107.27305 NAD:1927 \overline{\text{NAD}:} 1983
Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude36.86621 Longitude _107.27305 NAD:1927 \omegastyre{\text{NAD}}:19283
Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation) On-site Closure Location: Latitude36.86621 Longitude _107.27305 NAD:1927 \omega 1983  19.  Operator Closure Certification:  I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

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

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

> Well: (Rosa Unit #383 API No: 30-039-29367

Location: P <u>\$29-T31N-R04W, NMPM</u>

In accordance with Rule 19.15.17.13 NMAC, the following plan describes the general in-place closure requirements of temporary pits on Williams Production Co, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard procedure for all temporary pits to be utilized for the drilling, completion and/or workovers of oil and gas wells operated by WPX. For those temporary pits which do not conform to this standard closure plan, a separate well/pit specific closure plan will be developed and utilized.

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

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

#### General Plan Requirements:

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

To the extent practical, free liquids were pulled from the reserve pit following the completion rigoff. Haul dates were from 10/21/2011 #002 API # 30-039-3081 Order – SWD-1236

2. The preferred method of closure for all temporary pits will be on-site closure by in-place burial, provided all the criteria in 19.15.17.13.B are met.

On-site burial plan for this location was approved by the Aztec District Office on 7/26/2011

- The surface owner shall be notified of WPX's proposed closure plan using a means that
  provides proof of notice (i.e. certified mail/return receipt requested)
   Williams notified the SMA of its intent to use a temporary pit and onsite burial in the Surface Use
  Plan in the well APD. The SMA was notified by email see attached. No return receipt required per
  BLM:FFO/NMOCD MOU dated 5/4/09.
- 4. Within six months of the "rig-off" status occurring WPX will ensure that the temporary pit is covered, recontoured and reseeding in progress.

<u>Drill rig-off 8/31/2011</u>, Completion rig-off 10/13/2011 Pit covered 10/21/2011 Pit area along with unused portions of well pad to be interim reclaimed in accordance with Surface Management Agency requirements in APD-COAs and per BLM:FFO/NMOCD MOU dated 5/4/09.

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

The Aztec District Office of NMOCD was notified by email using a format acceptable to the District. Copies of the notification from Abode Contractors on 10/07/2011 is attached.

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

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

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

Following removal of free liquids, the pit contents were mixed with non-waste containing, earthen material in order to achieve appropriate solidification and a consistency that was deemed safe and stable. The solidification process was accomplished using a combination of natural drying, and mechanically mixing using a dozer and trackhoe. The mixing ration was approximately 2.5-3 parts native soil to 1 part pit contents. Solidification was completed 10/19/2011

8. A five-point composite sample will be taken of the pit using sampling tools and all samples tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), all contents will be handled per 19.15.17.13(B)(1)(a) (i.e. dig and haul to a Division-approved facility). Approval to haul will be requested of the Aztec District office prior to initiation.

A five-point composite sampling was taken of the pit area using sampling tools and the sample

A five-point composite sampling was taken of the pit area using sampling tools and the sample was tested per 19.15.17.13(B)(1)(b) NMAC. Results are shown in Table 1 and lab reports are attached.

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

Components	Testing Methods	Limits (mg/Kg)	Pit (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2	.009
BTEX	EPA SW-846 Method 8021B or 8260B	50	.0239
TPH	EPA SW-846 Method 418.1	2500	25.7
GRO/DRO	EPA SW-846 Method 8015M (GRO/DRO)	500	ND
Chlorides	EPA SW-846 Method 300.1	500	90

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

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

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

Following cover, Williams reestablished drainage and contours to approximately match previous topography meeting the Conditions of Approval in the APD and the direction offered by a BLM/USFS inspector. Cover and re-contouring were completed 10/21/2011

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

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specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.

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

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

The temporary pit was located with a steel marker meeting the above listed specifications. The marker has the following information welded for future reference: Williams Production \$29-T31N-R04W-P, "in place burial" (photo attached). Steel marker set 12/14/2011

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WILLIAMS PRODUCTION COMPANY ROSA UNIT #383 1045' PSL & 1110' FEL, SECTION 29, T31N, R4W, NMPM RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 6631'

Plat #2 Location Layout 0 = Sample AREa 0 (5) ය F2 RESERVE PIT DRAIN TO RESERVE PIT 52 Š N66°E AYDOWN F2 ④ 125 0 Č2 <u>8</u> CA DRAINAGE F6 <u>\_</u>\_@ <u>ر</u> B' A-A' 6641 6631' 6621' B-B' 6641 6631 6621 くしく 6641 6631 6621

NCE SURVEYS, DIC.

DRAWN BY, KER

CHECKED BY, JCE

FILE NAME ROSASSOCP-2

SHEET 2 OF 5



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

Client:	W.P.X.	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	12-13-11
Laboratory Number:	60578	Date Sampled:	12-07-11
Chain of Custody No:	13051	Date Received:	12-09-11
Sample Matrix:	Soil	Date Extracted:	12-12-11
Preservative:	Cool	Date Analyzed:	12-13-11
Condition:	Intact	Analysis Requested:	8015 TPH

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

ND - Parameter not detected at the stated detection limit.

References:

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

Waste, SW-846, USEPA, December 1996.

Comments:

Rosa Unit #383

Analyst



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

## **Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	12-13-11 QA/QC	Date Reported:	12-13-11
Laboratory Number:	60580	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-13-11
Condition:	N/A	Analysis Requested:	TPH

	l-Căl Date	I-Cal RF:	C:Cál RF	Difference	Accept Range
Gasoline Range C5 - C10	40890	9.996E+02	1.000E+03	0.04%	0 - 15%
Diesel Range C10 - C28	40890	9.996E+02	1.000E+03	0.04%	0 - 15%

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

Duplicate Conc. (mg/Kg)	Ç Şample ,	Duplicate.		Range
Gasoline Range C5 - C10	ND	ND	0.00%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.00%	0 - 30%

Spike Conc. (mg/Kg) 👑	.∉∜Sample;∍	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	241	96.2%	75 - 125%
Diesel Range C10 - C28	ND	250	286	115%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References:

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

Waste,

SW-846, USEPA, December 1996.

Comments:

QA/QC for Samples 60577-60580 and 60587

Analyst



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	W.P.X.	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	12-13-11
Laboratory Number:	60578	Date Sampled:	12-07-11
Chain of Custody:	13051	Date Received:	12-09-11
Sample Matrix:	Soil	Date Analyzed:	12-13-11
Preservative:	Cool	Date Extracted:	12-12-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Det. Limit (ug/Kg)	
0.9	
1.0	
1.0	
1.2	
0.9	
	1.0 1.2

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery						
	Fluorobenzene	84.5 %						
	1,4-difluorobenzene	89.9 %						
	Bromochlorobenzene	108 %						

References:

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

December 1996.

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

USEPA, December 1996.

Comments:

Rosa Unit #383

Analyst



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

Client:	N/A	1	Project#:		N/A		
Sample ID:	1213BBLK QA/Q0	۱ (	Date Reported:		12-13-11		
Laboratory Number:	60587	1	Date Sampled:		N/A		
Sample Matrix:	Soil	1	Date Received:		N/A		
Preservative:	N/A	İ	Date Analyzed:		12-13-11		
Condition:	N/A	•	Analysis:		BTEX		
		1	Dilution:	1	0		
30. \$20.00 使多种的气态 (1)		C-Cal RF √Accept∗ Rang	%%Diff!	Blank	Detect Limit		
Detection Limits (ug/L)		∴ C-Cal RF Accept∗ Rang	%Diff! e 0 - 15%	Blank Conc	Limit		
Detection Limits (ug/L)	2.2714E+007	Accepts Rang 2.2760E+007	%Diff. e 0 - 15% 0.2%	Blank Conc ND	Limit		
Detection Limits (ug/L) Benzene Toluene	2.2714E+007 2.3016E+007	Accepts Rang 2.2760E+007 2.3063E+007	%Diff: e 0. 415% 0.2% 0.2%	Blank Conc ND ND	0.1 0.1		
Detection Limits (ug/L) Benzene Toluene Ethylbenzene	2.2714E+007 2.3016E+007 2.0329E+007	Accept* Rang 2.2760E+007 2.3063E+007 2.0370E+007	%Diff e 0 -15% 0.2% 0.2% 0.2%	Blank Conc ND ND ND ND	0.1 0.1 0.1 0.1		
Calibration and Detection Limits (ug/L) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	2.2714E+007 2.3016E+007	Accepts Rang 2.2760E+007 2.3063E+007	%Diff: e 0. 415% 0.2% 0.2%	Blank Conc ND ND	0.1 0.1		

Duplicate Conc. (ug/Kg)	Sample Sample Du	plicate	%Diff.	Accept Range	Detect: Limit
Benzene	ИD	ND	0.0%	0 - 30%	0.9
Toluene	1.3	1.3	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	3.9	3.8	2.6%	0 - 30%	1.2
o-Xylene	2.4	2.4	0.0%	0 - 30%	0.9

Spike(Conc. (ug/Kg)	Sample/ Amo	ount Spiked Spik	ed Sample 1947	Recovery	/Accept Range	N.
Benzene	ND	500	479	95.8%	39 - 150	
Toluene	1.3	500	469	93.6%	46 - 148	
Ethylbenzene	ND	500	473	94.6%	32 - 160	
p,m-Xylene	3.9	1000	954	95.0%	46 - 148	
o-Xylene	2.4	500	478	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,

December 1996.

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

QA/QC for Samples 60577-60580 and 60587

Analyst



# EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	W.P.X.	Project #:	04108-0136
Sample ID:	Reserve Pit	Date Reported:	12-12-11
Laboratory Number:	60578	Date Sampled:	12-07-11
Chain of Custody No:	13051	Date Received:	12-09-11
Sample Matrix:	Soil	Date Extracted:	12-12-11
Preservative:	Cool	Date Analyzed:	12-12-11
Condition:	Intact	Analysis Needed:	TPH-418.1

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

**Total Petroleum Hydrocarbons** 

25.7

6.4

ND = Parameter not detected at the stated detection limit.

References:

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

and Waste, USEPA Storet No. 4551, 1978.

Comments: Rosa Unit #383

Analyst



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

Client:

QA/QC

Project #:

N/A

Sample ID:

QA/QC

Date Reported:

12-12-11

Laboratory Number:

12-12-TPH.QA/QC 60577

Date Sampled:

N/A

Sample Matrix:

Freon-113

Date Analyzed:

12-12-11 12-12-11

Preservative: Condition:

N/A N/A

11-16-11

Date Extracted: Analysis Needed:

**TPH** 

Calibration - L-Cal Date

C-Cal Date

: I±Cal RF: : C-Cal RF: : % Difference : Accept Range

12-12-11

1,610

1,720

6.8%

**⊹/- 10%** 

Blank Conc. (mg/Kg)

Concentration

Detection Limit

TPH

ND

6.4

Duplicate Conc. (mg/kg)

TPH

TPH

Sample Duplicater % Difference Accept Range 19.3

19.3

0.0%

**\*/- 30%** 

Spike Conc. (mg/Kg)

Sample: Spike Added Spike Result % Recovery - Accept Range 19.3

2,000

1,670

82.7%

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 60497 and 60573-60580

Analyst



#### Chloride

Client: W.P.X. Project #: 04108-0136 Sample ID: Reserve Pit Date Reported: 12-13-11 Lab ID#: 60578 Date Sampled: 12-07-11 Sample Matrix: Soil Date Received: 12-09-11 Preservative: Cool Date Analyzed: 12-13-11 Condition: Chain of Custody: Intact 13051

Parameter Concentration (mg/Kg)

**Total Chloride** 

90

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Rosa Unit #383

Analyst

# CHAIN OF CUSTODY RECORD

Client:		Pro	ject Name / Locat OSA UNI						Α	NAL	/SIS	/ PAI	RAMI	ETEF	IS							
Email results to:	<del></del>		npler Name:	7	ده د				-	=	_					l .	·	Γ			1	T
Email roodito to.			Johnny E	stinu <	Said				015)	805	3260									ŀ		
Client Phone No.:  MYKe Lane		Clie	ent No.: 54108-						TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P	CO Table 910-1	118.1)	RIDE			e Cool	Sample Intact
Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./	Volume ontainers	Pi HgCl <sub>2</sub>	eserva HCI	tive UUI	трн (м	втех	voc (	RCRA	Cation	RCI	TCLP	со та	TPH (418.1)	CHLORIDE			Sample	Sampl
Reserve Pit	12.711	10200 Am	60578	1-	9 c2			/	V								/	-			Y	Y
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													-									
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		,																				
Relinquished by: (Signature)				Date /2-4-//	Time 2:53841	Recei T	ved b	y: (Si	gnatu	ire)  //	M	D	V L	1.						Date 12-9.	į	ime
Relinquished by: (Signature)						Recei	ved b	y: (Si	gnatu	ire)					***************************************							
Sample Matrix																						
Soil 🔀 Solid 🗌 Sludge 🗌	Aqueous [	Other 🔲 _																				
Sample(s) dropped off after	hours to sec	cure drop off	area.	3	NVN Analy	Î [ C	) { il La	e (	] itory	)										·		
5795 US Highway 64	• Farmingto	on, NM 87401	• 505-632-0615 • 1	Three Spri	ngs • 65 M	lercac	lo Stre	eet, Su	uite 11	5, Du	ràng	o, CC	8130	01 • 1	abore	atory	@env	iroted	:h-inc.	com		

District I 1625 N. French Dr., Hobbs, NM 88240 State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr. Santa Fe, NM 87505

OIL CONSERVATION DIVISION 1220 South St. Francis Dr Santa Fe, NM 87505

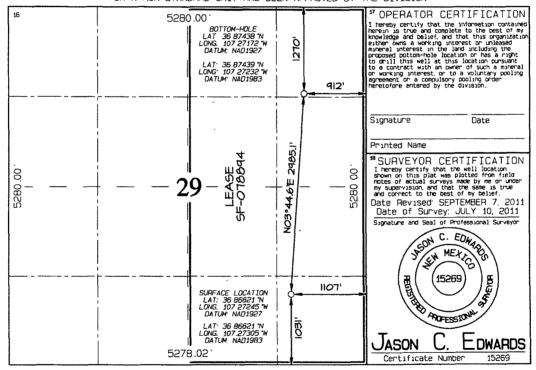
AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	*Pool Code 71629	'Pobl Name BASIN FRUITLAND COAL								
Property Code 17033		*Property Name ROSA UNIT								
'0GRID No 120782		erator Name ODUCTION COMPANY	*Elevation 6633							

<sup>10</sup> Surface Location If or lot or Feet from the Feet from the RIO Р 29 31N 4W 1031 SOUTH 1107 FAST ARRIBA <sup>11</sup>Bottom Hole Location If Different From Surface Lot lor North/South line Feet from the County PTO 29 31N 1270 912 NORTH EAST ARRIBA Joint or Infill Consolidation Code 320.0 Acres - (E/2)

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



From: johnny@adobecontractorsinc.com
Sent: Friday, October 07, 2011 8:08 AM

To: Brandon Powell

Cc: 'Jon J Miller'; Meador, Tasha; Granillo, Lacey; Lepich, Mark

Subject: Williams Clean ups RU #601 and 602

Brandon,

We will be starting the clean ups on the RU #601, 602 and 383 early next week. Please let me know if you have any questions.

Thank you,

Johnny Stinson Gen. Manager/ Adobe Contractors Office: (505)632-1486

Mobile: (505)320-6076

johnny@adobecontractorsinc.com

Two Copies	riate Distric	et Office		-		State of No										orm C-105		
District I 1625 N French Di	. Hobbs, N	M 88240		Ene	ergy, I	Minerals an	d Na	atural Re	esources		1. WELL APINO					July 17, 2008		
District II 1301 W Grand Av	enue Artes	sia, NM 8821	10		Oil	l Conserva	ition	Divisio	\n		30-039-293	367						
District III 1000 Rio Brazos R	ld . Aztec. N	NM 87410				20 South S					2. Type of L							
District IV 1220 S St Francis			15			Santa Fe, l			<b>71</b> .		STA 3 State Oil 8		☐ FEE		FED/IND 8894	IAN		
	•			RECC		ETION RE			NIOG		To Commission of Commission of Commission Co							
4 Reasons for fil		LLTIO	10111	<u>\L</u> OC	/IVII L	LIIONIKE	.1 01	INI ANL	, 100		5. Lease Name of Unit Agreement Name							
☐ COMPLET	ION REP	ORT (Fill	in hoxes	#1 throu	oh #31	for State and Fe	e well	ls only)				•	F	Rosa				
☐ C-144 CLO					_			• ,	and #32 and	l/or	6 Well Numl	er:	Rosa	Jnit #38	3			
#33; attach this a		t to the C-1	44 closus	re report	ın accoi	rdance with 19.	15.17	13 K NMA	<u>C)</u>									
☐ NEW	WELL [	] worke	VER [	DEEPE	ENING	□PLUGBAC	к 🔲	DIFFERE	NT RESERV	/OIR	IR OTHER Side-Track							
8. Name of Operator WPX Energy Production, LLC								9 OGRID	1207	782								
10. Address of C	perator	РО ВОХ	640	AZTE	C, NM	87410					11 Pool name	or W	'ildeat					
12.Location	Unit Ltı	Section	on	Towns	hip	Range	Lot		Feet from t	the	N/S Line	Feet	t from the	E/W	Line	County		
Surface:							1							1	-			
вн:																		
13 Date Spudde	d 14. D	ate T D. Re	eached	15 <u>E</u>	Date Rig	Released 10/13/2011		16.	Date Comp	leted	(Ready to Proc	luce)		7. Eleva T, GR, o		and RKB,		
18 Total Measur	red Depth	of Well		19. F	lug Bac	k Measured De	pth	20	Was Direct	tiona	l Survey Made	>	21. Туј	e Electr	ric and O	ther Logs Run		
22 Producing In	terval(s), o	of this com	pletion - 1	Fop, Bot	tom, Na	ime		. =-					<u> </u>					
23		<del></del>			CAS	ING REC	OR	D (Rep	ort all st	ring	gs set in w	ell)						
CASING SI	ZE	WEIG	HT LB./I			DEPTH SET			LE SIZE		CEMENTIN		CORD	A	MOUNT	PULLED		
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SIZE	ТОР		BO	ГТОМ	LINI	ER RECORD SACKS CEM	IFNT	SCREEN	J	25. SIZ			NG REC		PACK	ER SET		
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26. Perforation	record (ii	iterval, sizo	e, and nur	nber)					ID, SHOT, INTERVAL		ACTURE, CE							
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Date First Produc	ction		Product	ion Meth	nod (Flo	wing, gas lift, p		ODUC		)	Well Status	(Pro	d or Shut					
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Date of Test	Hours	Tested	Cho	ke Size	<del></del> -	Prod'n For		Oıl - Bbl		Gas	s - MCF	W	ater - Bbl	<del></del>	Gas - C	Dil Ratio		
						Test Period								-				
Flow Tubing Press	Casını	g Pressure		culated 2 ir Rate	24- 	Oil - Bbl		Gas	- MCF		Water - Bbl.		Oil Gra	vity - A	PI - (Cor	r)		
29 Disposition o	of Gas <i>(Sol</i>	d, used for	fuel, veni	ted, etc.)				1				30	Test Witne	essed By	,			
31 List Attachm	ents												٠.					
32. If a temporar		ised at the	well*atta	chainlat	with the	e location of the	temp	otarv/nits										
33 If an on-site																		
						Latitude 3	36 866	521 Longitu	de -107 273		. <u>-</u>			AD 4.983				
I hereby certi B	fy that the en Mitcl	<i>he inform</i> hell		hown o		sides of this	i forn	n is true d	and compl	lete	to the best o	f my . I	knowle	dge an	d beliej			
Signature	E	rw	0					Title Re	gulatory S	Spec	cialist Date	4	1/201	<u> </u>				
E-mail Addre	ess: ben.	mitchell	@wpxe	nergy.	com									_				

΄,



# **TEMPORARY PIT INSPECTION REPORT**

 Well Name
 Rosa Unit 383
 Field Name
 Basin Fruitland Coal
 API #
 30-039-29367
 Report #
 1

 Location
 SE/4 SE/4 Sec 29(P), T31N, R04W
 County
 Rio Arriba
 State
 NM
 Rpt Date
 8/13/2011

Location	SE/4 SE	SE/4 SE/4 Sec 29(P), T31N, R04W Co			Rio Arriba			State		NM	Rpt Date	8/13/2011
Date	Report Type	Inspector	Liner Intact Y/N	Fenced Y/N	Slopes Intact Y/N	Adequate Freeboard Y/N	Oil Free Y/N	Flare Liquid Y/	l Free		Comment	
8/13/11					,							
8/15/11												
8/15/11	Daily		Y	Υ	Υ	Y	Υ	١	′			
8/16/11	Daily		Y	Υ	Υ	Y	Y	Y				
8/17/11	Daily		Y	Υ	Υ	Y	Υ	\	,			
8/18/11	Daily		Y	Υ	Y	Y	Υ	,	,	-		
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8/22/11	Daily		Υ	Y	Υ	Υ	Y	`				
8/23/11	Daily		Υ	Υ	Υ.	Υ	Y	Y			*** *** ****	
8/24/11	Daily		Y	Y	Υ	Υ	Y	,				
8/25/11	Daily		Y	Y	Υ	Υ	Y	Y				
8/26/11	Daily		Y	Y	Y	Y	Y	Y				
8/27/11	Daily		Y	Y	Y	Y	Y	Y				
8/28/11	Daily		Y	Y	Y	Y	Y	γ				
8/29/11	Daily		Y	Y	Y	Y	Y	Y				
8/30/11	Daily		Y	Y	Y	Y	Y	Y				
8/31/11	Daily		Y	Y	Y	Ÿ	Y	Y				
9/1/11	Daily		Y	Y	Y	Y	Y	Y				
9/7/11			Y	Y	Y	Y	Y	Y				
	Daily		Y	Y	Y	Y	Y	Y				
9/8/11	Daily		Y	Y	Y	Y	Y	Y				
9/10/11	Daily		Y		Y							
9/11/11	Daily		Y	Y	<u> </u>	Y	Y	Y				
9/12/11			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				<del></del>					
9/13/11	Daily		Y	Y	Y	Y	Y	Y				
9/14/11	Daily		Y	Y	Y	Υ	Y	Y				
9/15/11	Daily		Y	Y	Y	Υ	Y	Y				
9/16/11	Daily		Y	Y	Y	Y	Y	Y			<del></del>	
9/17/11	Daily		Y	Y	Y	Y	Y	Y			* '''	
9/30/11	Daily		Y	Y	Y	Υ	Y	١				
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10/2/11	Daily		Y	Y	Y	Y	Y	Y				
10/3/11	Daily		Y	Y	Y	Y	Y	Y	<del></del>			
10/4/11	Daily		Y	Y	Y	Y	Y	Y				
10/5/11	Daily		Y	Y	Y	Y	Y	Y				
10/6/11	Daily		Y	Y	Y	Y	Y	Y				
10/7/11	Daily		Y	Y	Y	Y	Y	Y				
10/8/11	Daily		Y	Y	Υ	Y	Y	Y				
10/9/11	Daily		Y	Y	Y	Y	Y	Y				
10/11/11	Daily		Y	Υ	Y	Y	Y	Y				
10/12/11	Daily		Υ	Y	Y	Y	Y	Y				
10/13/11	Daily		Y	Υ	Y	Y	Υ	Y				
10/14/11	Daily		Y	Y	Y	Y	Y	Y				
9/8/11	Weekly		Y	Y	Y	Y	Υ	Y	•	No pits		·-····
			20	01-2009 WellE:	z Information Ma	anagement, LLC All	rights res	erved ver. 1	11709јс			

