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: 9/5/13
Well information;
Operator WPX, Well Name and Number Chaco 2306-20M 208H

API# 30-043-21170, Section 20, Township 23 (N)S, Range 6 E(W)

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
- o Hold C-104 for NSL, NSP, DHC
- o Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- o 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
- o 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
- o 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

NMOCD Approved by Signature

10-25-2013 ca
Date

1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3460 • Fax (505) 476-3462 • www.emnrd.state.nm.us/ocd

Form 3160-3
(September 2001)

RECEIVED
SEP 05 2013
Farmington Field Office
Bureau of Land Management

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. NMSF-078360
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. Chaco 2306-20M #208H
2. Name of Operator WPX Energy Production, LLC	9. API Well No. 30-043-21170
3a. Address P.O. Box 640 Aztec, NM 87410 / 3b. Phone No. (include area code) (505) 333-1808	10. Field and Pool, or Exploratory Lybrook Gallup
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface M 485' FSL & 155' FWL, sec 20, T23N, R6W; At proposed prod. zone M 380' FSL & 230' FWL, sec 19, T23N, R6W	11. Sec., T., R., M., or Blk. and Survey or Area Section 20, T23N, R6W
14. Distance in miles and direction from nearest town or post office* approximately 4 miles southeast of Lybrook, New Mexico	12. County or Parish Rio Arriba County / 13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 155' / 16. No. of Acres in lease 2565.24 / 17. Spacing Unit dedicated to this well 160.98 160 acres	RCVD OCT 21 '13
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 500' / 19. Proposed Depth 10,556' MD / 5,469' TVD / 20. BLM/BIA Bond No. on file UTB000178	OIL CONS. DIV. DIST. 3
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7037' GR / 22. Approximate date work will start* November 1, 2013 / 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)	Date
Larry Higgins	Larry Higgins	9/5/13

Title: Permit Supervisor

Approved by (Signature)	Name (Printed/Typed)	Date
AFM		10/18/13
Title	Office	
	FTO	

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.

No new access road is needed.

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE 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

NMOCD

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

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 5th day of September, 2013.

Name Larry Higgins

Position Title Permit Supervisor

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: 09/05/2013

Larry Higgins
Permit Suprv.
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

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

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-043-21170	42289	LYBROOK GALLUP

[4] Property Code	[5] Property Name	[6] Well Number
401860	CHACO 2306-20M	208H

[7] OGRID No.	[8] Operator Name	[9] Elevation
120782	WPX ENERGY PRODUCTION, LLC	7037'

[10] Surface Location

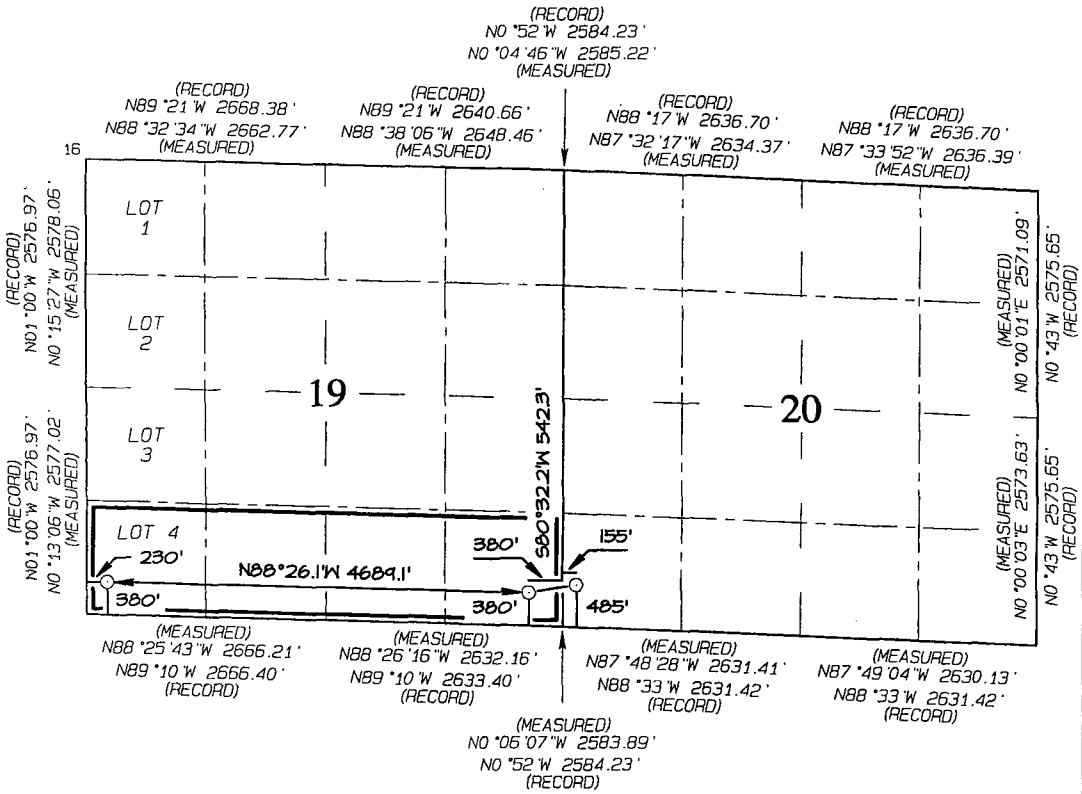
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	20	23N	6W		485	SOUTH	155	WEST	SANDOVAL

[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	19	23N	6W	4	380	SOUTH	230	WEST	SANDOVAL

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160.90 Acres S/2 S/2 – Section 19			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



END-OF-LATERAL
380' FSL 230' FWL
SECTION 19, T23N, R6W
LAT: 36.20507 °N
LONG: 107.51681 °W
DATUM: NAD1927

LAT: 36.20508 °N
LONG: 107.51742 °W
DATUM: NAD1983

POINT-OF-ENTRY
380' FSL 380' FEL
SECTION 19, T23N, R6W
LAT: 36.20488 °N
LONG: 107.50092 °W
DATUM: NAD1927

LAT: 36.20490 °N
LONG: 107.50153 °W
DATUM: NAD1983

SURFACE LOCATION
485' FSL 155' FWL
SECTION 20, T23N, R6W
LAT: 36.20515 °N
LONG: 107.49911 °W
DATUM: NAD1927

LAT: 36.20516 °N
LONG: 107.49972 °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 9/5/13 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: AUGUST 28, 2013
Date of Survey: JULY 9, 2013

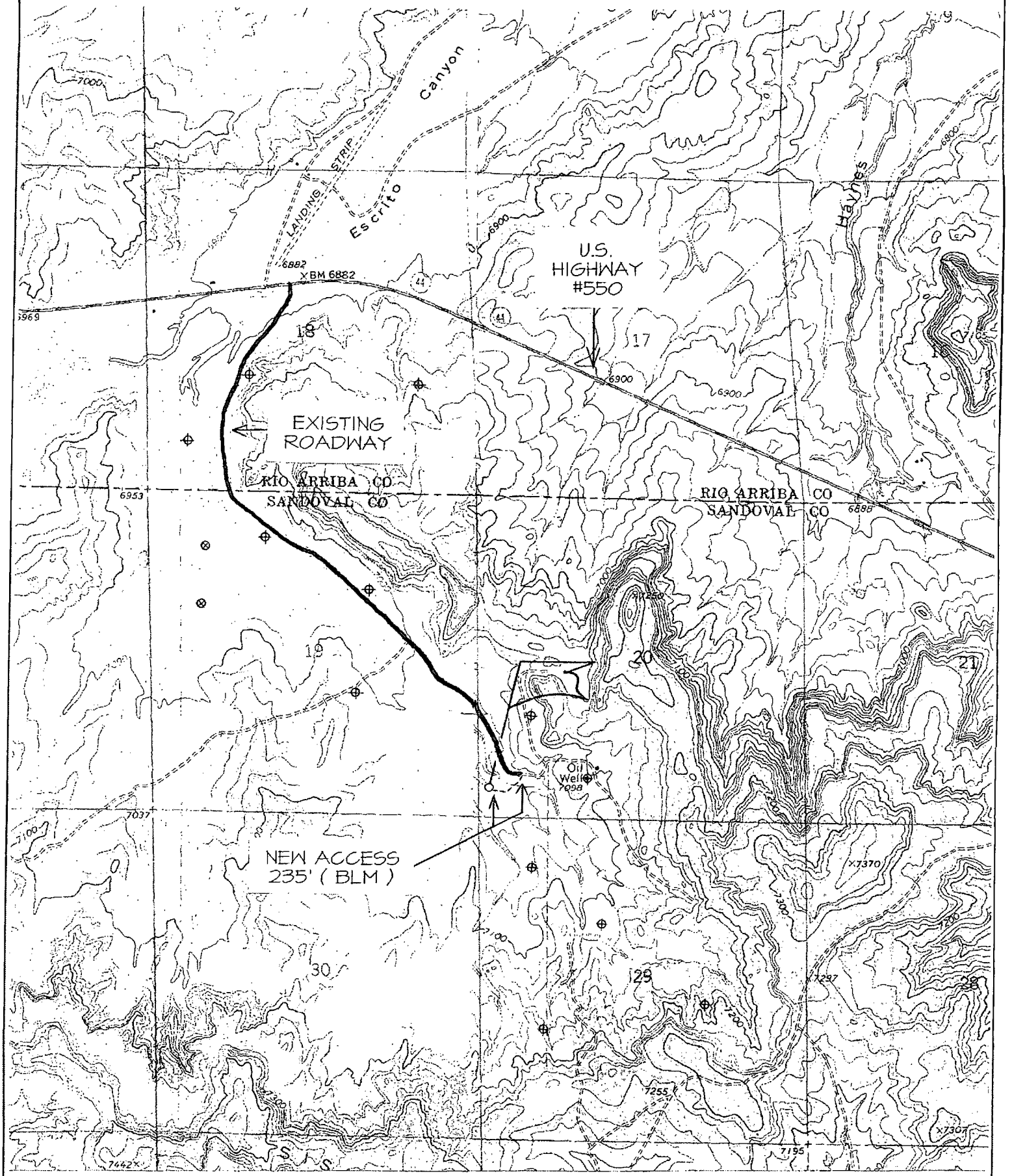
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

WPX ENERGY PRODUCTION, LLC CHACO 2306–20M #208H

485' FSL & 155' FWL, SECTION 20, T23N, R6W, N.M.P.M.
SANDOVAL COUNTY, NEW MEXICO



TOPO NAMES : LYBROOK & COUNSELOR ⊕ PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL

WPXENERGY

WPX ENERGY

Operations Plan

(Note: This procedure will be adjusted on site based upon actual conditions)

DATE:	8/23/13	**FIELD:**	Lybrook Gallup
WELL NAME:	**Chaco 2306-20M #208H**	**SURFACE:**	BLM
SH Location:	SWSW Sec 20-23N-6W	**ELEVATION:**	7,037' GR
BH Location:	SWSW Sec 19-23N-6W Sandoval Co, NM	**MINERALS:**	BLM
MEASURED DEPTH:	**10,556'**	**LEASE #:**	NMSF-078360

I. **GEOLOGY:** Surface formation – San Jose

A. **FORMATION TOPS:** (KB)

Name		MD	TVD		Name		MD	TVD
Ojo Alamo		1,391	1,389		Point Lookout		4,271	4,267
Kirtland		1,668	1,666		Mancos		4,458	4,454
Pictured Cliffs		1,973	1,970		**Kickoff Point**		**5,039**	**5,035**
Lewis		2,072	2,069		Target Top		5,639	5,509
Chacra		2,400	2,396		**Landing Point**		**5,867**	**5,556**
Cliff House		3,480	3,476		Target Base		5,867	5,556
Menefee		3,501	3,497					
					TD		**10,556**	**5,469**

B. **MUD LOGGING PROGRAM:** Mudlogger on location from surface csg to TD.

C. **LOGGING PROGRAM:** LWD GR from KOP to TD. LWD GR / 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 and the 8 ¾" Directional Vertical hole and drill the curve portion of the wellbore. (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 1500 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 vertically/directionally drilled as per attached Directional Plan to +/- 5,039' (MD) +/- 5,035' (TVD). The 8-3/4 in. Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,867' (MD) +/-5,556' (TVD). 7 in. csg will be set at this point. Will drill the lateral (6-1/8 in. hole) as per the attached Directional Plan to +/- 10,556'(MD) +/- 5,469' (TVD). Will run 4-1/2 in. Production Casing to TD and Cement.

III. MATERIALS

A. CASING PROGRAM:

Surface	12.25"	400'+	9 5/8	36#	J-55
Intermediate	8.75"	5,867'	7	23#	K-55
Longstring	6.125"	10,556'	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 +/- 3,500 ft. Run (1) centralizer at 2,700 ft., 2,500 ft., 2,300ft., 2,000ft., 1,500 ft., and 1,000 ft.

3. PRODUCTION CASING: Run 4-1/2" casing with cement nose guide Float Shoe + 1 joint 4-1/2" csg.+ Float Collar. Centralizer program will be determined when Lateral is evaluated by Geoscientists and Reservoir Engineers.

C. CEMENTING:

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

1. SURFACE: 10 bbl Fr Water Spacer + 230 sx (270 cu.ft.) of "Premium Cement" + 2% Calcium Chloride Cement + 0.125# pps of Poly-E-Flake, 15.8 #/gal. The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 600 psi for 30 minutes. Total Volume: (230 sx / 270 cu-ft / 48 Bbls).

2. INTERMEDIATE: 10 bbl FW spacer + 40 bbl (112 cu-ft) Chemical Wash + 10 bbl FW spacer + Lead: 590 sx Foamed 50/50 Poz Cement. 13.0 ppg / 9.5 ppg (Foamed wt.) Yield :2.01 cu-ft/ sk. (Vol: 1186 cu-ft / 211 bbls) + 0.15% Halad 766 + 0.2% Versaset + 1.5% Chem-Foamer 760. TAIL: 100 sx 50-50 Poz Premium 13.5 #/gal. Yield: 1.29 cu-ft / sk (Vol: 129 cu-ft / 23 bbls) + 0.2% Versaset + 0.15% HALAD -766. + Displacement (+/-230 bbls / 1,292 cu-ft) + 100 sx Top-Out Cement: Premium: Yield: (1.17 cu-ft/ sk (Vol: 117 cu-ft / 20.8 bbls). Est TOC: Surface. Test Casing to 1500 PSI for 30 minutes. Total Volume: (790 sx / 1432 cu-ft / 255 bbls). Mix W / +/- 70,000 SCF Nitrogen.

3. PRODUCTION CASING: **STAGE 1**: 40 bbl (224.6 cu-ft) KCL water Spacer + **STAGE 2**:10 bbl (56.cu-ft) Fr Water Spacer.+ **STAGE 3**:40 bbl 10 ppg (224.6 cu-ft) Tuned Spacer III + 0.2 gal/bbl Musol + 38.7 ppb Barite + 0.5 gal/bbl SEM-7. + **STAGE 4**: 10 bbl Fr Water Spacer.+ **STAGE 5**: Lead Cement, 70 sx Premium cmt + 0.1% Halad-766, Yield 1.16 cu ft/sk, 15.8 #/gal, (81.2 cu ft. / 14.46 bbls) **STAGE 6:** Foamed Lead Cement: 240 sx. 50/50 Poz Standard. 13.0 ppg / (9.5 ppg Foamed wt.) + 0.2% Versaset + 0.2% HALAD-766 + 1.5% Chem-Foamer 760. Yield: (2.01 cu-ft/sk, / 483 cu-ft / 86 bbls) + **STAGE 7**: Tail Cement : 110 sx 50/50 Poz Premium + 0.2% Versaset + .05% HALAD-766 + .05% SA-1015,Yield 1.3 cu-ft/sk,13.5 ppg. (143 cu ft. / 25.46 bbls) **STAGE 8**: Displace w / +/-164 bbl KCL Water. Total Cement (420 sx / 568.5 cu ft / 101.2 bbls). Mix w/ +/- 98,000 SCF Nitrogen. Est. TOC +/- 4,500 ft. Total Volume: (707.2 cu-ft / 420 sx / 126 bbls).

IV. COMPLETION

A. CBL

1. Run Cement Bond Log and ensure top of cement is above 7" casing shoe.

B. PRESSURE TEST

1. Pressure test 4-1/2" casing to 5000 psi max, hold at 1500 psi for 30 minutes.

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 with CTU and flowback lateral.

D. RUNNING TUBING

1. *Production Tubing:* Run 2-3/8", 4.7#, N-80, EUE tubing with a SN (1.91" ID) on top of bottom joint. Land tubing at landing point of curve (~5,800' 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.

WPXENERGY

WPX Energy

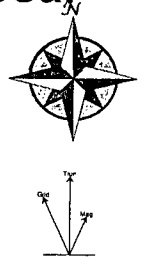
Rev 0

PATHFINDER
A Schlumberger Company

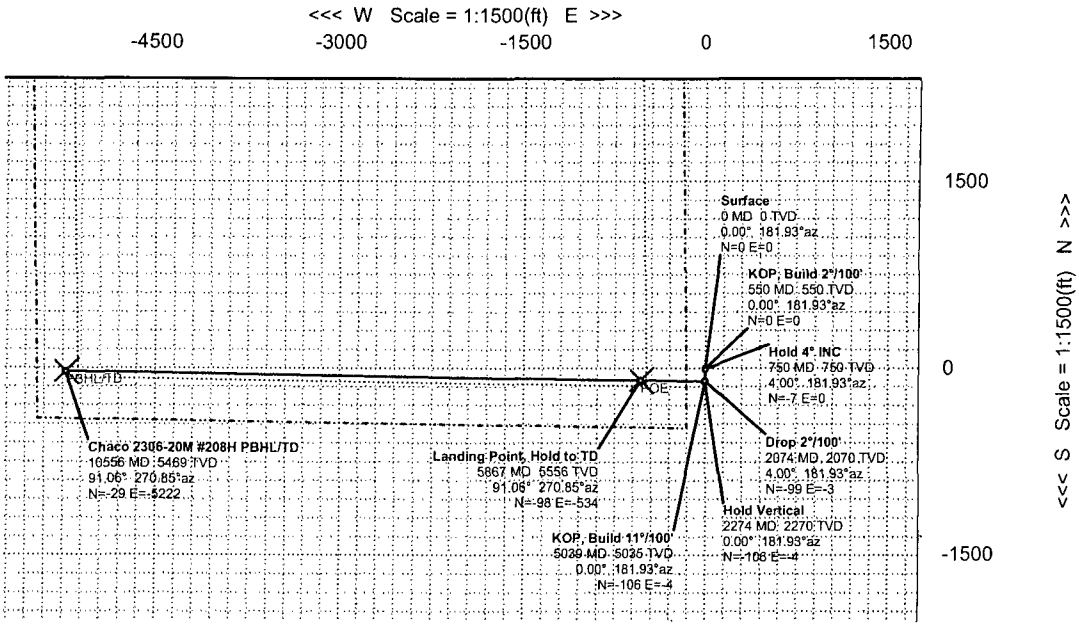
WELL	FIELD	STRUCTURE
Chaco 2306-20M #208H	NM Sandoval County NAD27	Sec 20-23N-6W

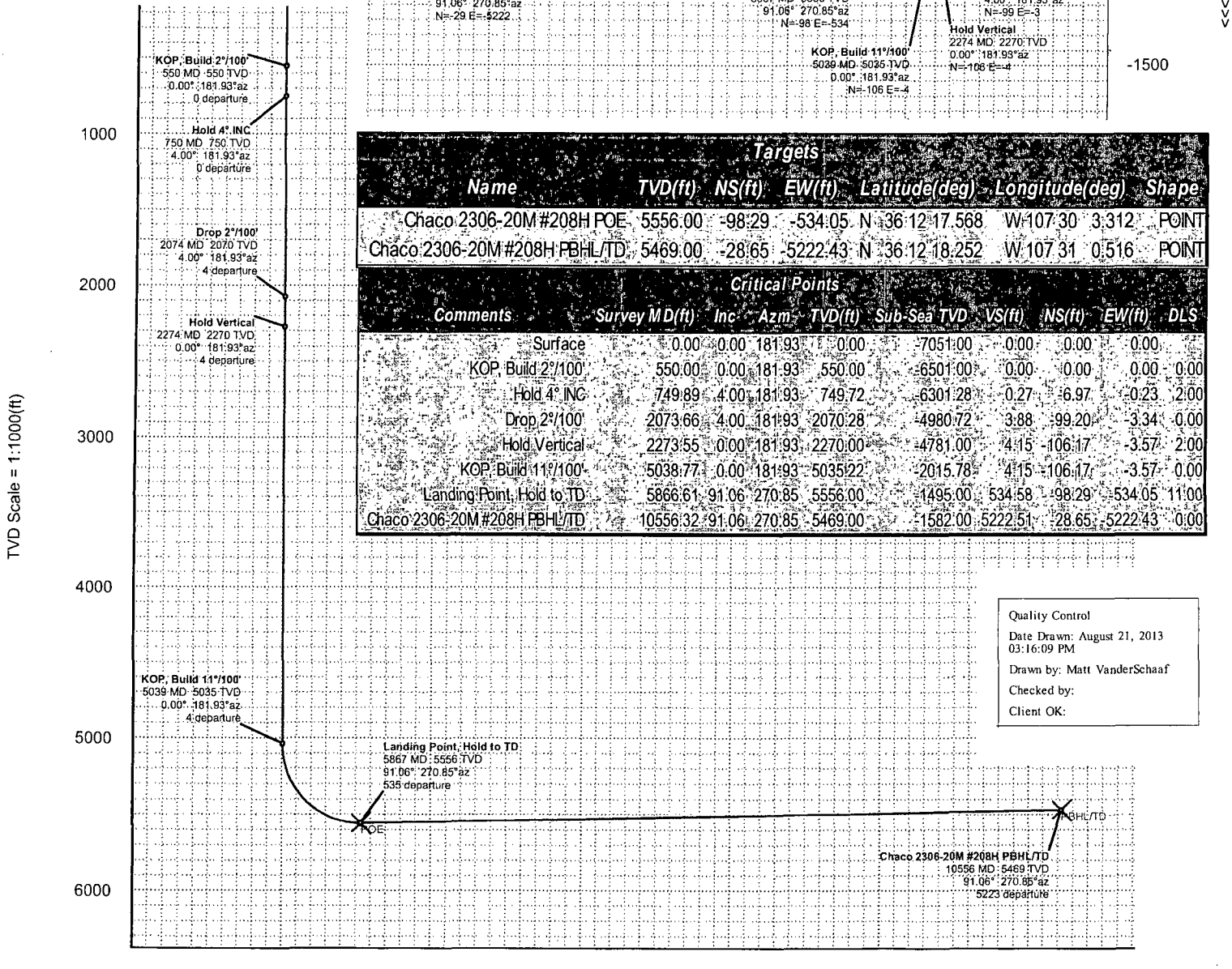
Magnetic Parameters				Surface Location				Miscellaneous			
Model: BGGM 2013	Dip: 63.008°	Date: August 21, 2013		Lat: N 36 12 18.540	Northing: 1898257.41 ftUS	Grid Conv: -0.738°	NAD27 New Mexico State Plane, Central Zone, US Feet	Slot: Chaco 2306-20M #208H	TVD Ref: RKB(7051ft above MSL)		
	Mag Dec: 9.492°	FS: 50188.4nT		Lon: W 107 29 56.796	Easting: 131476.76 ftUS	Scale Fact: 1.00005541		Plan: R0 mov 21Aug13	Srvy Date: August 21, 2013		

Proposal



True North
Tot Corr (M->T 9.4917°)
Mag Dec (9.492°)
Grid Conv (-0.738°)





Targets

Name	TVD(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Shape
Chaco 2306-20M #208H POE	5556.00	-98.29	-534.05	N 36 12 17.568	W 107 30 3.312	POINT
Chaco 2306-20M #208H PBHL/TD	5469.00	-28.65	-5222.43	N 36 12 18.252	W 107 31 0.516	POINT

Critical Points

Comments	Survey MD(ft)	Inc	Azm	TVD(ft)	Sub-Sea TVD	VS(ft)	NS(ft)	EW(ft)	DLS
Surface	0.00	0.00	181.93	0.00	-7051.00	0.00	0.00	0.00	
KOP, Build 2°/100'	550.00	0.00	181.93	550.00	-6501.00	0.00	0.00	0.00	0.00
Hold 4° INC	749.89	4.00	181.93	749.72	-6301.28	0.27	-6.97	-0.23	2.00
Drop 2°/100'	2073.66	4.00	181.93	2070.28	-4980.72	3.88	-99.20	-3.34	0.00
Hold Vertical	2273.55	0.00	181.93	2270.00	-4781.00	4.15	-106.17	-3.57	2.00
KOP, Build 11°/100'	5038.77	0.00	181.93	5035.22	-2015.78	4.15	-106.17	-3.57	0.00
Landing Point, Hold to TD	5866.61	91.06	270.85	5556.00	-1495.00	534.58	-98.29	-534.05	11.00
Chaco 2306-20M #208H PBHL/TD	10556.32	91.06	270.85	5469.00	-1582.00	5222.51	-28.65	-5222.43	0.00

Quality Control
Date Drawn: August 21, 2013 03:16:09 PM
Drawn by: Matt VanderSchaaf
Checked by:
Client OK:

WPXENERGY

PATHFINDER
A Schlumberger Company

Chaco 2306-20M #208H R0 mdv 21Aug13 Proposal Geodetic Report

(Def Plan)

Report Date:	August 21, 2013 - 03:15 PM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	WPX Energy	**Vertical Section Azimuth:**	269.686 ° (True North)
Field:	NM Sandoval County NAD27	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	WPX Sec 20-23N-6W (Chaco 2306-20M #208H) / Chaco 2306-20M #208H	**TVD Reference Datum:**	RKB
Well:	Chaco 2306-20M #208H	**TVD Reference Elevation:**	7051.000 ft above MSL
Borehole:	Original Hole	**Seabed / Ground Elevation:**	7037.000 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	9.492 °
Survey Name:	Chaco 2306-20M #208H R0 mdv 21Aug13	**Total Gravity Field Strength:**	998.4793mgn (9.80665 Based)
Survey Date:	August 21, 2013	**Total Magnetic Field Strength:**	50188.446 nT
Tort / AHD / DDI / ERD Ratio:	99.058 ° / 5325.666 ft / 6.001 / 0.959	**Magnetic Dip Angle:**	63.008 °
Coordinate Reference System:	NAD27 New Mexico State Plane, Central Zone, US Feet	**Declination Date:**	August 21, 2013
Location Lat / Long:	N 36° 12' 18.54000", W 107° 29' 56.79600"	**Magnetic Declination Model:**	BGGM 2013
Location Grid N/E Y/X:	N 1896257.413 ftUS, E 131476.765 ftUS	**North Reference:**	True North
CRS Grid Convergence Angle:	-0.7379 °	**Grid Convergence Used:**	0.0000 °
Grid Scale Factor:	1.00005541	**Total Corr Mag North->True North:**	9.4917 °
		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	181.93	0.00	0.00	0.00	0.00	N/A	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
	100.00	0.00	181.93	100.00	0.00	0.00	0.00	0.00	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
	200.00	0.00	181.93	200.00	0.00	0.00	0.00	0.00	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
	300.00	0.00	181.93	300.00	0.00	0.00	0.00	0.00	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
	400.00	0.00	181.93	400.00	0.00	0.00	0.00	0.00	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
	500.00	0.00	181.93	500.00	0.00	0.00	0.00	0.00	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
KOP, Build 2°/100'	550.00	0.00	181.93	550.00	0.00	0.00	0.00	0.00	1896257.41	131476.76	N 36 12 18.54	W 107 29 56.80
	600.00	1.00	181.93	600.00	0.02	-0.44	-0.01	2.00	1896256.98	131476.74	N 36 12 18.54	W 107 29 56.80
	700.00	3.00	181.93	699.93	0.15	-3.92	-0.13	2.00	1896253.49	131476.58	N 36 12 18.50	W 107 29 56.80
Hold 4° INC	749.89	4.00	181.93	749.72	0.27	-6.97	-0.23	2.00	1896250.45	131476.44	N 36 12 18.47	W 107 29 56.80
	800.00	4.00	181.93	799.72	0.41	-10.46	-0.35	0.00	1896246.96	131476.28	N 36 12 18.44	W 107 29 56.80
	900.00	4.00	181.93	899.47	0.68	-17.43	-0.59	0.00	1896239.99	131475.95	N 36 12 18.37	W 107 29 56.80
	1000.00	4.00	181.93	999.23	0.95	-24.39	-0.82	0.00	1896233.03	131475.63	N 36 12 18.30	W 107 29 56.81
	1100.00	4.00	181.93	1098.99	1.23	-31.36	-1.05	0.00	1896226.07	131475.31	N 36 12 18.23	W 107 29 56.81
	1200.00	4.00	181.93	1198.74	1.50	-38.33	-1.29	0.00	1896219.10	131474.98	N 36 12 18.16	W 107 29 56.81
	1300.00	4.00	181.93	1298.50	1.77	-45.30	-1.52	0.00	1896212.14	131474.66	N 36 12 18.09	W 107 29 56.81
	1400.00	4.00	181.93	1398.26	2.04	-52.26	-1.76	0.00	1896205.17	131474.33	N 36 12 18.02	W 107 29 56.82
	1500.00	4.00	181.93	1498.01	2.32	-59.23	-1.99	0.00	1896198.21	131474.01	N 36 12 17.95	W 107 29 56.82
	1600.00	4.00	181.93	1597.77	2.59	-66.20	-2.23	0.00	1896191.24	131473.69	N 36 12 17.89	W 107 29 56.82
	1700.00	4.00	181.93	1697.53	2.86	-73.17	-2.46	0.00	1896184.28	131473.36	N 36 12 17.82	W 107 29 56.83
	1800.00	4.00	181.93	1797.28	3.13	-80.14	-2.69	0.00	1896177.31	131473.04	N 36 12 17.75	W 107 29 56.83
	1900.00	4.00	181.93	1897.04	3.41	-87.10	-2.93	0.00	1896170.35	131472.71	N 36 12 17.68	W 107 29 56.83
	2000.00	4.00	181.93	1996.80	3.68	-94.07	-3.16	0.00	1896163.39	131472.39	N 36 12 17.61	W 107 29 56.83
Drop 2°/100'	2073.66	4.00	181.93	2070.28	3.88	-99.20	-3.34	0.00	1896158.26	131472.15	N 36 12 17.56	W 107 29 56.84
	2100.00	3.47	181.93	2096.56	3.95	-100.92	-3.39	2.00	1896156.54	131472.07	N 36 12 17.54	W 107 29 56.84
	2200.00	1.47	181.93	2196.46	4.12	-105.23	-3.54	2.00	1896152.23	131471.87	N 36 12 17.50	W 107 29 56.84
Hold Vertical	2273.55	0.00	181.93	2270.00	4.15	-106.17	-3.57	2.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2300.00	0.00	181.93	2296.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2400.00	0.00	181.93	2396.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2500.00	0.00	181.93	2496.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2600.00	0.00	181.93	2596.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2700.00	0.00	181.93	2696.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2800.00	0.00	181.93	2796.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	2900.00	0.00	181.93	2896.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3000.00	0.00	181.93	2996.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3100.00	0.00	181.93	3096.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3200.00	0.00	181.93	3196.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3300.00	0.00	181.93	3296.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3400.00	0.00	181.93	3396.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3500.00	0.00	181.93	3496.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3600.00	0.00	181.93	3596.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3700.00	0.00	181.93	3696.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3800.00	0.00	181.93	3796.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	3900.00	0.00	181.93	3896.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4000.00	0.00	181.93	3996.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4100.00	0.00	181.93	4096.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4200.00	0.00	181.93	4196.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4300.00	0.00	181.93	4296.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4400.00	0.00	181.93	4396.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4500.00	0.00	181.93	4496.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4600.00	0.00	181.93	4596.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4700.00	0.00	181.93	4696.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4800.00	0.00	181.93	4796.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	4900.00	0.00	181.93	4896.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	5000.00	0.00	181.93	4996.45	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
KOP, Build 11°/100'	5038.77	0.00	181.93	5035.22	4.15	-106.17	-3.57	0.00	1896151.29	131471.83	N 36 12 17.49	W 107 29 56.84
	5100.00	6.74	270.85	5096.31	7.75	-106.12	-7.16	11.00	1896151.39	131468.23	N 36 12 17.49	W 107 29 56.88
	5200.00	17.74	270.85	5193.89	28.90	-105.80	-28.32	11.00	1896151.98	131447.08	N 36 12 17.49	W 107 29 57.14
	5300.00	28.74	270.85	5285.64	68.29	-105.22	-67.71	11.00	1896153.07	131407.70	N 36 12 17.50	W 107 29 57.62
	5400.00	39.74	270.85	5368.19	124.45	-104.38	-123.88	11.00	1896154.63	131351.55	N 36 12 17.51	W 107 29 58.31
	5500.00	50.74	270.85	5438.50	195.32	-103.33	-194.76	11.00	1896156.59	131280.68	N 36 12 17.52	W 107 29 59.17
	5600.00	61.74	270.85	5493.99	278.31	-102.10	-277.76	11.00	1896158.90	131197.70	N 36 12 17.53	W 107 30 0.18
	5700.00	72.74	270.85	5532.62	370.36	-100.73	-369.82	11.00	1896161.45	131105.66	N 36 12 17.54	W 107 30 1.31
	5800.00	83.74	270.85	5552.98	468.09	-99.28	-467.55	11.00	1896164.16	131007.95	N 36 12 17.56	W 107 30 2.50
Landing Point, Hold to TD	5866.61	91.06	270.85	5556.00	534.58	-98.29	-534.05	11.00	1896166.00	130941.47	N 36 12 17.57	W 107 30 3.31
	5900.00	91.06	270.85	5555.38	567.95	-97.79	-567.42	0.00	1896166.93	130908.10	N 36 12 17.57	W 107 30 3.72
	6000.00	91.06	270.85	5553.53	667.91	-96.31	-667.40	0.00	1896169.70	130808.15	N 36 12 17.59	W 107 30 4.94
	6100.00	91.06	270.85	5551.67	767.88	-94.82	-767.37	0.00	1896172.47	130708.20	N 36 12 17.60	W 107 30 6.16
	6200.00	91.06	270.85	5549.82	867.84	-93.34	-867.34	0.00	1896175.25	130608.25	N 36 12 17.62	W 107 30 7.38
	6300.00	91.06	270.85	5547.96	967.80	-91.85	-967.31	0.00	1896178.02	130508.30	N 36 12 17.63	W 107 30 8.60
	6400.00	91.06	270.85	5546.11	1067.76	-90.37	-1067.28	0.00	1896180.79	130408.35	N 36 12 17.65	W 107 30 9.82
	6500.00	91.06	270.85	5544.25	1167.72	-88.88	-1167.25	0.00	1896183.56	130308.40	N 36 12 17.66	W 107 30 11.04
	6600.00	91.06	270.85	5542.40	1267.69	-87.40	-1267.23	0.00	1896186.34	130208.45	N 36 12 17.68	W 107 30 12.26
	6700.00	91.06	270.85	5540.54	1367.65	-85.91	-1367.20	0.00	1896189.11	130108.50	N 36 12 17.69	W 107 30 13.48
	6800.00	91.06	270.85	5538.69	1467.61	-84.43	-1467.17	0.00	1896191.88	130008.55	N 36 12 17.70	W 107 30 14.70
	6900.00	91.06	270.85	5536.83	1567.57	-82.94	-1567.14	0.00	1896194.65	129908.60	N 36 12 17.72	W 107 30 15.92
	7000.00	91.06	270.85	5534.98	1667.53	-81.46	-1667.11	0.00	1896197.43	129808.65	N 36 12 17.73	W 107 30 17.14

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 ° ' ")
	7100.00	91.06	270.85	5533.12	1767.50	-79.97	-1767.08	0.00	1896200.20	129708.70	N 36 12 17.75	W 107 30 18.36
	7200.00	91.06	270.85	5531.27	1867.46	-78.49	-1867.06	0.00	1896202.97	129608.75	N 36 12 17.76	W 107 30 19.58
	7300.00	91.06	270.85	5529.41	1967.42	-77.00	-1967.03	0.00	1896205.74	129508.80	N 36 12 17.78	W 107 30 20.80
	7400.00	91.06	270.85	5527.56	2067.38	-75.52	-2067.00	0.00	1896208.52	129408.85	N 36 12 17.79	W 107 30 22.02
	7500.00	91.06	270.85	5525.70	2167.35	-74.03	-2166.97	0.00	1896211.29	129308.90	N 36 12 17.81	W 107 30 23.24
	7600.00	91.06	270.85	5523.85	2267.31	-72.55	-2266.94	0.00	1896214.06	129208.95	N 36 12 17.82	W 107 30 24.46
	7700.00	91.06	270.85	5521.99	2367.27	-71.06	-2366.92	0.00	1896216.83	129109.00	N 36 12 17.84	W 107 30 25.68
	7800.00	91.06	270.85	5520.13	2467.23	-69.58	-2466.89	0.00	1896219.61	129009.05	N 36 12 17.85	W 107 30 26.90
	7900.00	91.06	270.85	5518.28	2567.19	-68.09	-2566.86	0.00	1896222.38	128909.10	N 36 12 17.87	W 107 30 28.11
	8000.00	91.06	270.85	5516.42	2667.16	-66.61	-2666.83	0.00	1896225.15	128809.16	N 36 12 17.88	W 107 30 29.33
	8100.00	91.06	270.85	5514.57	2767.12	-65.12	-2766.80	0.00	1896227.92	128709.21	N 36 12 17.89	W 107 30 30.55
	8200.00	91.06	270.85	5512.71	2867.08	-63.64	-2866.77	0.00	1896230.70	128609.26	N 36 12 17.91	W 107 30 31.77
	8300.00	91.06	270.85	5510.86	2967.04	-62.15	-2966.75	0.00	1896233.47	128509.31	N 36 12 17.92	W 107 30 32.99
	8400.00	91.06	270.85	5509.00	3067.00	-60.67	-3066.72	0.00	1896236.24	128409.36	N 36 12 17.94	W 107 30 34.21
	8500.00	91.06	270.85	5507.15	3166.97	-59.18	-3166.69	0.00	1896239.01	128309.41	N 36 12 17.95	W 107 30 35.43
	8600.00	91.06	270.85	5505.29	3266.93	-57.70	-3266.66	0.00	1896241.79	128209.46	N 36 12 17.97	W 107 30 36.65
	8700.00	91.06	270.85	5503.44	3366.89	-56.21	-3366.63	0.00	1896244.56	128109.51	N 36 12 17.98	W 107 30 37.87
	8800.00	91.06	270.85	5501.58	3466.85	-54.73	-3466.60	0.00	1896247.33	128009.56	N 36 12 18.00	W 107 30 39.09
	8900.00	91.06	270.85	5499.73	3566.81	-53.24	-3566.58	0.00	1896250.11	127909.61	N 36 12 18.01	W 107 30 40.31
	9000.00	91.06	270.85	5497.87	3666.78	-51.76	-3666.55	0.00	1896252.88	127809.66	N 36 12 18.03	W 107 30 41.53
	9100.00	91.06	270.85	5496.02	3766.74	-50.27	-3766.52	0.00	1896255.65	127709.71	N 36 12 18.04	W 107 30 42.75
	9200.00	91.06	270.85	5494.16	3866.70	-48.79	-3866.49	0.00	1896258.42	127609.76	N 36 12 18.05	W 107 30 43.97
	9300.00	91.06	270.85	5492.31	3966.66	-47.30	-3966.46	0.00	1896261.20	127509.81	N 36 12 18.07	W 107 30 45.19
	9400.00	91.06	270.85	5490.45	4066.63	-45.82	-4066.44	0.00	1896263.97	127409.86	N 36 12 18.08	W 107 30 46.41
	9500.00	91.06	270.85	5488.60	4166.59	-44.33	-4166.41	0.00	1896266.74	127309.91	N 36 12 18.10	W 107 30 47.63
	9600.00	91.06	270.85	5486.74	4266.55	-42.85	-4266.38	0.00	1896269.51	127209.96	N 36 12 18.11	W 107 30 48.85
	9700.00	91.06	270.85	5484.89	4366.51	-41.36	-4366.35	0.00	1896272.29	127110.01	N 36 12 18.13	W 107 30 50.07
	9800.00	91.06	270.85	5483.03	4466.47	-39.88	-4466.32	0.00	1896275.06	127010.06	N 36 12 18.14	W 107 30 51.29
	9900.00	91.06	270.85	5481.18	4566.44	-38.39	-4566.29	0.00	1896277.83	126910.11	N 36 12 18.16	W 107 30 52.51
	10000.00	91.06	270.85	5479.32	4666.40	-36.91	-4666.27	0.00	1896280.60	126810.16	N 36 12 18.17	W 107 30 53.73
	10100.00	91.06	270.85	5477.47	4766.36	-35.42	-4766.24	0.00	1896283.38	126710.21	N 36 12 18.19	W 107 30 54.95
	10200.00	91.06	270.85	5475.61	4866.32	-33.94	-4866.21	0.00	1896286.15	126610.26	N 36 12 18.20	W 107 30 56.17
	10300.00	91.06	270.85	5473.76	4966.28	-32.45	-4966.18	0.00	1896288.92	126510.31	N 36 12 18.21	W 107 30 57.39
	10400.00	91.06	270.85	5471.90	5066.25	-30.97	-5066.15	0.00	1896291.69	126410.36	N 36 12 18.23	W 107 30 58.61
	10500.00	91.06	270.85	5470.04	5166.21	-29.48	-5166.12	0.00	1896294.47	126310.41	N 36 12 18.24	W 107 30 59.83
Chaco 2306-20M #208H PBHL/TD	10556.32	91.06	270.85	5469.00	5222.51	-28.65	-5222.43	0.00	1896296.03	126254.12	N 36 12 18.25	W 107 31 0.52

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_UNKNOWN-Depth Only	Original Hole / Chaco 2306-20M #208H R0 mdv 21Aug13
	14.000	10556.322	1/100.000	30.000	30.000	SLB_UNKNOWN	Original Hole / Chaco 2306-20M #208H R0 mdv 21Aug13

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), related to 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 Chaco 2306-20M Number (No.) 208H (208H) project involves one well and an associated well pad and access road. If the project is approved by the BLM, the well will be permitted via an Application for Permit to Drill (APD), and the well pad and access road, both of which are off-lease, will each be permitted via a Right-of-Way (ROW) Grant. Therefore, this document will serve as a SUPO for the APD and as a POD for the ROW Grant application.

A pre-disturbance site visit for the 208H project was held on August 14, 2013.

In addition to the best management practices (BMPs) provided below and in the 208H Surface Reclamation Plan (Reclamation Plan; Appendix A), the general Conditions of Approval will be followed, if any are attached to the APD or ROW Grants.

2. PROJECT LOCATION AND EXISTING ROADS

The 208H well pad is located approximately 51 road miles south-southeast of the town of Bloomfield, New Mexico. To access the location, head south from the United States (U.S.) Highway 550-U.S. Highway 64 intersection for approximately 50.5 miles and turn right onto an unnamed road for approximately 2.0 miles until reaching the proposed 208H access road. The access route from U.S. Highway 550 is depicted on Figure 1 (Appendix B) and on the construction plats provided in the APD and ROW Grant permit packages.

For existing county roads or roads that are considered collector roads, WPX will defer to the county or Roads Committee, when formed, for maintenance determinations. During the pre-disturbance site visit, WPX was not allocated existing roads for upgrading or maintenance. WPX will upgrade existing non-County Roads leading to the project site, if required by the BLM-FFO. The road(s) will be upgraded following *The Gold Book: Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development* (*Gold Book*) and BLM Handbook 9113.

3. NEW OR RECONSTRUCTED ACCESS ROADS

An approximately 235-foot-long access road will be needed to access the proposed well site. The proposed access road is depicted on Figures 1 and 2 in Appendix B, and on the construction plats provided in the APD and ROW Grant permit packages.

The proposed access road (a resource road) will travel south-southwestward from an existing oil and gas lease road and will enter the proposed well pad at the eastern side (corner 3) of the pad. The maximum grade of the proposed access road will be 6 percent. The all-weather driving surface will be 14 feet wide with turnouts, as necessary, and will be crowned with a surface material (sandstone), if economically available. The proposed access road will be built up 18 to 24 inches and designed following the Basic Design Requirements for Constructed Roads from the *Gold Book* and BLM Handbook 9113. Topsoil removed from the proposed access road will be used on cut slopes and bar ditches.

During the pre-disturbance site visit, it was determined that a 24-inch-diameter culvert would be placed beneath the proposed access road near where the proposed access road enters the proposed well pad.

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