

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

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
Revised August 1, 2011

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

11213

- 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 604 /721 S Main Aztec, NM 87410
Facility or well name: Rosa Unit 271
API Number: 30-039-24911 OCD Permit Number: _____
U/L or Qtr/Qtr G Section 35 Township 31N Range 5W County: Rio Arriba
Center of Proposed Design: Latitude 36.85841N Longitude -107.32885W NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

2.
 Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: Drilling Workover
 Permanent Emergency Cavitation P&A
 Lined Unlined Liner type: Thickness 20 mil LLDPE HDPE PVC Other _____
 String-Reinforced
Liner Seams: Welded Factory Other _____ Volume: 15,700 bbl Dimensions: L 140' x W 55' x D 12'

RCVD MAY 10 '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: _____ bbl Type of fluid: _____
Tank Construction material: _____
 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.

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 As per BLM specifications

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 19.15.16.8 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

14.

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 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

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 identify 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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> 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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> 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 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> 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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within 500 feet of a wetland.
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within the area overlying a subsurface mine.
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within an unstable area.
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Within a 100-year floodplain.
- FEMA map | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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): Ben Mitchell Title: Regulatory Specialist

Signature: [Handwritten Signature] Date: 5/10/13

e-mail address: ben.mitchell@wpenergy.com Telephone: 505-333-1806

20.

OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)

OCD Representative Signature: [Handwritten Signature] Approval Date: 5/14/2013

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: _____

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): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District 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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number		*Pool Code	*Pool Name	
		71629	BASIN FRUITLAND COAL	
*Property Code	*Property Name		*Well Number	
	ROSA UNIT		271	
*DGRID No.	*Operator Name		*Elevation	
120782	WPX ENERGY PRODUCTION, LLC		6738'	

¹⁰ Surface Location

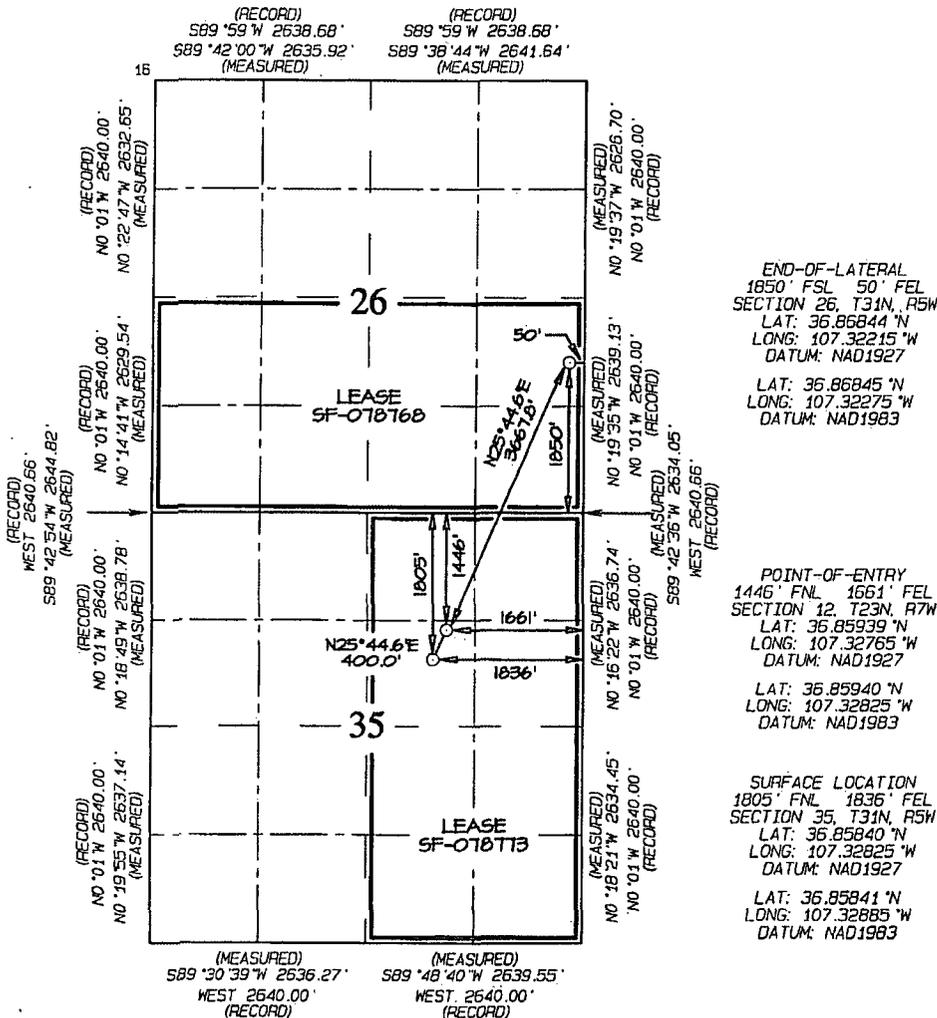
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	35	31N	5W		1805	NORTH	1836	EAST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	26	31N	5W		1850	SOUTH	50	EAST	RIO ARRIBA

¹² Dedicated Acres	S/2 of Section 26 E/2 of Section 35	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
640.0 Acres				

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
1850' FSL 50' FEL
SECTION 26, T31N, R5W
LAT: 36.86844°N
LONG: 107.32215°W
DATUM: NAD1927

LAT: 36.86845°N
LONG: 107.32275°W
DATUM: NAD1983

POINT-OF-ENTRY
1446' FNL 1661' FEL
SECTION 12, T23N, R7W
LAT: 36.85939°N
LONG: 107.32765°W
DATUM: NAD1927

LAT: 36.85940°N
LONG: 107.32825°W
DATUM: NAD1983

SURFACE LOCATION
1805' FNL 1836' FEL
SECTION 35, T31N, R5W
LAT: 36.85840°N
LONG: 107.32825°W
DATUM: NAD1927

LAT: 36.85841°N
LONG: 107.32885°W
DATUM: NAD1983

¹⁷ 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 _____

¹⁸ 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 of Survey: APRIL 29, 2013

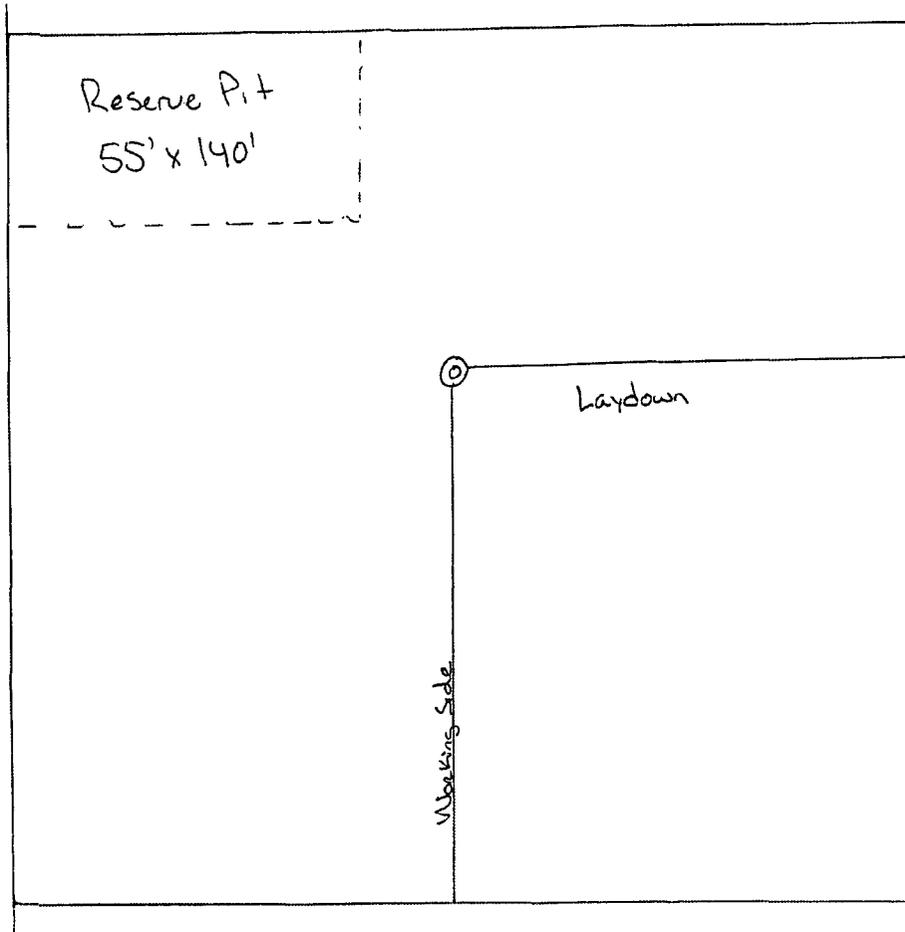
Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

WPX ENERGY PRODUCTION, LLC ROSA UNIT 271
1805' FNL & 1836' FEL, SECTION 35, T31N, R5W, NMPM
RIO ARRIBA COUNTY, NEW MEXICO ELEVATION 6738'



LAT: 36.85841N
LONG: 107.32885W

162 SACKS
122
20

CPS GROUND BED CONSTRUCTION WORKSHEET

CPS# 2290	P/L NAME (S), NUMBER (S) ROSA UNIT # 221					
WO # L923	TOTAL 11.5	VOLTS 28.1	AMPS .41	OHMS	DATE 9-29-91	NAME W.R. McGAHA
REMARKS (notes for construction log) Set 60' of 8" PVC surface casing cemented w/ 12 sacks; No H ₂ O; Install 415' 1" pvc well pipe; perf. 300'. Load w/ 20 sacks Lorraine & 125 sacks Anthony 45' @ Eldo.						

DEPTH	LOG ANODE	ANODE #										
100	3.1		295	2.1		490			685			
105	3.0		300	3.0		495			690			
110	3.4		305	3.2	8V	500			695			
115	3.8		310	3.4		505			700			
120	4.0		315	3.5	8	510			ANODE	DEPTH	NO	FULLY
125	3.8		320	3.2	7V	515			"	COKE	COKE	COK'D
130	3.7		325	2.7		520			1	460	2.2	4.1
135	3.7		330	1.8		525			2	415	3.0	5.1
140	3.8	8	335	1.6		530			3	400	3.7	5.6
145	3.2		340	2.1		535			4	390	3.3	5.3
150	3.4		345	2.6		540			5	375	3.8	5.6
155	3.6	#12V	350	2.9	6V	545			6	350	2.8	4.9
160	3.4		355	2.8		550			7	320	3.5	5.8
165	3.3		360	2.8		555			8	305	3.1	5.3
170	3.6		365	2.9		560			9	245	3.4	5.8
175	3.7	#11V	370	3.5		565			10	230	3.8	6.1
180	3.5		375	3.6	5V	570			11	175	3.9	6.4
185	3.3	8	380	2.8		575			12	155	3.9	6.4
190	3.3		385	3.0		580			13			
195	2.6		390	3.5	4V	585			14			
200	3.0		395	3.4		590			15			
205	2.8		400	3.7	3V	595			16			
210	2.6		405	3.4	8	600			17			
215	2.5		410	3.0		605			18			
220	3.1		415	2.7	2V	610			19			
225	3.4		420	2.1		615			20			
230	3.5	#10	425	2.1		620			21			
235	3.5	8	430	1.8		625			22			
240	3.4		435	1.9		630			23			
245	3.3	8V	440	2.2		635			24			
250	3.2		445	2.0		640			25			
255	2.6		450	2.1		645			26			
260	2.0		455	2.2		650			27			
265	1.8		460	2.2	1V	655			28			
270	1.7		465	2.2		660			29			
275	1.7		470	2.0		665			30			
280	1.7		475	2.0		670						
285	1.6		480		480 + 1	675						
290	1.5		485			680						

DISTRIBUTION - original - permanent CPS FILE
 copy - Division Corrosion Supervisor
 copy - Region Corrosion Specialist

3.9 85 3.7
 3.9 90 3.8
 3.9 95 3.6

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO

Operator Meridian Oil Inc. Location: Unit A Sec. 35 Twp 31 Rng 5

Name of Well/Wells or Pipeline Serviced ROSA UNIT # 271

Elevation 6726 Completion Date 9-29-91 Total Depth 480' Land Type SF 078773

Casing Strings, Sizes, Types & Depths 60' 8" PVC SURFACE CASING

If Casing Strings are cemented, show amounts & types used 12 SACKS

CLEAN CEMENT

If Cement or Bentonite Plugs have been placed, show depths & amounts used

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc.

Depths gas encountered:

Ground bed depth with type & amount of coke breeze used: 480'; 20 sacks

Loversco 125 sacks Asbury 451B Fla Coke

Depths anodes placed: 460; 415; 400; 390; 375; 350; 320; 305; 285; 230; 175; 155

Depths vent pipes placed: 415'

Vent pipe perforations: Bottom 360'

Remarks:

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

**Hydrogeological Report
WPX Energy Production, LLC
Rosa Unit #271**

Regional Hydrological Context

Referenced Well Location:

The referenced well and pit is located on Carson National Forest's Jicarilla Ranger District management 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 6,738 feet MSL.

General Regional Groundwater Description:

As a portion of the San Juan Basin, the Jicarilla Ranger District 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 mesa top draining to the Northwest into Cabresto Canyon which travels approximately 6 miles into Navajo Lake.

1st Water Bearing Formation:

San Jose, Tertiary

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, this well is a cathodic well with water depth at 480 feet. (see Siting Criteria Map I for details).

References:

Allen, Erin. Undated. Colorado Plateau Aquifers.

<http://academic.emporio.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. 2010. 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

No records found.

PLSS Search:

Township: 31N Range: 05W

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.

6/6/11 1:39 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

POD Number	Sub basin	Use	County	Q Q Q			Sec	Tws	Rng	X	Y	Depth Depth Water		
				64	16	4						Well	Water	Column
SJ 02771	STK	RA		2	1	1	17	30N	05W	287141	4077449*	325	137	188
SJ 03556	STK	RA		4	2	4	06	30N	05W	286796	4079673*	450	250	200

Average Depth to Water: **193 feet**

Minimum Depth: **137 feet**

Maximum Depth: **250 feet**

Record Count: 2

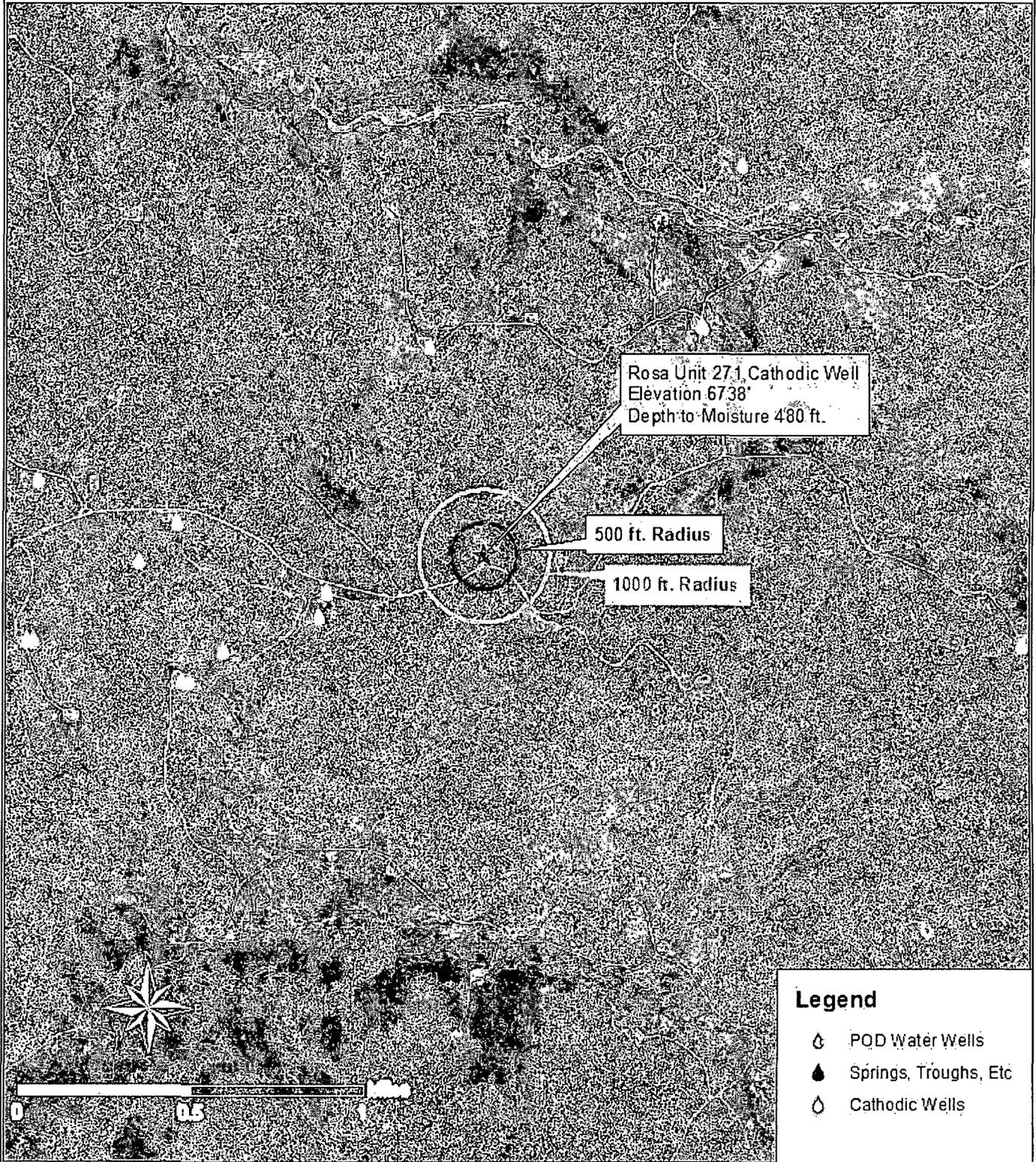
PLSS Search:

Township: 30N Range: 05W

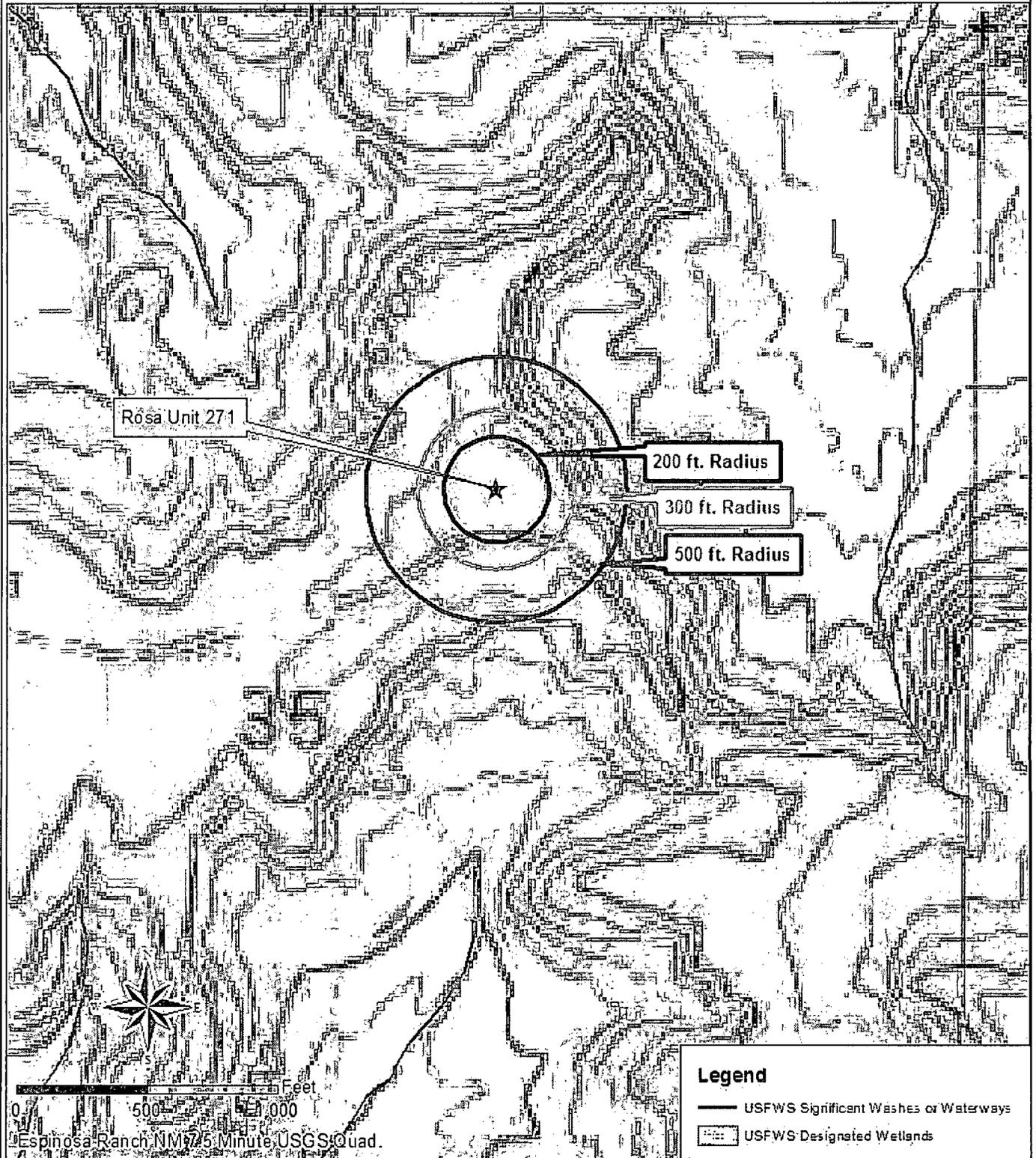
*UTM location was derived from PLSS - see Help

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.

Siting Criteria Map I
Water Wells, Cathodic Wells, & Springs
WPX Energy Production, LLC
Rosa Unit 271
T31N, R05W, Section 35 NMPM
Rio Arriba County, New Mexico

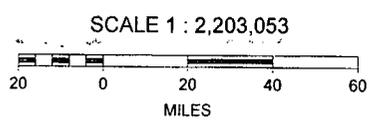
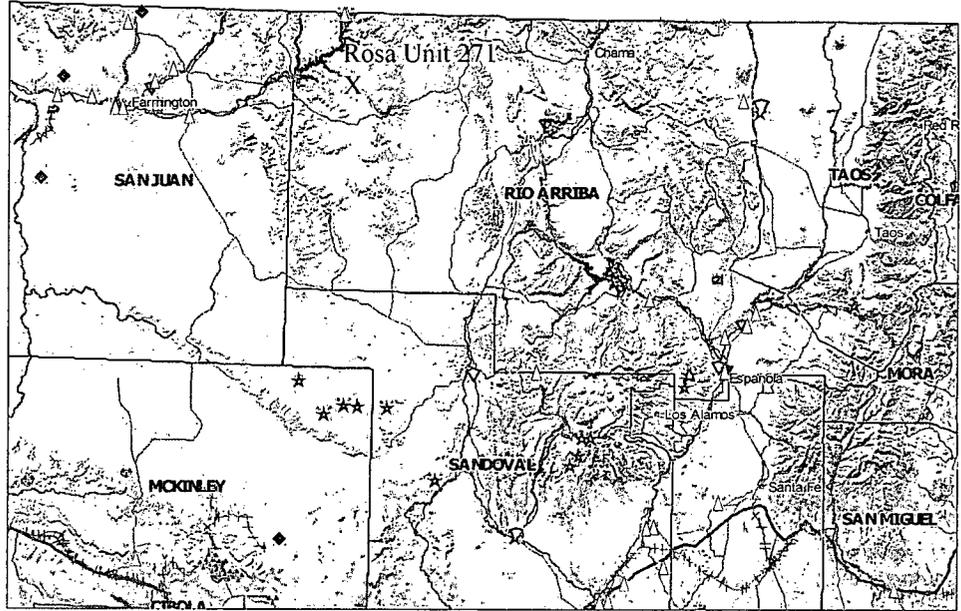


Siting Criteria Map II
Topographic Features
WPX Energy Production, LLC
Rosa Unit 271
T31N, R05W, Section 35 NMPM
Rio Arriba County, New Mexico



MMQonline Public Version

- Mines, Mills & Quarries Commodity Groups**
- △ Aggregate & Stone Mines
 - ◆ Coal Mines
 - ★ Industrial Minerals Mines
 - ▽ Industrial Minerals Mills
 - ☒ Metal Mines and Mill Concentrate
 - ☑ Potash Mines & Refineries
 - ⊞ Smelters & Refinery Ops.
 - ✱ Uranium Mines
 - ⊕ Uranium Mills
-
- Population**



FEMA Map – 100-Year Floodplain:

As this location is within Carson National Forest, no FEMA maps are available. However, ortho-photographic and topographic maps, and an on site investigation indicate that this location is not within a floodplain..

Siting Criteria Compliance Demonstrations:

The Rosa Unit #271 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 500 feet of any reported riparian areas or wetlands; 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 proposed 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.

WPX Energy Production, LLC
San Juan Basin: New Mexico Assets
Temporary Pit Design and Construction Plan
Drilling/Completion and Workover

In accordance with Rule 19.15.17 NMAC, the following plan describes the general design and construction (D&C) of temporary pits on WPX Energy Production, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard procedure for all temporary pits to be utilized for the drilling, completion and/or workover of oil and gas wells operated by WPX. For those temporary 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 temporary pit to contain liquids and solids associated with drilling, completion and workover of oil and gas wells which will prevent contamination of fresh water resources and protect public health and the environment.
2. Prior to excavation of the pit, topsoil will be stripped and stockpiled within the construction zone for later use during restoration.
3. WPX will post a well sign, not less than 12" by 24", on the well site prior to construction of the temporary pit. This sign will list the operator on record, the location of the well site by unit letter/section/township/range, and emergency telephone number(s).
4. WPX shall construct all new fences utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts will be installed every 12 feet and corners shall be anchored utilizing a secondary T-post or similar bracing. Temporary pits will be fenced at all times excluding drilling/completion and/or workover operations when the rig is present on site, at which time the "front" side of the fence will be temporarily removed for operational purposes.
5. WPX shall construction the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to meet manufacturers' specifications and potential liner failure.
6. WPX shall construct the pit so that the slopes are no steeper than two horizontal to one vertical. Where steeper slopes are required due to surface owner and right-a-way restriction, an engineer's certification of stability will be provided with the well pit application.
7. Pit well will be walked down by a crawler type tractor following construction and prior to liner installation.
8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
9. Geotextile will be installed beneath the liner when rocks, debris, sharp objects or irregularities cannot be avoided.
10. All liners will be anchored in the bottom of a compacted earth-filled trench consistent with manufacturer's specifications and at least 18 inches deep.
11. WPX will minimize liner seams and orient them up and down, not across slope faces. Factory seams will be used whenever possible. Field seams will be overlapped per manufacturers' specifications. WPX will minimize the number of field seams in corners and irregularly shaped areas.
12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides (secondary liner placed over the primary liner), and/or a manifold system.
13. The pit shall be protected from run-on by construction of diversion ditches around the location or around the perimeter of the pit in as necessary.
14. The volume of the pit shall not exceed 10 acre-feet, including freeboard
15. Temporary blow pits will be constructed to allow gravity flow to discharge into the lined reserve pit.
16. Only the upper portion of the blow pit will be unlined as allowed in the Rule 19.15.17.11.F(11) NMAC.

17. WPX will modify this design if field and/or operating conditions do not effectively allow drainage of the blow pit and freestanding liquids pose a potential concern.

WPX Energy Production, LLC
San Juan Basin: New Mexico Assets
Temporary Pit Maintenance & Operating Plan
Drilling/Completion and Workover

In accordance with Rule 19.15.17 NMAC, the following plan describes the general operations and maintenance (O&M) of temporary pits on WPX Energy Production, LLC (WPX) locations in the San Juan Basin of New Mexico. This is WPX's standard procedure for all temporary pits to be utilized for the drilling, completion and/or workover of oil and gas wells operated by WPX. For those temporary pits which do not conform to this standard O&M plan, a separate well specific O&M plan will be developed and utilized.

General Plan Requirements:

1. WPX will operate and maintain a temporary pit to contain liquids and solids associated with drilling, completion and workover of oil and gas wells which will prevent contamination of fresh water resources and protect public health and the environment.
2. WPX will to the extent practical conserve drilling fluids for reuse by transferring liquids to pits ahead of the rigs. All other fluids will be disposed by evaporation or transport to Basin Disposal, Inc in Bloomfield, New Mexico (Permit # NM-01-005).
3. WPX shall maintain at least two (2) feet of vertical freeboard for a temporary pit.
4. WPX shall remove all free liquids from a temporary pit within 30 days from the date the drilling or workover rig is released.
5. Only fluids and solids generated during the drilling/completion/workover process may be discharged into a temporary pit. Other miscellaneous solid waste or debris will not be allowed.
6. WPX will not discharge or store any hazardous waste as defined under RCRA 40CFR 261 and 19.15.1.7.W(3) NMA in any temporary pit.
7. If any pit liner's integrity is compromised, or if any penetration of the liner occurs:
 - a. Above the liquid's surface, WPX shall repair the damage or replace the liner as necessary. WPX will notify the NMOCD Aztec District Office by phone or email within 48-hours of discovery.
 - b. Leak below the liquid's surface, WPX shall suspend operations, remove all liquids above the damaged liner within 48 hours, and repair the damage or replace the liner. 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).
 - c. 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.
8. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides (secondary liner placed over the primary liner), and/or a manifold system.
9. Diversion ditches, around the location or around the perimeter of the pit, shall be maintained as protection from run-on.
10. WPX shall immediately remove any visible layer of oil from the surface of a temporary pit following cessation of drilling/completion/workover operations. Oil absorbent booms will be utilized to contain and remove oil. An oil absorbent boom will stored on-site until the pit is covered.
11. WPX will inspect the temporary pits as follows to ensure compliance with this plan:
 - a. Daily during drilling or workover operations. Inspections will be included with the IADC reports.
 - b. Weekly as long as liquids remain in the pit. Electronic copies of the inspections will be kept at the WPX San Juan Basin office.

- a. Copies of the inspections will be filed with the NMOCD Aztec District office upon pit closure.
- 12. WPX shall remove all free liquids from a blow/flare (cavitation) pit within 48 hours after completing operations. WPX may request additional time to remove liquids from the Aztec District office if it is not feasible to meet the 48 hour requirement.

WPX Energy Production, LLC
San Juan Basin: New Mexico Assets
Temporary Pit In-place Closure Plan
Drilling/Completion and Workover
(Groundwater >100 feet below bottom of pit liner)

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

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

- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection reports
- Sampling Results
- Division Form C-105: *WELL COMPLETION OR RECOMPLETION REPORT AND LOG*
- Copy of Deed Notice filed with the County Clerk (formatted to meet county requirements)

General Plan Requirements:

1. All free-standing liquids will be removed from the pit at the start of the closure process. Liquids will be removed in a manner that the appropriate District Office approves including: recycled, reused, reclaimed, evaporated, and/or disposed of in a Division-approved facility. Once all free liquids are removed, the sludge will be stabilized by one of the following methods depending on equipment availability: blending with clean stockpiled soils or dewatering using a Bowl Decanter Centrifuge, then blending with clean stockpiles soils.
2. The preferred method of closure for all temporary pits will be on-site closure by in-place burial, provided all the criteria in 19.15.17.13.B are met.
3. The surface owner shall be notified of WPX's proposed closure plan using a means that provides proof of notice (i.e. certified mail/return receipt requested).
4. Within six months of the "rig-off" status occurring, WPX will ensure that the temporary pit is covered and recontoured, and that reseeded is in progress.
5. Notice of Closure will be given to the Aztec District office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
 - a. Operator's Name (WPX)
 - b. Well Name and API Number
 - c. Location (USTR)

The pit liner shall be removed above "mud level" after stabilization. Removal of the liner will consist of manually or mechanically cutting the liner at the mud level and removing all remaining liner. Care will be taken to remove "all" of the liner (i.e. anchored material). All

6. excessive liner will be disposed of at a licensed disposal facility (probably San Juan Regional Landfill, operated by Waste Management under NMED Permit SWM-052426).
7. A five-point composite sample will be taken of the pit using sampling tools; all samples will be tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), all contents will be handled per 19.15.17.13(B)(1)(a) (i.e. dig and haul to a Division-approved facility). Approval to haul will be requested of the Aztec District office prior to initiation.

Table 1: Closure Criteria for Temporary Pits in Non-sensitive Areas

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 8015 M(Full Range)* or Method 418.1	2500
GRO/DRO	EPA SW-846 Method 8015M (GRO/DRO)	500
Chlorides	EPA SW-846 Method 300.1	1000

* Preferred method

8. Upon completion of solidification and testing, the pit area will be backfilled with non-waste, earthen material compacted to native conditions to enable effective revegetation for successful evapotranspiration. A minimum of four feet of cover will be used, including replacement of one foot of suitable material to establish vegetation, or the background thickness of topsoil, whichever is greater.
9. Following cover, the site will be recontoured to meet the Surface Management Agency or surface owner requirements. Re-contouring will attempt to match fit, shape, line form, and texture of the surrounding geography. Re-shaping will provide drainage control, prevent ponding, and minimize erosion. Natural drainages will be unimpeded and stormwater Best Management Practices (BMPs) will be used to aid in soil stabilization and protect surface water quality.
10. Notification will be sent to the Aztec District office when the reclaimed area is seeded.
11. WPX shall seed the disturbed areas the first growing season after the pit is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted), consisting of at least three native plant species, including at least one grass, but not including noxious weeds. Cover will be maintained through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. *Note: WPX assumes the seeding stipulations, including mix and seeding methods, specified by the Surface Management Agency (BLM, BOR, USFS, Tribal, etc.) or Landowner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.*
12. Upon the abandonment of all wells on the pad, the temporary pit will be located with a steel marker no less than four inches in diameter, cemented in a hole three feet deep in the center of the on-site burial. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the on-site burial of the temporary pit. The plate will be easily removable and a four-foot tall riser will be threaded into the top of the collar marker and welded around the base with the operations information at the time of all wells on the pad abandoned. The information will include Operator Name, Lease Name, Well Name and number, USTR, and an indicator that the marker is an onsite pit burial location.