District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

Below-grade tank: Subsection I of 19.15.17.11 NMAC

Alternate. Please specify As per BLM specifications

☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other ___

Tank Construction material: Double Wall, Double Bottom Steel

Volume: 120

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

Revised June 6, 2013

RCVD MAR 4'14

<u>OIL CO</u>MS. DIV.

DIST. 3

Form C-144

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office. For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Proposed Alternative Method Permit or Closure Plan Application Type of action: Below grade tank registration Permit of a pit or proposed alternative method Closure of a pit, below-grade tank, or proposed alternative method Modification to an existing permit/or registration Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, 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 640/721 S Main Aztec, NM 87410
Facility or well name: Chaco 2307-13L 175H, Chaco 2307-13L #174H, Chaco 2307- 13L #238H, Chaco
API Number: <u>30-039-31192,30-03931197, 30-03931213</u> OCD Permit Number:
U/L or Qtr/Qtr L Section 13 Township 23N Range 7W County: Rio Arriba
Center of Proposed Design: Latitude 36.22236N Longitude -107.53540W NAD: □1927 ⊠
1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment
Pit: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: Drilling Completion Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
☐ String-Reinforced
Liner Seams: Welded Factory Other Volume: bb! Dimensions: L x W x D

4.
Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
5.
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

____bbl Type of fluid: _____Produced Water_____

Secondary containment with leak detection

Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

Liner type: Thickness mil HDPE PVC Other

6:	
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)	
7.	
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 19.15.16.8 NMAC	
8. Variances 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:	
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9. Siting Criteria (regarding permitting): 19.15.17.10 NMAC	
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accematerial are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	ptable source
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - □ NM Office of the State Engineer - iWATERS database search; □ USGS; ☑ Data obtained from nearby wells	☐ Yes ☑ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	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. (Does not apply to below grade tanks) - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. (Does not apply to below grade tanks) - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No
 Within an unstable area. (Does not apply to below grade tanks) 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. (Does not apply to below grade tanks) - FEMA map	Yes No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
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Form C-144

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Within 100'feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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 spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
Permanent Pit or Multi-Well Fluid Management Pit	
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 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	100 🗀 110
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, 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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 N Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the docattached. 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. and 19.15.17.13 NMAC	NMAC 15.17.9 NMAC
11.	
Multi-Well Fluid Management Pit 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 doc attached. 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 A List of wells with approved application for permit to drill associated with the pit. Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	.15.17.9 NMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:	

12.	
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
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 H₂S, 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 Completion Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Management Pit 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)	☐ Multi-well Fluid
☐ In-place Burial ☐ On-site Trench Burial ☐ Alternative Closure Method	
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be 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 C 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 H of 19.15.17.13 NMAC □ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
15.	
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 sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. F 19.15.17.10 NMAC for guidance.	
Ground water is less than 25 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 25-50 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
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 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, 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 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, 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
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ⊠ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No

With the state of	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordin adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	nance
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
was to the manifestation and manifestation approval obtained from the manifestation	- 1 C3 M 140
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 Geolog	ical
Society; Topographic map	
Within a 100-year floodplain.	Yes 🛛 No
- FEMA map	☐ Yes ☒ No
16.	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the cl	osure 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 E of 19.15.17.13 NMAC	
Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 1	9 15 17 11 NMAC
Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requiremen	ts 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 19.15.17.13 NMAC	
☐ Waste Material Sampling Plan - based upon the appropriate requirements 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 standa	rds 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 H of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
Site Rectaination France based upon the appropriate requirements of Subsection PLOT 19, 13.17.13 INVIAC	
17	
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 haliaf
Thereby certify that the information submitted with this approachol is true, accurate and complete to the best of my knowledge	and belief.
Name (Dint)	
Name (Print): Vanessa Fields Title: Environmental Specia	alist
Name (Print): Valiessa rietus Title: Environmental Specia	alist
Signature: Date: 3-4-2014	alist
	alist
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Signature:	ent)
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Signature: Date: 3-4-2014	ent)
Signature:	ent)
Signature: Date: 3-4-2014 e-mail address: vanessa.fields@wpxenergy.com Telephone: 505-333-1880 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachm OCD Representative Signature: Approval Date: Title: OCD Permit Number:	ent)
Signature:	ent)
Signature: Date: 3-4-2014 e-mail address: vanessa.fields@wpxenergy.com Telephone: 505-333-1880 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachm OCD Representative Signature: Approval Date: Title: OCD Permit Number:	ient) 3/11/2014
Signature:	ient) 3/11/2014 bmitting the closure report.
e-mail address: vanessa.fields@wpxenergy.com Telephone: 505-333-1880 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachm OCD Representative Signature: Approval Date: Title: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and successions.	ient) 3/11/2014 bmitting the closure report.
Signature:	ient) 3/11/2014 bmitting the closure report.
e-mail address:	ient) 3/11/2014 bmitting the closure report.
Signature:	ient) 3/11/2014 bmitting the closure report.
e-mail address:	bmitting the closure report.
e-mail address: vanessa.fields@wpxenergy.com Telephone: 505-333-1880 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachm OCD Representative Signature: Approval Date: Title: OCD Permit Number: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and sur The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Pleas section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date: 20. Closure Method:	bmitting the closure report.
Signature: Date: 3-4-2014	bmitting the closure report.
Signature: Date: 3-4-2014 e-mail address: vanessa.fields@wpxenergy.com Telephone: 505-333-1880 18. OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachm OCD Representative Signature: Approval Date: Title: OCD Permit Number: 19. Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and sur the closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Pleas section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closure Method) If different from approved plan, please explain.	bmitting the closure report. e do not complete this Closed-loop systems only)
Signature: Date: 3-4-2014	bmitting the closure report. e do not complete this Closed-loop systems only)
Signature:	bmitting the closure report. e do not complete this Closed-loop systems only)
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Signature: Date: 3-4-2014	bmitting the closure report. e do not complete this Closed-loop systems only)
Signature:	bmitting the closure report. e do not complete this Closed-loop systems only)
o-mail address: vanessa_fields@wpxenergy.com	bmitting the closure report. e do not complete this Closed-loop systems only)
e-mail address:vanessa_fields@wpxenergy.com	bmitting the closure report. e do not complete this Closed-loop systems only)

Operator Closure Certification:	
I hereby certify that the information and attachments submitted with this closure report belief. I also certify that the closure complies with all applicable closure requirements	
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:

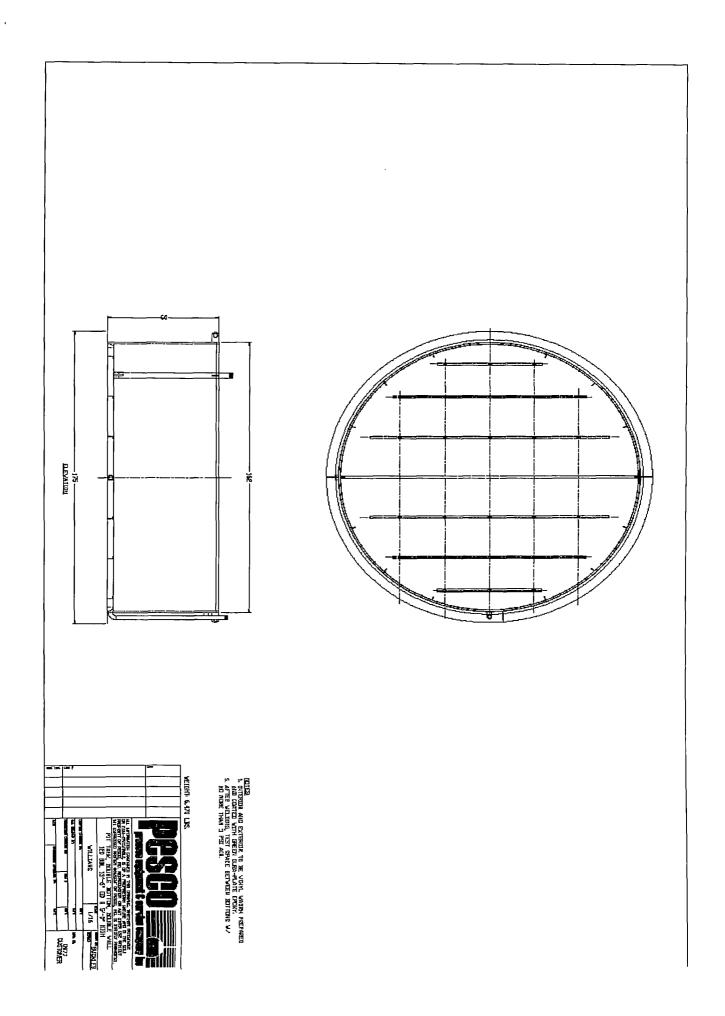
WPX Energy Co., LLC San Juan Basin: New Mexico Assets

Production Pit: Buried Double-Wall Steel Tank
Design and Construction Plan

In accordance with Rule 19.15.17 NMAC, the following plan describes the general design and construction (D&C) of production pits using buried double-wall steel tanks on WPX Energy Co, LLC (WPX) locations in the San Juan Basin of New Mexico. For those production pits which do not conform to this standard plan, a separate well-specific D&C plan will be developed and utilized.

General Plan Requirements:

- 1. WPX will design and construct a production pit to contain liquids associated with the dehydration and compression of produced natural gas, which will prevent contamination of fresh water resources and protect public health and the environment.
- 2. The pit will be located as close as possible to the well and associated production/process equipment to minimize surface disturbance. Prior to excavation for the pit, topsoil will be stripped and stockpiled on the well location.
- 3. The excavation will have a firm compacted bottom and sidewalls that are stable for the soil conditions.
- 4. The BGT will be placed in the excavation such that there is a minimum 12 inch free board between the surrounding soils and the tank top. Backfilled soils will be carefully compacted to avoid damaging the tank.
- 5. The buried BGT will be constructed of steel with double-walls and double-bottom, welded following appropriate API and industry codes, coated with an epoxy based paint, covered with a steel #9 mesh screen, and equipped with an EFM to monitor high liquid levels and automatically shut off liquid discharges.
- 6. A solid riser pipe will be installed to allow withdrawal of liquids by suction. The riser will draw from the bottom of the BGT, capped when not in use and sloped to the pit to allow drainage of liquids not collected during withdrawal operations.
- 7. A solid riser pipe will be installed between the interstitial space of the double-walls to allow monthly inspection to determine tank integrity.
- 8. The BGT will be protected from run-on by the construction of a compacted earthen berm.
- 9. Fencing will be constructed to protect livestock/wildlife as specified by the federal Surface Management Agency or, if not federal land/minerals, NMOCD rule 17 requirements.
- 10. WPX will post a well sign in accordance with the federal Surface Management Agency and rule 19.15.3.103.



WPX Energy Co., LLC San Juan Basin: New Mexico Assets

Production Pit: Buried Double-Wall Steel Tank Operations and Maintenance Plan

In accordance with Rule 19.15.17 NMAC, the following plan describes the general operations and maintenance (O&M) of production pits using subgrade tanks on WPX Energy Co, LLC (WPX) locations in the San Juan Basin of New Mexico. For those production pits which do not conform to this standard O&M plan, a separate well specific O&M plan will be developed and utilized.

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

WPX Energy Co., LLC San Juan Basin: New Mexico Assets

Production Pit: Buried Double-Wall Steel Tank Closure Plan

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

Closure Conditions and Timing:

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

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

General Plan Requirements:

- 1. Prior to initiating any BGT Closure except in the case of an emergency, WPX will review County Tax Records for the current surface owner of record. The surface owner of record will be notified of the intent to close the BGT by certified mail and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner of record will be notified as soon as practical.
- 2. Notice of Closure will be given to the Aztec District office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
 - a. Operators Name (WPX)
 - b. Well Name and API Number
 - c. Location (USTR)
- 3. All piping will be rerouted to an alternative produced water storage/disposal location (e.g. surface tanks, temporary frac tank ...). The well will be temporarily shut in until the rerouting is completed.
- 4. All produced water will be removed from the BGT following discharge-pipe rerouting. Produced water will be disposed at one of the following NMOCD approved facilities depending on the proximity of the BGT site: Rosa Unit SWD #1 (Order: SWD-916, API: 30-039-27055), Rosa Unit #94 (Order: SWD-3RP-1003-0, API: 30-039-23035), Jillson Fed. SWD #001 (Order: R10168/R10168A, API: 30-039-25465), Middle Mesa SWD #001 (Order: SWD-350-0, API: 30-045-27004) and/or Basin Disposal (Permit: NM-01-0005).
- 5. Solids and sludges will be shoveled and /or vacuumed out for disposal at Envirotech (Permit Number NM-01-0011).
- 6. WPX will obtain prior approval from NMOCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste.

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 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 reported to the Division following receipt from the lab on Form C-141.

Table 1: Closure Criteria for BGTs

Depth below bottom of pit to groundwater less than 10,000 mg/1 TDS	Constituent	Method	Limit
	Chloride	EPA 300.0	10,000 mg/kg
	ТРН	EPA SW-846 Method 418.1	2,500 mg/kg
51 feet-100 feet	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	ВТЕХ	EPA SE-846 Method 8021B or 8015M	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg

RCVD MAR 11'14 OIL CONS. DIV. DIST. 3 Oistrict I 1625 N. French Drive, Hobbs, NM 88240 Phone (575) 393-6161 Fax: (575) 393-0720 Oistrict II 811 S. First Street, Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV 1220 S. St. Francis Drive, Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 1, 2011

Submit one copy to Appropriate District Office

AMENDED REPORT

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

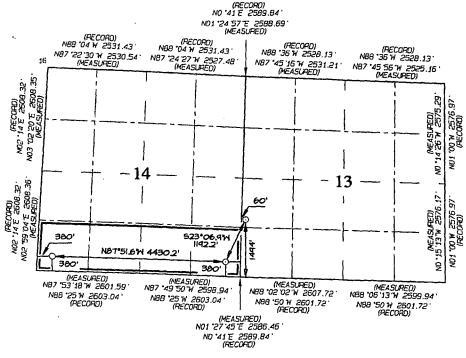
WELL LOCATION AND ACREAGE DEDICATION PLAT

	'API Number	'Pool Code 42289	'Pool Name LYBROOK GALLUP	
	'Property Code	³Pr	*Property Name CHACO 2307-13L	
	'0GRID No. 120782	*ope WPX ENERGY	*Elevation 7046	
10 Surface Location				

UL or lot no. Sect ior Township Lot Idn Feet from the North/South line Feat from the East/West line RIO 13 **NES** 7W 1494 SOUTH 60 WEST ARRIBA ¹¹ Bottom Hole Location Ιf Different From Surface UL or lot no. Lot Im Feet from the North/South line Feet from the East/West line RIO 14 23N 7W М 380 SOUTH 380 WEST ARRIBA

Occupated Acres Jaint or Infill Consolidation Code Order No. 160.0 Acres S/2 S/2 -Section 14

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



END-OF-LATERAL 380 * F5L 380 * FWL 5ECTION 14, T23N, F7W LAT: 35.21985 *N LONG: 107.35181 *W DATUM: NAD1927 LAT: 36.21986 N LONG: 107.55241 W DATUM: NAD1983

POINT-OF-ENTRY 380 FSL 380 FEL SECTION 14, T23N, R7W LAT: 36.21955 N LONG: 107.53679 W DATUM: NAD1927

LAT: 35.21957 N LONG: 107.53740 W DATUM: NAD1983 '

SURFACE LOCATION 1494 FSL 60 FWL SECTION 13. T23N, RY LAT: 36.22258 N LONG: 107.53526 W DATUM: NAD1927

LAT: 36.22259 N LONG: 107.53586 W DATUM: NAD1983

³⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.				
Signature Date				
Printed Name				
E-mail Address				
Is SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. Date Revised: MAY 14, 2013 Date of Survey: JULY 5, 2012				
Signature and Seal of Professional Surveyor				
MEXICO BE SEED OF SEED				

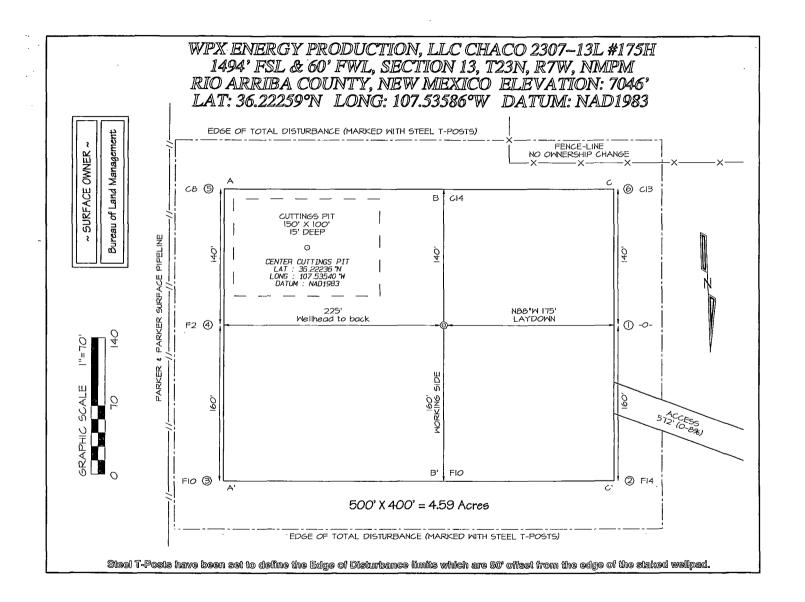
ARCFESSION !

JASON

Certificate Number

DWARDS

15269



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Hydrogeological Report WPX Energy Production, LLC Chaco 2307-13L 175H

Regional Hydrological Context

Referenced Well Location:

The referenced well and pit is located on Bureau of Land Management land within Farmington Field Office (FFO) jurisdiction in Rio Arriba County, New Mexico. This site is positioned in the northeastern portion of the San Juan Basin, an asymmetrical syncline that extends from northwestern New Mexico into southwestern Colorado (Carson National Forest FEIS, 2008). Elevation of the referenced well is approximately 7,046 feet MSL.

General Regional Groundwater Description:

As a portion of the San Juan Basin, the FFO region is underlain by sandstone aquifers of the Colorado Plateau. The primary aquifer of potential concern at this location is the Uinta-Animas Aquifer, composed primarily of Lower Tertiary rocks in the San Juan Basin. The aquifer consists of the San Jose Formation; the underlying Animas formation and its lateral equivalent, the Nacimiento formation; and the Ojo Alamo Sandstone. The thickness of the Uinta-Animas aquifer generally increases toward the central part of the basin. In this region, the maximum thickness of the aquifer is approximately 3500 feet (USGS, 2001). This aquifer contains fresh to moderately saline water.

Groundwater generally flows toward the San Juan River and its tributaries, where it becomes alluvial groundwater or is discharged to stream flow. Additional information regarding the hydrogeologic setting can be found in the provided references.

Site Specific Information:

Surface Hydrology: The pit is located on a low northt facing slope draining northeast

into Escrito Canyon. San Jose, Tertiary

1st Water Bearing Formation:

Formation Thickness: Approximately 1,900 ft. Underlying Formation: Nacimiento, Tertiary

Depth to Groundwater: Depth to groundwater is estimated at greater than 100 feet below

bottom of pit liner. Within a one-mile radius of this location, there were no iWATERS wells with recorded water depth information. However, based on the comparison between the elevation of the location and the test well Chaco 188H groundwater is estimated at 132 feet (see Siting Criteria Map I

for details).

References:

Allen, Erin. Undated. Colorado Plateau Aquifers.

http://academic.emporia.edu/schulmem/hydro/TERM%20PROJECTS/2007/Allen/Aquifer.html.

New Mexico Energy, Minerals and Natural Resources Department, Division of Mining and Minerals. Database. 2010. Internet accessed January 2010.

New Mexico Office of the State Engineer. 2013. iWaters database. Internet accessed January 2010.

New Mexico WQCC. 2005. State of New Mexico Water Quality Act and the Water Control Commission Regulations.

United States Department of Agriculture, Forest Service. 2008. Final Environmental Impact Statement for Surface Management of Gas Leasing and Development. Jicarilla Ranger District, Carson National Forest, Rio Arriba County, New Mexico.

United States Department of the Interior. Bureau of Land Management. 2003. Final Farmington Resource Management Plan and Final Environmental Impact Statement. Farmington Field Office, Farmington, New Mexico.

United States Geological Survey. 2001. Ground Water Atlas of the United States: Arizona, Colorado, New Mexico and Utah. USGS Publication HA 730-C;



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

POD

closed)

(quarters are 1=NW 2=NE 3=SW 4=SE) C=the file is

QQQ

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

Depth Depth Water

POD Number

Code Subbasin County 64 16 4 Sec Tws Rng

X

Y Well Water Column

SJ 01156

2 2 1 18 23N 06W

274330 4012555* 1300

SJ 01506

1 1 3 22 23N 06W

278535 4010015* 280 Average Depth to Water:

200 feet

Minimum Depth: 200 feet

Maximum Depth: 200 feet

Record Count: 2

PLSS Search:

Township: 23N

Range: 06W

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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Page 1 of 1

WATER COLUMN/ AVERAGE DEPTH TO WATER



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced,

O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Depth Depth Water **POD Number** Code Subbasin County 64 16 4 Sec Tws Rng Y Well Water Column SJ 01507 3 3 4 10 23N 07W 269889 4013098* 1709 900 SJ 02233 1 1 2 15 23N 07W RA 269856 4012864* 1100 SJ 02233 CLW223636 RA 1 1 2 15 23N 07W 269856 4012864* 1100

Average Depth to Water: 900 feet

Minimum Depth: 900 feet

Maximum Depth: 900 feet

Record Count: 3

PLSS Search:

Township: 23N

Range: 07W

*UTM location was derived from PLSS - see Help

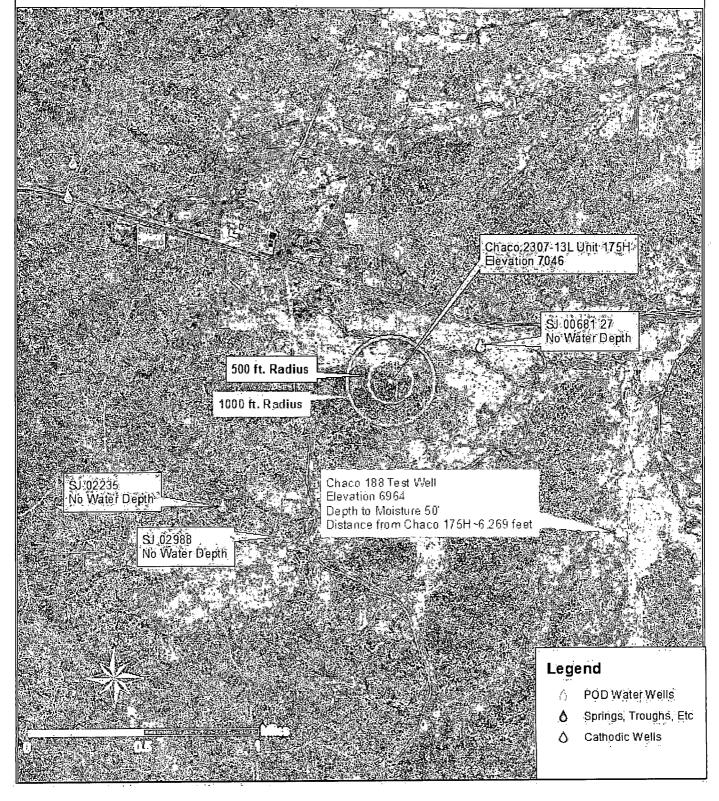
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

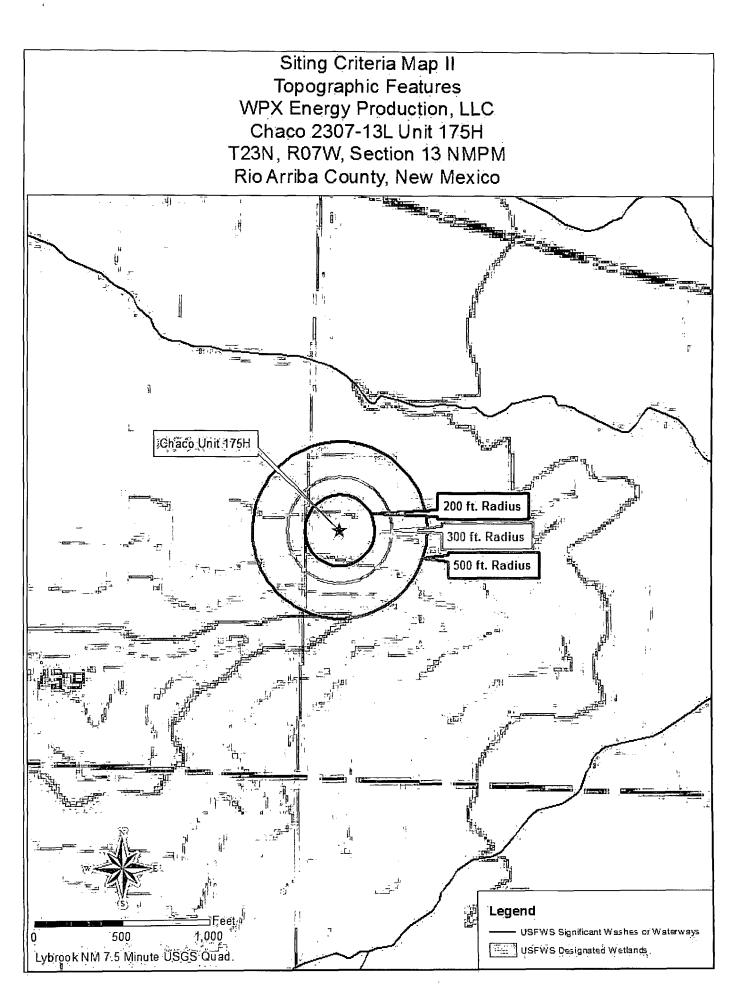
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Page 1 of 1

WATER COLUMN/ AVERAGE DEPTH TO WATER

Siting Criteria Map I
Water Wells, Cathodic Wells, & Springs
WPX Energy Production, LLC
Chaco 2307-13L Unit 175H
T23N, R07W, Section 13 NMPM
Rio Arriba County, New Mexico





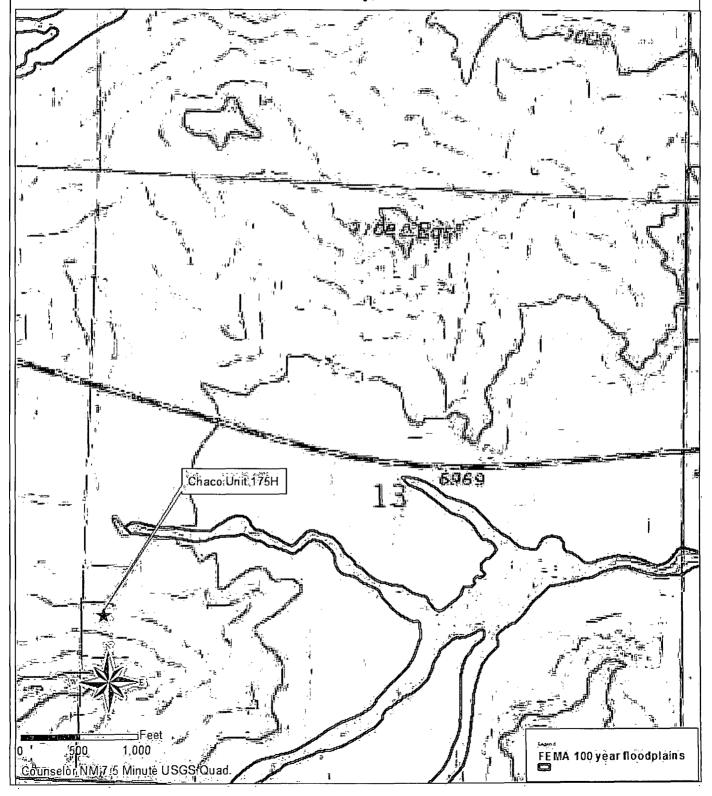
FEMA Map – 100-Year Floodplain:

According to FEMA records, this site is not located in a 100-year floodplain (see attached FEMA map).

Siting Criteria Compliance Demonstrations:

The Chaco 2307-13L 175H well is not located in an unstable area. The location is not situated over a mine or a steep slope. Excavated pit material will not be located within 300 feet of a continuously flowing water course or within 200 feet of any other significant water course, lakebed, sinkhole, or playa lake (see Siting Criteria Map II). The site is not within 300 feet of any reported riparian areas or wetlands (see attached USFWS wetland map); within 500 feet of any private, domestic fresh water well or spring; or within 1000 feet of any other fresh water well or spring (see Siting Criteria Map I). The pit will not be within any incorporated municipal boundaries or defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. The location of the proposed pit is not within 300 feet of any permanent residence, school, hospital, institution, or church.

FEMA Flood Map
Topographic Features
WPX Energy Production, LLC
Chaco 2307-13L Unit 175H
T23N, R07W, Section 13 NMPM
Rio Arriba County, New Mexico



MMQonline Public Version

