

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: 5-22-14

Well information;

Operator WPX, Well Name and Number Chaco 2308-24H #154H

API# 30-045-35549, Section 24, Township 23 NS, Range 8 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.
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ 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.

Charlie Herrera
NMOCD Approved by Signature

9-18-2014
Date
XO

-10-14

Form 3160-3
(September 2001)

RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 23 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

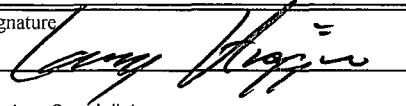
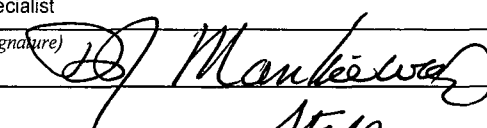
Fannington Field Office

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM-110324	
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ 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		8. Lease Name and Well No. Chaco 2308-24H #154H	
3b. Phone No. (include area code) (505) 333-1808		9. API Well No. 30-045-35549	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1744' FNL & 195' FEL, sec 24, T23N, R8W At proposed prod. zone 1676' FNL & 230' FWL, sec 24, T23N, R8W		10. Field and Pool, or Exploratory Basin Mancos	
14. Distance in miles and direction from nearest town or post office* Approximately 6 miles northwest of Lybrook, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area Section 24, T23N, R8W Section 24, T23N, R8W	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 195'		12. County or Parish San Juan County	
16. No. of Acres in lease 640		13. State NM	
17. Spacing Unit dedicated to this well RCVD SEP 11 '14			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 22'		20. BLM/BIA Bond No. on file UTB000178 OIL CONS. DIV.	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6896' GR		22. Approximate date work will start* July 1, 2014	
		23. Estimated duration 1 month DIST. 3	

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Larry Higgins	Date 5/22/14
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) J. Manke	Date 9/18/14
Title AFN	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 Basin Mancos Oil 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 will be submitted directly to the BLM.

1902' of new access road is needed.

1292' of the access is owned by the W. A. Lybrook heirs. A surface agreement is near completion and a copy will be furnished to BLM.

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

NMCCD

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

action is subject to
initial and procedural review
pursuant to 43 CFR 3165.3 and
real pursuant to 43 CFR 3165.4

CONFIDENTIAL

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

MAY 23 2014

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-35549		Pool Code 97232	Pool Name FARMINGTON FIELD OFFICE BASIN MANCOS
Property Code 313712	Property Name CHACO 2308-24H		Well Number 154H
GRID No. 120782	Operator Name WPX ENERGY PRODUCTION, LLC		Elevation 6896'

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
H	24	23N	8W		1744	NORTH	195	EAST	SAN JUAN

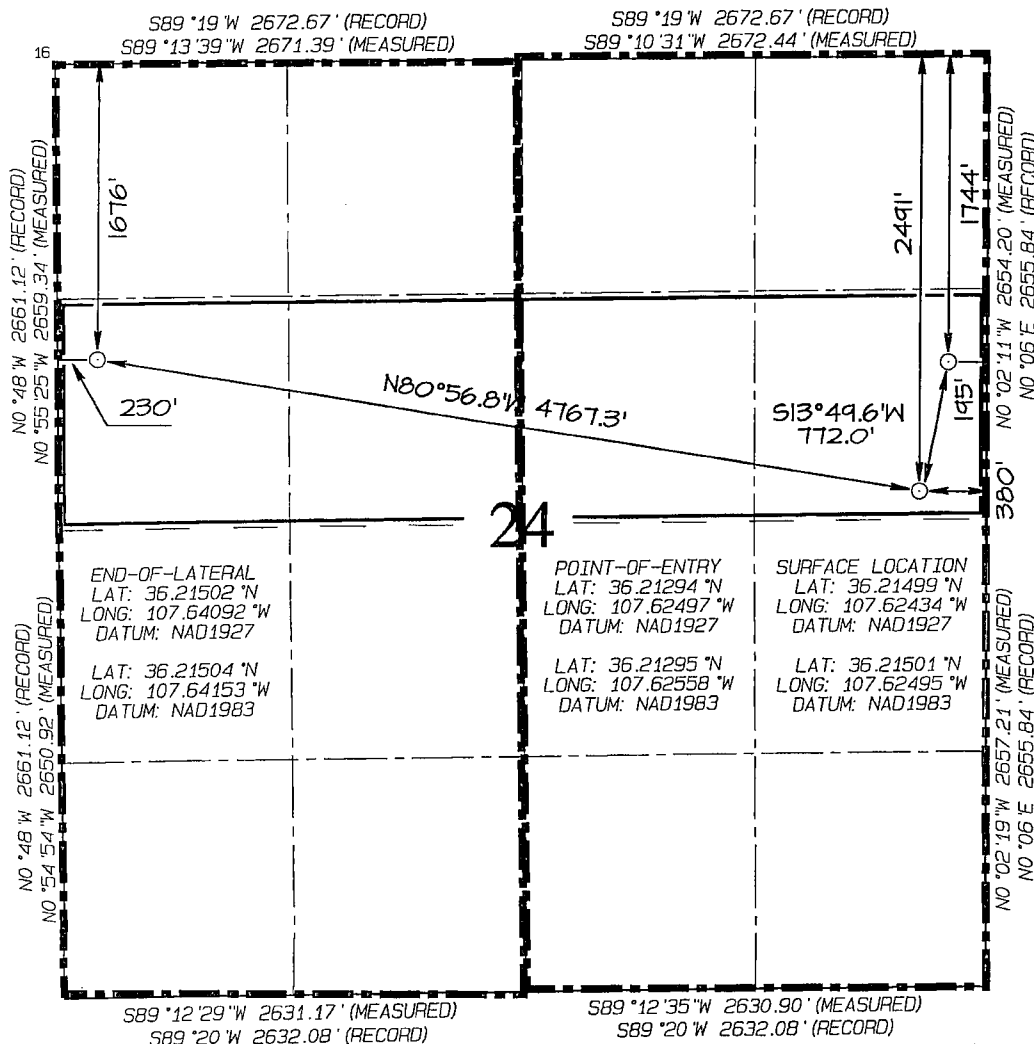
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	23N	8W		1676	NORTH	230	WEST	SAN JUAN

Dedicated Acres 640 Acres		Joint or Infill	Consolidation Code	Order No.
------------------------------	--	-----------------	--------------------	-----------

OIL CONS. DIV DIST. 3

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 SEP 11 2014



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: 5/22/14

Printed Name: Larry Higgins

E-mail Address: larry.higgins@wpenergy.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: MAY 16, 2014
Survey Date: SEPTEMBER 12, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

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 22nd day of May, 2014.

Name Larry Higgins

Position Title Regulatory Specialist

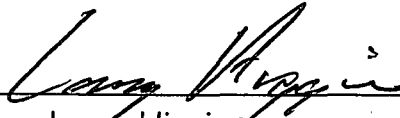
Address P.O. Box 640, Aztec, NM 87410

Telephone (505) 333-1808

Field representative (if not above signatory) _____

E-mail larry.higgins@wpxenergy.com

Date: 05/22/14


Larry Higgins
Regulatory Spec.
WPX Energy Production, LLC

WPX ENERGY

Operations Plan

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

DATE: 5/8/2014 **FIELD:** Basin Mancos

WELL NAME: Chaco 2308-24H #154H **SURFACE:** BLM

SH Location: SENE Sec 24-23N-08W **ELEVATION:** 6896' GR

BH Location: SWNW Sec 24-23N-08W **MINERALS:** BLM
San Juan, NM

MEASURED DEPTH: 10,570' **LEASE #:** NMNM 110324

I. GEOLOGY: Surface formation – Nacimiento

A. FORMATION TOPS: (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	932	931	Point Lookout	4073	3920
Kirtland	1118	1114	Mancos	4248	4094
Picture Cliffs	1579	1557	Kickoff Point	4714	4559
Lewis	1704	1675	Top Target	5299	5065
Chacra	1982	1937	Landing Point	5799	5225
Cliff House	3121	3011	Base Target	5799	5225
Menefee	3187	3073			
			TD	10570	5039

- 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 +/- 4714 (MD) / 4,559' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,799' (MD) / 5225 (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 +/- 10,570' (MD) / 5,039' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,649 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 5/8	36#	J-55
Intermediate	8.75"	5,799'	7	23#	K-55
Prod. Liner	6.125"	5,649' - 10,570'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5649'	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., and 2,000ft. Additionally run 1 turbolizing centralizer on every other joint from 100' below the top of the Kirtland to 100' above the top of the Ojo Alamo, as referenced in Formation Tops in Section I-A.
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 +/- 5,349 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 5,799 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,649 ft. (MD) +/- 79 degree angle. TOC: +/- 5,349 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.

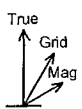
The Drilling Rig will be rigged down at this point and Completion operations will begin. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

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

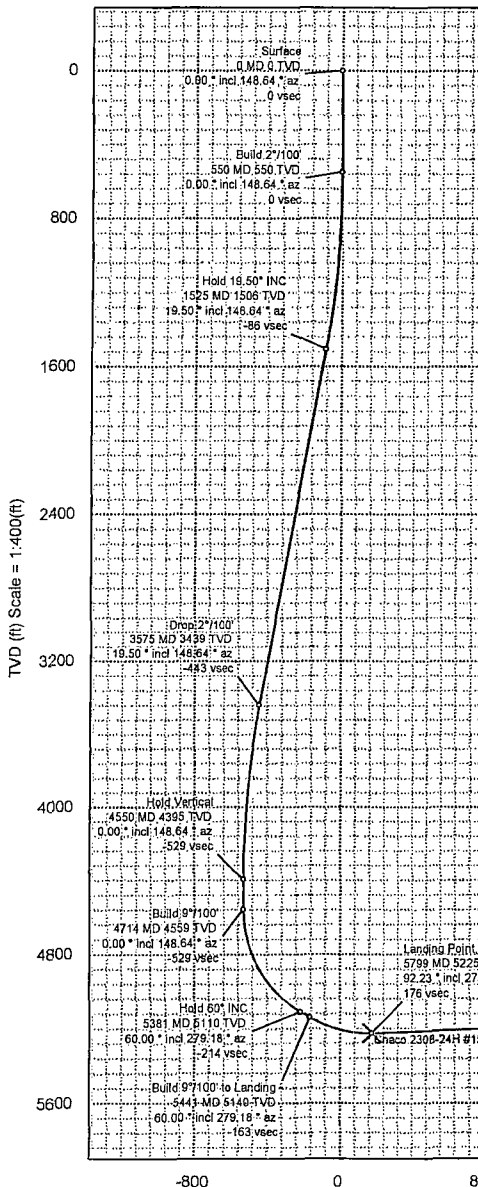
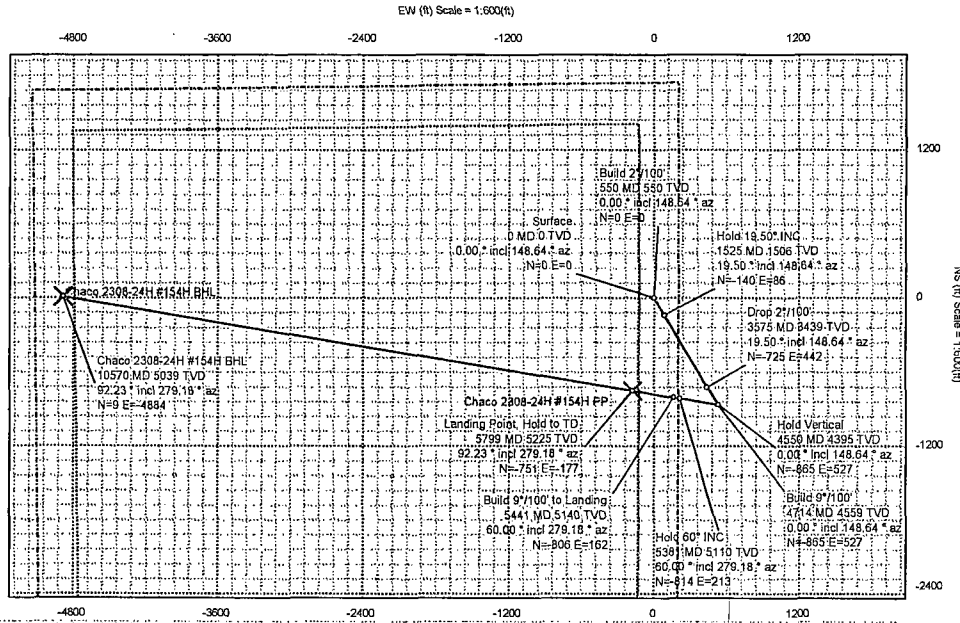
Borehole:	Well:	Field:	Structure:
Original Hole	Chaco 2308-24H #154H	NM San Juan County NAD27	Sec 24-23N-8W

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: BGGM 2013 Dip: 62.987° Date: 22-Nov-2013	NAD27 New Mexico State Plane, Western Zone, US Feet	Slot: Chaco 2308-24H #154H
MagDec: 9.517° FS: 50148.915mT Gravity FS: 998.919mgn (9.80665 Based)	Lat: N 36 12 54.00 Northing: 1897567.872r Grid Conv: 0.1235°	TVD Ref: RKB(6910ft above MSL)
	Lon: W 107 37 27.73 Easting: 561642.024ftU Scale Fact: 0.99982101	Plan: Chaco 2308-24H #154H R0 mdy 07May14

Proposal



True North
Tot Corr (M->T 9.517°)
Mag Dec (9.517°)
Grid Conv (0.123°)



Surface Location									
Northing: 1897567.872		Easting: 561642.024		Latitude: N 36 12 54.00		Longitude: W 107 37 27.73		VSec Azimuth: 270.107	
Target Description	Grid Coord						Local Coord		
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)	
Chaco 2308-24H #154H BHL	N 36 12 54.09	W 107 38 27.33	1897566.50	556758.68	5039.00	4883.74	9.15	-4883.73	
Chaco 2308-24H #154H PP	N 36 12 46.57	W 107 37 29.89	1896816.30	561466.54	5225.00	175.72	-751.26	-177.12	
Chaco 2308-24H 330° Setback	N 36 12 54.22	W 107 37 27.62	1897589.73	561650.83	6910.00	-8.81	21.84	8.65	
Chaco 2308-24H Section Line	N 36 12 54.22	W 107 37 27.62	1897589.73	561650.83	6910.00	-8.81	21.84	8.65	
Critical Points									
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS	
Surface	0.00	0.00	148.64	0.00	0.00	0.00	0.00		
Build 2°/100'	550.00	0.00	148.64	550.00	0.00	0.00	0.00	0.00	
Hold 19.50° INC	1525.11	19.50	148.64	1506.39	-85.79	-140.35	85.53	2.00	
Drop 2°/100'	3574.93	19.50	148.64	3438.61	-443.01	-724.70	441.65	0.00	
Hold Vertical	4550.04	0.00	148.64	4395.00	-528.80	-865.05	527.18	2.00	
Build 9°/100'	4713.90	0.00	148.64	4558.86	-528.80	-865.05	527.18	0.00	
Hold 60° INC	5380.57	60.00	279.18	5110.19	-214.47	-814.27	212.95	9.00	
Build 9°/100' to Landing	5440.57	60.00	279.18	5140.19	-163.16	-805.98	161.65	0.00	
Landing Point, Hold to TD	5796.72	92.23	279.18	5225.00	175.68	-751.25	-177.08	9.00	
Chaco 2308-24H #154H BHL	10570.02	92.23	279.18	5039.00	4883.74	9.15	-4883.73	0.00	

Vertical Section (ft) Azim = 270.107° Scale = 1:400(ft) Origin = ON-S, OE-W



Chaco 2308-24H #154H R0 mdv 07May14 Proposal Geodetic Report



(Def Plan)

Report Date: May 08, 2014 - 08:53 AM
Client: WPX Energy
Field: NM San Juan County NAD27
Structure / Slot: WPX Sec 24-23N-8W (Chaco 2308-24H #153H & #154H) / Chaco 2308-24H #154H
Well: Chaco 2308-24H #154H
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Chaco 2308-24H #154H R0 mdv 07May14
Survey Date: November 22, 2013
Tort / AHD / DDI / ERD Ratio: 131.243 ° / 8494.102 ft / 6.237 / 1.243
Coordinate Reference System: NAD27 New Mexico State Plane, Western Zone, US Feet
Location Lat / Long: N 36° 12' 54.00000", W 107° 37' 27.73200"
Location Grid N/E Y/X: N 1897567.872 ftUS, E 581642.024 ftUS
CRS Grid Convergence Angle: 0.1235 °
Grid Scale Factor: 0.99992101
Version / Patch: 2.7.1043.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 270.107 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 6910.000 ft above MSL
Seabed / Ground Elevation: 6896.000 ft above MSL
Magnetic Declination: 9.517 °
Total Gravity Field Strength: 998.9186mgn (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 50148.915 nT
Magnetic Dip Angle: 62.987 °
Declination Date: November 22, 2013
Magnetic Declination Model: BGGM 2013
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North->True: 9.5169 °
North:
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	148.64	0.00	0.00	0.00	0.00	N/A	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
Build 2°/100'	100.00	0.00	148.64	100.00	0.00	0.00	0.00	0.00	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
	200.00	0.00	148.64	200.00	0.00	0.00	0.00	0.00	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
	300.00	0.00	148.64	300.00	0.00	0.00	0.00	0.00	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
	400.00	0.00	148.64	400.00	0.00	0.00	0.00	0.00	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
	500.00	0.00	148.64	500.00	0.00	0.00	0.00	0.00	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
	550.00	0.00	148.64	550.00	0.00	0.00	0.00	0.00	1897567.87	561642.02	N 36 12 54.00	W 107 37 27.73	
	600.00	1.00	148.64	600.00	-0.23	-0.37	0.23	2.00	1897567.50	561642.25	N 36 12 54.00	W 107 37 27.73	
	700.00	3.00	148.64	699.93	-2.05	-3.35	2.04	2.00	1897564.52	561644.07	N 36 12 53.97	W 107 37 27.71	
	800.00	5.00	148.64	799.68	-5.69	-9.31	5.67	2.00	1897558.58	561647.72	N 36 12 53.91	W 107 37 27.66	
	900.00	7.00	148.64	899.13	-11.15	-18.23	11.11	2.00	1897549.66	561653.18	N 36 12 53.82	W 107 37 27.60	
	1000.00	9.00	148.64	998.15	-18.41	-30.12	18.35	2.00	1897537.80	561660.44	N 36 12 53.70	W 107 37 27.51	
	1100.00	11.00	148.64	1096.63	-27.47	-44.95	27.39	2.00	1897522.99	561669.51	N 36 12 53.56	W 107 37 27.40	
	1200.00	13.00	148.64	1194.44	-38.33	-62.70	38.21	2.00	1897505.26	561680.37	N 36 12 53.38	W 107 37 27.27	
	1300.00	15.00	148.64	1291.46	-50.95	-83.36	50.80	2.00	1897484.63	561693.00	N 36 12 53.18	W 107 37 27.11	
	1400.00	17.00	148.64	1387.58	-65.34	-106.89	65.14	2.00	1897461.13	561707.39	N 36 12 52.94	W 107 37 26.94	
Hold 19.50° INC	1500.00	19.00	148.64	1482.68	-81.47	-133.28	81.22	2.00	1897434.78	561723.53	N 36 12 52.68	W 107 37 26.74	
	1525.11	19.50	148.64	1506.39	-85.79	-140.35	85.53	2.00	1897427.72	561727.85	N 36 12 52.61	W 107 37 26.69	
	1600.00	19.50	148.64	1576.98	-98.84	-161.70	98.54	2.00	1897406.40	561740.91	N 36 12 52.40	W 107 37 26.53	
	1700.00	19.50	148.64	1671.25	-116.27	-190.20	115.91	0.00	1897377.93	561758.34	N 36 12 52.12	W 107 37 26.32	
	1800.00	19.50	148.64	1765.51	-133.70	-218.71	133.29	0.00	1897349.46	561775.77	N 36 12 51.84	W 107 37 26.11	
	1900.00	19.50	148.64	1859.77	-151.12	-247.22	150.66	0.00	1897321.00	561793.21	N 36 12 51.56	W 107 37 25.89	
	2000.00	19.50	148.64	1954.03	-168.55	-275.73	168.03	0.00	1897292.53	561810.64	N 36 12 51.27	W 107 37 25.68	
	2100.00	19.50	148.64	2048.30	-185.98	-304.24	185.41	0.00	1897264.06	561828.07	N 36 12 50.99	W 107 37 25.47	
	2200.00	19.50	148.64	2142.56	-203.40	-332.74	202.78	0.00	1897235.59	561845.50	N 36 12 50.71	W 107 37 25.26	
	2300.00	19.50	148.64	2236.82	-220.83	-361.25	220.15	0.00	1897207.13	561862.94	N 36 12 50.43	W 107 37 25.05	
	2400.00	19.50	148.64	2331.09	-238.26	-389.76	237.53	0.00	1897178.66	561880.37	N 36 12 50.15	W 107 37 24.83	
	2500.00	19.50	148.64	2425.35	-255.68	-418.27	254.90	0.00	1897150.19	561897.80	N 36 12 49.86	W 107 37 24.62	
	2600.00	19.50	148.64	2519.61	-273.11	-446.77	272.27	0.00	1897121.72	561915.24	N 36 12 49.58	W 107 37 24.41	
	2700.00	19.50	148.64	2613.88	-290.54	-475.28	289.65	0.00	1897093.25	561932.67	N 36 12 49.30	W 107 37 24.20	
	2800.00	19.50	148.64	2708.14	-307.96	-503.79	307.02	0.00	1897064.79	561950.10	N 36 12 49.02	W 107 37 23.99	
	2900.00	19.50	148.64	2802.40	-325.39	-532.30	324.39	0.00	1897036.32	561967.54	N 36 12 48.74	W 107 37 23.77	
	3000.00	19.50	148.64	2896.66	-342.82	-560.80	341.77	0.00	1897007.85	561984.97	N 36 12 48.45	W 107 37 23.56	
	3100.00	19.50	148.64	2990.93	-360.24	-589.31	359.14	0.00	1896979.38	562002.40	N 36 12 48.17	W 107 37 23.35	
	3200.00	19.50	148.64	3085.19	-377.67	-617.82	376.51	0.00	1896950.92	562019.84	N 36 12 47.89	W 107 37 23.14	
	3300.00	19.50	148.64	3179.45	-395.09	-646.33	393.88	0.00	1896922.45	562037.27	N 36 12 47.61	W 107 37 22.93	
	3400.00	19.50	148.64	3273.72	-412.52	-674.83	411.26	0.00	1896893.98	562054.70	N 36 12 47.33	W 107 37 22.71	
	Drop 2°/100'	3500.00	19.50	148.64	3367.98	-429.95	-703.34	428.63	0.00	1896865.51	562072.14	N 36 12 47.04	W 107 37 22.50
		3574.93	19.50	148.64	3438.61	-443.01	-724.70	441.65	0.00	1896844.18	562085.20	N 36 12 46.83	W 107 37 22.34
		3600.00	19.00	148.64	3462.28	-447.32	-731.76	445.95	2.00	1896837.13	562089.51	N 36 12 46.76	W 107 37 22.29
		3700.00	17.00	148.64	3557.38	-463.45	-758.15	462.03	2.00	1896810.78	562105.65	N 36 12 46.50	W 107 37 22.09
		3800.00	15.00	148.64	3653.50	-477.84	-781.69	476.38	2.00	1896787.28	562120.04	N 36 12 46.27	W 107 37 21.92
		3900.00	13.00	148.64	3750.52	-490.47	-802.34	488.97	2.00	1896766.55	562132.68	N 36 12 46.07	W 107 37 21.77
		4000.00	11.00	148.64	3848.33	-501.32	-820.10	499.79	2.00	1896748.92	562143.53	N 36 12 45.89	W 107 37 21.63
		4100.00	9.00	148.64	3946.81	-510.38	-834.93	508.82	2.00	1896734.11	562152.60	N 36 12 45.74	W 107 37 21.52
		4200.00	7.00	148.64	4045.83	-517.65	-846.81	516.06	2.00	1896722.24	562159.87	N 36 12 45.63	W 107 37 21.43
		4300.00	5.00	148.64	4145.28	-523.11	-855.74	521.51	2.00	1896713.33	562165.33	N 36 12 45.54	W 107 37 21.37
		4400.00	3.00	148.64	4245.03	-526.75	-861.70	525.14	2.00	1896707.38	562168.97	N 36 12 45.48	W 107 37 21.32
		4500.00	1.00	148.64	4344.96	-528.57	-864.68	526.95	2.00	1896704.40	562170.80	N 36 12 45.45	W 107 37 21.30
		4550.04	0.00	148.64	4395.00	-528.80	-865.05	527.18	2.00	1896704.03	562171.02	N 36 12 45.45	W 107 37 21.30
		4600.00	0.00	148.64	4444.96	-528.80	-865.05	527.18	0.00	1896704.03	562171.02	N 36 12 45.45	W 107 37 21.30
		Build 9°/100'	4700.00	0.00	148.64	4544.96	-528.80	-865.05	527.18	0.00	1896704.03	562171.02	N 36 12 45.45
	4713.90		0.00	148.64	4558.86	-528.80	-865.05	527.18	0.00	1896704.03	562171.02	N 36 12 45.45	W 107 37 21.30
	4800.00		7.75	279.18	4644.70	-523.06	-864.12	521.44	9.00	1896704.94	562165.28	N 36 12 45.45	W 107 37 21.37
	4900.00		16.75	279.18	4742.32	-502.13	-860.74	500.52	9.00	1896708.28	562144.36	N 36 12 45.49	W 107 37 21.62
	5000.00		25.75	279.18	4835.43	-466.38	-854.97	464.78	9.00	1896713.98	562108.60	N 36 12 45.55	W 107 37 22.06
	5100.00		34.75	279.18	4921.72	-416.68	-846.94	415.10	9.00	1896721.90	562058.91	N 36 12 45.62	W 107 37 22.67
	5200.00		43.75	279.18	4999.08	-354.27	-836.55	352.70	9.00	1896731.85	561996.50	N 36 12 45.72	W 107 37 23.43
	5300.00		52.75	279.18	5065.60	-280.67	-824.96	279.13	9.00	1896743.58	561922.91	N 36 12 45.84	W 107 37 24.33
	5380.57		60.00	279.18	5110.19	-214.47	-814.27	212.95	9.00	1896754.13	561856.71	N 36 12 45.95	W 107 37 25.13
	5400.00		60.00	279.18	5119.91	-197.85	-811.58	196.33	0.00	1896756.78	561840.09	N 36 12 45.97	W 107 37 25.34
Build 9°/100' to Landing	5440.57		60.00	279.18	5140.19	-163.16	-805.98	161.65	0.00	1896762.31	561805.40	N 36 12 46.03	W 107 37 25.76
	5500.00		65.35	279.18	5167.46	-111.04	-797.56	109.55	9.00	1896770.82	561753.28	N 36 12 46.11	W 107 37 26.40
	5600.00		74.35	279.18	5201.88	-18.43	-782.60	16.96	9.00	1896785.37	561660.67	N 36 12 46.26	W 107 37 27.53
Landing Point, Hold to TD	5700.00		83.35	279.18	5221.20	78.36	-766.97	-79.79	9.00	1896800.80	561563.89	N 36 12 46.42	W 107 37 28.71
	5798.72		92.23	279.18	5225.00	175.68	-751.25	-177.08	9.00	1896816.30	561466.58	N 36 12 46.57	W 107 37 29.89
	5800.00	92.23	279.18	5224.95	176.94	-751.05	-178.34	0.00	1896816.50	561465.31	N 36 12 46.57	W 107 37 29.91	
	5900.00	92.23	279.18	5221.05	275.61	-735.12	-276.99	0.00	1896832.22	561366.64	N 36 12 46.73	W 107 37 31.11	
	6000.00	92.23	279.18	5217.15	374.29	-719.18	-375.63	0.00	1896847.94	561267.97	N 36 12 46.89	W 107 37 32.32	
	6100.00	92.23	279.18	5213.25	472.96	-703.25	-474.28	0.00	1896863.66	561169.30	N 36 12 47.05	W 107 37 33.52	
	6200.00	92.23	279.18	5209.35	571.64	-687.32	-572.92	0.00	1896879.38	561070.63	N 36 12 47.20	W 1070	

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	92.23	279.18	5189.86	1065.01	-607.65	-1066.15	0.00	1895957.98	560577.27	N 36 12 47.99	W 107 37 40.74
	6800.00	92.23	279.18	5185.97	1163.69	-591.71	-1164.80	0.00	1896973.70	560478.60	N 36 12 48.15	W 107 37 41.95
	6900.00	92.23	279.18	5182.07	1262.36	-575.78	-1263.44	0.00	1896989.42	560379.93	N 36 12 48.31	W 107 37 43.15
	7000.00	92.23	279.18	5178.17	1361.04	-559.84	-1362.09	0.00	1897005.14	560281.26	N 36 12 48.46	W 107 37 44.35
	7100.00	92.23	279.18	5174.27	1459.71	-543.91	-1460.73	0.00	1897020.86	560182.59	N 36 12 48.62	W 107 37 45.56
	7200.00	92.23	279.18	5170.37	1558.39	-527.97	-1559.38	0.00	1897036.58	560083.91	N 36 12 48.78	W 107 37 46.76
	7300.00	92.23	279.18	5166.47	1657.06	-512.04	-1658.02	0.00	1897052.31	559985.24	N 36 12 48.94	W 107 37 47.96
	7400.00	92.23	279.18	5162.58	1755.74	-496.10	-1756.67	0.00	1897068.03	559886.57	N 36 12 49.09	W 107 37 49.17
	7500.00	92.23	279.18	5158.68	1854.41	-480.17	-1855.31	0.00	1897083.75	559787.90	N 36 12 49.25	W 107 37 50.37
	7600.00	92.23	279.18	5154.78	1953.09	-464.23	-1953.96	0.00	1897099.47	559689.23	N 36 12 49.41	W 107 37 51.58
	7700.00	92.23	279.18	5150.88	2051.76	-448.29	-2052.60	0.00	1897115.19	559590.56	N 36 12 49.57	W 107 37 52.78
	7800.00	92.23	279.18	5146.98	2150.43	-432.36	-2151.25	0.00	1897130.92	559491.89	N 36 12 49.72	W 107 37 53.98
	7900.00	92.23	279.18	5143.09	2249.11	-416.42	-2249.89	0.00	1897146.64	559393.22	N 36 12 49.88	W 107 37 55.19
	8000.00	92.23	279.18	5139.19	2347.78	-400.48	-2348.54	0.00	1897162.36	559294.54	N 36 12 50.04	W 107 37 56.39
	8100.00	92.23	279.18	5135.29	2446.46	-384.55	-2447.18	0.00	1897178.08	559195.87	N 36 12 50.20	W 107 37 57.59
	8200.00	92.23	279.18	5131.39	2545.13	-368.61	-2545.83	0.00	1897193.81	559097.20	N 36 12 50.35	W 107 37 58.80
	8300.00	92.23	279.18	5127.49	2643.81	-352.67	-2644.47	0.00	1897209.53	558998.53	N 36 12 50.51	W 107 38 0.00
	8400.00	92.23	279.18	5123.59	2742.48	-336.74	-2743.12	0.00	1897225.25	558899.86	N 36 12 50.67	W 107 38 1.21
	8500.00	92.23	279.18	5119.70	2841.16	-320.80	-2841.76	0.00	1897240.98	558801.19	N 36 12 50.83	W 107 38 2.41
	8600.00	92.23	279.18	5115.80	2939.83	-304.86	-2940.41	0.00	1897256.70	558702.52	N 36 12 50.98	W 107 38 3.61
	8700.00	92.23	279.18	5111.90	3038.51	-288.92	-3039.05	0.00	1897272.42	558603.85	N 36 12 51.14	W 107 38 4.82
	8800.00	92.23	279.18	5108.00	3137.18	-272.99	-3137.70	0.00	1897288.15	558505.18	N 36 12 51.30	W 107 38 6.02
	8900.00	92.23	279.18	5104.10	3235.85	-257.05	-3236.34	0.00	1897303.87	558406.51	N 36 12 51.46	W 107 38 7.22
	9000.00	92.23	279.18	5100.20	3334.53	-241.11	-3334.99	0.00	1897319.60	558307.84	N 36 12 51.61	W 107 38 8.43
	9100.00	92.23	279.18	5096.31	3433.20	-225.17	-3433.63	0.00	1897335.32	558209.16	N 36 12 51.77	W 107 38 9.63
	9200.00	92.23	279.18	5092.41	3531.88	-209.23	-3532.28	0.00	1897351.05	558110.49	N 36 12 51.93	W 107 38 10.84
	9300.00	92.23	279.18	5088.51	3630.55	-193.29	-3630.92	0.00	1897366.77	558011.82	N 36 12 52.09	W 107 38 12.04
	9400.00	92.23	279.18	5084.61	3729.23	-177.35	-3729.56	0.00	1897382.50	557913.15	N 36 12 52.24	W 107 38 13.24
	9500.00	92.23	279.18	5080.71	3827.90	-161.42	-3828.21	0.00	1897398.22	557814.48	N 36 12 52.40	W 107 38 14.45
	9600.00	92.23	279.18	5076.81	3926.57	-145.48	-3926.85	0.00	1897413.95	557715.81	N 36 12 52.56	W 107 38 15.65
	9700.00	92.23	279.18	5072.92	4025.25	-129.54	-4025.50	0.00	1897429.67	557617.14	N 36 12 52.72	W 107 38 16.85
	9800.00	92.23	279.18	5069.02	4123.92	-113.60	-4124.14	0.00	1897445.40	557518.47	N 36 12 52.87	W 107 38 18.06
	9900.00	92.23	279.18	5065.12	4222.60	-97.66	-4222.79	0.00	1897461.12	557419.80	N 36 12 53.03	W 107 38 19.26
	10000.00	92.23	279.18	5061.22	4321.27	-81.72	-4321.43	0.00	1897476.85	557321.13	N 36 12 53.19	W 107 38 20.47
	10100.00	92.23	279.18	5057.32	4419.95	-65.78	-4420.08	0.00	1897492.58	557222.46	N 36 12 53.35	W 107 38 21.67
	10200.00	92.23	279.18	5053.42	4518.62	-49.84	-4518.72	0.00	1897508.30	557123.79	N 36 12 53.50	W 107 38 22.87
	10300.00	92.23	279.18	5049.53	4617.29	-33.90	-4617.36	0.00	1897524.03	557025.12	N 36 12 53.66	W 107 38 24.08
	10400.00	92.23	279.18	5045.63	4715.97	-17.96	-4716.01	0.00	1897539.76	556926.45	N 36 12 53.82	W 107 38 25.28
	10500.00	92.23	279.18	5041.73	4814.64	-2.02	-4814.65	0.00	1897555.48	556827.78	N 36 12 53.98	W 107 38 26.48

Chaco 2308-24H #154H BHL 10570.02 92.23 279.18 5039.00 4883.74 9.15 -4683.73 0.00 1897566.50 556758.68 N 36 12 54.09 W 107 38 27.33

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 2308-24H #154H R0 mdv 07May14
	1	14.000	10570.024	1/100.000	30.000	30.000	SLB_MWD-STD	Original Hole / Chaco 2308-24H #154H R0 mdv 07May14

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 2308-24H Nos. 153H and 154H (153H/154H) Applications for Permit to Drill (APDs). This SUPO is provided per Onshore Oil and Gas Order No. 1.

The 153H/154H wells will each be permitted by an approved APD. The associated well pad (including construction zone), access road, and well-connect pipeline will be authorized/approved by a Surface Owner Agreement (project features located on Fee surface) or APD (on-lease project features located on BLM-FFO-managed surface). Two of the potential staging areas will not require permitting and one of the potential staging areas will be authorized by a Surface Owner Agreement. The table below lists the permit/approval type for each of the project features.

Table 1. Permit/Approval Type by Project Feature

Project Feature	Permit/Approval Type
Well Pad and Construction Zone	APD
Access Road	
0+00.0 to 12+91.5	Surface Owner Agreement
12+91.5 to 19+02.3	APD
Well-Connect Pipeline Corridor	
0+00.0 to 12+71.8	Surface Owner Agreement
12+71.8 to 22+16.8	APD
Potential Staging Areas	
WPX's proposed Chaco 2308-24I Nos. 155H & 156H (155H/156H) well pad	- ¹
Elm Ridge Exploration Company, LLC's (Elm Ridge's) active Dome Federal 24 No. 21 well pad	- ²
Access Road/Well-Connect Pipeline Corridor Staging Area	Surface Owner Agreement
¹ Since this staging area is a WPX location, no permitting will be needed for this staging area.	
² A Final Abandonment Notice (FAN) has not been issued for this staging area. Therefore, the use of this staging area will be authorized under an agreement between WPX and Elm Ridge.	

A pre-disturbance onsite meeting for the project was held on October 23, 2013. 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 San Juan County, New Mexico. The project area is located approximately 40 miles southeast of the town of Bloomfield, New Mexico. To access the project area from Bloomfield, head southward on U.S. Highway 550 from the U.S. Highway 550-U.S. Highway 64 intersection for approximately 39 miles, turn right onto County Road 7900 for approximately 2 miles, and turn left onto an existing road for approximately 5 miles to the start of the proposed 155H/156H access road, which starts at Elm Ridge's active Dome Federal 24 No. 21 well pad. Follow the proposed 155H/156H access road for approximately 2 miles to the beginning of the 153H/154H access road. The access route from U.S. Highway 550 is depicted on the construction plats provided in the APD permit packages.

8. CONSTRUCTION

The BLM-FFO will be notified (505-564-7600) at least 48 hours prior to the start of construction activities associated with the project. The construction phase of the project is anticipated to last approximately two to three weeks. Project activities will be confined to the project area described in Section 2 (Project Location and Description) and existing areas of disturbance (such as existing roads).

The access road and well pad will be leveled with a D-8 bulldozer to provide space and a level surface for vehicles and equipment. The construction zone at the western edge of the project area will be limited to avoid an existing wash. Excavated materials from cuts will be used on fill portions of the well pad to level the pad. Approximately 6 feet of cut and 5 feet of fill will be needed to create a level well pad. No additional surfacing materials will be required for construction.

Construction and 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. No frozen soils will be used for construction purposes or trench backfilling.

Vegetation and topsoil removal, storage, and protection are described in the Reclamation Plan (Appendix A).

Soils will be excavated from the well-connect pipeline trenches using a trencher or backhoe. Each trench will be 4 to 5 feet in depth. Each trench will be 16 inches in width if a trencher is used or 24 inches in width if a backhoe is used. Soft plugs will be placed within the trench every quarter mile. When stringing pipe, one joint of pipe will be set back every quarter mile. Backfilling operations will be performed within a reasonable amount of time to ensure that the trench is not left open for more than 24 hours. If a trench is left open overnight, it will be fenced with a temporary fence or a night watchman will be utilized.

After a pipe has been welded and coated, a side-boom tractor will be used to place the pipe into the trench. Prior to construction commencement, WPX will notify the BLM-FFO of additional types of construction equipment to be used.

The soils excavated from the trench will be returned to the trench, atop the pipe, and compacted to prevent subsidence. The trench will be compacted after approximately 2 feet of fill is placed within the trench and after the ground surface has been leveled.

Prior to the well-connect pipelines being placed in service, the pipes will be pressure tested.

Pipeline markers will be installed along the well-connect pipeline corridor within the line of sight. These markers will not create safety hazards.

Construction plats are provided in the APD permit packages.

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, the operator 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

