

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: 1/15/14

Well information;

Operator WPX, Well Name and Number Chaco 2306-19M 190H

API# 30-043-21189, Section 19, Township 23 NS, 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
- ☐ 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 Bern...
NMOCD Approved by Signature

3-21-2014
Date ca

RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 15 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

Farmington Field Office

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF-078360
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator WPX Energy Production, LLC		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 640 Aztec, NM 87410	3b. Phone No. (include area code) (505) 333-1808	8. Lease Name and Well No. Chaco 2306-19M #190H
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface M 1255' FSL & 277' FWL, sec 19, T23N, R6W At proposed prod. zone L 2206' FSL & 380' FWL, sec 24, T23N, R7W		9. API Well No. 3004321189
14. Distance in miles and direction from nearest town or post office* approximately 4 miles southeast of Lybrook, New Mexico		10. Field and Pool, or Exploratory Lybrook Gallup
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 277'	16. No. of Acres in lease 2565.24	11. Sec., T., R., M., or Blk. and Survey or Area Section 19, T23N, R6W
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 40'	19. Proposed Depth 10,523' MD / 5,406' TVD	12. County or Parish Sandoval County
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7012' GR	22. Approximate date work will start* March 1, 2014	13. State NM
24. Attachments		17. Spacing Unit dedicated to this well 160 acres
		20. BLM/BIA Bond No. on file UTB000178
		23. Estimated duration 1 month

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

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

25. Signature Larry Higgins Name (Printed/Typed) Larry Higgins Date 1/15/14
Title Regulatory Specialist

Approved by (Signature) Troy Salyers Name (Printed/Typed) Troy Salyers Date 2/25/2014
Title Petroleum Engineer (Acting AFM) Office FFO

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 on 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. This well be twinned on the Chaco 2306-19M #191H well pad which has already been built.

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

ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

NMOCDA

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 15th day of January, 2014.

Name Larry Higgins

Position Title Regulatory Specialist

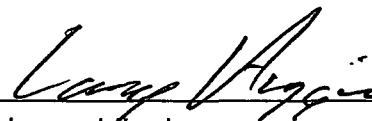
Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 333-1808

Field representative (if not above signatory) _____

E-mail larry.higgins@wpxenergy.com

Date: 01/15/14



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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-043-21189	Pool Code 42289	Pool Name LYBROOK GALLUP
Property Code 39731	Property Name CHACO 2306-19M	Well Number 190H
GRID No. 120782	Operator Name WPX ENERGY PRODUCTION, LLC	Elevation 7012'

¹⁰ Surface Location

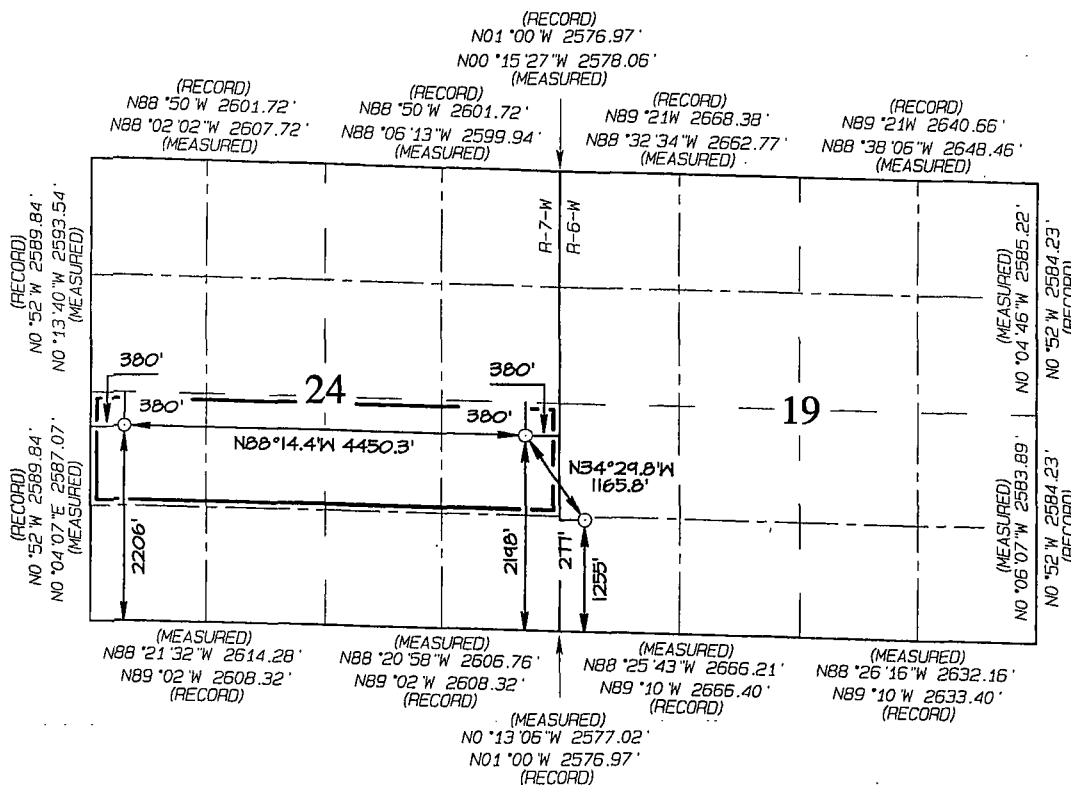
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	19	23N	6W	4	1255	SOUTH	277	WEST	SANDOVAL

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
L	24	23N	7W		2206	SOUTH	380	WEST	SANDOVAL

¹² Dedicated Acres 160.0 Acres N/2 S/2 - Section 24	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
2206' FSL 380' FWL
SECTION 24, T23N, R7W
LAT: 36.21030°N
LONG: 107.53407°W
DATUM: NAD1927

POINT-OF-ENTRY
2198' FSL 380' FWL
SECTION 24, T23N, R7W
LAT: 36.21009°N
LONG: 107.51899°W
DATUM: NAD1927

SURFACE LOCATION
1255' FSL 277' FWL
SECTION 19, T23N, R6W
LAT: 36.20747°N
LONG: 107.51671°W
DATUM: NAD1927

LAT: 36.21031°N
LONG: 107.53467°W
DATUM: NAD1983

LAT: 36.21010°N
LONG: 107.51959°W
DATUM: NAD1983

LAT: 36.20748°N
LONG: 107.51731°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 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 *Larry Higgins* Date *11/15/14*
Larry Higgins

Printed Name
larry.higgins@wpenergy.com

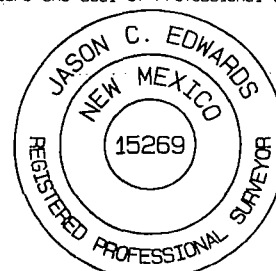
E-mail Address

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: JUNE 24, 2013
Survey Date: FEBRUARY 15, 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: 01/08/2014 **FIELD:** Lybrook (Gallup)

WELL NAME: Chaco 2306-06L #178H **SURFACE:** BLM

SH Location: SWSW Sec 19-23N-6W **ELEVATION:** 7,012' GR

BH Location: NWSW Sec 24-23N-7W **MINERALS:** BLM
Sandoval Co, NM

MEASURED DEPTH: 10,532' **LEASE #:** NMSF-078360

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

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1,391	1,386	Point Lookout	4,222	4,203
Kirtland	1,660	1,653	Mancos	4,418	4,399
Pictured Cliffs	1,947	1,938	Kickoff Point	4,859	4,840
Lewis	2,022	2,013	Target Top	5,664	5,455
Chacra	2,355	2,343	Landing Point	5,929	5,507
Cliff House	3,540	3,431	Target Base	5,929	5,507
Menefee	3,490	3,471			
			TD	10,532	5,438

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 +/- 4,859' (MD) / 4,840' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,929' (MD) / 5,507' (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 +/- 10,532' (MD) / 5,438' (TVD). Will run 4-1/2 in. Production Liner from +/- 5779 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 5/8	36#	J-55
Intermediate	8.75"	5,929'	7	23#	K-55
Prod. Liner	6.125"	5,779' - 10,532'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5,779'	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).
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 (563.3 cu ft / 95.5 bbls). Mix Foamed Cement w/ +/- 75,000 SCF Nitrogen. Est. TOC +/- 5,479 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. 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 (~5,930' 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 5,929 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,779 ft. (MD) +/- 78 degree angle. TOC: +/- 5,479 ft. (MD).

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.

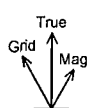
The Drilling Rig will be rigged down at this point and Completion operations will begin. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

Note: Changes to formation tops, casing landing points, well TD and Directional Plan

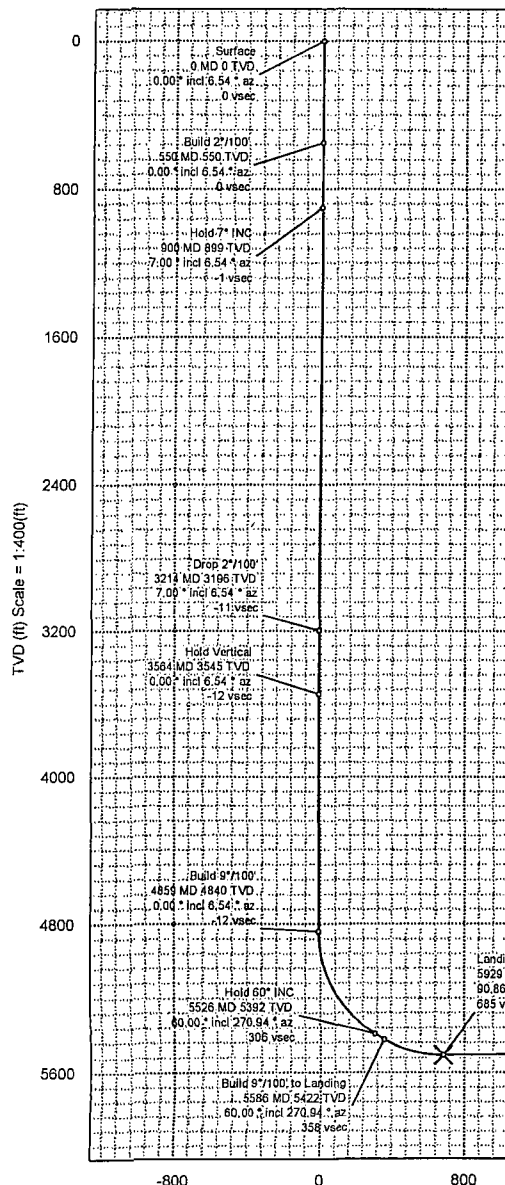
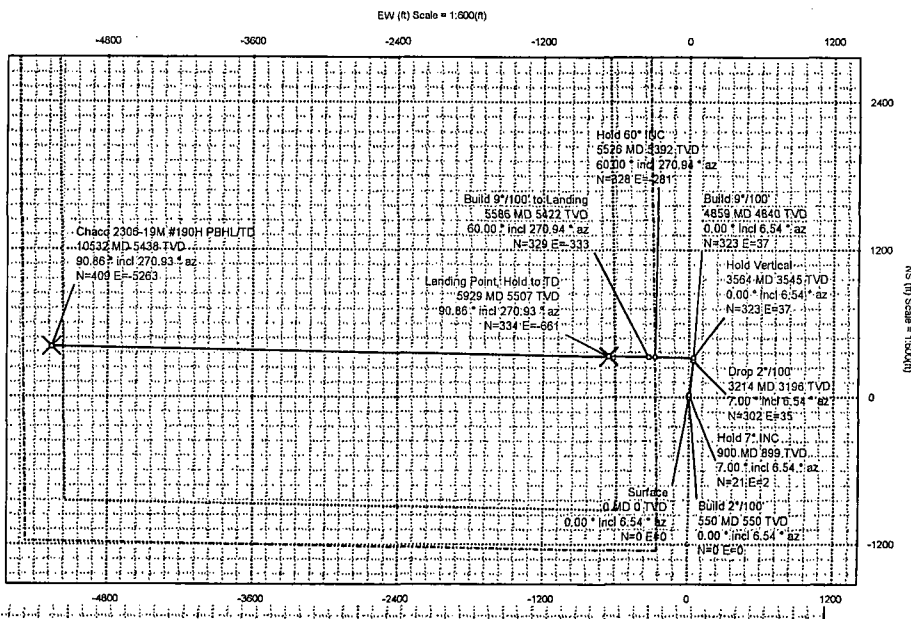
Borehole:	Well:	Field:	Structure:
Original Hole	Chaco 2306-19M #190H	NM Sandoval County NAD27	Sec 19-23N-6W

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: BGGM 2013 Dip: 62.996° Date: 08-Jan-2014	NAD27 New Mexico State Plane, Central Zone, US Feet	Slot: Chaco 2306-19M #190H TVD Ref: RKB(7026ft above MSL)
MagDec: 9.458° FS: 50142.315NT Gravity FS: 998.914mgm (9.80665 Based)	Lat: N 36 12 26.89 Northing: 1897169.319 Grid Conv: -0.7483° Lon: W 107 31 0.16 Easting: 126295.035ftU Scale Fact: 1.00005981	Plan: Chaco 2306-19M #190H R1 mdv 08Jan14

Proposal



True North
Tot Cor (M→T 9.458°)
Mag Dec (9.458°)
Grid Conv (-0.748°)



Surface Location								
Northing: 1897169.319		Easting: 126295.035		Latitude: N 36 12 26.89		Longitude: W 107 31 0.16		VSec Azimuth: 274.445
Target Description		Grid Coord					Local Coord	
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)
Chaco 2306-19M #190H PBHL/TD	N 36 12 30.93	W 107 32 4.37	1897647.21	121037.55	5438.00	5278.85	409.16	-5282.97
Chaco 2306-19M #190H POE	N 36 12 30.20	W 107 31 8.22	1897512.11	125638.35	5507.00	684.98	334.16	-661.07
Chaco 2306-19M #190 Section Line	N 36 12 26.89	W 107 31 0.16	1897169.32	126295.04	7026.00	0.00	0.00	0.00
Chaco 2306-19M #190 330' Setback	N 36 12 26.89	W 107 31 0.16	1897169.32	126295.04	7026.00	0.00	0.00	0.00
Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Surface	0.00	0.00	6.54	0.00	0.00	0.00	0.00	
Build 2°/100'	550.00	0.00	6.54	550.00	0.00	0.00	0.00	0.00
Hold 7° INC	900.21	7.00	6.54	899.34	-0.78	21.24	2.43	2.00
Drop 2°/100'	3213.80	7.00	6.54	3195.66	-11.07	301.53	34.55	0.00
Hold Vertical	3564.01	0.00	6.54	3545.00	-11.85	322.77	36.98	2.00
Build 9°/100'	4859.46	0.00	6.54	4840.45	-11.85	322.77	36.98	0.00
Hold 60° INC	5526.13	60.00	270.93	5391.78	305.86	327.96	-281.29	9.00
Build 9°/100' to Landing	5596.13	60.00	270.93	5421.78	357.73	328.81	-333.24	0.00
Landing Point, Hold to TD	5929.01	90.86	270.93	5507.00	684.98	334.16	-661.06	9.00
Chaco 2306-19M #190H PBHL/TD	10532.05	90.86	270.93	5438.00	5278.85	409.16	-5282.97	0.00



Chaco 2306-19M #190H R1 mdv 08Jan14 Proposal Geodetic Report



(Def Plan)

Report Date: January 08, 2014 - 02:14 PM
Client: WPX Energy
Field: NM Sandoval County NAD27
Structure / Slot: WPX Sec 19-23N-6W (Chaco 2306-19M #190H) / Chaco 2306-19M #190H
Well: Chaco 2306-19M #190H
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Chaco 2306-19M #190H R1 mdv 08Jan14
Survey Date: November 05, 2013
Tort / AHD / DDI / ERD Ratio: 104.871 * / 5625.537 ft / 6.052 / 1.022
Coordinate Reference System: NAD27 New Mexico State Plane, Central Zone, US Feet
Location Lat / Long: N 36° 12' 28.89200", W 107° 31' 0.15600"
Location Grid N/E Y/X: N 1897189.319 ftUS, E 126295.035 ftUS
CRS Grid Convergence Angle: -0.7483 *
Grid Scale Factor: 1.00005981
Version / Patch: 2.7.1043.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 274.445 * (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 7026.000 ft above MSL
Seabed / Ground Elevation: 7012.000 ft above MSL
Magnetic Declination: 9.458 *
Total Gravity Field Strength: 998.9139mgm (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 50142.315 nT
Magnetic Dip Angle: 62.996 *
Declination Date: January 08, 2014
Magnetic Declination Model: BGGM 2013
North Reference: True North
Grid Convergence Used: 0.0000 *
Total Corr Mag North->True North: 9.4578 *
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	6.54	0.00	0.00	0.00	0.00	N/A	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
	100.00	0.00	6.54	100.00	0.00	0.00	0.00	0.00	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
	200.00	0.00	6.54	200.00	0.00	0.00	0.00	0.00	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
	300.00	0.00	6.54	300.00	0.00	0.00	0.00	0.00	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
	400.00	0.00	6.54	400.00	0.00	0.00	0.00	0.00	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
	500.00	0.00	6.54	500.00	0.00	0.00	0.00	0.00	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
Build 2"/100'	550.00	0.00	6.54	550.00	0.00	0.00	0.00	0.00	1897169.32	126295.04	N 36 12 28.89	W 107 31 0.16
	600.00	1.00	6.54	600.00	-0.02	0.43	0.05	2.00	1897169.75	126295.09	N 36 12 28.90	W 107 31 0.16
	700.00	3.00	6.54	699.93	-0.14	3.90	0.45	2.00	1897173.21	126295.53	N 36 12 26.93	W 107 31 0.15
	800.00	5.00	6.54	799.68	-0.40	10.83	1.24	2.00	1897180.13	126296.42	N 36 12 27.00	W 107 31 0.14
	900.00	7.00	6.54	899.13	-0.78	21.21	2.43	2.00	1897190.50	126297.74	N 36 12 27.10	W 107 31 0.13
Hold 7" INC	900.21	7.00	6.54	899.34	-0.78	21.24	2.43	2.00	1897190.53	126297.75	N 36 12 27.10	W 107 31 0.13
	1000.00	7.00	6.54	998.38	-1.22	33.33	3.82	0.00	1897202.60	126299.29	N 36 12 27.22	W 107 31 0.11
	1100.00	7.00	6.54	1097.64	-1.67	45.44	5.21	0.00	1897214.69	126300.84	N 36 12 27.34	W 107 31 0.09
	1200.00	7.00	6.54	1196.89	-2.11	57.56	6.59	0.00	1897226.79	126302.38	N 36 12 27.46	W 107 31 0.08
	1300.00	7.00	6.54	1296.14	-2.56	69.67	7.98	0.00	1897238.89	126303.93	N 36 12 27.58	W 107 31 0.06
	1400.00	7.00	6.54	1395.40	-3.00	81.79	9.37	0.00	1897250.98	126305.47	N 36 12 27.70	W 107 31 0.04
	1500.00	7.00	6.54	1494.65	-3.45	93.90	10.76	0.00	1897263.08	126307.02	N 36 12 27.82	W 107 31 0.02
	1600.00	7.00	6.54	1593.91	-3.89	106.02	12.15	0.00	1897275.18	126308.57	N 36 12 27.94	W 107 31 0.01
	1700.00	7.00	6.54	1693.16	-4.34	118.13	13.53	0.00	1897287.27	126310.11	N 36 12 28.06	W 107 30 59.99
	1800.00	7.00	6.54	1792.41	-4.78	130.25	14.92	0.00	1897299.37	126311.66	N 36 12 28.18	W 107 30 59.97
	1900.00	7.00	6.54	1891.67	-5.23	142.36	16.31	0.00	1897311.47	126313.21	N 36 12 28.30	W 107 30 59.96
	2000.00	7.00	6.54	1990.92	-5.67	154.48	17.70	0.00	1897323.56	126314.75	N 36 12 28.42	W 107 30 59.94
	2100.00	7.00	6.54	2090.17	-6.12	166.59	19.09	0.00	1897335.66	126316.30	N 36 12 28.54	W 107 30 59.92
	2200.00	7.00	6.54	2189.43	-6.56	178.71	20.47	0.00	1897347.76	126317.84	N 36 12 28.66	W 107 30 59.91
	2300.00	7.00	6.54	2288.68	-7.01	190.82	21.86	0.00	1897359.85	126319.39	N 36 12 28.78	W 107 30 59.89
	2400.00	7.00	6.54	2387.94	-7.45	202.94	23.25	0.00	1897371.95	126320.94	N 36 12 28.90	W 107 30 59.87
	2500.00	7.00	6.54	2487.19	-7.90	215.05	24.64	0.00	1897384.04	126322.48	N 36 12 29.02	W 107 30 59.86
	2600.00	7.00	6.54	2586.44	-8.34	227.17	26.03	0.00	1897396.14	126324.03	N 36 12 29.14	W 107 30 59.84
	2700.00	7.00	6.54	2685.70	-8.79	239.28	27.41	0.00	1897408.24	126325.57	N 36 12 29.26	W 107 30 59.82
	2800.00	7.00	6.54	2784.95	-9.23	251.40	28.80	0.00	1897420.33	126327.12	N 36 12 29.38	W 107 30 59.80
	2900.00	7.00	6.54	2884.20	-9.68	263.51	30.19	0.00	1897432.43	126328.67	N 36 12 29.50	W 107 30 59.79
	3000.00	7.00	6.54	2983.46	-10.12	275.63	31.58	0.00	1897444.53	126330.21	N 36 12 29.62	W 107 30 59.77
	3100.00	7.00	6.54	3082.71	-10.57	287.74	32.97	0.00	1897456.62	126331.76	N 36 12 29.74	W 107 30 59.75
Drop 2"/100'	3200.00	7.00	6.54	3181.97	-11.01	299.86	34.35	0.00	1897468.72	126333.31	N 36 12 29.86	W 107 30 59.74
	3213.80	7.00	6.54	3195.66	-11.07	301.53	34.55	0.00	1897470.39	126333.52	N 36 12 29.87	W 107 30 59.73
	3300.00	5.28	6.54	3281.36	-11.41	310.69	35.60	2.00	1897479.54	126334.69	N 36 12 29.96	W 107 30 59.72
	3400.00	3.28	6.54	3361.08	-11.68	318.11	36.45	2.00	1897486.94	126335.64	N 36 12 30.04	W 107 30 59.71
Hold Vertical	3500.00	1.28	6.54	3481.00	-11.83	322.06	36.90	2.00	1897490.89	126336.14	N 36 12 30.08	W 107 30 59.71
	3564.01	0.00	6.54	3545.00	-11.85	322.77	36.98	2.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	3600.00	0.00	6.54	3580.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	3700.00	0.00	6.54	3680.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	3800.00	0.00	6.54	3780.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	3900.00	0.00	6.54	3880.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4000.00	0.00	6.54	3980.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4100.00	0.00	6.54	4080.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4200.00	0.00	6.54	4180.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4300.00	0.00	6.54	4280.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4400.00	0.00	6.54	4380.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4500.00	0.00	6.54	4480.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4600.00	0.00	6.54	4580.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4700.00	0.00	6.54	4680.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4800.00	0.00	6.54	4780.99	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
Build 9"/100'	4859.46	0.00	6.54	4840.45	-11.85	322.77	36.98	0.00	1897491.60	126336.23	N 36 12 30.08	W 107 30 59.70
	4900.00	3.65	270.93	4880.96	-10.56	322.79	35.69	9.00	1897491.63	126334.94	N 36 12 30.08	W 107 30 59.72
	5000.00	12.65	270.93	4979.65	3.57	323.02	21.53	9.00	1897492.05	126320.79	N 36 12 30.09	W 107 30 59.89
	5100.00	21.65	270.93	5075.31	32.97	323.50	-7.92	9.00	1897492.92	126291.34	N 36 12 30.09	W 107 31 0.25
	5200.00	30.65	270.93	5164.98	76.91	324.22	-51.94	9.00	1897494.21	126247.33	N 36 12 30.10	W 107 31 0.79
	5300.00	39.65	270.93	5246.66	134.31	325.16	-109.44	9.00	1897495.90	126189.84	N 36 12 30.11	W 107 31 1.49
	5400.00	48.65	270.93	5318.34	203.77	326.29	-179.01	9.00	1897497.94	126120.29	N 36 12 30.12	W 107 31 2.34
	5500.00	57.65	270.93	5378.26	283.55	327.60	-258.94	9.00	1897500.29	126040.38	N 36 12 30.13	W 107 31 3.32
Hold 60" INC	5528.13	60.00	270.93	5391.78	305.86	327.96	-281.29	9.00	1897500.95	126018.04	N 36 12 30.14	W 107 31 3.59
Build 9"/100' to Landing	5586.13	60.00	270.93	5421.78	357.73	328.81	-333.24	0.00	1897502.47	125966.10	N 36 12 30.14	W 107 31 4.22
	5600.00	61.25	270.93	5428.58	369.79	329.01	-345.33	9.00	1897502.83	125954.01	N 36 12 30.15	W 107 31 4.37
	5700.00	70.25	270.93	5469.62	460.70	330.49	-436.40	9.00	1897505.50	125862.96	N 36 12 30.16	W 107 31 5.48
	5800.00	79.25	270.93	5495.89	556.90	332.07	-532.77	9.00	1897508.33	125766.62	N 36 12 30.18	W 107 31 6.66
	5900.00	88.25	270.93	5506.77	656.02	333.68	-632.06	9.00	1897511.25	125667.35	N 36 12 30.19	W 107 31 7.87
Landing Point, Hold to TD	5929.01	90.86	270.93	5507.00	684.98	334.16	-661.06	9.00	1897512.10	125638.35	N 36 12 30.20	W 107 31 8.22
	6000.00	90.86	270.93	5505.93	755.82	335.31	-732.03	0.00	1897514.19	125567.40	N 36 12 30.21	W 107 31 9.09
	6100.00	90.86	270.93	5504.43	855.62	336.94	-832.01	0.00	1897517.12	125467.45	N 36 12 30.22	W 107 31 10.31
	6200.00	90.86	270.93	5502.93	955.42	338.57	-931.98	0.00	1897520.06	125367.50	N 36 12 30.24	W 107 31 11.53

Comments	MD (ft)	Incl (°)	Azim True (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	6700.00	90.86	270.93	5495.43	1454.43	346.72	-1431.86	0.00	1897534.73	124867.74	N 36 12 30.32	W 107 31 17.63
	6800.00	90.86	270.93	5493.93	1554.23	348.35	-1531.84	0.00	1897537.67	124767.79	N 36 12 30.34	W 107 31 18.85
	6900.00	90.86	270.93	5492.43	1654.03	349.98	-1631.81	0.00	1897540.61	124667.84	N 36 12 30.35	W 107 31 20.07
	7000.00	90.86	270.93	5490.93	1753.83	351.61	-1731.79	0.00	1897543.54	124567.89	N 36 12 30.37	W 107 31 21.29
	7100.00	90.86	270.93	5489.43	1853.63	353.24	-1831.76	0.00	1897546.48	124467.94	N 36 12 30.38	W 107 31 22.51
	7200.00	90.86	270.93	5487.93	1953.43	354.87	-1931.74	0.00	1897549.41	124367.99	N 36 12 30.40	W 107 31 23.73
	7300.00	90.86	270.93	5486.43	2053.23	356.50	-2031.71	0.00	1897552.35	124268.03	N 36 12 30.42	W 107 31 24.95
	7400.00	90.86	270.93	5484.93	2153.03	358.13	-2131.69	0.00	1897555.28	124168.08	N 36 12 30.43	W 107 31 26.17
	7500.00	90.86	270.93	5483.43	2252.83	359.76	-2231.66	0.00	1897558.22	124068.13	N 36 12 30.45	W 107 31 27.39
	7600.00	90.86	270.93	5481.93	2352.64	361.39	-2331.64	0.00	1897561.15	123968.18	N 36 12 30.46	W 107 31 28.61
	7700.00	90.86	270.93	5480.43	2452.44	363.02	-2431.61	0.00	1897564.09	123868.23	N 36 12 30.48	W 107 31 29.83
	7800.00	90.86	270.93	5478.93	2552.24	364.65	-2531.59	0.00	1897567.02	123768.28	N 36 12 30.50	W 107 31 31.05
	7900.00	90.86	270.93	5477.43	2652.04	366.28	-2631.57	0.00	1897569.96	123668.33	N 36 12 30.51	W 107 31 32.27
	8000.00	90.86	270.93	5475.93	2751.84	367.91	-2731.54	0.00	1897572.89	123568.37	N 36 12 30.53	W 107 31 33.49
	8100.00	90.86	270.93	5474.43	2851.64	369.54	-2831.52	0.00	1897575.83	123468.42	N 36 12 30.54	W 107 31 34.71
	8200.00	90.86	270.93	5472.93	2951.44	371.17	-2931.49	0.00	1897578.76	123368.47	N 36 12 30.56	W 107 31 35.93
	8300.00	90.86	270.93	5471.44	3051.24	372.80	-3031.47	0.00	1897581.70	123268.52	N 36 12 30.58	W 107 31 37.15
	8400.00	90.86	270.93	5469.94	3151.04	374.43	-3131.44	0.00	1897584.63	123168.57	N 36 12 30.59	W 107 31 38.37
	8500.00	90.86	270.93	5468.44	3250.84	376.05	-3231.42	0.00	1897587.57	123068.62	N 36 12 30.61	W 107 31 39.58
	8600.00	90.86	270.93	5466.94	3350.65	377.68	-3331.39	0.00	1897590.51	122968.67	N 36 12 30.62	W 107 31 40.80
	8700.00	90.86	270.93	5465.44	3450.45	379.31	-3431.37	0.00	1897593.44	122868.71	N 36 12 30.64	W 107 31 42.02
	8800.00	90.86	270.93	5463.94	3550.25	380.94	-3531.34	0.00	1897596.38	122768.76	N 36 12 30.66	W 107 31 43.24
	8900.00	90.86	270.93	5462.44	3650.05	382.57	-3631.32	0.00	1897599.31	122668.81	N 36 12 30.67	W 107 31 44.46
	9000.00	90.86	270.93	5460.94	3749.85	384.20	-3731.30	0.00	1897602.25	122568.86	N 36 12 30.69	W 107 31 45.68
	9100.00	90.86	270.93	5459.45	3849.65	385.83	-3831.27	0.00	1897605.18	122468.91	N 36 12 30.70	W 107 31 46.90
	9200.00	90.86	270.93	5457.95	3949.45	387.46	-3931.25	0.00	1897608.12	122368.96	N 36 12 30.72	W 107 31 48.12
	9300.00	90.86	270.93	5456.45	4049.25	389.09	-4031.22	0.00	1897611.05	122269.01	N 36 12 30.74	W 107 31 49.34
	9400.00	90.86	270.93	5454.95	4149.05	390.72	-4131.20	0.00	1897613.99	122169.05	N 36 12 30.75	W 107 31 50.56
	9500.00	90.86	270.93	5453.45	4248.86	392.35	-4231.17	0.00	1897616.92	122069.10	N 36 12 30.77	W 107 31 51.78
	9600.00	90.86	270.93	5451.96	4348.66	393.98	-4331.15	0.00	1897619.85	121969.15	N 36 12 30.78	W 107 31 53.00
	9700.00	90.86	270.93	5450.46	4448.46	395.61	-4431.12	0.00	1897622.79	121869.20	N 36 12 30.80	W 107 31 54.22
	9800.00	90.86	270.93	5448.96	4548.26	397.23	-4531.10	0.00	1897625.73	121769.25	N 36 12 30.82	W 107 31 55.44
	9900.00	90.86	270.93	5447.46	4648.06	398.86	-4631.08	0.00	1897628.66	121669.30	N 36 12 30.83	W 107 31 56.66
	10000.00	90.86	270.93	5445.97	4747.86	400.49	-4731.05	0.00	1897631.59	121569.35	N 36 12 30.85	W 107 31 57.88
	10100.00	90.86	270.93	5444.47	4847.66	402.12	-4831.03	0.00	1897634.53	121469.39	N 36 12 30.86	W 107 31 59.10
	10200.00	90.86	270.93	5442.97	4947.46	403.75	-4931.00	0.00	1897637.46	121369.44	N 36 12 30.88	W 107 32 0.32
	10300.00	90.86	270.93	5441.47	5047.26	405.38	-5030.98	0.00	1897640.40	121269.49	N 36 12 30.90	W 107 32 1.54
	10400.00	90.86	270.93	5439.98	5147.06	407.01	-5130.95	0.00	1897643.33	121169.54	N 36 12 30.91	W 107 32 2.76
	10500.00	90.86	270.93	5438.48	5246.87	408.64	-5230.93	0.00	1897646.27	121069.59	N 36 12 30.93	W 107 32 3.98
Chaco 2306-19M #190H PBHL/TD	10532.05	90.86	270.93	5438.00	5278.85	409.16	-5262.97	0.00	1897647.21	121037.55	N 36 12 30.93	W 107 32 4.37

Survey Type: Def Plan

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

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	14.000	1/100.000	30.000	30.000	SLB_MWD-STD-Depth Only	Original Hole / Chaco 2306-19M #190H R1 mdv 08Jan14
	1	14.000	10532.050	1/100.000	30.000	30.000	SLB_MWD-STD	Original Hole / Chaco 2306-19M #190H R1 mdv 08Jan14

1. INTRODUCTION

WPX Energy Production, LLC (WPX), is providing this Surface Use Plan of Operations (SUPO) to the Bureau of Land Management – Farmington Field Office (BLM-FFO), per Onshore Oil and Gas Order No. 1. This SUPO applies to the Chaco 2306-19M No. 190H (190H) project.

The 190H oil and natural gas well will be twinned with the Chaco 2306-19M No. 191H (191H) well. An Application for Permit to Drill (APD) has been issued for the 191H (APD No. 30-043-21139), and the associated 191H access road and well pad were already built prior to the development of this SUPO. The 191H well pad will not be expanded to accommodate the twin. The 190H well will be permitted by an approved APD.

A pre-disturbance site visit for the 191H project was held on December 19, 2012. A pre-disturbance site visit for the 190H project was held on July 31, 2013. The BLM, WPX, and an environmental consultant (Nelson Consulting, Inc.) attended both pre-disturbance site visits.

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

2. PROJECT LOCATION AND EXISTING ROADS

The project area is located approximately 52.0 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 51.0 miles, then turn right to follow unnamed, dirt roads for approximately 1.1 miles until reaching the start of the 191H 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 permit package.

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. For the project, WPX was not allocated existing roads for upgrading or maintenance. If required by the BLM-FFO, WPX will upgrade existing non-County Roads leading to the project site. 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

No new roads will be constructed as part of the 190H project.

The 191H access road is depicted on Figures 1 and 2 in Appendix B and on the construction plats provided in the APD permit package.

No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment. If equipment creates ruts deeper than 6 inches, the soil will be deemed too wet for construction or maintenance.

BMPs for dust abatement and erosion control will be utilized along the 191H access road to reduce fugitive dust for the life of the project. Water application, using a rear-spraying truck or other suitable means, will be the primary method of dust suppression along the road. Any additional erosion-control practices, such as the application of magnesium chloride, organic-based compounds, or polymer compounds to the road, will include the BLM-standard BMPs found in the *Gold Book* and the BMPs outlined in the Conditions of Approval/stipulations.

WPX will maintain the 191H access road as outlined in the Road Maintenance Plan (Appendix C).

If the 191H well is plugged before the 190H well, WPX will continue to operate and maintain the 191H access road as described in the 191H SUPO, and the road will be reclaimed after the 190H well is plugged. In such a case, the 191H access road will be reclaimed following the Reclamation Plan (Appendix A).

4. LOCATION OF EXISTING WELLS

There are no recorded water wells within a 1-mile radius of the 190H/191H well pad.

The plugged and abandoned oil and gas wells, active oil and gas wells, and proposed oil and gas wells within a 1-mile radius of the well pad are depicted on Figure 2 (Appendix B).

5. LOCATION OF PRODUCTION FACILITIES

After the drilling and completion phases of the 190H well, the production facilities will be located within the 1.0-acre teardrop / facility area described in Section 10 (Well Site Layout), below.

A depiction of the production facility layout will be deferred until the facility on-site meeting is held with the BLM-FFO. All production equipment will comply with Visual Resource Management requirements. Within 90 days of installation, above-ground structures not subject to safety requirements will be painted Juniper Green (Federal 595a-34127) to blend with vegetation and reduce visual resource impacts.

6. WATER SUPPLY

The well will be horizontally drilled, and completion will include well stimulation (hydraulic fracturing). Water for drilling and completion operations will be purchased from San Juan Basin Water Haulers Association. San Juan Basin Water Haulers Association will obtain water from the following two permitted water wells:

- Turtle Mountain: SJ-960-S-3
- Blanco Trading Post: WR711

The water hauler(s) will access the well pad via the roads described in Sections 2 (Project Location and Existing Roads) and 3 (New or Reconstructed Access Roads).

7. WELL PAD CONSTRUCTION MATERIAL

The 191H well pad has already been constructed. Because the addition of the 190H twin to the well pad will not result in the expansion of the well pad, there will be no additional construction materials associated with the 190H project.

Construction plats are provided in the APD permit package.

8. METHODS FOR HANDLING WASTE DISPOSAL

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

A 30-mil reinforced liner will be placed under the drill rig mats and all drilling machinery, as shown on Figure 3 (Appendix B). This 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.

The project area will not be fully reclaimed until the 190H and 191H APDs expire.

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 drilling and completion operations.

9. ANCILLARY FACILITIES

Pipelines will be permitted and constructed at a later date.

During the pre-disturbance site visit, two staging areas were identified for the 190H project; these two staging areas are described below.

- Elm Ridge Exploration Company, LLC's plugged and abandoned Lybrook South No. 12 well pad will be used as a staging area for the project. The staging area is located immediately east of the start of the 191H access road. The Lybrook South No. 12 well has been plugged, and the well pad has been reclaimed. During staging, WPX will stay within the boundaries of the original well pad area, which measures approximately 2.0 acres (estimated from an aerial photograph). During interim reclamation, WPX will repair any damage to the staging area and will reseed the staging area.
- WPX's Chaco 2306-19E No. 188H well pad will be used as a staging area for the project. The staging area is located immediately west of the northern end of the 191H access road. The Chaco 2306-19E No. 188H well is an active well. During staging, WPX will stay within the boundaries of the original well pad and well pad construction area, which measures approximately 5.0 acres. The working area for this well pad measures approximately 3.0 acres. WPX may use the working area or reclaimed areas for staging. During interim reclamation, WPX will repair any damage to the staging area and will reseed the staging area (with the exception of any previously unvegetated portions of the well pad that facility operator [WPX] prefers to remain unseeded).

The staging areas are depicted in Appendix B (Figure 1).

10. WELL SITE LAYOUT

The interim reclamation/long-term disturbance layout is depicted in Figure 4, Appendix B, and is described below.

WPX will utilize the disturbance already permitted for the 191H well. This includes the following features:

- The teardrop / facility area (known as the "non-reseed working areas") will remain unreclaimed throughout the lifetime of the project. This approximately 1.0-acre area will include the 35-foot-wide tear drop driving surface and the production facilities.
- A 210-by-180-foot potential workover area will surround each wellhead (known as the "reseed working areas"). This area may be used for future activities within the well pad, but will not be used for daily activities. The reseed working area will be reseeded (but not recontoured) during interim reclamation. After excluding the portions of this area that overlap the non-reseed working areas, this area measures approximately 0.7 acre.

