

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: 6-25-14

Well information;

Operator WRX, Well Name and Number Chaco 2306-8L #199H

API# 30-039-31247, Section 8, Township 23N, Range 6E 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. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

Cheryl Herrin
NMOCD Approved by Signature

7-29-2014
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

JUN 25 2014

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

Farmington Field Office
Bureau of Land Management

☒ Single Zone ☐ Multiple Zones

5. Lease Serial No.

NMSF-078362

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

Chaco 2306-08L #199H

9. API Well No.

30-039-31247

10. Field and Pool, or Exploratory

Lybrook Gallup

11. Sec., T., R., M., or Blk. and Survey or Area

Sur: Section 8, T23N, R6W

BHL: Section 12, T23N, R7W

2. Name of Operator

WPX Energy Production, LLC

3a. Address

P.O. Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

(505) 333-1808

4. Location of Well (Report location clearly and in accordance with any State requirements)

At surface 1474' FSL & 209' FWL, sec 8, T23N, R6W

At proposed prod. zone 2321' FNL & 329' FEL, sec 12 T23N, R7W

RECEIVED

JUL 15 2014

14. Distance in miles and direction from nearest town or post office*

approximately 4 miles east of Lybrook, New Mexico

12. County or Parish

Rio Arriba

13. State

NM

15. Distance from proposed*

location to nearest

property or lease line, ft.

(Also to nearest drig. unit line, if any) 209'

16. No. of Acres in lease

2530.37

17. Spacing Unit dedicated to this well

280.50 acres

OIL CONS. DIV DIST. 3

18. Distance from proposed location*

to nearest well, drilling, completed,

applied for, on this lease, ft.

22'

19. Proposed Depth

11,849' MD / 5,387' TVD

20. BLM/BIA Bond No. on file

UTB000178

JUL 18 2014

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6832' GR

22. Approximate date work will start*

July 31, 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

Larry Higgins

Name (Printed/Typed)

Larry Higgins

Date

6/25/14

Title

Regulatory Specialist

Approved by (Signature)

[Signature]
AFM

Name (Printed/Typed)

Office

FFO

Date

7/11/14

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.

This well shares this location with the Chaco #200H. A 124' access road will be required for this well site.

An approximate 375' pipeline access is included in this application

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

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

NMCCD

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

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 25th day of June, 2014.

Name Larry Higgins

Position Title Regulatory Specialist

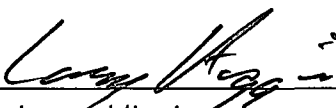
Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 333-1808

Field representative (if not above signatory) _____

E-mail larry.higgins@wpxenergy.com

Date: 06/25/14



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

JUN 25 2014

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-31247	*Pool Code 10079/42289	*Pool Name Counseles Canyon	*Farmington Field Office LYBROOK GALLUP
*Property Code 313513	*Property Name CHACO 2306-08L	*Well Number 199H	
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6832'	

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
L	8	23N	6W		1474	SOUTH	209	WEST	RIO ARriba

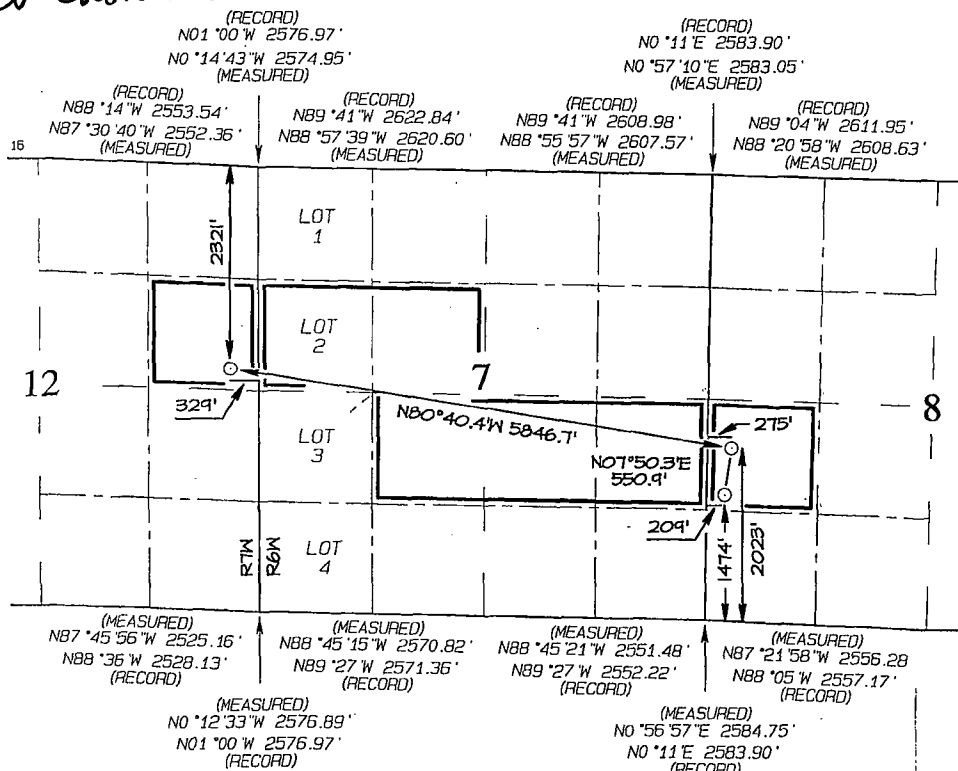
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	12	23N	7W		2321	NORTH	329	EAST	RIO ARriba

12 Dedicated Acres 280.50	NW/4 SW/4 (8) SE/4 NE/4 (12) 280.50 N/2 SE/4-NE/4 SW/4-S/2 NW/4 (7)	13 Joint or Infill	14 Consolidation Code	15 Order No. R-13817
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160.5 Lybrook
120 Counseles

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
2321' FNL 329' FEL
SECTION 12, T23N, R6W
LAT: 36.24014°N
LONG: 107.51945°W
DATUM: NAD1927

LAT: 36.24015°N
LONG: 107.52006°W
DATUM: NAD1983

POINT-OF-ENTRY
2023' FSL 275' FEL
SECTION 7, T23N, R6W
LAT: 36.23774°N
LONG: 107.49985°W
DATUM: NAD1927

LAT: 36.23776°N
LONG: 107.50046°W
DATUM: NAD1983

SURFACE LOCATION
1474' FSL 209' FNL
SECTION 8, T23N, R6W
LAT: 36.23624°N
LONG: 107.50008°W
DATUM: NAD1927

LAT: 36.23626°N
LONG: 107.50069°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: *Larry Higgins* Date: *6/25/14*
Printed Name: **Larry Higgins**
E-mail Address: **larry.higgins@wpxenergy.com**

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 20, 2014
Survey Date: AUGUST 22, 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: 6/18/2014 **FIELD:** Lybrook (Gallup)

WELL NAME: Chaco 2306-08L #199H **SURFACE:** BLM

SH Location: NWSW Sec 8 -23N -06W **ELEVATION:** 6846' GR

BH Location: SENE Sec 12 -23N -07W **MINERALS:** BLM
Rio Arriba Co, NM

MEASURED DEPTH: 11,849' **LEASE #:** NMSF 078362

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

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1337	1329	Point Lookout	4272	4201
Kirtland	1655	1640	Mancos	4496	4420
Picture Cliffs	1952	1930	Kickoff Point	4819	4736
Lewis	2067	2043	Top Target	5656	5422
Chacra	2399	2368	Landing Point	6001	5506
Cliff House	3502	3447	Base Target	6001	5506
Menefee	3546	3490			
			TD	11849	5387

- B. **MUD LOGGING PROGRAM:** Mudlogger on location from surface csg to TD.
- C. **LOGGING PROGRAM:** LWD GR from surface casing to TD.
- 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, and the curve portion of the wellbore. A 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 +/- 4819 (MD) / 4,736' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 6,001' (MD) / 5,506' (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 +/- 11,849' (MD) / 5,470' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,851 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:

<u>CASING TYPE</u>	<u>OH SIZE (IN)</u>	<u>DEPTH (MD) (FT)</u>	<u>CASING SIZE (IN)</u>	<u>WEIGHT(LB)</u>	<u>GRADE</u>
Surface	12.25"	400'+	9.625"	36#	J-55
Intermediate	8.75"	6,001'	7"	23#	K-55
Prod. Liner	6.125"	5,851' - 11,849'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5851'	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 the 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 (536.3 cu ft / 95.5 bbls). Mix Foamed Cement w/ +/- 75,000 SCF Nitrogen. Est. TOC +/- 5,551 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 (~5,800' 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.

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 6,001 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,851 ft. (MD) +/- 78 degree angle. TOC: +/- 5,551 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.

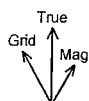
The Drilling Rig will be rigged down at this point and Completion operations will begin. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

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

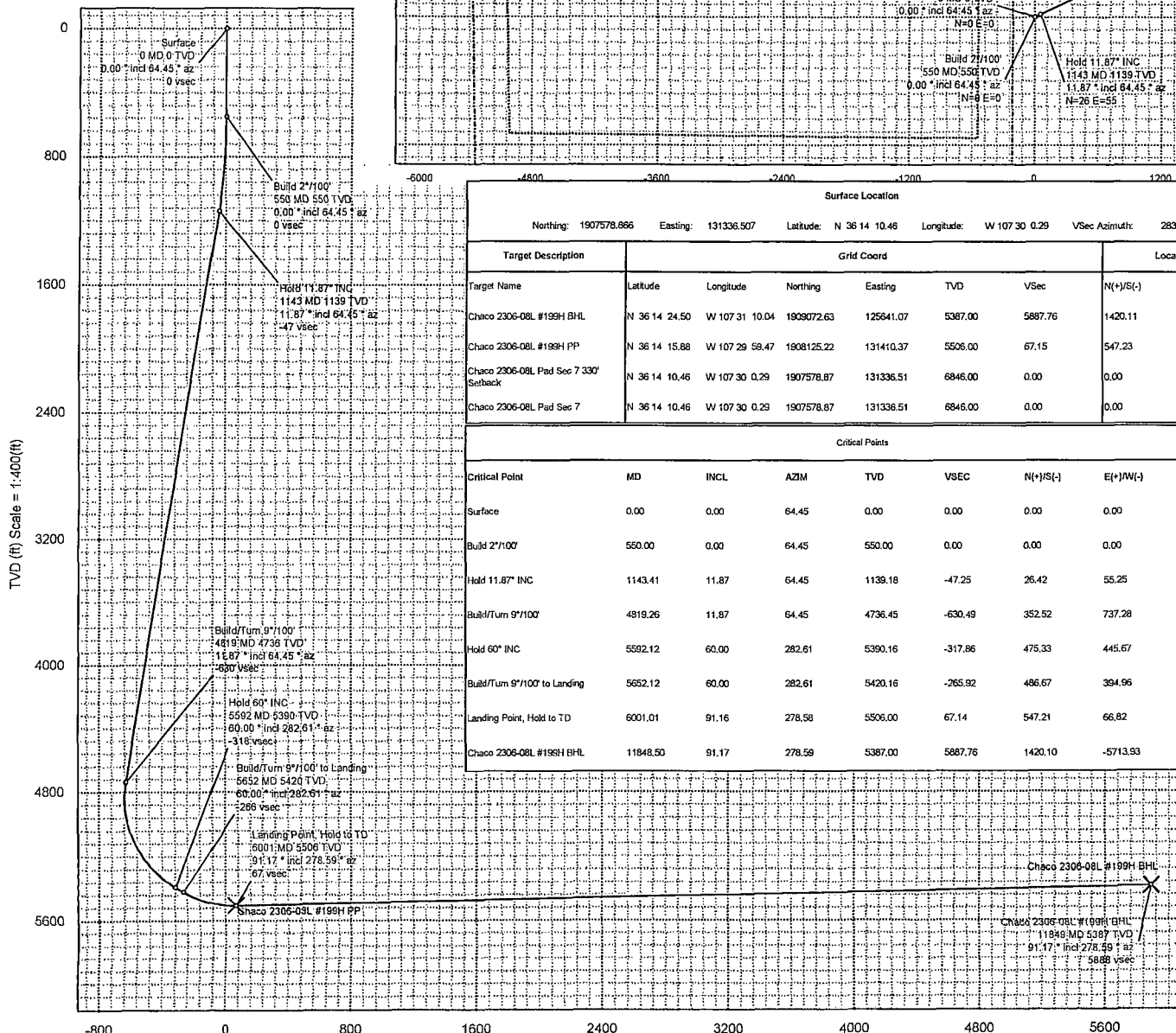
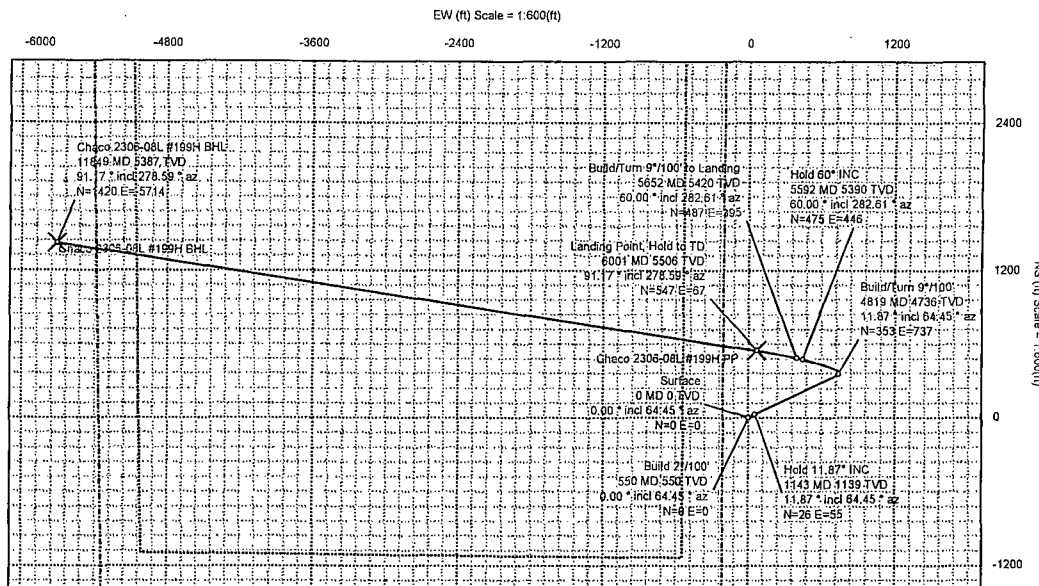
Borehole:	Well:	Field:	Structure:
Original Hole	Chaco 2306-08L #199H	NM, Rio Arriba (NAD 27 CZ)	Sec 8-23N-6W

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: BGGM 2014 Dip: 63.021° Date: 18-Jun-2014	NAD27 New Mexico State Plane, Central Zone, US Feet	Slot: Chaco 2306-08L #199H
MagDec: 9.435° FS: 50101.358nT Gravity FS: 998.506mgm (9.80665 Based)	Lat: N 36 14 10.46 Northing: 1907578.866ft Grid Conv: -0.739°	TVD Ref: KB(6846ft above MSL)
	Lon: W 107 30 0.29 Easting: 131336.507ft Scale Fact: 1.00005553	Plan: Chaco 2306-08L #199H R0 mdv 18Jun14

Proposal



True North
Tot Corr (M->T 9.435°)
Mag Dec (9.435°)
Grid Conv (-0.739°)



Surface Location										
Northing: 1907578.866			Easting: 131336.507		Latitude: N 36 14 10.46		Longitude: W 107 30 0.29		VSec Azimuth: 283.957	
Target Description		Grid Coord						Local Coord		
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)		
Chaco 2306-08L #199H BHL	N 36 14 24.50	W 107 31 10.04	1909072.63	125641.07	5387.00	5887.76	1420.11	-5713.93		
Chaco 2306-08L #199H PP	N 36 14 15.88	W 107 29 58.47	1908125.22	131410.37	5506.00	67.15	547.23	66.81		
Chaco 2306-08L Pad Sec 7 330' Setback	N 36 14 10.46	W 107 30 0.29	1907578.87	131336.51	6846.00	0.00	0.00	0.00		
Chaco 2306-08L Pad Sec 7	N 36 14 10.46	W 107 30 0.29	1907578.87	131336.51	6846.00	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	64.45	0.00	0.00	0.00	0.00			
Build 2°/100'	550.00	0.00	64.45	550.00	0.00	0.00	0.00	0.00		
Hold 11.87° INC	1143.41	11.87	64.45	1139.18	-47.25	26.42	55.25	2.00		
Build/Turn 9°/100'	4819.26	11.87	64.45	4736.45	-630.49	352.52	737.28	0.00		
Hold 60° INC	5592.12	60.00	282.61	5390.16	-317.86	475.33	445.67	9.00		
Build/Turn 9°/100' to Landing	5652.12	60.00	282.61	5420.16	-265.92	486.67	394.96	0.00		
Landing Point, Hold to TD	6001.01	91.16	278.58	5506.00	67.14	547.21	66.82	9.00		
Chaco 2306-08L #199H BHL	11848.50	91.17	278.59	5387.00	5887.76	1420.10	-5713.93	0.00		



Chaco 2306-08L #199H R0 mdv 18Jun14 Proposal Geodetic Report

(Def Plan)

Report Date: June 18, 2014 - 12:35 PM
Client: WPX Energy
Field: NM, Rio Arriba (NAD 27 CZ)
Structure / Slot: WPX Sec 8-23N-6W (Chaco 2306-08L #199HÈH) / Chaco 2306-08L #199H
Well: Chaco 2306-08L #199H
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Chaco 2306-08L #199H R0 mdv 18Jun14
Survey Date: June 18, 2014
Tort / AHD / DDI / ERD Ratio: 112.830 * / 7394.780 ft / 6.254 / 1.343
Coordinate Reference System: NAD27 New Mexico State Plane, Central Zone, US Feet
Location Lat / Long: N 36° 14' 10.46400", W 107° 30' 0.28800"
Location Grid N/E Y/X: N 1907578.866 ftUS, E 131336.507 ftUS
CRS Grid Convergence Angle: -0.7390 *
Grid Scale Factor: 1.00005553
Version / Patch: 2.7.1043.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 283.957 * (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB
TVD Reference Elevation: 6846.000 ft above MSL
Seabed / Ground Elevation: 6832.000 ft above MSL
Magnetic Declination: 9.435 *
Total Gravity Field Strength: 998.5056mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 50101.358 nT
Magnetic Dip Angle: 63.021 *
Declination Date: June 18, 2014
Magnetic Declination Model: BGGM 2014
North Reference: True North
Grid Convergence Used: 0.0000 *
Total Corr Mag North->True North: 9.4353 *
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	64.45	0.00	0.00	0.00	0.00	N/A	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
Build 2"/100'	100.00	0.00	64.45	100.00	0.00	0.00	0.00	0.00	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
	200.00	0.00	64.45	200.00	0.00	0.00	0.00	0.00	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
	300.00	0.00	64.45	300.00	0.00	0.00	0.00	0.00	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
	400.00	0.00	64.45	400.00	0.00	0.00	0.00	0.00	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
	500.00	0.00	64.45	500.00	0.00	0.00	0.00	0.00	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
	550.00	0.00	64.45	550.00	0.00	0.00	0.00	0.00	1907578.87	131336.51	N 36 14 10.46	W 107 30 0.29
	600.00	1.00	64.45	600.00	-0.34	0.19	0.39	2.00	1907579.05	131336.90	N 36 14 10.47	W 107 30 0.28
	700.00	3.00	64.45	699.93	-3.03	1.69	3.54	2.00	1907580.51	131340.07	N 36 14 10.48	W 107 30 0.24
	800.00	5.00	64.45	799.68	-8.41	4.70	9.83	2.00	1907583.44	131346.40	N 36 14 10.51	W 107 30 0.17
	900.00	7.00	64.45	899.13	-16.47	9.21	19.26	2.00	1907587.83	131355.89	N 36 14 10.56	W 107 30 0.05
Hold 11.87° INC	1000.00	9.00	64.45	998.15	-27.21	15.21	31.82	2.00	1907593.67	131368.52	N 36 14 10.61	W 107 29 59.90
	1100.00	11.00	64.45	1096.63	-40.61	22.70	47.49	2.00	1907600.96	131384.28	N 36 14 10.69	W 107 29 59.71
	1143.41	11.87	64.45	1139.18	-47.25	26.42	55.25	2.00	1907604.57	131392.10	N 36 14 10.73	W 107 29 59.61
	1200.00	11.87	64.45	1194.56	-56.23	31.44	65.75	0.00	1907609.45	131402.66	N 36 14 10.77	W 107 29 59.48
	1300.00	11.87	64.45	1292.42	-72.09	40.31	84.30	0.00	1907618.09	131421.33	N 36 14 10.86	W 107 29 59.26
	1400.00	11.87	64.45	1390.28	-87.96	49.18	102.86	0.00	1907626.72	131440.00	N 36 14 10.95	W 107 29 59.03
	1500.00	11.87	64.45	1488.14	-103.83	58.05	121.41	0.00	1907635.35	131458.66	N 36 14 11.04	W 107 29 58.81
	1600.00	11.87	64.45	1586.01	-119.69	66.92	139.97	0.00	1907643.98	131477.33	N 36 14 11.13	W 107 29 58.58
	1700.00	11.87	64.45	1683.87	-135.56	75.79	158.52	0.00	1907652.61	131496.00	N 36 14 11.21	W 107 29 58.35
	1800.00	11.87	64.45	1781.73	-151.43	84.67	177.08	0.00	1907661.25	131514.67	N 36 14 11.30	W 107 29 58.13
	1900.00	11.87	64.45	1879.59	-167.29	93.54	195.63	0.00	1907669.88	131533.34	N 36 14 11.39	W 107 29 57.90
	2000.00	11.87	64.45	1977.45	-183.16	102.41	214.18	0.00	1907678.51	131552.01	N 36 14 11.48	W 107 29 57.67
	2100.00	11.87	64.45	2075.32	-199.03	111.28	232.74	0.00	1907687.14	131570.67	N 36 14 11.56	W 107 29 57.45
	2200.00	11.87	64.45	2173.18	-214.89	120.15	251.29	0.00	1907695.77	131589.34	N 36 14 11.65	W 107 29 57.22
	2300.00	11.87	64.45	2271.04	-230.76	129.02	269.85	0.00	1907704.40	131608.01	N 36 14 11.74	W 107 29 56.99
	2400.00	11.87	64.45	2368.90	-246.63	137.90	288.40	0.00	1907713.04	131626.68	N 36 14 11.83	W 107 29 56.77
	2500.00	11.87	64.45	2466.77	-262.49	146.77	306.96	0.00	1907721.67	131645.35	N 36 14 11.92	W 107 29 56.54
	2600.00	11.87	64.45	2564.63	-278.36	155.64	325.51	0.00	1907730.30	131664.02	N 36 14 12.00	W 107 29 56.31
	2700.00	11.87	64.45	2662.49	-294.23	164.51	344.06	0.00	1907738.93	131682.68	N 36 14 12.09	W 107 29 56.09
	2800.00	11.87	64.45	2760.35	-310.09	173.38	362.62	0.00	1907747.56	131701.35	N 36 14 12.18	W 107 29 55.86
	2900.00	11.87	64.45	2858.22	-325.96	182.25	381.17	0.00	1907756.20	131720.02	N 36 14 12.27	W 107 29 55.64
	3000.00	11.87	64.45	2956.08	-341.83	191.12	399.73	0.00	1907764.83	131738.69	N 36 14 12.35	W 107 29 55.41
	3100.00	11.87	64.45	3053.94	-357.69	200.00	418.28	0.00	1907773.46	131757.36	N 36 14 12.44	W 107 29 55.18
	3200.00	11.87	64.45	3151.80	-373.56	208.87	436.84	0.00	1907782.09	131776.02	N 36 14 12.53	W 107 29 54.96
	3300.00	11.87	64.45	3249.66	-389.43	217.74	455.39	0.00	1907790.72	131794.69	N 36 14 12.62	W 107 29 54.73
	3400.00	11.87	64.45	3347.53	-405.29	226.61	473.94	0.00	1907799.36	131813.36	N 36 14 12.70	W 107 29 54.50
	3500.00	11.87	64.45	3445.39	-421.16	235.48	492.50	0.00	1907807.99	131832.03	N 36 14 12.79	W 107 29 54.28
	3600.00	11.87	64.45	3543.25	-437.03	244.35	511.05	0.00	1907816.62	131850.70	N 36 14 12.88	W 107 29 54.05
	3700.00	11.87	64.45	3641.11	-452.90	253.22	529.61	0.00	1907825.25	131869.37	N 36 14 12.97	W 107 29 53.82
	3800.00	11.87	64.45	3738.98	-468.76	262.10	548.16	0.00	1907833.88	131888.03	N 36 14 13.06	W 107 29 53.60
3900.00	11.87	64.45	3836.84	-484.63	270.97	566.72	0.00	1907842.52	131906.70	N 36 14 13.14	W 107 29 53.37	
4000.00	11.87	64.45	3934.70	-500.50	279.84	585.27	0.00	1907851.15	131925.37	N 36 14 13.23	W 107 29 53.14	
4100.00	11.87	64.45	4032.56	-516.36	288.71	603.83	0.00	1907859.78	131944.04	N 36 14 13.32	W 107 29 52.92	
4200.00	11.87	64.45	4130.43	-532.23	297.58	622.38	0.00	1907868.41	131962.71	N 36 14 13.41	W 107 29 52.69	
4300.00	11.87	64.45	4228.29	-548.10	306.45	640.93	0.00	1907877.04	131981.38	N 36 14 13.49	W 107 29 52.46	
4400.00	11.87	64.45	4326.15	-563.96	315.33	659.49	0.00	1907885.67	132000.04	N 36 14 13.58	W 107 29 52.24	
4500.00	11.87	64.45	4424.01	-579.83	324.20	678.04	0.00	1907894.31	132018.71	N 36 14 13.67	W 107 29 52.01	
4600.00	11.87	64.45	4521.87	-595.70	333.07	696.60	0.00	1907902.94	132037.38	N 36 14 13.76	W 107 29 51.79	
4700.00	11.87	64.45	4619.74	-611.56	341.94	715.15	0.00	1907911.57	132056.05	N 36 14 13.85	W 107 29 51.56	
4800.00	11.87	64.45	4717.60	-627.43	350.81	733.71	0.00	1907920.20	132074.72	N 36 14 13.93	W 107 29 51.33	
Build/Turn 9"/100'	4819.26	11.87	64.45	4736.45	-630.49	352.52	737.28	0.00	1907921.87	132078.31	N 36 14 13.95	W 107 29 51.29
Hold 60° INC	4900.00	7.20	29.25	4816.11	-638.24	360.53	747.26	9.00	1907929.74	132088.39	N 36 14 14.03	W 107 29 51.17
	5000.00	9.34	324.66	4915.26	-633.73	372.64	745.62	9.00	1907941.88	132088.91	N 36 14 14.15	W 107 29 51.19
	5100.00	16.85	301.68	5012.65	-613.73	386.90	728.55	9.00	1907956.36	132070.03	N 36 14 14.29	W 107 29 51.40
	5200.00	25.34	293.16	5105.89	-578.73	402.96	696.48	9.00	1907972.83	132038.17	N 36 14 14.45	W 107 29 51.79
	5300.00	34.07	288.77	5192.67	-529.59	420.42	650.19	9.00	1907990.89	131992.10	N 36 14 14.62	W 107 29 52.35
	5400.00	42.91	286.00	5270.87	-467.53	438.86	590.82	9.00	1908010.09	131932.97	N 36 14 14.80	W 107 29 53.08
	5500.00	51.79	284.04	5338.55	-394.07	457.81	519.84	9.00	1908029.96	131862.23	N 36 14 14.99	W 107 29 53.94
	5592.12	60.00	282.61	5390.16	-317.86	475.33	445.67	9.00	1908048.43	131788.29	N 36 14 15.16	W 107 29 54.85
	5600.00	60.00	282.61	5394.10	-311.04	476.82	439.01	0.00	1908050.01	131781.65	N 36 14 15.18	W 107 29 54.93
	Build/Turn 9"/100' to Landing	5652.12	60.00	282.61	5420.16	-285.92	486.67	394.96	0.00	1908060.43	131737.73	N 36 14 15.28
Landing Point, Held to TD	5700.00	64.27	281.97	5442.54	-223.61	495.88	353.61	9.00	1908069.96	131696.50	N 36 14 15.37	W 107 29 55.97
	5800.00	73.20	280.75	5478.77	-130.62	513.98	262.33	9.00	1908089.45	131605.46	N 36 14 15.55	W 107 29 57.09
	5900.00	82.14	279.65	5500.10	-33.23	531.25	166.28	9.00	1908107.96	131509.63	N 36 14 15.72	W 107 29 58.26
	6000.00	91.07	278.60	5506.02	66.13	547.06	67.82	9.00	1908125.04	131411.38	N 36 14 15.87	W 107 29 59.46
	6001.01	91.17	278.59	5506.00	67.14	547.21	66.82	9.00	1908125.20	131410.38	N 36 14 15.88	W 107 29 59.47
	6100.00	91.17	278.59	5503.99	165.67	561.99	-31.04	0.00	1908141.24	131312.72	N 36 14 16.02	W 107 30 0.67
	6200.00	91.17	278.59	5501.95	265.21	576.91	-129.90	0.00	1908157.44	131214.05	N 36 14 16.17	W 107 30 1.87

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 ° ' ")
	6700.00	91.17	278.59	5491.78	762.91	651.54	-624.19	0.00	1908238.43	130720.74	N 36 14 16.91	W 107 30 7.91
	6800.00	91.17	278.59	5489.75	862.45	666.46	-723.05	0.00	1908254.63	130622.07	N 36 14 17.05	W 107 30 9.11
	6900.00	91.17	278.59	5487.72	961.99	681.39	-821.91	0.00	1908270.83	130523.41	N 36 14 17.20	W 107 30 10.32
	7000.00	91.17	278.59	5485.68	1061.53	696.31	-920.77	0.00	1908287.03	130424.75	N 36 14 17.35	W 107 30 11.53
	7100.00	91.17	278.59	5483.65	1161.08	711.24	-1019.63	0.00	1908303.23	130326.08	N 36 14 17.50	W 107 30 12.73
	7200.00	91.17	278.59	5481.62	1260.62	726.16	-1118.49	0.00	1908319.44	130227.42	N 36 14 17.64	W 107 30 13.94
	7300.00	91.17	278.59	5479.58	1360.16	741.09	-1217.35	0.00	1908335.64	130128.75	N 36 14 17.79	W 107 30 15.15
	7400.00	91.17	278.59	5477.55	1459.70	756.02	-1316.21	0.00	1908351.84	130030.09	N 36 14 17.94	W 107 30 16.35
	7500.00	91.17	278.59	5475.51	1559.24	770.94	-1415.07	0.00	1908368.04	129931.43	N 36 14 18.09	W 107 30 17.56
	7600.00	91.17	278.59	5473.48	1658.78	785.87	-1513.92	0.00	1908384.24	129832.76	N 36 14 18.23	W 107 30 18.77
	7700.00	91.17	278.59	5471.45	1758.32	800.79	-1612.78	0.00	1908400.44	129734.10	N 36 14 18.38	W 107 30 19.97
	7800.00	91.17	278.59	5469.41	1857.86	815.72	-1711.64	0.00	1908416.64	129635.44	N 36 14 18.53	W 107 30 21.18
	7900.00	91.17	278.59	5467.38	1957.40	830.65	-1810.50	0.00	1908432.84	129536.77	N 36 14 18.68	W 107 30 22.39
	8000.00	91.17	278.59	5465.34	2056.94	845.57	-1909.36	0.00	1908449.04	129438.11	N 36 14 18.83	W 107 30 23.59
	8100.00	91.17	278.59	5463.31	2156.48	860.50	-2008.22	0.00	1908465.24	129339.45	N 36 14 18.97	W 107 30 24.80
	8200.00	91.17	278.59	5461.27	2256.02	875.43	-2107.08	0.00	1908481.45	129240.78	N 36 14 19.12	W 107 30 26.01
	8300.00	91.17	278.59	5459.24	2355.56	890.35	-2205.94	0.00	1908497.65	129142.12	N 36 14 19.27	W 107 30 27.21
	8400.00	91.17	278.59	5457.20	2455.10	905.28	-2304.79	0.00	1908513.85	129043.46	N 36 14 19.42	W 107 30 28.42
	8500.00	91.17	278.59	5455.17	2554.64	920.21	-2403.65	0.00	1908530.05	128944.79	N 36 14 19.56	W 107 30 29.63
	8600.00	91.17	278.59	5453.13	2654.18	935.14	-2502.51	0.00	1908546.25	128846.13	N 36 14 19.71	W 107 30 30.83
	8700.00	91.17	278.59	5451.10	2753.72	950.06	-2601.37	0.00	1908562.45	128747.47	N 36 14 19.86	W 107 30 32.04
	8800.00	91.17	278.59	5449.06	2853.26	964.99	-2700.23	0.00	1908578.66	128648.81	N 36 14 20.01	W 107 30 33.25
	8900.00	91.17	278.59	5447.03	2952.80	979.92	-2799.09	0.00	1908594.86	128550.14	N 36 14 20.15	W 107 30 34.46
	9000.00	91.17	278.59	5444.99	3052.34	994.85	-2897.95	0.00	1908611.06	128451.48	N 36 14 20.30	W 107 30 35.66
	9100.00	91.17	278.59	5442.96	3151.88	1009.77	-2996.81	0.00	1908627.26	128352.82	N 36 14 20.45	W 107 30 36.87
	9200.00	91.17	278.59	5440.92	3251.42	1024.70	-3095.66	0.00	1908643.47	128254.15	N 36 14 20.60	W 107 30 38.08
	9300.00	91.17	278.59	5438.89	3350.96	1039.63	-3194.52	0.00	1908659.67	128155.49	N 36 14 20.74	W 107 30 39.28
	9400.00	91.17	278.59	5436.85	3450.50	1054.56	-3293.38	0.00	1908675.87	128056.83	N 36 14 20.89	W 107 30 40.49
	9500.00	91.17	278.59	5434.82	3550.04	1069.49	-3392.24	0.00	1908692.08	127958.16	N 36 14 21.04	W 107 30 41.70
	9600.00	91.17	278.59	5432.78	3649.58	1084.41	-3491.10	0.00	1908708.28	127859.50	N 36 14 21.19	W 107 30 42.90
	9700.00	91.17	278.59	5430.75	3749.13	1099.34	-3589.96	0.00	1908724.48	127760.84	N 36 14 21.33	W 107 30 44.11
	9800.00	91.17	278.59	5428.71	3848.67	1114.27	-3688.81	0.00	1908740.68	127662.17	N 36 14 21.48	W 107 30 45.32
	9900.00	91.17	278.59	5426.68	3948.21	1129.20	-3787.67	0.00	1908756.89	127563.51	N 36 14 21.63	W 107 30 46.52
	10000.00	91.17	278.59	5424.64	4047.75	1144.13	-3886.53	0.00	1908773.09	127464.85	N 36 14 21.78	W 107 30 47.73
	10100.00	91.17	278.59	5422.61	4147.29	1159.06	-3985.39	0.00	1908789.29	127366.19	N 36 14 21.92	W 107 30 48.94
	10200.00	91.17	278.59	5420.57	4246.83	1173.99	-4084.25	0.00	1908805.50	127267.52	N 36 14 22.07	W 107 30 50.14
	10300.00	91.17	278.59	5418.53	4346.37	1188.92	-4183.11	0.00	1908821.70	127168.86	N 36 14 22.22	W 107 30 51.35
	10400.00	91.17	278.59	5416.50	4445.91	1203.84	-4281.97	0.00	1908837.91	127070.20	N 36 14 22.37	W 107 30 52.56
	10500.00	91.17	278.59	5414.46	4545.45	1218.77	-4380.82	0.00	1908854.11	126971.53	N 36 14 22.51	W 107 30 53.76
	10600.00	91.17	278.59	5412.43	4644.99	1233.70	-4479.68	0.00	1908870.31	126872.87	N 36 14 22.66	W 107 30 54.97
	10700.00	91.17	278.59	5410.39	4744.53	1248.63	-4578.54	0.00	1908886.52	126774.21	N 36 14 22.81	W 107 30 56.18
	10800.00	91.17	278.59	5408.35	4844.07	1263.56	-4677.40	0.00	1908902.72	126675.55	N 36 14 22.96	W 107 30 57.38
	10900.00	91.17	278.59	5406.32	4943.61	1278.49	-4776.26	0.00	1908918.93	126576.88	N 36 14 23.10	W 107 30 58.59
	11000.00	91.17	278.59	5404.28	5043.15	1293.42	-4875.12	0.00	1908935.13	126478.22	N 36 14 23.25	W 107 30 59.80
	11100.00	91.17	278.59	5402.24	5142.69	1308.35	-4973.97	0.00	1908951.34	126379.56	N 36 14 23.40	W 107 31 1.00
	11200.00	91.17	278.59	5400.21	5242.23	1323.28	-5072.83	0.00	1908967.54	126280.89	N 36 14 23.55	W 107 31 2.21
	11300.00	91.17	278.59	5398.17	5341.77	1338.21	-5171.69	0.00	1908983.74	126182.23	N 36 14 23.69	W 107 31 3.42
	11400.00	91.17	278.59	5396.13	5441.31	1353.14	-5270.55	0.00	1908999.95	126083.57	N 36 14 23.84	W 107 31 4.62
	11500.00	91.17	278.59	5394.10	5540.86	1368.07	-5369.41	0.00	1909016.15	125984.91	N 36 14 23.99	W 107 31 5.83
	11600.00	91.17	278.59	5392.06	5640.40	1383.00	-5468.26	0.00	1909032.36	125886.24	N 36 14 24.14	W 107 31 7.04
	11700.00	91.17	278.59	5390.02	5739.94	1397.93	-5567.12	0.00	1909048.57	125787.58	N 36 14 24.28	W 107 31 8.24
	11800.00	91.17	278.59	5387.99	5839.48	1412.86	-5665.98	0.00	1909064.77	125688.92	N 36 14 24.43	W 107 31 9.45
Chaco 2306-08L #199H BHL	11848.50	91.17	278.59	5387.00	5887.76	1420.10	-5713.93	0.00	1909072.63	125641.06	N 36 14 24.50	W 107 31 10.04

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 2306-08L #199H R0 mdv 18Jun14
	1	14.000	11848.503	1/100.000	30.000	30.000	SLB_MWD-STD	Original Hole / Chaco 2306-08L #199H R0 mdv 18Jun14

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) as part of their Chaco 2306-08L Nos. 199H and 200H (199H/200H) Applications for Permit to Drill (APDs). This SUPO is provided per Onshore Oil and Gas Order No. 1.

The 199H and 200H wells will each be permitted under an approved APD. The associated well pad, access road, and well-connect pipeline corridor, which will be located on-lease, will also be permitted under the approved APDs. One staging area, which is located on an inactive well pad, will be authorized by an agreement with Elm Ridge Exploration Company LLC (Elm Ridge).

The 199H and 200H wells will drill to BLM-managed minerals. All surface features associated with the project will be on surface managed by the BLM-FFO. A pre-disturbance onsite meeting was held for the project on January 29, 2014. The BLM, WPX, and an environmental consultant (Nelson Consulting, Inc.) 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 Conditions of Approval will be followed, if any are attached to the approved APDs.

2. PROJECT LOCATION AND DESCRIPTION

2.1. Project Location

The project area is located in Rio Arriba County, New Mexico. The project area is located approximately 43 miles south-southeast of the town of Bloomfield, New Mexico. To access the project area from Bloomfield, head south on U.S. Highway 550 from the U.S. Highway 550-U.S. Highway 64 intersection for approximately 51 miles, turn left onto an access road for approximately 0.3 mile, turn right onto another access road for 0.1 mile, turn right onto another access road for 0.1 mile, then turn left onto another access road for 0.3 mile. The 199H/200H access road begins on the left (northern) 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 APD packages.

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

Facility	Legal Location (New Mexico Principal Meridian)		
	Quarter-Quarter	Section	Township & Range
Staging Area:	NW ¼ SW ¼ W ½ SW ¼	8	Township 23 North, Range 6 West
Marcus A No. 021 Well Pad			
Access Road/Pipeline Corridor			
Well Pad	NE ¼ SE ¼	7	
Construction Zone			

The latitude/longitude and footages of the bottom holes and surface holes (wellheads) are provided in the below table.

7. WATER SUPPLY

The wells 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 project area via the roads described in Sections 2 (Project Location and Description) and 3 (New or Reconstructed Access Roads).

8. CONSTRUCTION

Excavated materials from the cuts will be used on the fill portions of the location to level the well pad. Approximately 3 feet of cut and 3 feet of fill will be needed to create a level well pad. No additional materials will be required for construction of the well pad.

Construction plats are provided in the APD packages.

Working areas will be confined to the project areas described in Section 2 (Project Location and Description).

Maintenance activities will cease when soil or road surfaces become saturated to the extent that construction equipment is unable to stay within the project area and/or when activities cause irreparable harm to roads, soils, or streams.

9. METHODS FOR HANDLING WASTE DISPOSAL

- ✓ Drilling operations will utilize a closed-loop system. Drilling of the horizontal lateral will be accomplished with water-based mud. All cuttings will be hauled to a commercial disposal facility or land farm. WPX will follow New Mexico Oil Conservation Division "Pit Rule" guidelines and Onshore Order No. 1 regarding the placement, operation, and removal of closed-loop systems. No blow pit will be used.

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

One previously disturbed staging area will be used; the staging area is described in Section 2.2 (Project Description). During staging, WPX will stay within the boundaries of the previously disturbed well pad. During interim reclamation, WPX will repair any damage to and reseed the staging areas (with the exception of portions of the staging area that the well pad operator prefers to remain unseeded).

