

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 June 6, 2013

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

11811

- 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 2306-19M #190H & Chaco 2306-19M 191H
API Number: 30-043-21189 & 30-043-21139 OCD Permit Number: _____
U/L or Qtr/Qtr M Section 19 Township 23N Range 6W County: Sandoval
Center of Proposed Design: Latitude 36.20789 Longitude -107.51696 NAD: 1927 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

2. Pit: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: Drilling 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: _____ bbl Dimensions: L _____ x W _____ x D _____

3. Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: 120 bbl Type of fluid: Produced Water
Tank Construction material: Double wall, double bottom, Steel
 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 _____

RCVD MAR 27 '14
OIL CONS. DIV.
DIST. 3

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
 Alternate. Please specify As per BLM specifications

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. **Variations 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 acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

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
 NA

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.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes No

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

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.

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

Yes No

Within 500 horizontal feet of a spring or 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

10.

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: 11323

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 documents are 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 19.15.17.9 NMAC 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

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 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

13.

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 Multi-well Fluid 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)
 In-place Burial On-site Trench Burial
 Alternative Closure Method

14.

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 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 source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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	<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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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	<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 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Within 300 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 incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

- Written confirmation or verification from the municipality; Written approval obtained from the municipality Yes No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division Yes No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Yes No

Within a 100-year floodplain.

- FEMA map Yes No

16. **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 E of 19.15.17.13 NMAC

Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K 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 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 standards cannot be achieved)

Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

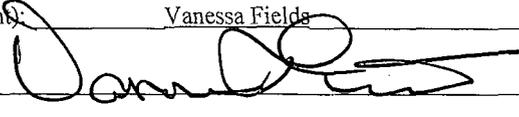
Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17. **Operator Application Certification:**

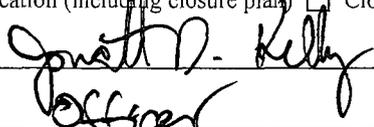
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Vanessa Fields Title: Environmental Specialist

Signature:  Date: 3/26/2014

e-mail address: Vanessa.fields@wpenergy.com Telephone: 505-333-1880

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

OCD Representative Signature:  Approval Date: 3/31/2014

Title: Compliance Officer 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 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: _____

20. **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.

21. **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 for private land only)

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

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: _____

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 30 mil rubber liner overlay between the surrounding soils and the tank top.
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 being installed upon a top felt rock shield with a overlay of 30 mil rubber liner attached to the sidewalls of the inside containment berm.
9. A 42 inch tall, 12 gauge coated metal steel will be constructed around the BGT 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 below 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), WPX Energy Rosa SWD#1 (Permit # SWD-916), WPX Energy 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 run-on.
7. WPX will inspect the BGT pit monthly. Electronic copies of the inspections will be kept at the WPX San Juan Basin office for a minimum of five years following completion. Copies of the inspections will be available to NMOCD upon request.

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.I (6) NMAC and WPX chooses not to retrofit or upgrade. Closure under these conditions will be completed within five years (by June 16, 2013).

General Plan Requirements:

1. Prior to initiating any BGT Closure except in the case of an emergency, WPX will review County Tax Records for the current surface owner of record. The surface owner of record will be notified of the intent to 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(E)(4) NMAC as identified in Table 1. Grab samples will be collected from any area that is wet, discolored or showing other evidence of a release. Results will be reported to the Division following receipt from the lab on Form C-141.

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

⁽¹⁾ Method modified for solid waste.

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

9. If the Division and/or WPX determine there is a release, WPX will comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC.

10. Upon completion of the tank removal, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot of top soil or background thickness whichever is greater and to existing grade. The surface will be re-contoured to match the native grade and prevent ponding.
11. For those portions of the former pit area no longer required for production activities, WPX will seed the disturbed areas the first growing season after the pit is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other Division-approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintained that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. *Note: If a surface owner agreement requires reseeding or other surface restoration that do not meet the re-vegetation requirements of 19.15.17.13.1 NMAC then WPX will submit the proposed alternative with written documentation that the surface owner agrees to the alternative, for Division approval.*
12. For those portions of the former pit area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

Closure Report:

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

- Proof of Closure Notice (surface owner & NMOCD)
- Backfilling & Cover Installation
- Site Diagram with coordinates
- Available Inspection reports
- Confirmation Sampling Analytical Results
- Disposal Facility Name(s) and Permit Number(s)
- Application Rate & Seeding techniques
- Photo Documentation of Reclamation

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 42289		*Pool Name LYBROOK GALLUP	
*Property Code		*Property Name CHACO 2306-19M			*Well Number 191H
*OGRID No. 120782		*Operator Name WPX ENERGY PRODUCTION, LLC			*Elevation 7012'

¹⁰ Surface Location

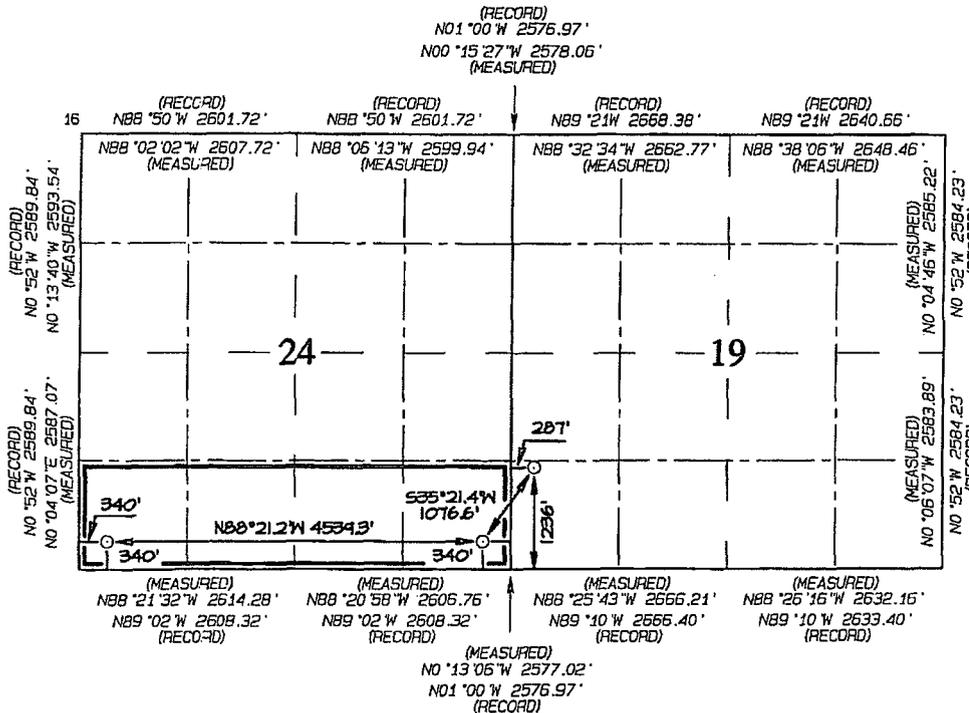
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	19	23N	6W		1236	SOUTH	287	WEST	SANDOVAL

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
M	24	23N	7W		340	SOUTH	340	WEST	SANDOVAL

¹² Dedicated Acres 150.0 Acres S/2 S/2 - Section 24	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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
340' FSL 340' FWL
SECTION 24, T23N, R7W
LAT: 36.20518°N
LONG: 107.53412°W
DATUM: NAD1927

LAT: 36.20519°N
LONG: 107.53473°W
DATUM: NAD1983

POINT-OF-ENTRY
340' FSL 340' FWL
SECTION 24, T23N, R7W
LAT: 36.20498°N
LONG: 107.51874°W
DATUM: NAD1927

LAT: 36.20499°N
LONG: 107.51935°W
DATUM: NAD1983

SURFACE LOCATION
1236' FSL 287' FWL
SECTION 19, T23N, R6W
LAT: 36.20742°N
LONG: 107.51667°W
DATUM: NAD1927

LAT: 36.20743°N
LONG: 107.51728°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 Revised: FEBRUARY 15, 2013

Date of Survey: JULY 11, 2012

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

7-16
16

MU-IE DRILLING, INC.

DAY Wed

JAN. 03. 2013 09:30 5052584531

DRILLER <u>Jeremy</u>	LEFT TOWN	ARRIVED FIELD
HELPER <u>Andy</u>	LEFT FIELD	ARRIVED TOWN
HELPER <u>Tony</u>	TOTAL FOOTAGE TODAY	

RIG NO. 211 DATE 12/5/12 CLIENT WPX
 BEGIN WORK ON HOLE NO. Lybrook 237-19 #7011 FEET
 BEGIN WORK ON HOLE NO. _____ AT _____ FEET

1584

TIME		ACTIVITY
FROM	TO	
2:30	3:00	Roll on location / Rig up Drill (0-70') TON
3:00	4:00	Wait for water meter readings (wet)
4:00	4:30	Rig down / move off (Water level @ 50')
		Note:

MOT DRILLING

BIT RECORD			
SIZE & MAKE	SERIAL NO.	FOOTAGE	
			1/3 Day Rig 1166 ⁶⁷
			1/2 Rig Supermeter 258 ³⁷
			1/2 Water Meter 33 ³⁸
			Tax 103 ⁹¹
			Total 1562 ²⁵
CIRCULATION MATERIAL			
QUAN.	UNIT	MATERIAL	

#0461 P. 002 / 002

VO. OF LOADS OF WATER _____ SOURCE _____

**Hydrogeological Report
WPX Energy Production, LLC
Chaco 2306-19M 191H**

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 7,012 feet MSL.

General Regional Groundwater Description:

As a portion of the San Juan Basin, the FFO 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 even terrain, with a very gentle slope to the north-northeast toward Escrito Canyon.

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 less than 100 feet below bottom of pit liner. Within a one-mile radius of this location, there is no iWATERS well with recorded water depth. However, based on the comparison between the elevation of the location and the test well Chaco 188H groundwater is estimated at 98 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 July 2013.

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,

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

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

(In feet)

POD Number	POD		Q Q Q				X	Y	Depth	Depth	Water			
	Code	Subbasin	County	64	16	4			Sec	Tws	Rng	Well	Water Column	
<u>SJ 01507</u>			RA	3	3	4	10	23N	07W	269889	4013098*	1709	900	809
<u>SJ 02233</u>			RA	1	1	2	15	23N	07W	269856	4012864*	1100		
<u>SJ 02233 CLW223636</u>	O		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.



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 Number	POD Code	Subbasin	County	Q Q Q			X	Y	Depth	Depth	Water			
				64	16	4			Sec	Tws	Rng	Well	Water	Column
<u>SJ 01156</u>			RA	2	2	1	18	23N	06W	274330	4012555*	1500	200	1300
<u>SJ 01506</u>			SA	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

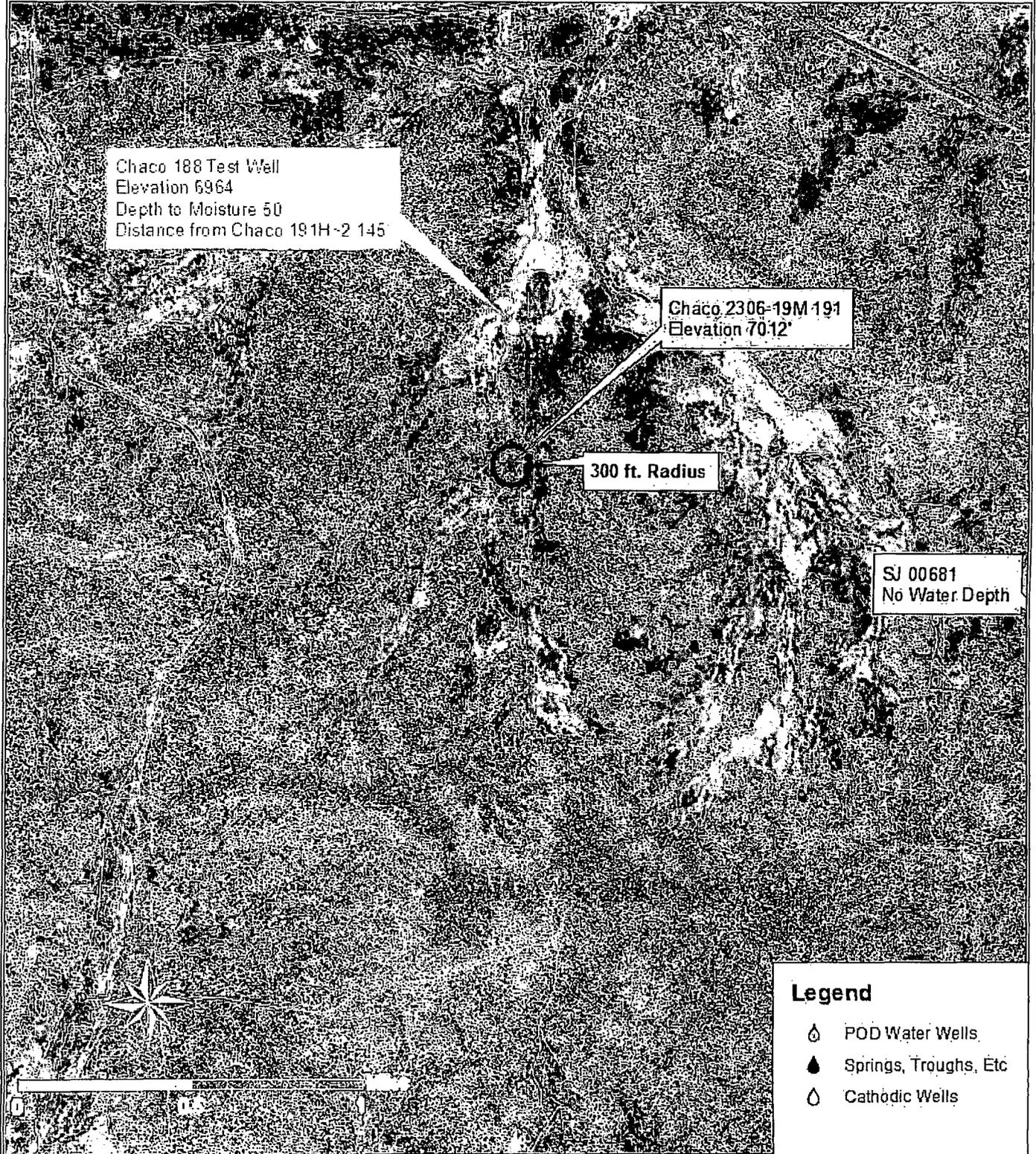
PLSS Search:

Township: 23N Range: 06W

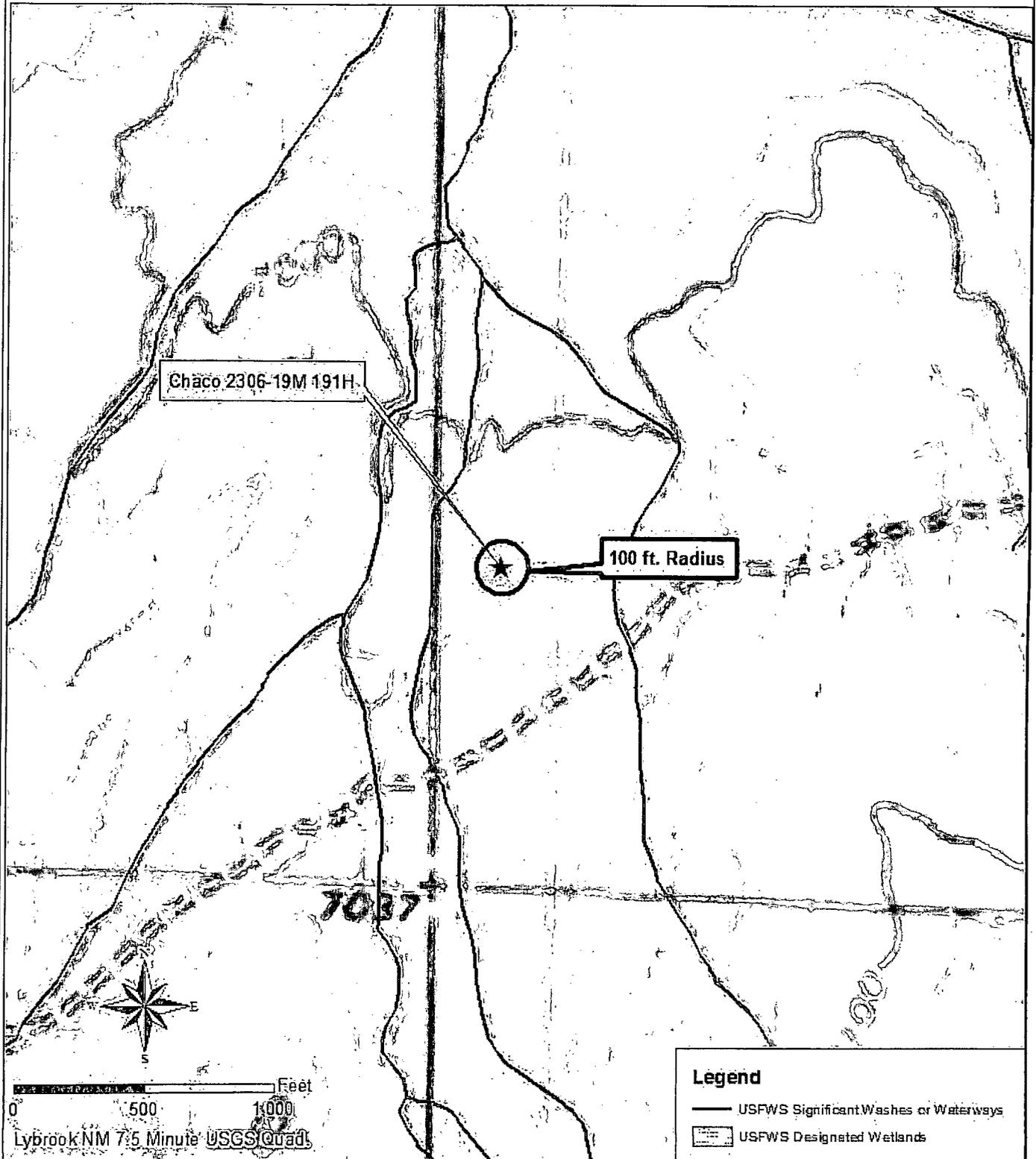
*UTM location was derived from PLSS - see Help

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.

Siting Criteria Map I
Water Wells, Cathodic Wells, & Springs
WPX Energy Production, LLC
Chaco 2306-19M 191H
T23N, R06W, Section 19 NMPM
Sandoval County, New Mexico



Siting Criteria Map II
Topographic Features
WPX Energy Production, LLC
Chaco 2306-19M 191H
T23N, R06W, Section 19 NMPM
Sandoval County, New Mexico



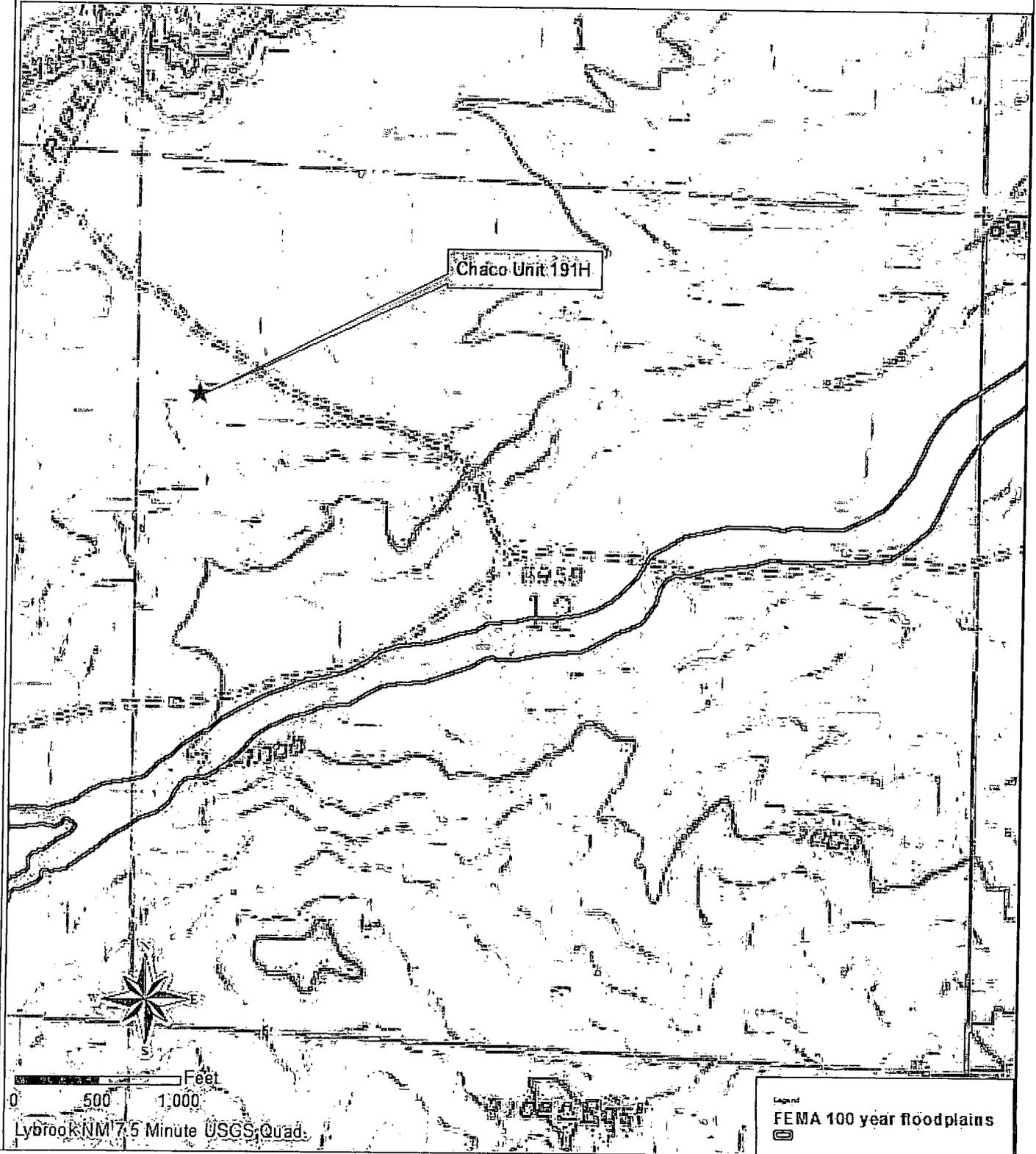
FEMA Map – 100-Year Floodplain:

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

Siting Criteria Compliance Demonstrations:

The Chaco 2306-19M 191H 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 100 feet of a continuously flowing water course or within 100 feet of any other significant water course, lakebed, sinkhole, or playa lake (see Siting Criteria Map II). The site is not within 100 feet of any reported riparian areas or wetlands (see attached USFWS wetland map); within 300 feet of any private, domestic fresh water well or spring; or within 300 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 2306-19M 191H
T23N, R06W, Section 19 NMPM
Sandoval County, New Mexico

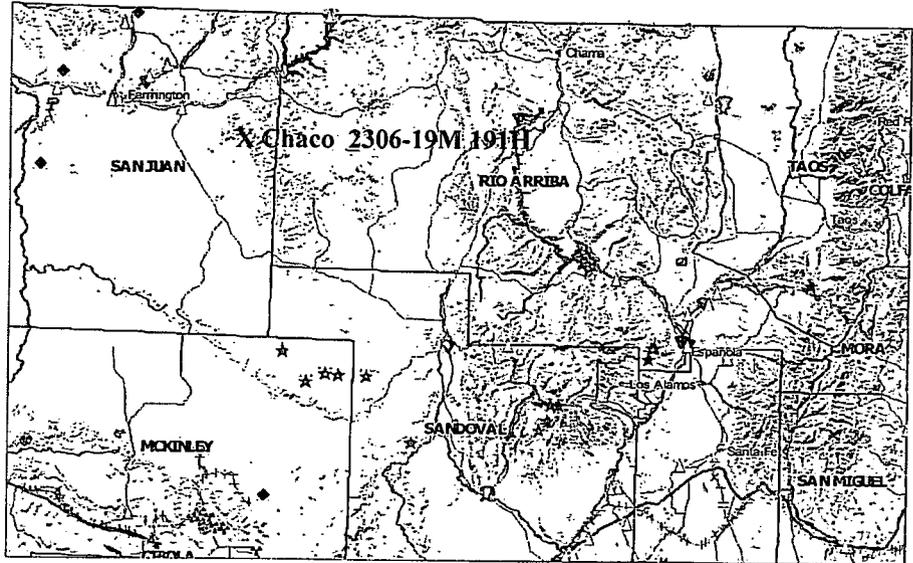


MMQonline Public Version

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



SCALE 1 : 2,203,053





RCVD MAR 27 '14
OIL CONS. DIV.
DIST. 3

721. South Main Street
Aztec, NM 87410

March 26, 2014

Jonathan Kelly
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Dear Mr. Kelly

Please find attached the modification below grade tank registration for the Chaco2306-19M #191H to add the Chaco 2306-19M #190H in which both locations are sitting on the same pad. The BGT is sitting on the Chaco 2306-19M #191H, produced water is being piped into the Chaco 2306-19M #190H BGT. The coordinates of the BGT is provided in the modification report. I have attached the letter previously submitted to the NMOCD for the variance request.

Please let me know if you need any further information regarding this registration.

Thank you,

A handwritten signature in black ink, appearing to read 'Vanessa Fields', with a long horizontal flourish extending to the right.

Vanessa Fields
Environmental Specialist

Cc: /
Environmental file