District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144
July 21, 2008

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.

11450

Pit, Closed-Loop System, Below-Grade Tank, or 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-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: WPX Energy Production LLC. OGRID #: 120782
Address: PO Box 640 Aztec, NM 87410
Facility or well name: ROSA UNIT #108
API Number: 30-039-23506 OCD Permit Number: _____
Section 7G Township 31N Range 05W County RIO ARRIBA
Latitude: 36.887450000000001 Longitude 107.47138 NAD: 1983 Surface Owner: FEDERAL

2.
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

RCVD NOV 12 '13
OIL CONS. DIV.
DIST. 3

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☒ **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 ☐ HDPE ☐ PVC ☐ Other _____

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.

50

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, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☒ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

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.

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 acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - 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)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

11.
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: _____

12.
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)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, 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

14.
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)

15.
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 I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☒ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

18.
On-Site 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.***
☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☒ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☒ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 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: _____

20.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure ~~Plan (only)~~ ☐ OCD Conditions (see attachment)

OCD Representative Signature: Jonathan D. Kelly **Approval Date:** 11/25/2013

Title: Compliance Officer **OCD Permit Number:** _____

21.
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:** 9/30/2013 ☒ **Closure Completion Date S.J. Regional landfill, NMED Permit SWM-052426**

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
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐ 1927 ☐ 1983

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): Vanessa Fields Title: EH&S Coordinator

Signature: Vanessa Fields Date: 11/11/2013

e-mail address: vanessa.fields@wpxenergy.com Telephone: 505-333-1880

WPX Energy Production, 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 WPX Energy 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	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[2]

[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 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.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

WPX Energy Production LLC. Co., LLC
San Juan Basin: New Mexico Assets
Below-Grade Tank Removal
Closure Report

Well: (Rosa Unit#108)
API No: 30-039-23506
Location: G07-T31N-R05W, NMPM

In accordance with Rule 19.15.17.13 NMAC, the following report describes the general closure of the referenced below-grade tanks (BGT) on WPX Energy Production LLC. 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.

WPX Energy 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 WPX Energy E&P intent to close on (07/23/2013). 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 separator and piped all liquids to the Rosa Unit#108 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).

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

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 Criteria for BGTs

Components	Testing Methods	Closure Limits (mg/Kg)	Sample Results (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2	ND
BTEX	EPA SW-846 Method 8021B or 8260B	50	ND
TPH	EPA SW-846 Method 418.1[1]	100	35.9
Chlorides	EPA SW-846 Method 300.1[1]	250[2]	73.7

[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.

Pit area backfilled with clean earthen material following sample results. No contaminated soil taken off site. 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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	WPX Energy Production LLC.	Contact	Vanessa Fields
Address	P.O. BOX 640, AZTEC, NM 87410	Telephone No.	(505) 333-1880
Facility Name	Rosa Unit # 108	Facility Type	Well Site

Surface Owner: Federal	Mineral Owner:	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	07	31N	05W					

Latitude 36.8874501 **Longitude** -107.47138W

NATURE OF RELEASE

Type of Release No Release Occurred	Volume of Release	Volume Recovered
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*
No action required

Describe Area Affected and Cleanup Action Taken.*

N/A

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Vanessa Fields	Approved by District Supervisor:	
Title: EH&S Coordinator	Approval Date:	Expiration Date:
E-mail Address: Vanessa.fields@wpxenergy.com	Conditions of Approval:	Attached ☐
Date: 11-11-13 Phone: (505) 333-1880		

* Attach Additional Sheets If Necessary

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

March 10, 2009

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

Sent via Certified Mail

RE: Notification of Production Pit Closure
Rule 19.15.17.13 NMAC
Production Pits associated Natural Gas Development
Operated by Williams Production Co, LLC

Pursuant to Rule 19.15.17.13 NMAC, this correspondence is to notify the Bureau of Land Management, Farmington Field Office, of Williams Production LLC's (Williams') intent to clean close all production pits on the attached list of wells operated with the District in San Juan County and Rio Arriba County, New Mexico. Closure will follow the plan included with this correspondence.

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

Respectfully submitted,

Holly C. Perkins
EH&S Specialist

Encl: Williams Production Pit Inventory List (Federal wells)
San Juan Basin - New Mexico Assets: Below-Grade Tank Closure Plan

cc: Environmental File

WELLS w/FEDERAL SURF MGT	API	FMT	SEC	TWN	RNG	PIT TYPE	CONSTRUCTION MATERIAL
ROSA UNIT #079	3003922539	BASIN DK / BLANCO MV	22K	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #079	3003922539	BASIN DK / BLANCO MV	22K	31N	06W	SGT	DBL WALL STEEL
ROSA UNIT #079A	3003925412	BLANCO MV / ROSA PC	22E	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #079B	3003926920	BASIN DK / BLANCO MV	22C	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #079C	3003929902	BLANCO MV	31P	31N	05W	BGT	DBL WALL STEEL
ROSA UNIT #080	3003922537	BASIN DK / BLANCO MV	8K	31N	05W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #080A	3003926413	BLANCO MV	8F	31N	05W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #085	3003922778	BASIN DK	20A	31N	05W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #085	3003922778	BLANCO MV	20A	31N	05W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #085A	3003926314	BLANCO MV	20C	31N	05W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #085B	3003930130	BLANCO MV	20D	31N	05W	BGT	DBL WALL STEEL
ROSA UNIT #086	3003922766	UNDES GL	12W	31N	04W	SGT	SINGLE WALL STEEL
ROSA UNIT #088	3004525140	BLANCO MV / ROSA PC	8E	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #089	3003922782	BLANCO MV	34A	32N	06W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #089A	3003925512	BLANCO MV	34O	32N	06W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #089B	3003926851	BLANCO MV	34I	32N	06W	BGT	DBL WALL STEEL
ROSA UNIT #089C	3003926674	BLANCO MV	34G	32N	06W	SGT	SINGLE WALL STEEL
ROSA UNIT #090 COM	3004525370	BLANCO MV	33G	32N	06W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #090A COM	3004529259	BLANCO MV	33G	32N	06W	BGT	DBL WALL STEEL
ROSA UNIT #091	3003922780	BLANCO MV	35H	32N	06W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #091A	3003925790	BLANCO MV	35O	32N	06W	SGT	DBL WALL STEEL
ROSA UNIT #091B	3003926684	BLANCO MV	35P	32N	06W	BGT	DBL WALL STEEL
ROSA UNIT #091C	3003926991	BLANCO MV	35G	32N	06W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #098	3003923265	BASIN DK / GL	23L	31N	06W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER
ROSA UNIT #100B	3003929547	BASIN DK / BLANCO MV	21O	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #100C	3003929851	BLANCO MV	21K	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #100E	3003925135	BLANCO MV / ROSA PC	21I	31N	06W	SGT	SINGLE WALL STEEL
ROSA UNIT #101M	3003925577	BLANCO MV	24F	31N	06W	BGT	DBL WALL STEEL
ROSA UNIT #108	3003923506	BASIN DK / GL	7G	31N	05W	BGT	FIBERGLASS TANK w/BANDED 20-mil HDPE SECONDARY LINER

Fields, Vanessa

From: Griswold, Jim, EMNRD [Jim.Griswold@state.nm.us]
Sent: Friday, July 26, 2013 8:07 AM
To: Fields, Vanessa
Subject: FW: Request for review of pit closure Rosa Unit #108

Vanessa,

Got your voicemail from last nite. You can either forward me the application, or simply have Brandon handle it there at the District office in Aztec.

Jim Griswold
Senior Hydrologist
EMNRD/Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3465
email: jim.griswold@state.nm.us

From: Jones, Brad A., EMNRD
Sent: Tuesday, July 23, 2013 2:02 PM
To: Griswold, Jim, EMNRD
Subject: FW: Request for review of pit closure Rosa Unit #108

FYI...

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Fields, Vanessa [mailto:Vanessa.Fields@wpxenergy.com]
Sent: Tuesday, July 23, 2013 1:22 PM
To: Jones, Brad A., EMNRD
Cc: Powell, Brandon, EMNRD; Lepich, Mark; Heckman, Curt
Subject: Request for review of pit closure Rosa Unit #108

Good Afternoon Brad,

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

Well Site	API	FMT	SEC	TWN	RNG
Rosa Unit # 108	30-03923506	Dakota	07G	31N	05W

Please let me know if you have any questions or concerns.

Thank you,

Vanessa Fields
EH&S Coordinator
Office# 505-333-1880
Fax# 505-333-1805
Cell# 505-419-6219
vanessa.fields@wpxenergy.com
WPXENERGY.

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: WPX Energy, Inc.

Chain Of Custody Number: 12779

Samples Received: 9/5/2013 3:30:00PM

Job Number: 04108-0137

Work Order: P309026

Project Name/Location: Rosa UT #108

Entire Report Reviewed By: _____ Date: 9/10/13

Tim Cain, Laboratory Manager

5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com
laboratory@envirotech-inc.com

envirotech
Analytical Laboratory

WPX Energy, Inc.	Project Name:	Rosa UT #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	10-Sep-13 14:33

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Rosa UT 108 TPH Re-Sample	P309026-01A	Soil	09/05/13	09/05/13	Glass Jar, 4 oz.

WPX Energy, Inc.	Project Name:	Rosa UT #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	10-Sep-13 14:33

Rosa UT 108 TPH Re-Sample

P309026-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	**35.9**	20.0	mg/kg	1	1337008	10-Sep-13	10-Sep-13	EPA 418.1	

envirotech
Analytical Laboratory

WPX Energy, Inc.	Project Name:	Rosa UT #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	10-Sep-13 14:33

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1337008 - 418 Freon Extraction										
Blank (1337008-BLK1)				Prepared & Analyzed: 10-Sep-13						
Total Petroleum Hydrocarbons	ND	20.0	mg/kg							
Duplicate (1337008-DUP1)		**Source: P309026-01**		Prepared & Analyzed: 10-Sep-13						
Total Petroleum Hydrocarbons	39.8	19.9	mg/kg		35.9			10.1	30	
Matrix Spike (1337008-MS1)		**Source: P309026-01**		Prepared & Analyzed: 10-Sep-13						
Total Petroleum Hydrocarbons	2150	19.9	mg/kg	1990	35.9	106	80-120			

WPX Energy, Inc.	Project Name:	Rosa UT #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	10-Sep-13 14:33

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CHAIN OF CUSTODY RECORD

12779

Client: WPX Energy	Project Name / Location: Rosa Unit # 108
Client Address: 721 S. Main Street	Sampler Name: Curtis Heckman
Client Phone No.: 333-1880	Client No.: 04108-0137

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl2	Preservative HCl	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Rosa UT 108 - TPH Re-Sample	9-5-13	1:00pm	P309026-01	Soil (circled) Sludge Solid Aqueous	1-4oz											X					—	X
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	9-5-13	3:30	[signature]	09/05/13	3:30
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

Email Results
Vanessa.fields@wpxenergy.com
buddy.shaw@wpxenergy.com

RUSH per Vanessa 9/9/13 TC

envirotech
Analytical Laboratory

5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

ACCENT Printing • Form 28-0807

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: WPX Energy, Inc.

Chain Of Custody Number: 15920

Samples Received: 8/26/2013 8:25:00AM

Job Number: 04108-0137

Work Order: P308080

Project Name/Location: Rosa Unit #108

Entire Report Reviewed By: _____ Date: 9/3/13

Tim Cain, Laboratory Manager

envirotech
Analytical Laboratory

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Rosa UT #108	P308080-01A	Soil	08/23/13	08/26/13	Glass Jar, 4 oz.

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Rosa UT #108

P308080-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1	1335010	27-Aug-13	30-Aug-13	EPA 8021B	
Surrogate: Bromochlorobenzene		*89.9 %*	*80-120*		*1335010*	*27-Aug-13*	*30-Aug-13*	*EPA 8021B*	
Surrogate: 1,4-Difluorobenzene		*88.2 %*	*80-120*		*1335010*	*27-Aug-13*	*30-Aug-13*	*EPA 8021B*	
Surrogate: Fluorobenzene		*88.5 %*	*80-120*		*1335010*	*27-Aug-13*	*30-Aug-13*	*EPA 8021B*	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg	1	1335011	27-Aug-13	30-Aug-13	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	4.99	mg/kg	1	1335011	27-Aug-13	30-Aug-13	EPA 8015D	
GRO and DRO Combined Fractions	ND	4.99	mg/kg	1	1335011	27-Aug-13	30-Aug-13	EPA 8015D	
Total Petroleum Hydrocarbons by 418.1									
Total Petroleum Hydrocarbons	ND	20.0	mg/kg	1	1335008	27-Aug-13	27-Aug-13	EPA 418.1	
Cation/Anion Analysis									
Chloride	**73.7**	9.98	mg/kg	1	1335021	28-Aug-13	28-Aug-13	EPA 300.0	

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335010 - Purge and Trap EPA 5030A										
Blank (1335010-BLK1)				Prepared: 27-Aug-13 Analyzed: 03-Sep-13						
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	"							
p,m-Xylene	ND	0.05	"							
o-Xylene	ND	0.05	"							
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: Bromochlorobenzene	*46.1*		*ug/L*	*50.0*		*92.2*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*48.8*		"	*50.0*		*97.6*	*80-120*			
Surrogate: Fluorobenzene	*48.3*		"	*50.0*		*96.6*	*80-120*			
Duplicate (1335010-DUP1)	**Source: P308079-01**			Prepared: 27-Aug-13 Analyzed: 03-Sep-13						
Benzene	ND	0.05	mg/kg		ND				30	
Toluene	ND	0.05	"		ND				30	
Ethylbenzene	ND	0.05	"		ND				30	
p,m-Xylene	ND	0.05	"		ND				30	
o-Xylene	ND	0.05	"		ND				30	
Surrogate: Bromochlorobenzene	*47.9*		*ug/L*	*50.0*		*95.9*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*47.6*		"	*50.0*		*95.2*	*80-120*			
Surrogate: Fluorobenzene	*47.3*		"	*50.0*		*94.7*	*80-120*			
Matrix Spike (1335010-MS1)	**Source: P308079-01**			Prepared: 27-Aug-13 Analyzed: 03-Sep-13						
Benzene	2.44	0.05	mg/kg	2.50	ND	97.5	39-150			
Toluene	2.45	0.05	"	2.50	ND	98.1	46-148			
Ethylbenzene	2.46	0.05	"	2.50	ND	98.3	32-160			
p,m-Xylene	4.89	0.05	"	5.00	ND	97.9	46-148			
o-Xylene	2.44	0.05	"	2.50	ND	97.7	46-148			
Surrogate: Bromochlorobenzene	*49.3*		*ug/L*	*50.0*		*98.7*	*80-120*			
Surrogate: 1,4-Difluorobenzene	*48.1*		"	*50.0*		*96.3*	*80-120*			
Surrogate: Fluorobenzene	*48.0*		"	*50.0*		*96.1*	*80-120*			

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335011 - GRO/DRO Extraction EPA 3550C										
Blank (1335011-BLK1)				Prepared: 27-Aug-13 Analyzed: 29-Aug-13						
Gasoline Range Organics (C6-C10)	ND	5.00	mg/kg							
Diesel Range Organics (C10-C28)	ND	5.00	"							
GRO and DRO Combined Fractions	ND	5.00	"							
Duplicate (1335011-DUP1)	**Source: P308079-01**			Prepared: 27-Aug-13 Analyzed: 30-Aug-13						
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg		ND				30	
Diesel Range Organics (C10-C28)	ND	4.99	"		ND				30	
Matrix Spike (1335011-MS1)	**Source: P308079-01**			Prepared: 27-Aug-13 Analyzed: 30-Aug-13						
Gasoline Range Organics (C6-C10)	258	5.26	mg/kg	263	ND	98.1	75-125			
Diesel Range Organics (C10-C28)	269	5.26	"	263	ND	102	75-125			

envirotech
Analytical Laboratory

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Total Petroleum Hydrocarbons by 418.1 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335008 - 418 Freon Extraction										
Blank (1335008-BLK1)				Prepared & Analyzed: 27-Aug-13						
Total Petroleum Hydrocarbons	ND	20.0	mg/kg							
Duplicate (1335008-DUP1)		**Source: P308068-01**		Prepared & Analyzed: 27-Aug-13						
Total Petroleum Hydrocarbons	24.0	20.0	mg/kg		ND				30	
Matrix Spike (1335008-MS1)		**Source: P308068-01**		Prepared & Analyzed: 27-Aug-13						
Total Petroleum Hydrocarbons	1970	20.0	mg/kg	2000	ND	98.6	80-120			

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Cation/Anion Analysis - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1335021 - Anion Extraction EPA 300.0										
Blank (1335021-BLK1)				Prepared & Analyzed: 28-Aug-13						
Chloride	ND	9.98	mg/kg							
Duplicate (1335021-DUP1)		**Source: P308080-01**		Prepared & Analyzed: 28-Aug-13						
Chloride	79.0	10.0	mg/kg		73.7			6.91	30	

WPX Energy, Inc.	Project Name:	Rosa Unit #108	
PO Box 21218	Project Number:	04108-0137	**Reported:**
Tulsa OK, 74121-1358	Project Manager:	Vanessa Fields	03-Sep-13 16:09

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CHAIN OF CUSTODY RECORD

15920

Client: WPX Energy	Project Name / Location: Rosa Unit #108
Email results to: Vanessa.Fields@wpxenergy.com	Sampler Name: Curtis Heckman
Client Phone No.: 505-419-6219	Client No.: 04108-0137

Sample No./ Identification	Sample Date	Sample Time	Lab No.	No./Volume of Containers	Preservative HNO_3	Preservative HCl	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	CO Table 910-1	TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Rosa Unit #108	8-23-13	3:10pm	P308080-01					X	X							X	X				X	X

	Date	Time		Date	Time
Relinquished by: (Signature)	8/24/13	8:25am	Received by: (Signature)	8/24/13	8:25
Relinquished by: (Signature)			Received by: (Signature)		

Sample Matrix

Soil ☐ Solid ☒ Sludge ☐ Aqueous ☐ Other ☐ _____

☐ Sample(s) dropped off after hours to secure drop off area.

envirotech
Analytical Laboratory

5795 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301 • laboratory@envirotech-inc.com

Date Inspected	WellName	Formation	Construction	SGT, BGT, Above Ground Tank	Liner	Is this a Twin Well?	Leak Detection?	Leak Detection Level	Pit Level	Comments / Repairs needed
2/28/2011	ROSA UNIT #108	Dk/MV	FIBERGLASS	BGT	Banded Plastic liner	YES	YES	4"	50"	
6/28/2011	ROSA UNIT #108	04-61	Dk/MV	BGT	YES	Yes	YES	1.75	18	
7/28/2011	ROSA UNIT #108	Dakota	FIBERGLASS	BGT	YES	yes	yes	0	51	
12/28/2011	ROSA UNIT #108	Dakota	FIBERGLASS	BGT	YES	yes	yes	7.5	50	
1/15/2013	ROSA UNIT #108	04-61	Dk/MV	BGT	YES	YES	YES	0	27	
3/28/2011	ROSA UNIT #108	04-61	Dk/MV	BGT	BGT	Yes	YES	0	0	

Below Grade Tanks Inspection

A. General Information

Date Inspected:
6/29/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
Yes

Workorder Assignee:
Vanessa Fields

B. Inspection Information

Leak Detection Level (in):
1.6

Pit Level (in):
1

Comments/Repairs Needed:
leak level high

C. Validation

Ecocion Review
Y

Below Grade Tanks Inspection

A. General Information

Date Inspected:
7/20/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
Yes

Workorder Assignee:
Vanessa Fields

B. Inspection Information

Leak Detection Level (in):
1.8

Pit Level (in):
48

Comments/Repairs Needed:
Leak level high

C. Validation

Ecocion Review
Y

Below Grade Tanks Inspection

A. General Information

Date Inspected:
8/21/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
14

Pit Level (in):
16

Below Grade Tanks Inspection

A. General Information

Date Inspected:
8/21/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
14

Pit Level (in):
16

Below Grade Tanks Inspection

A. General Information

Date Inspected:
9/11/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
18

Pit Level (in):
52

Below Grade Tanks Inspection

A. General Information

Date Inspected:
10/16/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
8

Pit Level (in):
24

Below Grade Tanks Inspection

A. General Information

Date Inspected:
11/15/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
12

Pit Level (in):
55

Below Grade Tanks Inspection

A. General Information

Date Inspected:
12/20/2012 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
12

Pit Level (in):
18

Below Grade Tanks Inspection

A. General Information

Date Inspected:
1/22/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
12

Pit Level (in):
20

Below Grade Tanks Inspection

A. General Information

Date Inspected:
2/19/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
12

Pit Level (in):
33

Below Grade Tanks Inspection

A. General Information

Date Inspected:
3/26/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
10

Pit Level (in):
12

Below Grade Tanks Inspection

A. General Information

Date Inspected:
5/15/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
10

Pit Level (in):
12

Below Grade Tanks Inspection

A. General Information

Date Inspected:
6/13/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
10

Pit Level (in):
12

Below Grade Tanks Inspection

A. General Information

Date Inspected:
7/18/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

B. Inspection Information

Leak Detection Level (in):
10

Pit Level (in):
12

Below Grade Tanks Inspection

A. General Information

Date Inspected:
8/27/2013 12:00 AM

Tank:
Tank PK 966 (Serial Number: SJB00199)

Technician:
Cody Boyd

Workorder Required?:
No

Workorder Assignee:
Vanessa Fields

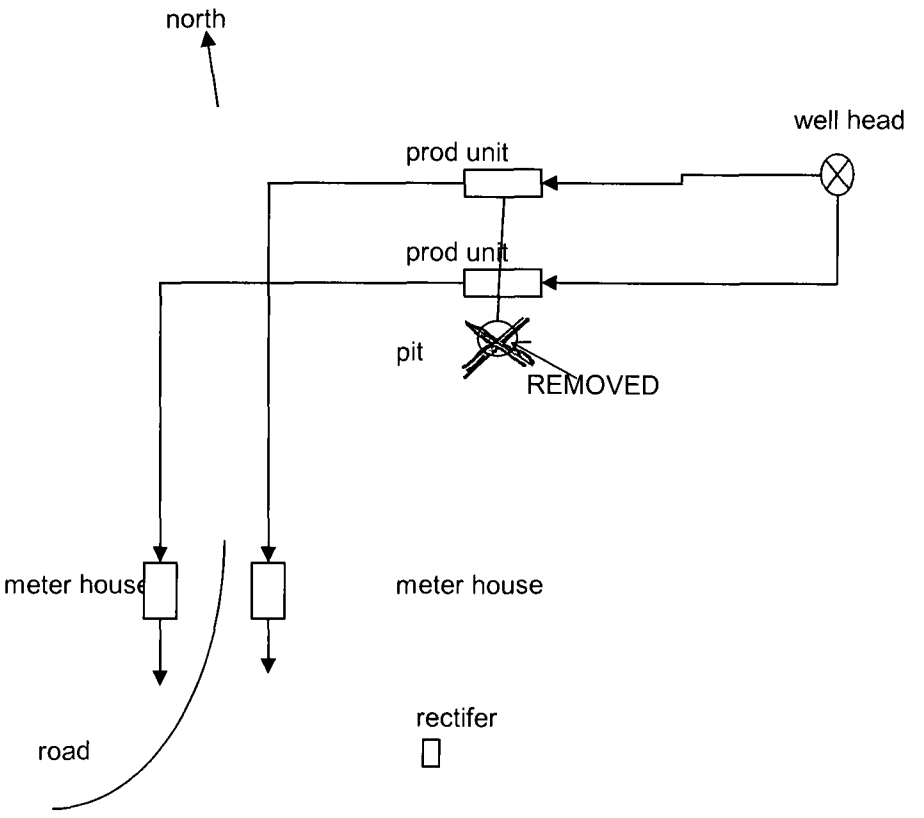
B. Inspection Information

Leak Detection Level (in):
0

Pit Level (in):
0

Comments/Repairs Needed:
Tnere is no pit well P/A

Willams production
Rosa 108 Gallup/Dakota
Sec 7 T 31 N R 6 W

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