

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 3/26/14
Well information:
Operator WPX, Well Name and Number Chaco 2408-26E 126H
API# 30-045-35528, Section 26, Township 24 NS, Range 8 EW

Conditions of Approval:

(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☐ Hold C-104 for NSL, NSP, DHC
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☐ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☐ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☐ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils

Charles Harris
NMOCD Approved by Signature

4-10-2014
Date
A

RECEIVED

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAR 26 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

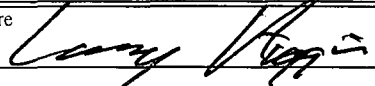
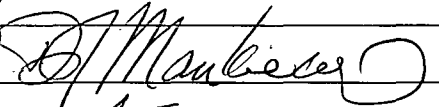
Forming on Field Office
Bureau of Land Management

5. Lease Serial No. NO-G-0110-1555
6. If Indian, Allottee or Tribe Name
7. If Unit or CA Agreement, Name and No. CA needed
8. Lease Name and Well No. Chaco 2408-26E #126H
9. API Well No. 30-045-35528
10. Field and Pool, or Exploratory Lybrook Gallup
11. Sec., T., R., M., or Blk. and Survey or Area Sec 27, T24N R8W
12. County or Parish San Juan County
13. State NM
14. Distance in miles and direction from nearest town or post office* approximately 6 miles northwest of Lybrook, New Mexico
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 324'
16. No. of Acres in lease 160
17. Spacing Unit dedicated to this well 160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2290
19. Proposed Depth 10,613' MD / 5,353' TVD
20. BLM/BIA Bond No. on file B001576
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6812' GR
22. Approximate date work will start* June 1, 2014
23. Estimated duration 1 month

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Larry Higgins	Date 03/26/2014
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) D. Mankiewicz	Date 4/3/14
Title AFM	Office FEO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

WPX Energy Production, LLC, proposes to develop the Lybrook Gallup formation at the above described location in accordance with the attached drilling and surface use plans.

The well pad surface is under jurisdiction of the BLM. The road and location are off lease.

This location has been archaeologically surveyed by La Plata Archaeological Consultants. Copies of their report have been submitted directly to the BLM.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS
15. A new access road is needed to comply with attached "GENERAL REQUIREMENTS"

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOC D N

APD Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 26th day of March, 2014.

Name Larry Higgins

Position Title Regulatory Specialist

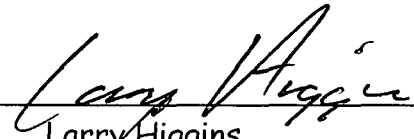
Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 333-1808

Field representative (if not above signatory) _____

E-mail larry.higgins@wpxenergy.com

Date: 03/26/14



Larry Higgins
Regulatory Spec.
WPX Energy Production, LLC

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
RECEIVED

MAR 26 2014

WELL LOCATION AND ACREAGE DEDICATION PLAT

Farmington Field Office
Bureau of Land Management

¹ API Number 30-045-35528	² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 313132	⁵ Property Name CHACO 2408-26E	⁶ Well Number 126H
⁷ GRID No. 120782	⁸ Operator Name WPX ENERGY PRODUCTION, LLC	⁹ Elevation 6812'

¹⁰Surface Location

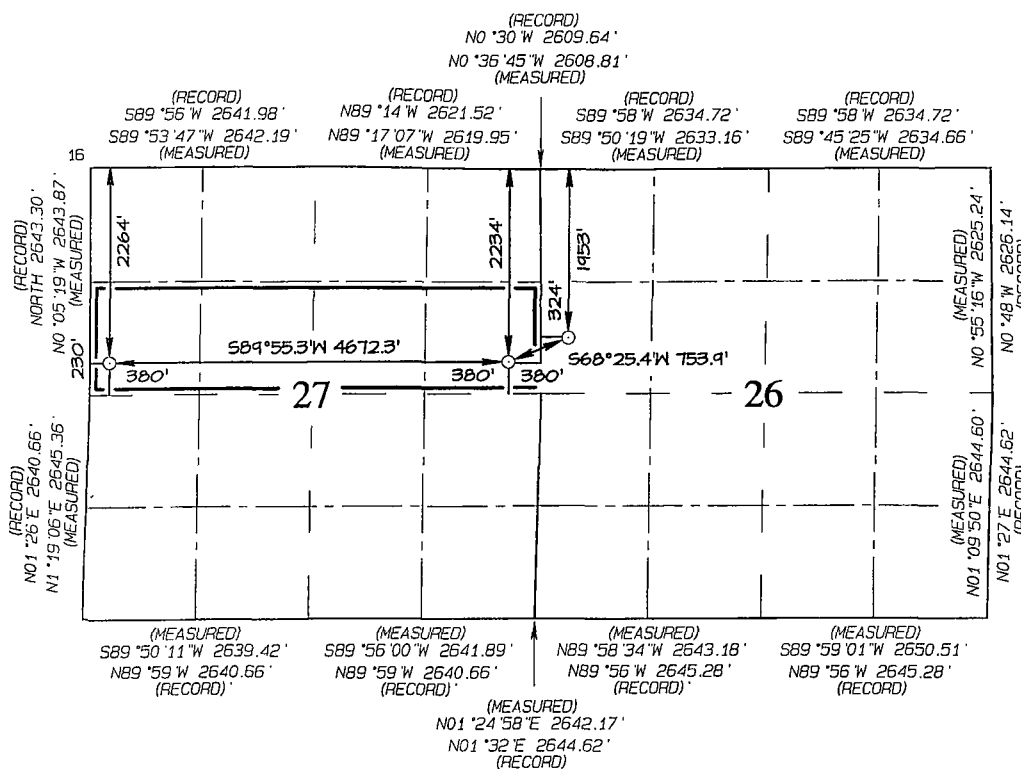
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	26	24N	8W		1953	NORTH	324	WEST	SAN JUAN

¹¹Bottom 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
E	27	24N	8W		2264	NORTH	230	WEST	SAN JUAN

¹² Dedicated Acres 160.0 Acres S/2 N/2 - Section 27	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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
2264' FNL 230' FWL
SECTION 27, T24N, R8W
LAT: 36.28635°N
LONG: 107.67665°W
DATUM: NAD1927

POINT-OF-ENTRY
2234' FNL 380' FEL
SECTION 27, T24N, R8W
LAT: 36.28635°N
LONG: 107.66079°W
DATUM: NAD1927

SURFACE LOCATION
1953' FNL 324' FWL
SECTION 26, T24N, R8W
LAT: 36.28711°N
LONG: 107.65841°W
DATUM: NAD1927

LAT: 36.28636°N
LONG: 107.67726°W
DATUM: NAD1983

LAT: 36.28636°N
LONG: 107.66140°W
DATUM: NAD1983

LAT: 36.28712°N
LONG: 107.65902°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.

Larry Higgins 3/26/14
Signature Date
Larry Higgins
Printed Name
larry.higgins@wpxenergy.com
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: NOVEMBER 9, 2013
Date of Survey: JUNE 25, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

WPX ENERGY**Operations Plan***(Note: This procedure will be adjusted on site based upon actual conditions)*

DATE: 11/07/2013 **FIELD:** Lybrook (Gallup)

WELL NAME: Chaco 2408-26E #126H **SURFACE:** BLM

SH Location: SWNW Sec 26-24N-8W **ELEVATION:** 6,812' GR

BH Location: SWNW Sec 27-24N-8W
San Juan Co, NM **MINERALS:** Indian

MEASURED DEPTH: 10,613' **LEASE #:** BIANOG 01101556
BIANOG 00101555

I. GEOLOGY: Surface formation – San Jose**A. FORMATION TOPS:** (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1,155	1,151	Point Lookout	4,201	4,179
Kirtland	1,304	1,298	Mancos	4,400	4,378
Pictured Cliffs	1,843	1,828	Kickoff Point	4,857	4,836
Lewis	1,932	1,916	Target Top	5,522	5,386
Chacra	2,726	2,704	Landing Point	5,938	5,502
Cliff House	3,367	3,345	Target Base	5,938	5,502
Menefee	3,405	3,383			
			TD	10,613	5,353

- B. MUD LOGGING PROGRAM:** Mudlogger on location from surface csg to TD.
- C. LOGGING PROGRAM:** LWD GR from surface casing to TD. LWD GR / E- Sonic will be run in Lateral.
- D. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. DRILLING

- A. MUD PROGRAM:** LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, the curve portion of the wellbore. LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.
- B. BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes and 1500 psi (High) for 10 minutes**. Pressure test surface casing to **600 psi for 30 minutes** and intermediate casing to **1500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

NOTE: Vertical portion of the well (8-3/4 in.) will be directionally drilled as per attached Directional Plan to +/- 4,857' (MD) / 4,836' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,938' (MD) / 5,502' (TVD). 7 in. csg will be set at this point. A 6-1/8" Lateral will be drilled as per the attached Directional Plan to +/- 10,613' (MD) / 5,353' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,788 ft. to TD and cemented. Liner will be tied back to surface w / 4-1/2" Casing for stimulation / testing, then removed from the well.

III. MATERIALS**A. CASING PROGRAM:**

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	12.25"	400'+	9.625"	36#	J-55
Intermediate	8.75"	5,938'	7"	23#	K-55
Prod. Liner	6.125"	5,788' - 10,613'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5,788'	4-1/2"	11.6#	N-80

B. FLOAT EQUIPMENT:

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (4) joints of Surface Casing.
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install (1) centralizer on each of the bottom (3) joints and one standard centralizer every (3) joints to 2,500 ft. Run (1) centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft.
3. PRODUCTION LINER: Run 4-1/2" Liner with cement nose guide Float Shoe + 2jts. of 4-1/2" casing + Landing Collar + 4-1/2" pup joint + (2) RSI (Sliding Sleeves) positioned inside 330ft Hard line. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers. Set seals on Liner Hanger. Test TOL to 1500 psi for 15 minutes.
4. TIE-BACK CASING: None

C. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. SURFACE: 10 bbl Fr Water Spacer + 190 sx (222.3 cu.ft.) of "Premium Cement" + 2% Calcium Chloride Cement + 0.125# pps of Poly-E-Flake, 15.8 #/gal (1.17 cu ft./sk, Vol 39.58 Bbls.). The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 600psi. Total Volume: (222.3 cu-ft/190 sx/39.6 Bbls). TOC at Surface.
2. INTERMEDIATE: 20 bbl (112 cu-ft) Mud Flush III spacer + Lead: 850 sx Foamed 50/50 Poz Cement. 13.0 ppg + 0.1% Halad 766 + 0.2% Versaset + 1.5% Chem-Foamer 760 (Yield :1.43 cu-ft/ sk. / Vol: 1216 cu-ft / 216.5 Bbls.) + TAIL: 100 sx 13.5 #/gal. + 0.2% Versaset + 0.15% HALAD-766 (Yield: 1.28 cu-ft / sk / Vol: 128 cu-ft / 22.8 Bbls.). + Fresh Water Displacement (1,362 cu-ft / +/- 242 Bbls) + 100 sx Top-Out Cement Premium: Yield: (1.17 cu-ft/ sk / (Vol: 117 cu-ft / 20.8 Bbls). Test Casing to 1500 PSI for 30 minutes. Total Cement Volume: (1050 sx / 1461 cu-ft / 260 bbls). Mix with +/- 84,000 SCF Nitrogen. TOC at surface.
3. PRODUCTION LINER: **STAGE 1**: 10 bbl (56 cu-ft) Fr Water Spacer. **STAGE 2**: 40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III + 0.5 gal/bbl Musol + 38.75 ppb Barite + 0.5 gal/bbl SEM-7. **STAGE 3**: 10 bbl Fr Water Spacer. **STAGE 4: Lead Cement**: 50 / 50 Poz Premium + 0.2% Versaset + 0.2% Halad -766, Yield 1.43 cu ft/sk, 13.0 ppg, (10 sx / 14.3 cu ft. / 2.5 bbls.). **STAGE 5**: 200 sx. Foamed Lead Cement: 50 / 50 Poz Standard + 0.2% Versaset + 0.2% HALAD-766 + 1.5% Chem-Foamer 760. Yield 1.97 cu-ft/sk. 13.0 ppg (200 sx / 394 cu-ft. / 70.2 bbls.). **STAGE 6**: Tail Cement : 100 sx. 50/50 Poz Standard + 0.2% Versaset + 0.05% HALAD-766 + .05% SA-1015, Weight: 13.5 ppg (100 sx / Yield 1.28 cu ft/sk. / 128 cu ft. / 22.8 bbls) **STAGE 7**: Displace w/ +/- 137 bbl Fr Water. Total Cement (310 sx / 536.3 cu ft / 95.5 bbls). Mix Foamed Cement w/ +/- 75,000 SCF Nitrogen. Est. TOC +/- 5,488 ft.

IV. COMPLETION

A. CBL

1. Run CCL for perforating.

B. PRESSURE TEST

1. Pressure test 4-1/2" casing to 4500 psi max, hold at 1500 psi for 30 minutes. Increase pressure to open RSI sleeves.

C. STIMULATION

1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N₂ for 17 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs and flowback lateral.

D. RUNNING TUBING

1. Production Tubing: Run 2-7/8", 6.5#, J-55, EUE tubing with a SN on top of bottom joint. Land tubing near Top of Liner point of curve (~5,600' MD).

- Although this horizontal well will be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 B(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 B(2) NMAC, 19.15.16.15 B(2) NMAC, and 19.15.16.15 B(4) NMAC.

NOTE:

Installation of RSI sleeves at Toe of Lateral.

Proposed Operations:

A 4-1/2" 11.6# N-80 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# K-55 Intermediate casing (set at 5,788 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,788 ft. (MD) +/- 78 degree angle. TOC: +/- 5,488 ft. (MD). Set Pack-off at TOL.

After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

A 4-1/2" 11.6# N-80 tie-back string with seal assembly will be run and stung into the PBR of the liner hanger, tested to 1500 PSI and hung off at the surface.

The Drilling Rig will be rigged down at this point and Completion operations will begin. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

WELL	Chaco 2408-26E #126H	FIELD	NM San Juan County NAD27	STRUCTURE	Sec 26-24N-8W
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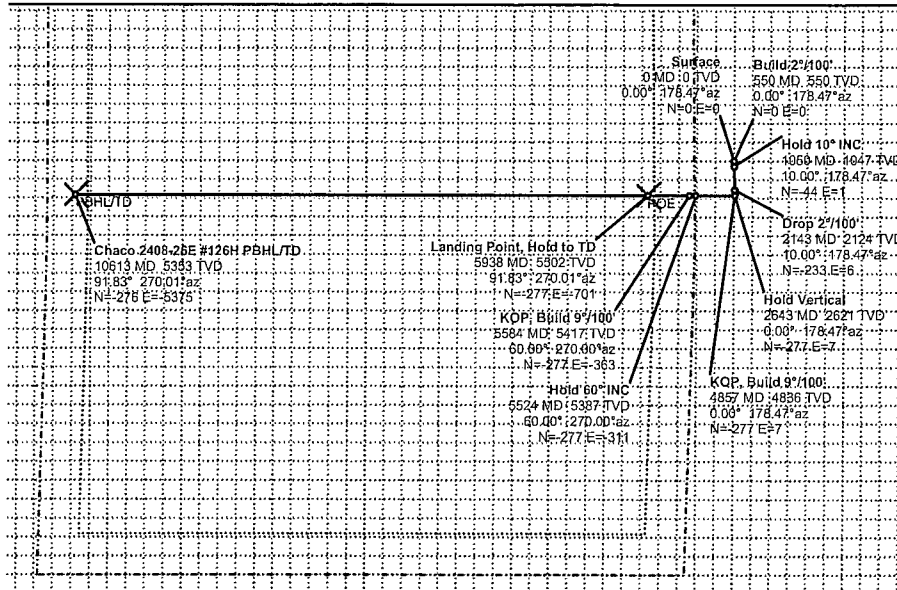
Magnetic Parameters			Surface Location			NAD27 New Mexico State Plane, Western Zone, US Foot			Miscellaneous						
Model:	BGGM 2013	Dip:	63.045°	Date:	November 05, 2013	Lat:	N 35 17 13.596	Northing:	1923797.68 ftUS	Grid Conv:	0.104°	Slot:	Chaco 2408-26E #129H	TVD Ref:	RKB(6826# above MSL)
		Mag Dec:	9.545°	FS:	50191.5m	Lon:	W 107 39 30.276	Easting:	551553.18 ftUS			Plan:	R1 mdv 05Nov13	Srvy Date:	November 05, 2013

Proposal

<<< W Scale = 1:1500(ft) E >>>
-4500 -3000 -1500 0



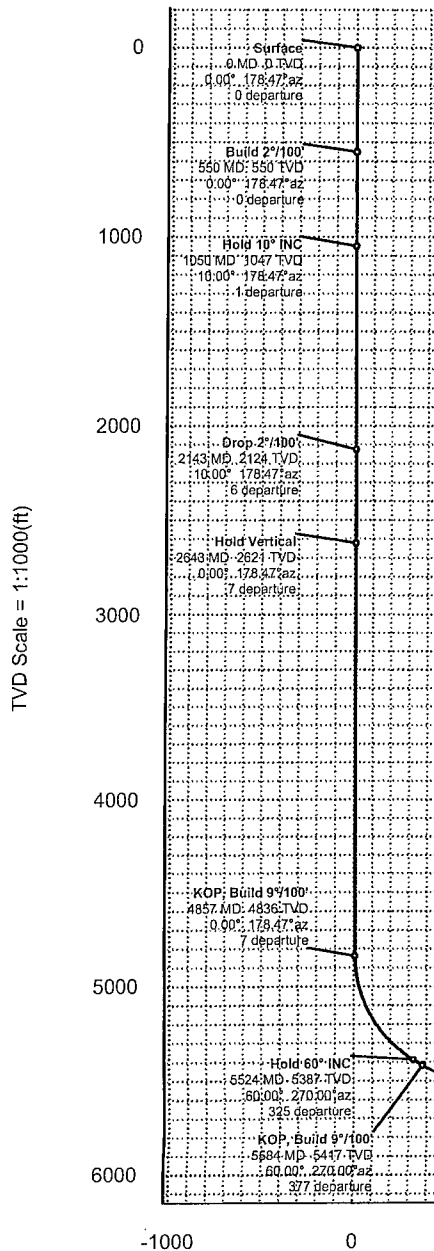
True North
Tot Corr (M->T 9.5448°)
Mag Dec (9.545°)
Grid Conv (0.104°)



0
-1500
-3000
Scale = 1:1500(ft) N >>>
<<< S

Targets						
Name	TVD(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Shape
Chaco 2408-26E #126H POE	5502.00	-276.67	-701.50	N 36 17 10.860	W 107 39 38.844	POINT
Chaco 2408-26E #126H PBHL/TD	5353.00	-276.17	-5374.70	N 36 17 10.860	W 107 40 35.922	POINT

Critical Points									
Comments	Survey	INC	AZM	TVD(ft)	SS TVD	VS(ft)	NS(ft)	EW(ft)	DLS
Surface	0.00	0.00	178.47	0.00	-6826.00	0.00	0.00	0.00	
Build 2°/100'	550.00	0.00	178.47	550.00	-6276.00	0.00	0.00	0.00	0.00
Hold 10° INC	1049.98	10.00	178.47	1047.45	-5778.55	1.08	-43.50	1.16	2.00
Drop 2°/100'	2142.69	10.00	178.47	2123.55	-4702.45	5.76	-233.18	6.21	0.00
Hold Vertical	2642.67	0.00	178.47	2621.00	-4205.00	6.84	-276.68	7.37	2.00
KOP, Build 9°/100'	4857.37	0.00	178.47	4835.70	-1990.30	6.84	-276.68	7.37	0.00
Hold 60° INC	5524.03	60.00	270.00	5387.03	-1438.97	324.73	-276.68	-310.94	9.00
KOP, Build 9°/100'	5584.03	60.00	270.00	5417.03	-1408.97	376.62	-276.68	-362.90	0.00
Landing Point, Hold to TD	5937.65	91.83	270.01	5502.00	-1324.00	714.76	-276.66	-701.49	9.00
Chaco 2408-26E #126H PBHL/TD	10613.24	91.83	270.01	5353.00	-1473.00	5381.79	-276.17	-5374.70	0.00



Vertical Section (ft) Azim = 267.06° Scale = 1:1000(ft) Origin = 0 N/-S, 0 E/-W



Chaco 2408-26E #126H R1 mdv 05Nov13 Proposal Geodetic Report

(Def Plan)



Report Date: November 05, 2013 - 04:06 PM
Client: WPX Energy
Field: NM San Juan County NAD27
Structure / Slot: WPX Sec 26-24N-8W (Chaco 2408-26E #126H) / Chaco 2408-26E #126H
Well: Chaco 2408-26E #126H
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Chaco 2408-26E #126H R1 mdv 05Nov13
Survey Date: November 05, 2013
Tort / AHD / DDI / ERD Ratio: 111.827 * / 5658.850 ft / 6.087 / 1.028
Coordinate Reference System: NAD27 New Mexico State Plane, Western Zone, US Feet
Location Lat / Long: N 36° 17' 13.59600", W 107° 39' 30.27600"
Location Grid N/E Y/X: N 1923797.076 ftUS, E 551553.178 ftUS
CRS Grid Convergence Angle: 0.1035 *
Grid Scale Factor: 0.99991971

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 267.059 * (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 6826.000 ft above MSL
Seabed / Ground Elevation: 6812.000 ft above MSL
Magnetic Declination: 9.545 *
Total Gravity Field Strength: 998.5080mgm (9.80665 Bases)
Total Magnetic Field Strength: 50191.475 nT
Magnetic Dip Angle: 63.045 *
Declination Date: November 05, 2013
Magnetic Declination Model: BGGM 2013
North Reference: True North
Grid Convergence Used: 0.0000 *
Total Corr Mag North->True North: 9.5448 *
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	178.47	0.00	0.00	0.00	0.00	N/A	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
	100.00	0.00	178.47	100.00	0.00	0.00	0.00	0.00	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
	200.00	0.00	178.47	200.00	0.00	0.00	0.00	0.00	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
	300.00	0.00	178.47	300.00	0.00	0.00	0.00	0.00	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
	400.00	0.00	178.47	400.00	0.00	0.00	0.00	0.00	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
	500.00	0.00	178.47	500.00	0.00	0.00	0.00	0.00	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
Build 2°/100'	550.00	0.00	178.47	550.00	0.00	0.00	0.00	0.00	1923797.08	551553.18	N 36 17 13.60	W 107 39 30.28
	600.00	1.00	178.47	600.00	0.01	-0.44	0.01	2.00	1923796.64	551553.19	N 36 17 13.59	W 107 39 30.28
	700.00	3.00	178.47	699.93	0.10	-3.92	0.10	2.00	1923793.15	551553.29	N 36 17 13.56	W 107 39 30.27
	800.00	5.00	178.47	799.68	0.27	-10.90	0.29	2.00	1923786.18	551553.49	N 36 17 13.49	W 107 39 30.27
	900.00	7.00	178.47	899.13	0.53	-21.35	0.57	2.00	1923775.73	551553.78	N 36 17 13.38	W 107 39 30.27
	1000.00	9.00	178.47	998.15	0.87	-35.26	0.94	2.00	1923761.82	551554.18	N 36 17 13.25	W 107 39 30.26
Hold 10° INC	1049.98	10.00	178.47	1047.45	1.08	-43.50	1.16	2.00	1923753.58	551554.42	N 36 17 13.17	W 107 39 30.26
	1100.00	10.00	178.47	1096.71	1.29	-52.19	1.39	0.00	1923744.90	551554.66	N 36 17 13.08	W 107 39 30.26
	1200.00	10.00	178.47	1195.19	1.72	-69.54	1.85	0.00	1923727.54	551555.16	N 36 17 12.91	W 107 39 30.25
	1300.00	10.00	178.47	1293.67	2.15	-86.90	2.31	0.00	1923710.19	551555.65	N 36 17 12.74	W 107 39 30.25
	1400.00	10.00	178.47	1392.15	2.58	-104.26	2.78	0.00	1923692.83	551556.14	N 36 17 12.56	W 107 39 30.24
	1500.00	10.00	178.47	1490.63	3.01	-121.62	3.24	0.00	1923675.47	551556.64	N 36 17 12.39	W 107 39 30.24
	1600.00	10.00	178.47	1589.11	3.43	-138.98	3.70	0.00	1923658.12	551557.13	N 36 17 12.22	W 107 39 30.23
	1700.00	10.00	178.47	1687.59	3.86	-156.33	4.16	0.00	1923640.76	551557.62	N 36 17 12.05	W 107 39 30.23
	1800.00	10.00	178.47	1786.07	4.29	-173.69	4.63	0.00	1923623.41	551558.12	N 36 17 11.88	W 107 39 30.22
	1900.00	10.00	178.47	1884.55	4.72	-191.05	5.09	0.00	1923606.05	551558.61	N 36 17 11.71	W 107 39 30.21
	2000.00	10.00	178.47	1983.03	5.15	-208.41	5.55	0.00	1923588.70	551559.11	N 36 17 11.54	W 107 39 30.21
Drop 2°/100'	2100.00	10.00	178.47	2081.51	5.58	-225.77	6.01	0.00	1923571.34	551559.60	N 36 17 11.36	W 107 39 30.20
	2142.89	10.00	178.47	2123.55	5.76	-233.18	6.21	0.00	1923563.93	551559.81	N 36 17 11.29	W 107 39 30.20
	2200.00	8.85	178.47	2180.09	5.99	-242.56	6.46	2.00	1923554.55	551560.08	N 36 17 11.20	W 107 39 30.20
	2300.00	6.85	178.47	2279.15	6.33	-256.22	6.82	2.00	1923540.89	551560.47	N 36 17 11.08	W 107 39 30.19
	2400.00	4.85	178.47	2378.62	6.58	-266.41	7.10	2.00	1923530.70	551560.76	N 36 17 10.96	W 107 39 30.19
	2500.00	2.85	178.47	2478.39	6.75	-273.13	7.28	2.00	1923523.98	551560.95	N 36 17 10.90	W 107 39 30.19
Hold Vertical	2600.00	0.85	178.47	2578.33	6.83	-276.36	7.36	2.00	1923520.75	551561.04	N 36 17 10.86	W 107 39 30.19
	2642.87	0.00	178.47	2621.00	6.84	-276.68	7.37	2.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	2700.00	0.00	178.47	2678.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	2800.00	0.00	178.47	2778.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	2900.00	0.00	178.47	2878.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3000.00	0.00	178.47	2978.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3100.00	0.00	178.47	3078.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3200.00	0.00	178.47	3178.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3300.00	0.00	178.47	3278.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3400.00	0.00	178.47	3378.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3500.00	0.00	178.47	3478.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3600.00	0.00	178.47	3578.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3700.00	0.00	178.47	3678.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3800.00	0.00	178.47	3778.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	3900.00	0.00	178.47	3878.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4000.00	0.00	178.47	3978.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4100.00	0.00	178.47	4078.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4200.00	0.00	178.47	4178.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4300.00	0.00	178.47	4278.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4400.00	0.00	178.47	4378.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4500.00	0.00	178.47	4478.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4600.00	0.00	178.47	4578.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4700.00	0.00	178.47	4678.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4800.00	0.00	178.47	4778.33	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
KOP, Build 9°/100'	4857.37	0.00	178.47	4835.70	6.84	-276.68	7.37	0.00	1923520.43	551561.05	N 36 17 10.86	W 107 39 30.19
	4900.00	3.84	270.00	4878.30	8.26	-276.68	5.94	9.00	1923520.43	551559.62	N 36 17 10.86	W 107 39 30.20
	5000.00	12.84	270.00	4977.14	22.73	-276.68	-8.54	9.00	1923520.40	551545.14	N 36 17 10.86	W 107 39 30.38
	5100.00	21.84	270.00	5072.50	52.46	-276.68	-38.31	9.00	1923520.35	551515.37	N 36 17 10.86	W 107 39 30.74
	5200.00	30.84	270.00	5162.03	96.72	-276.68	-82.63	9.00	1923520.27	551471.06	N 36 17 10.86	W 107 39 31.29
	5300.00	39.84	270.00	5243.52	154.42	-276.68	-140.41	9.00	1923520.17	551413.28	N 36 17 10.86	W 107 39 31.99
	5400.00	48.84	270.00	5314.97	224.14	-276.68	-210.22	9.00	1923520.04	551343.47	N 36 17 10.86	W 107 39 32.84
	5500.00	57.84	270.00	5374.62	304.17	-276.68	-290.36	9.00	1923519.89	551263.35	N 36 17 10.86	W 107 39 33.82
Hold 60° INC	5524.03	60.00	270.00	5387.03	324.73	-276.68	-310.94	9.00	1923519.86	551242.76	N 36 17 10.86	W 107 39 34.07
KOP, Build 9°/100'	5584.03	60.00	270.00	5417.03	376.62	-276.68	-362.90	0.00	1923519.76	551190.81	N 36 17 10.86	W 107 39 34.71
	5600.00	61.44	270.00	5424.84	390.53	-276.68	-376.83	9.00	1923519.74	551176.88	N 36 17 10.86	W 107 39 34.88
	5700.00	70.44	270.00	5465.57	481.62	-276.68	-468.04	9.00	1923519.58	551085.67	N 36 17 10.86	W 107 39 35.99
	5800.00	79.44	270.00	5491.53	577.96	-276.67	-564.51	9.00	1923519.41	550989.22	N 36 17 10.86	W 107 39 37.17
	5900.00	88.44	270.00	5502.08	677.17	-276.67	-663.85	9.00	1923519.23	550889.89	N 36 17 10.86	W 107 39 38.38
Landing Point, Hold to TD	5937.65	91.83	270.01	5502.00	714.76	-276.66	-701.49	9.00	1923519.17	550852.25	N 36 17 10.86	W 107 39 38.84
	6000.00	91.83	270.01	5500.01	777.00	-276.66	-763.81	0.00	1923519.06	550789.93	N 36 17 10.86	W 107 39 39.61
	6100.00	91.83	270.01	5496.83	876.82	-276.65	-863.76	0.00	1923518.89	550689.99	N 36 17 10.86	W 107 39 40.83
	6200.00											

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7000.00	91.83	270.01	5468.16	1775.17	-276.57	-1763.30	0.00	1923517.35	549790.52	N 36 17 10.86	W 107 39 51.81
	7100.00	91.83	270.01	5464.97	1874.99	-276.56	-1863.25	0.00	1923517.18	549690.58	N 36 17 10.86	W 107 39 53.03
	7200.00	91.83	270.01	5461.79	1974.80	-276.55	-1963.20	0.00	1923517.00	549590.64	N 36 17 10.86	W 107 39 54.25
	7300.00	91.83	270.01	5458.60	2074.62	-276.54	-2063.15	0.00	1923516.83	549490.70	N 36 17 10.86	W 107 39 55.48
	7400.00	91.83	270.01	5455.42	2174.44	-276.53	-2163.10	0.00	1923516.66	549390.76	N 36 17 10.86	W 107 39 56.70
	7500.00	91.83	270.01	5452.23	2274.26	-276.52	-2263.05	0.00	1923516.49	549290.82	N 36 17 10.86	W 107 39 57.92
	7600.00	91.83	270.01	5449.04	2374.07	-276.51	-2363.00	0.00	1923516.32	549190.88	N 36 17 10.86	W 107 39 59.14
	7700.00	91.83	270.01	5445.86	2473.89	-276.50	-2462.95	0.00	1923516.15	549090.94	N 36 17 10.86	W 107 40 0.36
	7800.00	91.83	270.01	5442.67	2573.71	-276.49	-2562.89	0.00	1923515.98	548991.00	N 36 17 10.86	W 107 40 1.58
	7900.00	91.83	270.01	5439.49	2673.52	-276.48	-2662.84	0.00	1923515.81	548891.06	N 36 17 10.86	W 107 40 2.80
	8000.00	91.83	270.01	5436.30	2773.34	-276.47	-2762.79	0.00	1923515.64	548791.12	N 36 17 10.86	W 107 40 4.02
	8100.00	91.83	270.01	5433.11	2873.16	-276.46	-2862.74	0.00	1923515.47	548691.18	N 36 17 10.86	W 107 40 5.24
	8200.00	91.83	270.01	5429.93	2972.97	-276.45	-2962.69	0.00	1923515.30	548591.23	N 36 17 10.86	W 107 40 6.46
	8300.00	91.83	270.01	5426.74	3072.79	-276.44	-3062.64	0.00	1923515.13	548491.29	N 36 17 10.86	W 107 40 7.68
	8400.00	91.83	270.01	5423.55	3172.61	-276.43	-3162.59	0.00	1923514.96	548391.35	N 36 17 10.86	W 107 40 8.90
	8500.00	91.83	270.01	5420.37	3272.43	-276.41	-3262.54	0.00	1923514.79	548291.41	N 36 17 10.86	W 107 40 10.12
	8600.00	91.83	270.01	5417.18	3372.24	-276.40	-3362.49	0.00	1923514.62	548191.47	N 36 17 10.86	W 107 40 11.35
	8700.00	91.83	270.01	5413.99	3472.06	-276.39	-3462.44	0.00	1923514.45	548091.53	N 36 17 10.86	W 107 40 12.57
	8800.00	91.83	270.01	5410.80	3571.88	-276.38	-3562.39	0.00	1923514.28	547991.59	N 36 17 10.86	W 107 40 13.79
	8900.00	91.83	270.01	5407.62	3671.69	-276.37	-3662.34	0.00	1923514.11	547891.65	N 36 17 10.86	W 107 40 15.01
	9000.00	91.83	270.01	5404.43	3771.51	-276.36	-3762.29	0.00	1923513.94	547791.71	N 36 17 10.86	W 107 40 16.23
	9100.00	91.83	270.01	5401.24	3871.33	-276.35	-3862.23	0.00	1923513.77	547691.77	N 36 17 10.86	W 107 40 17.45
	9200.00	91.83	270.01	5398.06	3971.14	-276.34	-3962.18	0.00	1923513.60	547591.83	N 36 17 10.86	W 107 40 18.67
	9300.00	91.83	270.01	5394.87	4070.96	-276.33	-4062.13	0.00	1923513.43	547491.89	N 36 17 10.86	W 107 40 19.89
	9400.00	91.83	270.01	5391.68	4170.78	-276.31	-4162.08	0.00	1923513.27	547391.94	N 36 17 10.86	W 107 40 21.11
	9500.00	91.83	270.01	5388.49	4270.59	-276.30	-4262.03	0.00	1923513.10	547292.00	N 36 17 10.86	W 107 40 22.33
	9600.00	91.83	270.01	5385.30	4370.41	-276.29	-4361.98	0.00	1923512.93	547192.06	N 36 17 10.86	W 107 40 23.55
	9700.00	91.83	270.01	5382.12	4470.23	-276.28	-4461.93	0.00	1923512.76	547092.12	N 36 17 10.86	W 107 40 24.77
	9800.00	91.83	270.01	5378.93	4570.05	-276.27	-4561.88	0.00	1923512.59	546992.18	N 36 17 10.86	W 107 40 25.99
	9900.00	91.83	270.01	5375.74	4669.86	-276.26	-4661.83	0.00	1923512.42	546892.24	N 36 17 10.86	W 107 40 27.22
	10000.00	91.83	270.01	5372.55	4769.68	-276.24	-4761.78	0.00	1923512.25	546792.30	N 36 17 10.86	W 107 40 28.44
	10100.00	91.83	270.01	5369.36	4869.50	-276.23	-4861.73	0.00	1923512.08	546692.36	N 36 17 10.86	W 107 40 29.66
	10200.00	91.83	270.01	5366.18	4969.31	-276.22	-4961.68	0.00	1923511.91	546592.42	N 36 17 10.86	W 107 40 30.88
	10300.00	91.83	270.01	5362.99	5069.13	-276.21	-5061.62	0.00	1923511.75	546492.48	N 36 17 10.86	W 107 40 32.10
	10400.00	91.83	270.01	5359.80	5168.95	-276.20	-5161.57	0.00	1923511.58	546392.54	N 36 17 10.86	W 107 40 33.32
	10500.00	91.83	270.01	5356.61	5268.76	-276.18	-5261.52	0.00	1923511.41	546292.60	N 36 17 10.86	W 107 40 34.54
	10600.00	91.83	270.01	5353.42	5368.58	-276.17	-5361.47	0.00	1923511.24	546192.65	N 36 17 10.86	W 107 40 35.76
Chaco 2408-26E #126H PBHL/TD	10613.24	91.83	270.01	5353.00	5361.79	-276.17	-5374.70	0.00	1923511.22	546179.43	N 36 17 10.86	W 107 40 35.92

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	14.000	1/100.000	30.000	30.000	SLB_MWD-STD-Depth Only	Original Hole / Chaco 2408-26E #126H R1 mdv 05Nov13
	14.000	10613.237	1/100.000	30.000	30.000	SLB_MWD-STD	Original Hole / Chaco 2408-26E #126H R1 mdv 05Nov13

1. INTRODUCTION

WPX Energy Production, LLC (WPX) is providing this Surface Use Plan of Operations (SUPO)/Plan of Development (POD) to the Bureau of Land Management – Farmington Field Office (BLM-FFO) as part of their Chaco 2408-26E No. 126H (126H) Application for Permit to Drill (APD) and Right-of-Way (ROW) Grant application. This SUPO/POD is provided per Onshore Oil and Gas Order No. 1, 43 Code of Federal Regulations (CFR) 2804.12, 43 CFR 2884.11, BLM Manual Section 2804 (Applying for Federal Land Policy and Management Act [FLPMA] Grants), and BLM FLPMA ROW Manual Section 2884 (Applying for a Mineral Leasing Act Grant or a Temporary Use Permit).

The 126H well, which will drill to Navajo Allotted minerals, will be permitted under an APD. The associated well pad, which will be located off-lease on BLM-FFO surface, will be permitted under a ROW Grant. No additional permitting will be required for the access road, because it will be located entirely within the well pad construction zone. One previously disturbed staging area will be authorized by an agreement with Bannon Energy Inc. (Bannon).

A pre-disturbance onsite meeting was held for the project on September 19, 2013. The BLM, WPX, and an environmental consultant (Nelson Consulting, Inc. [NCI]) attended the meeting.

In addition to the best management practices (BMPs) provided below and in the Surface Reclamation Plan (Reclamation Plan; Appendix A), the general stipulations will be followed, if any are attached to the ROW Grant.

2. PROJECT LOCATION AND DESCRIPTION

2.1. Project Location

The project area is located in San Juan County, New Mexico. The project area is located approximately 34 miles south-southeast of the town of Bloomfield, New Mexico. To access the project area from the town of Bloomfield, head south on U.S. Highway 550 from the U.S. Highway 550-U.S. Highway 64 intersection for approximately 43 miles, turn left onto County Road 7997 for approximately 1.7 miles, turn right onto an unnamed road for approximately 0.7 mile, then turn left onto another unnamed road for approximately 0.3 mile. The start of the 126H access road will be on the right side of the road. The access route from U.S. Highway 550 is depicted on Figure B.1 (Appendix B) and on the construction plats provided in the ROW Grant application.

The proposed staging area is located approximately 0.3 mile to the east of the proposed well pad.

The legal location of the project area is described in the table below (New Mexico Principal Meridian [NMPM]).

Table 1. Legal Land Description for the Project Area

Township & Range	Section	Quarter-Quarter	Project Feature
Township 24 North, Range 8 West	26	southwestern ¼ northwestern ¼	Access road, well pad, & well pad construction zone
		southeastern ¼ northwestern ¼	Staging area: Bannon's South Blanco Federal 26 No. 2 well pad (inactive), now being used as a tank battery site

2.2. Project Description

The project includes the horizontal drilling, possible production, and plugging of the 126H well. The project also includes the construction, use, and reclamation of an associated access road and well pad

harm to roads, soils, or streams. WPX will use the six-step frozen ground procedure during frozen ground conditions.

9. METHODS FOR HANDLING WASTE DISPOSAL

- ✓ Drilling operations will utilize a closed-loop system. Drilling of the horizontal lateral may be done with water-based mud. All water-based mud cuttings will be hauled to a commercial disposal facility or land farm.

The drilling operations area will be enclosed by a containment berm and ditches, which will drain to sump areas for spill prevention and control. The containment berm will be ramped to allow access to the solids control area.

WPX will follow New Mexico Oil Conservation Division "Pit Rule" guidelines and Onshore Order Nos. 1 and 7 regarding the placement, operation, and closure of any reserve pits or closed-loop systems. No blow pit will be used.

As stated in the Reclamation Plan (Appendix A), if drilling has not been initiated on the well pad within 120 days of the well pad being constructed, WPX will submit a site-stabilization plan to the BLM-FFO.

All garbage and trash will be placed in a metal trash basket. The trash and garbage will be hauled off site and dumped in an approved landfill, as needed. Portable toilets will be provided and maintained during construction, as needed (see Figures B.3 and B.4, Appendix B, for the location of toilets and trash receptacles).

10. ANCILLARY FACILITIES

Pipeline(s) will be permitted and constructed at a later date.

One staging area will be used; this staging area is described in Section 2.2 (Project Description). During staging, WPX will stay within the boundaries of the previously disturbed well pad/tank battery area. During interim reclamation, WPX will repair any damage to the staging area, re-establish and reseed water diversions, re-establish the teardrop, reseed the center of the teardrop, and divert water away from the teardrop.

11. WELL SITE LAYOUT

The approximate cuts, approximate fills, and orientation for the well pad are depicted on the construction plats in the ROW Grant application. The location of drilling equipment, rig orientation, and the location of topsoil or spoil material stockpiles are provided on Figure B.3 (Appendix B). The layout of the completion rig is indicated on Figure B.4 (Appendix B).

After the drilling and completion phases of the project, WPX will meet with the BLM-FFO for a facility on-site meeting. A depiction of the production facility layout will be deferred until the facility on-site meeting is held with the BLM-FFO.

The interim reclamation/long-term disturbance layout is depicted in Figure B.5 (Appendix B) and is described below.

The following areas (known as the "non-reseed working areas") will remain unreclaimed throughout the lifetime of the project:

- Production facilities will be located within a 300-by-100-foot (0.7-acre) facility area at the eastern end of the well pad.

