

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised August 1, 2011

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-35474
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator WPX Energy Production, LLC		6. State Oil & Gas Lease No. NM L 2986-1 & NM LG 1034-9
3. Address of Operator P. O. Box 640, Aztec, NM 87410 (505) 333-1822		7. Lease Name or Unit Agreement Name Chaco 2408-36P
4. Well Location Unit Letter <u>P</u> : <u>782'</u> feet from the <u>S</u> line and <u>244'</u> feet from the <u>E</u> line Section <u>36</u> Township <u>24N</u> Range <u>8W</u> NMPM County <u>Sandoval</u>		8. Well Number <u>#143H</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6922' GR		9. OGRID Number 120782
		10. Pool name or Wildcat Lybrook Gallup

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐ RCVD SEP 13 '13
OIL CONS. DIV.
DIST. 3

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

WPX plans to change this well as follows: The production casing design has changed per the attached Operations Plan (see bottom of page 3). Also, the total depth of lateral section will be drilled +/- 50ft. past the hardline as noted in Completion Section of the revised Operations Plan to maximize the producing interval as per attached directional plan. The plug back TD of this well will be the float collar which will be one joint up from landing depth. 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.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Heather Riley TITLE Regulatory Specialist Sr. DATE 9/12/13

Type or print name Heather Riley E-mail address: heather.riley@wpxenergy.com PHONE: (505) 333-1822
For State Use Only

APPROVED BY: Walter Hryn TITLE Deputy Oil & Gas Inspector,
District #3 DATE SEP 18 2013

Conditions of Approval (if any):

AV

Hold C104
for Directional Survey
and "As Drilled" plat

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for Directional Survey
and "As Drilled" plat

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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		*Pool Code 42289	*Pool Name LYBROOK GALLUP
*Property Code	*Property Name CHACO 2408-36P		*Well Number 143H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 6922'

¹⁰ Surface Location

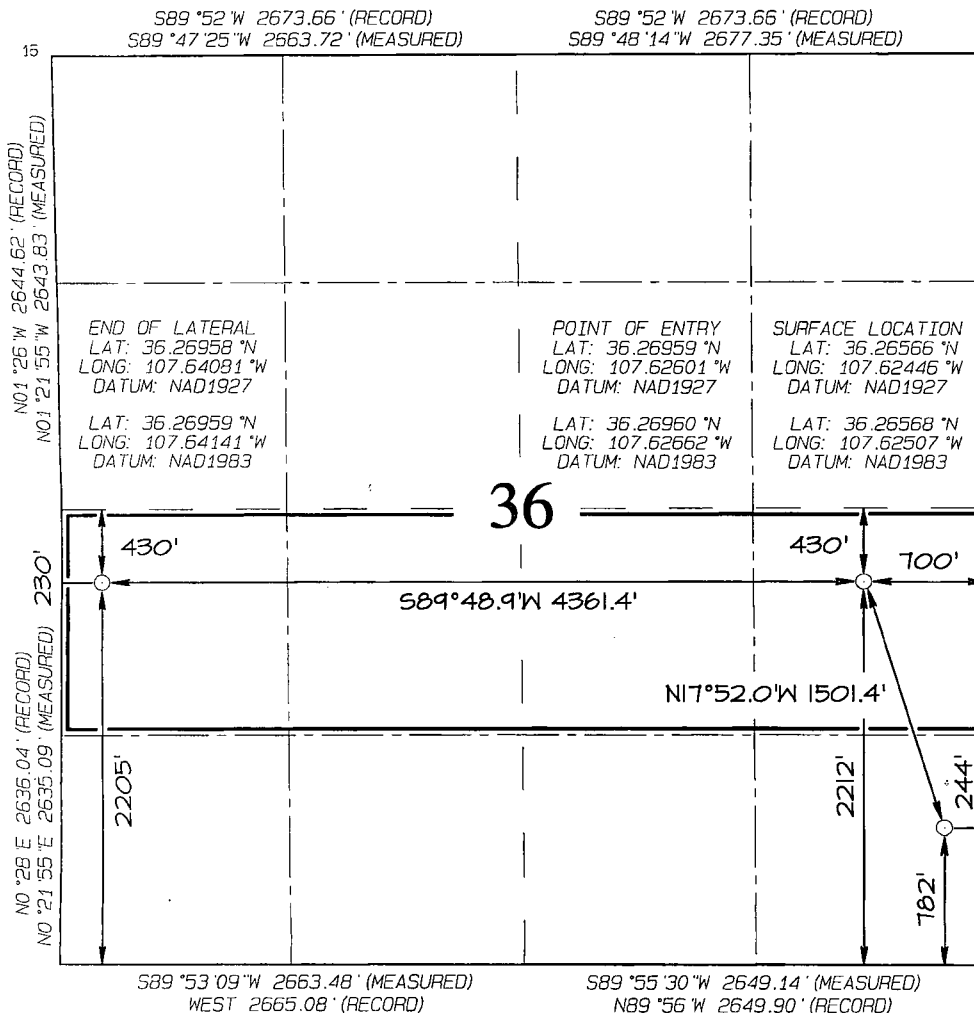
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	36	24N	8W		782	SOUTH	244	EAST	SAN JUAN

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
L	36	24N	8W		2205	SOUTH	230	WEST	SAN JUAN

¹² Dedicated Acres 160.0 Acres - (N/2 S/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. RCVD SEP 13 '13 OIL CONS. DIV.
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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 **DIST. 3**



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: *Heather Riley* Date: 9/12/13
Printed Name: Heather Riley
E-mail Address: heather.riley@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: SEPT 11, 2013
Date of Survey: JULY 6, 2012

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

CONFIDENTIAL



WPX Energy

PATHFINDER
A Schlumberger Company

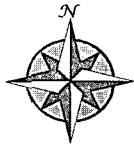
Rev 4

WELL	Chaco 2408-36P #143H	FIELD	NM San Juan County NAD27	STRUCTURE	WPX Chaco 2408-36P #143H
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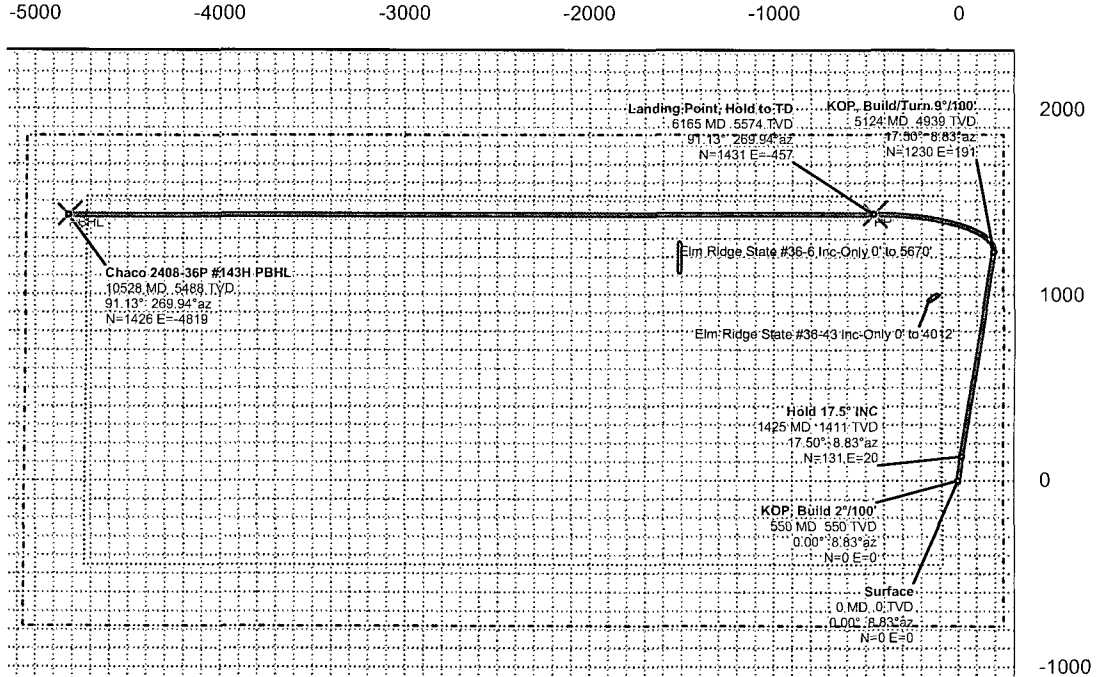
Magnetic Parameters	Dip:	Date:	Surface Location	NAD27 New Mexico State Plane, Western Zone, US Feet	Miscellaneous	TVD Ref:
Model: BCGM 2013	63.036°	September 10, 2013	Lat: N 36 16 56.376	1916008.76 RUS	Slot: Chaco 2408-36P #143H	RKB(6936ft above MSL)
	Mag Dec: 9.545°	FS: 50201.0nT	Lon: W 107 37 28.056	Eastng: 561675.73 RUS	Plan: R4 mdy 11Sept13	Srvy Date: February 04, 2013
				Grid Conv: 0.124°		
				Scale Fact: 0.99992101		

Proposal

<<< W Scale = 1:1000(ft) E >>>



True North
Tot Corr (M->T) 9.5447°
Mag Dec (9.545°)
Grid Conv (0.124°)



<<< S Scale = 1:1000(ft) N >>>

Targets							
Name	TVD(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Shape	
Chaco 2408-36P #143H PP	5571.00	1431.07	-456.95	N 36 16 10.528	W 107 37 33.636	POINT	
Chaco 2408-36P #143H PBHL	5488.00	1426.37	-4818.66	N 36 16 10.477	W 107 38 26.898	POINT	
Critical Points							
Comments	Survey MD(ft)	Inc	Azm	TVD(ft)	Sub-Sea TVD	VS(ft)	NS(ft) EW(ft) DLS(ft/100ft)
Surface	0.00	0.00	8.83	0.00	-6936.00	0.00	0.00 0.00 0.00
KOP, Build 2°/100'	550.00	0.00	8.83	550.00	-6386.00	0.00	0.00 0.00 0.00
Hold 17.5° INC	1424.84	17.50	8.83	1411.30	-5524.70	17.65	130.97 20.36 2.00
KOP, Build/Turn 9°/100'	5123.88	17.50	8.83	4939.20	-1996.80	165.79	1229.89 191.17 0.00
Landing Point, Hold to TD	6165.47	91.13	269.94	5574.00	-1362.00	844.35	1431.07 -456.95 9.00
Chaco 2408-36P #143H PBHL	10528.03	91.13	269.94	5488.00	-1448.00	5025.34	1426.37 -4818.66 0.00

TVD Scale = 1:1000(ft)

0
1000
2000
3000
4000
5000
6000

0 1000 2000 3000 4000 5000

Vertical Section (ft) Azim = 286.49° Scale = 1:1000(ft) Origin = 0 N/-S, 0 E/-W

WPX ENERGY**Operations Plan**

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

DATE: 9/12/2013 **FIELD:** Lybrook Gallup

WELL NAME: Chaco 2408-36P #143H **SURFACE:** STATE

SH Location: SESE of Sec 36-24N-8W **ELEVATION:** 6,922' GR

County: San Juan Co, NM

BH Location: NWSW Sec 36-24N-8W **MINERALS:** STATE

MEASURED DEPTH: 10,528' **LEASE #:** STATE

I. **GEOLOGY:** Surface formation – Nacimiento

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

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1,228	1,222	Point Lookout	4,412	4,260
Kirtland	1,383	1,371	Mancos	4,657	4,494
Pictured Cliffs	2,002	1,962	Kickoff Point	5,124	4,939
Lewis	2,127	2,081	Target Top	5,866	5,512
Chacra	2,399	2,340	Landing Point	6,165	5,574
Cliff House	3,530	3,419	Target Base	6,165	5,574
Menefee	3,562	3,450			
			TD	10,528	5,488

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

C. **LOGGING PROGRAM:** MWD GR for curve and E- Sonic 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 8 3/4" Directional Vertical Hole and the curve portion of the wellbore. (OBM) will be used to drill the lateral portion of the 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 **1800 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 +/- 5,124' (MD) / 4,939' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 6,165' (MD) / 5,574' (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 +/- 10,528' (MD) / 5,488' (TVD). Will run 4-1/2 in. Production Liner from +/- 6,015 ft. to TD and cement. 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:**

Surface	12.25"	+/- 400'	9.625"	36#	J-55
Intermediate	8.75"	6,165'	7"	23#	K-55
Prod. Liner	6.125"	6,015' - 10,528'	4.5"	11.6#	N-80
Tie-Back String	N/A	Surf. - 6,015'	4.5"	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', 2,500', 2,300', 2,000', 1,500', and 1,000'.
3. PRODUCTION LINER: Run 4-1/2" Liner with cement nose guide Float Shoe + 1jt. of 4-1/2" casing + Float Collar. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers.
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. The 100% excess should circulate cement to the surface. WOC 12 hours. Test csg to 600psi. Total Volume: (190sx / 222.3 cu-ft / 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 +/- 5,965 ft.

IV. COMPLETION**A. LOGS**

1. Run CCL for perforating.

B. PRESSURE TEST

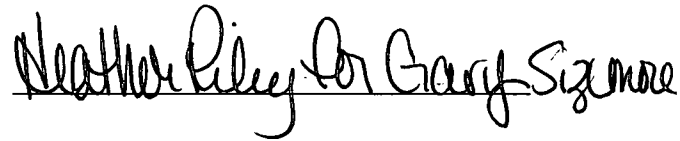
1. Pressure test 4-1/2" casing to 5000 psi max, hold at 1500 psi for 30 minutes.

C. STIMULATION

1. Stimulate with approximately 2,805,000# 20/40 mesh sand and 340,000# 16/30 mesh sand in 619,113 gallons water with 42,696 mscf N₂ for 17 stages.
2. Isolate stages with flow through frac plug.
3. Drill out frac plugs 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 landing point of curve (~6100' 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.



The CHACO 2408 – 36P #143H was originally planned to run a full string of 4-1/2" 11.6# N-80 Production Casing from surface to TD:

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 6,165 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 200 ft above the liner hanger. TOL will be +/- 6,015 ft. (MD) +/- 74 degree angle.

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 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.



WPX Chaco 2408-36P #143H R4 mdv 11Sept13 Proposal Geodetic Report



(Def Plan)

Report Date: September 11, 2013 - 12:53 PM
Client: WPX Energy
Field: NM San Juan County NAD27
Structure / Slot: WPX Chaco 2408-36P #143H / Chaco 2408-36P #143H
Well: Chaco 2408-36P #143H
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: WPX Chaco 2408-36P #143H R4 mdv 11Sept13
Survey Date: February 04, 2013
Tort / AHD / DDI / ERD Ratio: 111.240 ° / 6325.288 ft / 6.124 / 1.135
Coordinate Reference System: NAD27 New Mexico State Plane, Western Zone, US Feet
Location Lat / Long: N 36° 15' 56.37600", W 107° 37' 28.05600"
Location Grid N/E Y/X: N 1916008.762 ftUS, E 561575.732 ftUS
CRS Grid Convergence Angle: 0.1236 °
Grid Scale Factor: 0.99992101

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 286.489 ° (True North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 6936.000 ft above MSL
Seabed / Ground Elevation: 6922.000 ft above MSL
Magnetic Declination: 9.545 °
Total Gravity Field Strength: 998.4956mgn (9.80665 Based)
Total Magnetic Field Strength: 50201.018 nT
Magnetic Dip Angle: 63.036 °
Declination Date: September 10, 2013
Magnetic Declination Model: BGGM 2013
North Reference: True North
Grid Convergence Used: 0.0000 °
Total Corr Mag North-True North: 9.5447 °
Local Coord Referenced To: Structure Reference Point

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	8.83	0.00	0.00	0.00	0.00	N/A	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
	100.00	0.00	8.83	100.00	0.00	0.00	0.00	0.00	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
	200.00	0.00	8.83	200.00	0.00	0.00	0.00	0.00	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
	300.00	0.00	8.83	300.00	0.00	0.00	0.00	0.00	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
	400.00	0.00	8.83	400.00	0.00	0.00	0.00	0.00	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
	500.00	0.00	8.83	500.00	0.00	0.00	0.00	0.00	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
KOP, Build 2°/100'	550.00	0.00	8.83	550.00	0.00	0.00	0.00	0.00	1916008.76	561575.73	N 36 15 56.38	W 107 37 28.06
	600.00	1.00	8.83	600.00	0.06	0.43	0.07	2.00	1916009.19	561575.80	N 36 15 56.38	W 107 37 28.06
	700.00	3.00	8.83	699.93	0.52	3.88	0.60	2.00	1916012.64	561576.33	N 36 15 56.41	W 107 37 28.05
	800.00	5.00	8.83	799.68	1.45	10.77	1.67	2.00	1916019.54	561577.38	N 36 15 56.48	W 107 37 28.04
	900.00	7.00	8.83	899.13	2.84	21.10	3.28	2.00	1916029.87	561578.97	N 36 15 56.58	W 107 37 28.02
	1000.00	9.00	8.83	998.15	4.70	34.85	5.42	2.00	1916043.62	561581.07	N 36 15 56.72	W 107 37 27.99
	1100.00	11.00	8.83	1096.63	7.01	52.01	8.08	2.00	1916060.79	561583.70	N 36 15 56.89	W 107 37 27.96
	1200.00	13.00	8.83	1194.44	9.78	72.55	11.28	2.00	1916081.33	561586.85	N 36 15 57.09	W 107 37 27.92
	1300.00	15.00	8.83	1291.46	13.00	96.46	14.99	2.00	1916105.24	561590.52	N 36 15 57.33	W 107 37 27.87
	1400.00	17.00	8.83	1387.58	16.67	123.69	19.23	2.00	1916132.49	561594.69	N 36 15 57.60	W 107 37 27.82
Hold 17.5° INC	1424.84	17.50	8.83	1411.30	17.65	130.97	20.36	2.00	1916139.76	561595.80	N 36 15 57.67	W 107 37 27.81
	1500.00	17.50	8.83	1482.99	20.66	153.30	23.83	0.00	1916162.10	561599.23	N 36 15 57.89	W 107 37 27.77
	1600.00	17.50	8.83	1578.36	24.67	183.01	28.45	0.00	1916191.82	561603.78	N 36 15 58.19	W 107 37 27.71
	1700.00	17.50	8.83	1673.74	28.67	212.72	33.06	0.00	1916221.53	561608.33	N 36 15 58.48	W 107 37 27.65
	1800.00	17.50	8.83	1769.11	32.68	242.42	37.68	0.00	1916251.25	561612.89	N 36 15 58.77	W 107 37 27.60
	1900.00	17.50	8.83	1864.48	36.68	272.13	42.30	0.00	1916280.96	561617.44	N 36 15 59.07	W 107 37 27.54
	2000.00	17.50	8.83	1959.86	40.69	301.84	46.92	0.00	1916310.68	561621.99	N 36 15 59.36	W 107 37 27.48
	2100.00	17.50	8.83	2055.23	44.69	331.55	51.53	0.00	1916340.40	561626.55	N 36 15 59.65	W 107 37 27.43
	2200.00	17.50	8.83	2150.60	48.70	361.26	56.15	0.00	1916370.11	561631.10	N 36 15 59.95	W 107 37 27.37
	2300.00	17.50	8.83	2245.98	52.70	390.97	60.77	0.00	1916399.83	561635.65	N 36 16 0.24	W 107 37 27.31
	2400.00	17.50	8.83	2341.35	56.71	420.67	65.39	0.00	1916429.54	561640.21	N 36 16 0.54	W 107 37 27.26
	2500.00	17.50	8.83	2436.72	60.71	450.38	70.00	0.00	1916459.26	561644.76	N 36 16 0.83	W 107 37 27.20
	2600.00	17.50	8.83	2532.10	64.71	480.09	74.62	0.00	1916488.97	561649.31	N 36 16 1.12	W 107 37 27.14
	2700.00	17.50	8.83	2627.47	68.72	509.80	79.24	0.00	1916518.69	561653.87	N 36 16 1.42	W 107 37 27.09
	2800.00	17.50	8.83	2722.84	72.73	539.51	83.86	0.00	1916548.41	561658.42	N 36 16 1.71	W 107 37 27.03
	2900.00	17.50	8.83	2818.22	76.72	569.22	88.47	0.00	1916578.12	561662.97	N 36 16 2.00	W 107 37 26.98
	3000.00	17.50	8.83	2913.59	80.73	598.93	93.09	0.00	1916607.84	561667.53	N 36 16 2.30	W 107 37 26.92
	3100.00	17.50	8.83	3008.96	84.74	628.63	97.71	0.00	1916637.55	561672.08	N 36 16 2.59	W 107 37 26.86
	3200.00	17.50	8.83	3104.34	88.74	658.34	102.33	0.00	1916667.27	561676.63	N 36 16 2.89	W 107 37 26.81
	3300.00	17.50	8.83	3199.71	92.75	688.05	106.95	0.00	1916696.99	561681.19	N 36 16 3.18	W 107 37 26.75
	3400.00	17.50	8.83	3295.08	96.75	717.76	111.56	0.00	1916726.70	561685.74	N 36 16 3.47	W 107 37 26.69
	3500.00	17.50	8.83	3390.46	100.76	747.47	116.18	0.00	1916756.42	561690.29	N 36 16 3.77	W 107 37 26.64
	3600.00	17.50	8.83	3485.83	104.76	777.18	120.80	0.00	1916786.13	561694.84	N 36 16 4.06	W 107 37 26.58
	3700.00	17.50	8.83	3581.20	108.76	806.88	125.42	0.00	1916815.85	561699.40	N 36 16 4.36	W 107 37 26.52
	3800.00	17.50	8.83	3676.58	112.77	836.59	130.03	0.00	1916845.57	561703.95	N 36 16 4.65	W 107 37 26.47
	3900.00	17.50	8.83	3771.95	116.77	866.30	134.65	0.00	1916875.28	561708.50	N 36 16 4.94	W 107 37 26.41
	4000.00	17.50	8.83	3867.32	120.78	896.01	139.27	0.00	1916905.00	561713.06	N 36 16 5.24	W 107 37 26.36
	4100.00	17.50	8.83	3962.70	124.78	925.72	143.89	0.00	1916934.71	561717.61	N 36 16 5.53	W 107 37 26.30
	4200.00	17.50	8.83	4058.07	128.79	955.43	148.50	0.00	1916964.43	561722.16	N 36 16 5.82	W 107 37 26.24
	4300.00	17.50	8.83	4153.44	132.79	985.13	153.12	0.00	1916994.14	561726.72	N 36 16 6.12	W 107 37 26.19
	4400.00	17.50	8.83	4248.82	136.80	1014.84	157.74	0.00	1917023.86	561731.27	N 36 16 6.41	W 107 37 26.13
	4500.00	17.50	8.83	4344.19	140.80	1044.55	162.36	0.00	1917053.58	561735.82	N 36 16 6.71	W 107 37 26.07
	4600.00	17.50	8.83	4439.56	144.81	1074.26	166.97	0.00	1917083.29	561740.38	N 36 16 7.00	W 107 37 26.02
	4700.00	17.50	8.83	4534.94	148.81	1103.97	171.59	0.00	1917113.01	561744.93	N 36 16 7.29	W 107 37 25.96
	4800.00	17.50	8.83	4630.31	152.82	1133.68	176.21	0.00	1917142.72	561749.48	N 36 16 7.59	W 107 37 25.90
	4900.00	17.50	8.83	4725.68	156.82	1163.38	180.83	0.00	1917172.44	561754.04	N 36 16 7.88	W 107 37 25.85
	5000.00	17.50	8.83	4821.06	160.82	1193.09	185.45	0.00	1917202.16	561758.59	N 36 16 8.17	W 107 37 25.79
	5100.00	17.50	8.83	4916.43	164.83	1222.80	190.06	0.00	1917231.87	561763.14	N 36 16 8.47	W 107 37 25.74
KOP, Build/Turn 9°/100'	5123.88	17.50	8.83	4939.20	165.79	1229.89	191.17	0.00	1917238.97	561764.23	N 36 16 8.54	W 107 37 25.72
	5200.00	17.82	346.14	5011.83	173.20	1252.54	190.13	9.00	1917261.61	561763.15	N 36 16 8.76	W 107 37 25.73
	5300.00	21.70	321.85	5106.08	198.06	1282.00	175.01	9.00	1917291.03	561747.97	N 36 16 9.05	W 107 37 25.92
	5400.00	27.95	306.27	5196.89	233.27	1310.46	144.63	9.00	1917319.43	561717.53	N 36 16 9.33	W 107 37 26.29
	5500.00	35.33	296.38	5282.02	283.91	1337.23	99.74	9.00	1917346.09	561672.58	N 36 16 9.60	W 107 37 26.84
	5600.00	43.26	289.63	5359.38	346.74	1361.64	41.44	9.00	1917370.38	561614.24	N 36 16 9.84	W 107 37 27.55
	5700.00	51.49	284.65	5427.06	420.22	1383.10	-28.83	9.00	1917391.68	561543.92	N 36 16 10.05	W 107 37 28.41
	5800.00	59.88	280.71	5483.40	502.52	1401.07	-109.34	9.00	1917409.48	561463.38	N 36 16 10.23	W 107 37 29.39
	5900.00	68.37	277.39	5527.01	591.63	1415.11	-198.12	9.00	1917423.33	561374.58	N 36 16 10.37	W 107 37 30.48
	6000.00	76.92	274.44	5556.81	685.35	1424.88	-292.96	9.00	1917432.99	561279.72	N 36 16 10.47	W 107 37 31.63
	6100.00	85.50	271.69	5572.07	781.37	1430.14	-391.55	9.00	1917437.94	561181.13	N 36 16 10.52	W 107 37 32.84
Landing Point, Hold to TD	6165.47	91.13	269.94	5574.00	844.35	1431.07	-456.95	9.00	1917438.73	561115.73	N 36 16 10.53	W 107 37 33.64
	6200.00	91.13	269.94	5573.32	877.44	1431.03	-491.48	0.00	1917438.62	561081.21	N 36 16 10.53	W 107 37 34.06
	6300.00	91.13	269.94	5571.34	973.28	1430.93	-591.46	0.00	1917438.29	560981.24	N 36 16 10.53	W 107 37 35.28
	6400.00	91.13	269.94	5569.37	1069.12	1430.82	-691.44	0.00	1917437.97	560881.27	N 36 16 10.53	W 107 37 36.50
	6500.00	91.13	269.94	5567.40	1164.96	1430.71	-791.42	0.00	1917437.65	560781.30	N 36 16 10.52	W 107 37 37.72
	6600.00	91.13	269.94	5565.43	1260.79	1430.60	-891.40	0.00	1917437			

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 ° ' ")
	7300.00	91.13	269.94	5551.63	1931.66	1429.85	-1591.26	0.00	1917435.06	559981.52	N 36 16 10.52	W 107 37 47.49
	7400.00	91.13	269.94	5549.66	2027.50	1429.74	-1691.24	0.00	1917434.74	559881.55	N 36 16 10.51	W 107 37 48.71
	7500.00	91.13	269.94	5547.69	2123.34	1429.63	-1791.22	0.00	1917434.41	559781.58	N 36 16 10.51	W 107 37 49.93
	7600.00	91.13	269.94	5545.72	2219.17	1429.53	-1891.20	0.00	1917434.09	559681.60	N 36 16 10.51	W 107 37 51.15
	7700.00	91.13	269.94	5543.75	2315.01	1429.42	-1991.18	0.00	1917433.77	559581.63	N 36 16 10.51	W 107 37 52.37
	7800.00	91.13	269.94	5541.78	2410.85	1429.31	-2091.16	0.00	1917433.44	559481.66	N 36 16 10.51	W 107 37 53.59
	7900.00	91.13	269.94	5539.80	2506.69	1429.20	-2191.14	0.00	1917433.12	559381.69	N 36 16 10.51	W 107 37 54.81
	8000.00	91.13	269.94	5537.83	2602.53	1429.10	-2291.13	0.00	1917432.80	559281.72	N 36 16 10.51	W 107 37 56.03
	8100.00	91.13	269.94	5535.86	2698.36	1428.99	-2391.11	0.00	1917432.48	559181.74	N 36 16 10.51	W 107 37 57.25
	8200.00	91.13	269.94	5533.89	2794.20	1428.88	-2491.09	0.00	1917432.15	559081.77	N 36 16 10.50	W 107 37 58.48
	8300.00	91.13	269.94	5531.92	2890.04	1428.77	-2591.07	0.00	1917431.83	558981.80	N 36 16 10.50	W 107 37 59.70
	8400.00	91.13	269.94	5529.95	2985.88	1428.66	-2691.05	0.00	1917431.51	558881.83	N 36 16 10.50	W 107 38 0.92
	8500.00	91.13	269.94	5527.98	3081.72	1428.56	-2791.03	0.00	1917431.18	558781.86	N 36 16 10.50	W 107 38 2.14
	8600.00	91.13	269.94	5526.01	3177.56	1428.45	-2891.01	0.00	1917430.86	558681.88	N 36 16 10.50	W 107 38 3.36
	8700.00	91.13	269.94	5524.03	3273.39	1428.34	-2990.99	0.00	1917430.54	558581.91	N 36 16 10.50	W 107 38 4.58
	8800.00	91.13	269.94	5522.06	3369.23	1428.23	-3090.97	0.00	1917430.21	558481.94	N 36 16 10.50	W 107 38 5.80
	8900.00	91.13	269.94	5520.09	3465.07	1428.13	-3190.95	0.00	1917429.89	558381.97	N 36 16 10.50	W 107 38 7.02
	9000.00	91.13	269.94	5518.12	3560.91	1428.02	-3290.93	0.00	1917429.57	558282.00	N 36 16 10.50	W 107 38 8.24
	9100.00	91.13	269.94	5516.15	3656.75	1427.91	-3390.91	0.00	1917429.24	558182.02	N 36 16 10.49	W 107 38 9.46
	9200.00	91.13	269.94	5514.18	3752.58	1427.80	-3490.89	0.00	1917428.92	558082.05	N 36 16 10.49	W 107 38 10.68
	9300.00	91.13	269.94	5512.21	3848.42	1427.70	-3590.87	0.00	1917428.60	557982.08	N 36 16 10.49	W 107 38 11.91
	9400.00	91.13	269.94	5510.24	3944.26	1427.59	-3690.85	0.00	1917428.27	557882.11	N 36 16 10.49	W 107 38 13.13
	9500.00	91.13	269.94	5508.26	4040.10	1427.48	-3790.83	0.00	1917427.95	557782.14	N 36 16 10.49	W 107 38 14.35
	9600.00	91.13	269.94	5506.29	4135.94	1427.37	-3890.81	0.00	1917427.63	557682.17	N 36 16 10.49	W 107 38 15.57
	9700.00	91.13	269.94	5504.32	4231.77	1427.27	-3990.79	0.00	1917427.30	557582.19	N 36 16 10.49	W 107 38 16.79
	9800.00	91.13	269.94	5502.35	4327.61	1427.16	-4090.77	0.00	1917426.98	557482.22	N 36 16 10.49	W 107 38 18.01
	9900.00	91.13	269.94	5500.38	4423.45	1427.05	-4190.76	0.00	1917426.66	557382.25	N 36 16 10.48	W 107 38 19.23
	10000.00	91.13	269.94	5498.41	4519.29	1426.94	-4290.74	0.00	1917426.33	557282.28	N 36 16 10.48	W 107 38 20.45
	10100.00	91.13	269.94	5496.44	4615.13	1426.83	-4390.72	0.00	1917426.01	557182.31	N 36 16 10.48	W 107 38 21.67
	10200.00	91.13	269.94	5494.47	4710.96	1426.73	-4490.70	0.00	1917425.69	557082.33	N 36 16 10.48	W 107 38 22.89
	10300.00	91.13	269.94	5492.49	4806.80	1426.62	-4590.68	0.00	1917425.36	556982.36	N 36 16 10.48	W 107 38 24.11
	10400.00	91.13	269.94	5490.52	4902.64	1426.51	-4690.66	0.00	1917425.04	556882.39	N 36 16 10.48	W 107 38 25.33
	10500.00	91.13	269.94	5488.55	4998.48	1426.40	-4790.64	0.00	1917424.72	556782.42	N 36 16 10.48	W 107 38 26.56
Chaco 2408-36P #143H PBHL	10528.03	91.13	269.94	5488.00	5025.34	1426.37	-4818.66	0.00	1917424.63	556754.40	N 36 16 10.48	W 107 38 26.90

Survey Type: Def Plan

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

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	14.000	1/100.000	8.750	7.000	SLB_MWD-STD-Depth Only	Original Hole / WPX Chaco 2408-36P #143H R4 mdv 11Sept13
	14.000	5943.240	1/100.000	8.750	7.000	SLB_MWD-STD	Original Hole / WPX Chaco 2408-36P #143H R4 mdv 11Sept13
	5943.240	10528.029	1/100.000	6.125	4.500	SLB_MWD-STD	Original Hole / WPX Chaco 2408-36P #143H R4 mdv 11Sept13