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Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APR 29 2015

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Farmington Field Data Set Serial No. Bureau of Land Management NMSF 078362
2. Name of Operator WPX Energy Production, LLC		6. If Indian, Allottee or Tribe Name
3a. Address PO Box 640 Aztec, NM 87410	3b. Phone No. (include area code) 505-333-1808	7. If Unit of CA/Agreement, Name and/or No. 132829
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 1325' FSL & 250' FWL, Sec 5, T23N, R6W BHL: 2192' FNL & 245' FEL, Sec 1 T23N, R7W		8. Well Name and No. NE CHACO COM #254H
		9. API Well No. 30-039-31289
		10. Field and Pool or Exploratory Area Chaco Unit NE HZ(oil)
		11. Country or Parish, State Rio Arriba, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

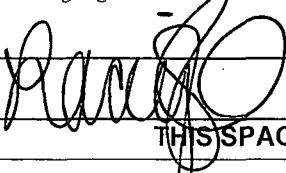
TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	BHL CHANGE/FRAC SLEEVE
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

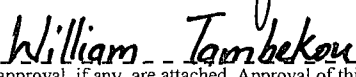
WPX Energy is proposing a change the BHL on the above mentioned well. Attached is the updated Directional and Ops plan and C102.

Also, will be running 4-1/2" liner with cement nose guide shoe + 2jts. Of 4-1/2" casing + landing Collar + 4-1/2" pup joint + 1 RSI sliding sleeve positioned inside the 330ft hard line. 60+/- FRAC SLEEVES will be ran and spaced out accordingly throughout the later for stimulation purposes. Centralizer program will be deter4mined by wellbore condition and when lateral is evaluated by Geoscientist and Reservoir Engineer. Set seals on liner hanger Test TOL to 1500 psi for 15min.

OIL CONS. DIV DIST. 3

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Lacey Granillo	Title Permit Tech III
Signature 	Date 4/29/15

MAY 06 2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by 	Title Petroleum Engineer	Date 5-1-15
Conditions of approval, if any, are attached. Approval of this notice 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.	Office FFO	

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 page 2)

NMOCDA

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

APR 29 2015

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-31289		*Pool Code 98088	*Pool Name CHACO UNIT NE HZ	Farmington Field Office (Oil & Gas Division of Land Management)
*Property Code 313800	*Property Name NE CHACO COM			*Well Number 254H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC			*Elevation 6830'

¹⁰ Surface Location

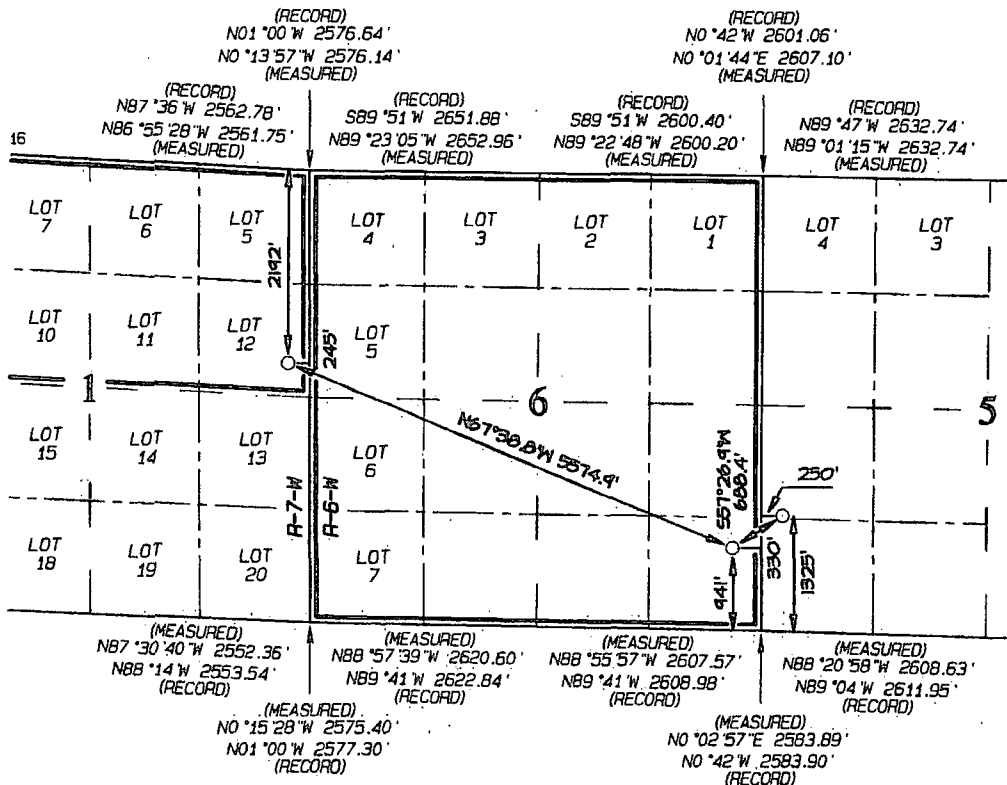
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	5	23N	6W		1325	SOUTH	250	WEST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	280	East/West line	County
H	1	23N	7W	12	2192	NORTH	245	EAST	RIO ARriba

¹² Dedicated Acres 950.07	Entire Section 6, T23N, R6W N/2 Section 1, T23N, R7W	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13817-A 9,237.3 acres
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



END-OF-LATERAL
2192' FSL 245' FEL
SECTION 1, T23N, R7W
LAT: 36.254640°N
LONG: 107.519481°W
DATUM: NAD1927

LAT: 36.254653°N
LONG: 107.520087°W
DATUM: NAD1983

POINT-OF-ENTRY
941' FSL 330' FEL
SECTION 6, T23N, R6W
LAT: 36.249001°N
LONG: 107.501905°W
DATUM: NAD1927

LAT: 36.249014°N
LONG: 107.502510°W
DATUM: NAD1983

SURFACE LOCATION
1325' FSL 250' FWL
SECTION 5, T23N, R6W
LAT: 36.250039°N
LONG: 107.499954°W
DATUM: NAD1927

LAT: 36.250052°N
LONG: 107.500559°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: *Jason C. Edwards* Date: *4/29/15*
Printed Name: *Jason C. Edwards*
E-mail Address: *jedwards@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: APRIL 29, 2015
Survey Date: NOVEMBER 25, 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: 4/29/15 **FIELD:** Chaco Unit NE HZ (Oil)

WELL NAME: NE Chaco Com #254H **SURFACE:** BLM

SH Location: NWSW Sec 5 -23N -06W **ELEVATION:** 6830' GR

BH Location: SENE Sec 1 -23N -07W **MINERALS:** Federal
Rio Arriba CO., NM

MEASURED DEPTH: 11,589 **LEASE #:** NMSF0078362

I. GEOLOGY: Surface formation – San Jose

A. FORMATION TOPS: (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1389	1382	Point Lookout	4294	4252
Kirtland	1704	1694	Mancos	4529	4484
Picture Cliffs	2007	1993	Kickoff Point	4941	4895
Lewis	2112	2097	Top Target	5769	5517
Chacra	2451	2431	Landing Point	6013	5568
Cliff House	3553	3520	Base Target	6013	5568
Menefee	3592	3559			
			TD	11589	5468

- 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.**

III. MATERIALS**A. CASING PROGRAM:**

CASING TYPE	OH SIZE (IN)	DEPTH (MD) (FT)	CASING SIZE (IN)	WEIGHT(LB)	GRADE
Surface	12.25"	320'+	9.625"	36#	J-55
Intermediate	8.75"	6,013'	7"	26#	P-110
Prod. Liner	6.125"	5,863 - 11,589'	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 + 1 RSI (Sliding Sleeve) positioned inside the 330ft Hard line. **60 +/- Frac sleeves** will be ran and spaced out accordingly throughout the lateral for stimulation purposes. 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: 5 bbl Fresh Water Spacer, 100 sx (160 cu.ft.) of 14.5 ppg Type I-II (Neat G) + 20% Fly Ash cement w/ 7.41 gal/sack mix water ratio @ 1.61 cu ft/sx yield. Calculated @ volume + 50% excess. WOC 12 hours. Test csg to 600psi. Total Volume: (160 cu-ft/100 sx/ Bbls). TOC at Surface.
2. INTERMEDIATE: 20 bbl (112 cu-ft) Mud Flush III spacer + Lead: +/- 700 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: 1001 cu-ft / 178.3 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: (900 sx / 1246 cu-ft / 222 bbls). Mix with +/- 84,000 SCF Nitrogen. TOC at surface.
1. PRODUCTION LINER: **Spacer #1**: 10 bbl (56 cu-ft) Water Spacer. **Spacer #2**: 40 bbl 9.5 ppg (224.6 cu-ft) Tuned Spacer III. **Spacer #3**: 10 bbl Water Spacer. **Lead Cement**: Extencem™ System. Yield 1.29 cu ft/sk, 13.5 ppg, (405 sx / 519.68 cu ft. / 92.6 bbls). **Tail Spacer**: 20 BBL of MMCR. **Displacement**: Displace w/ +/- 140 bbl Fr Water. Total Cement (520 cu ft / 92.6 bbls).

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.

- 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" 26# P-110 Intermediate casing with a Liner Hanger and pack-off assembly then cemented above the liner hanger.

After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

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



Company: WPX Energy
Project: T23N R6W
Site: Chaco 2306-05L

WPX ENERGY

Well Details: Chaco 2306-05L #254H

TVD Reference: KB @ 6844.00usft (Original Well Elev)

+N/-S
0.00

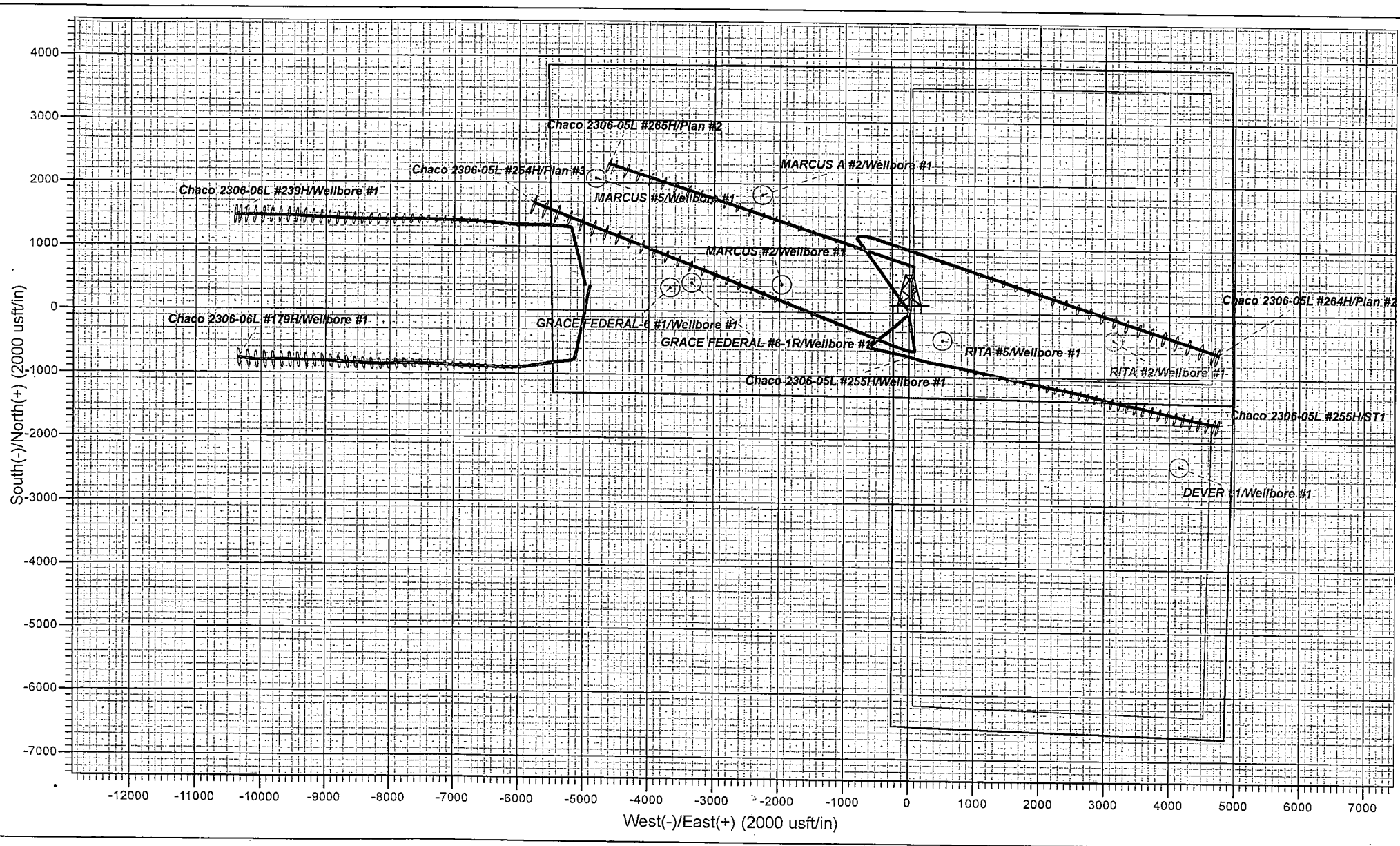
+E/-W
0.00

Northing
1910425.58

Easting
598300.87

Latitude
36.2500400

Longitude
-107.4999500

Slot
A2

Plan: Plan #3

12:15, April 28 2015
Created By: Janie Collins

WPX ENERGY

Company: WPX Energy
Project: T23N R6W
Site: Chaco 2306-05L
Well: Chaco 2306-05L #254H
Wellbore: Wellbore #1
Design: Plan #3

PROJECT DETAILS: T23N R6W

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level
Local North: True



Scientific Drilling



Azimuths to True North
Magnetic North: 9.05°

Magnetic Field
Strength: 49850.4snT
Dip Angle: 62.95°
Date: 4/29/2015
Model: HDGM

WELL DETAILS: Chaco 2306-05L #254H

KB @ 6844.00usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1910425.58	598300.87	36.2500400	-107.4999500

A2

Plan: Plan #3 (Chaco 2306-05L #254H/Wellbore #1)

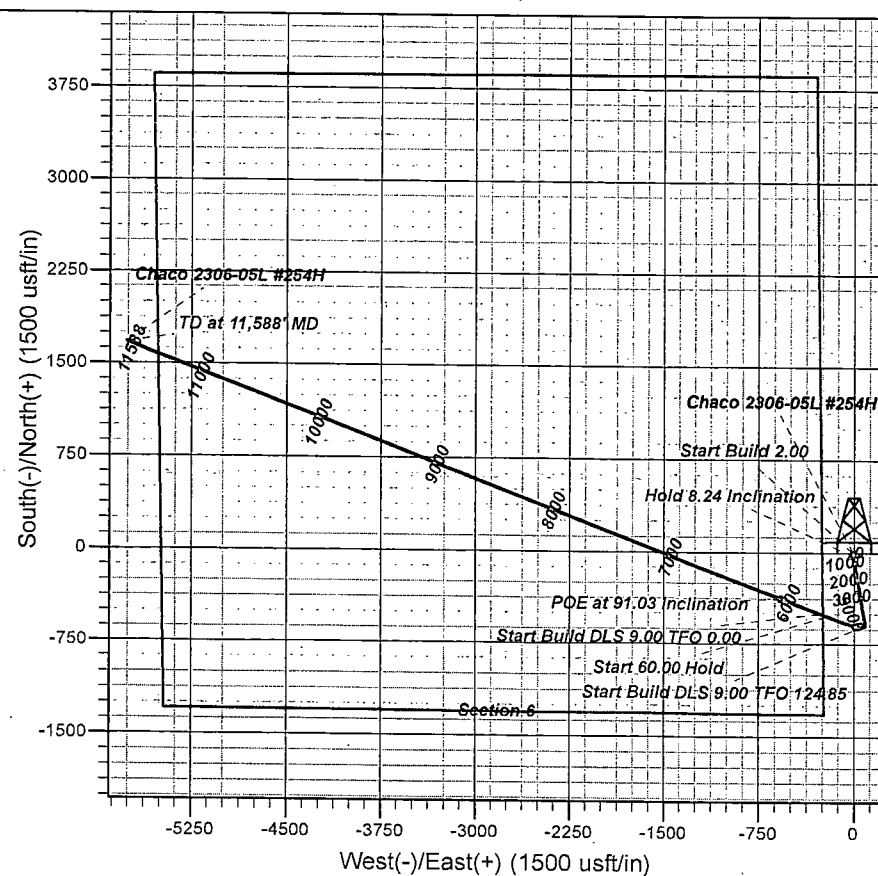
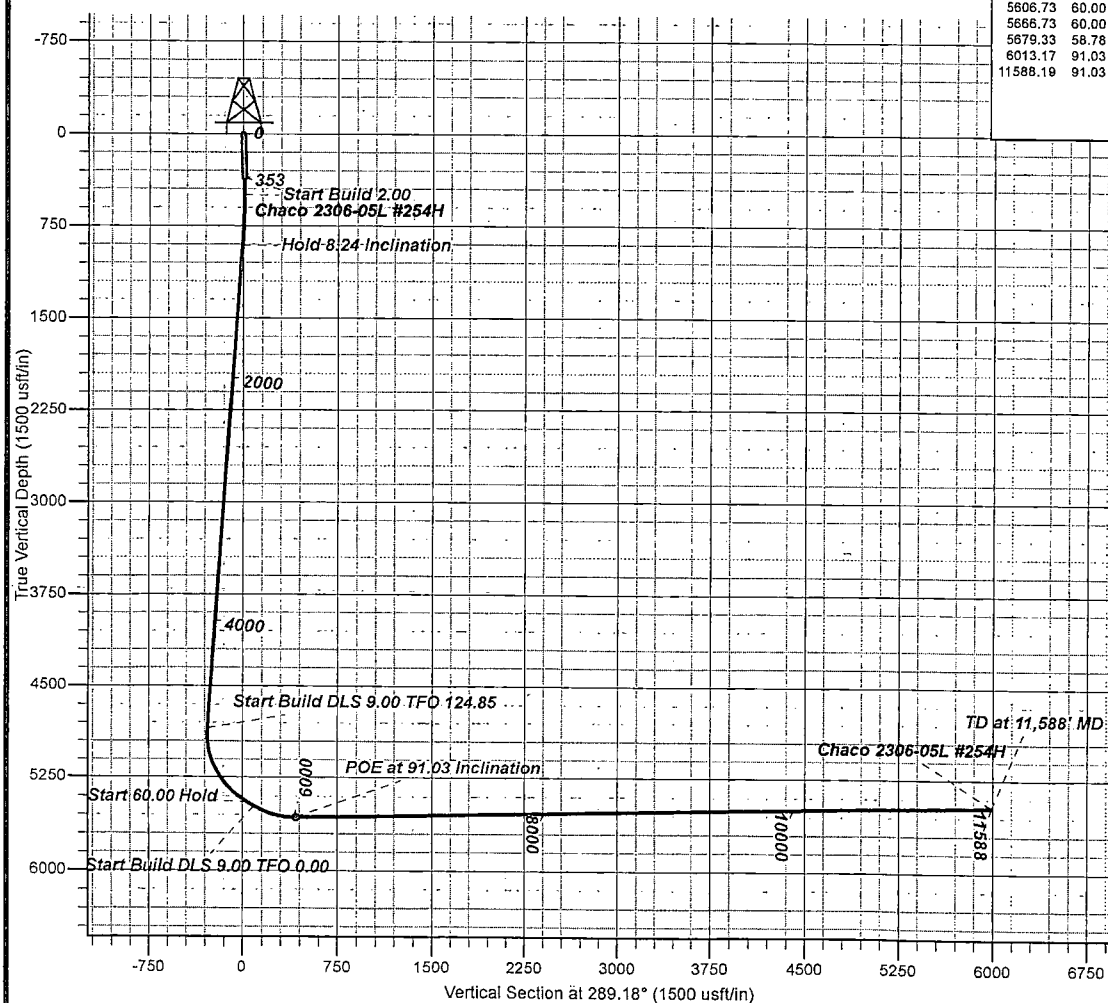
Created By: Janie Collins Date: 12:08, April 28 2015

DESIGN TARGET DETAILS

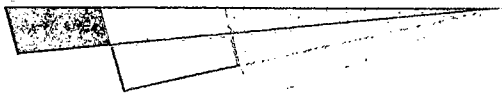
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Start 60 tan #254H	5445.80	-518.51	-222.35	1909906.30	598080.31	36.2486156	-107.5007041
End 60 tan #245H	5475.80	-499.37	-270.66	1909925.28	598031.93	36.2486682	-107.5008679
POP Chaco 2306-05L 254H	5568.00	-378.21	-576.46	1910045.39	597725.72	36.2490010	-107.5019050
BHL Chaco #254H 28apr15 sam	5468.00	1674.98	-5758.66	1912080.73	592536.48	36.2546398	-107.5194812

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSec	Target	Annotation
353.00	1.10	274.07	352.93	1.83	-6.33	0.00	0.00	8.58		
443.00	1.10	274.07	442.92	1.95	-8.06	0.00	0.00	8.25		
498.00	0.00	0.00	497.91	1.99	-8.58	2.00	180.00	8.76		Start Build 2.00
910.18	8.24	170.41	908.67	-27.20	-3.65	2.00	170.41	-5.49		Hold 8.24 Inclination
4890.05	8.24	170.41	4847.42	-589.86	91.46	0.00	0.00	-280.17		Start Build DLS 9.00 TFO 124.85
5606.73	60.00	291.61	5445.80	-518.51	-222.35	9.00	124.85	39.66	Start 60 tan #254H	Start Build DLS 9.00 TFO 0.00
5666.73	60.00	291.61	5475.80	-499.37	-270.66	0.00	0.00	91.57	End 60 tan #245H	
5679.33	58.78	291.61	5482.21	-495.38	-280.74	9.66	179.98	102.40		
6013.17	91.03	291.61	5568.00	-378.21	-576.46	9.66	0.00	420.21	POP Chaco 2306-05L 254H	POE at 91.03 Inclination
11588.19	91.03	291.61	5468.00	1674.98	-5758.66	0.00	-180.00	5468.00	Chaco 2306-05L #254H 28apr15 sam	TD at 11,588' MD



WPXENERGYSM



WPX Energy

T23N R6W

Chaco 2306-05L

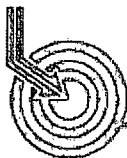
Chaco 2306-05L #254H - Slot A2

Wellbore #1

Plan: Plan #3

Standard Planning Report - Geographic

28 April, 2015



Scientific Drilling

www.scientificdrilling.com

Database:	Grand Junction District	Local Co-ordinate Reference:	Well Chaco 2306-05L #254H - Slot A2
Company:	WPX Energy	TVD Reference:	KB @ 6844.00usft (Original Well Elev)
Project:	T23N R6W	MD Reference:	KB @ 6844.00usft (Original Well Elev)
Site:	Chaco 2306-05L	North Reference:	True
Well:	Chaco 2306-05L #254H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Project	T23N R6W		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site	Chaco 2306-05L		
Site Position:		Northing:	1,910,443.81 usft
From:	Lat/Long	Easting:	598,309.66 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	36.2500900
		Longitude:	-107.4999200
		Grid Convergence:	0.20 °

Well	Chaco 2306-05L #254H - Slot A2		
Well Position	+N/-S	0.00 usft	Northing: 1,910,425.58 usft
	+E/-W	0.00 usft	Easting: 598,300.88 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36.2500400
		Longitude:	-107.4999500
		Ground Level:	6,830.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	HDGM	4/29/2015	(°)
			9.05
			Dip Angle
			(°)
			62.95
			Field Strength
			(nT)
			49,850

Design	Plan #3		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 353.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			289.18

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
353.00	1.10	274.07	352.93	1.83	-6.33	0.00	0.00	0.00	0.00	
443.00	1.10	274.07	442.92	1.95	-8.06	0.00	0.00	0.00	0.00	
498.00	0.00	0.00	497.91	1.99	-8.58	2.00	-2.00	0.00	180.00	
910.18	8.24	170.41	908.67	-27.20	-3.65	2.00	2.00	0.00	170.41	
4,890.05	8.24	170.41	4,847.42	-589.86	91.46	0.00	0.00	0.00	0.00	
5,606.73	60.00	291.61	5,445.80	-518.51	-222.35	9.00	7.22	16.91	124.85	Start 60 tan #254H
5,666.73	60.00	291.61	5,475.80	-499.37	-270.66	0.00	0.00	0.00	0.00	End 60 tan #245H
5,679.33	58.78	291.61	5,482.21	-495.38	-280.74	9.66	-9.66	0.00	179.98	
6,013.17	91.03	291.61	5,568.00	-378.21	-576.46	9.66	9.66	0.00	0.00	POP Chaco 2306-05L
11,588.19	91.03	291.61	5,468.00	1,674.98	-5,758.66	0.00	0.00	0.00	-180.00	BHL Chaco 2306-05L

Database:	Grand Junction District	Local Co-ordinate Reference:	Well Chaco 2306-05L #254H - Slot A2
Company:	WPX Energy	TVD Reference:	KB @ 6844.00usft (Original Well Elev)
Project:	T23N R6W	MD Reference:	KB @ 6844.00usft (Original Well Elev)
Site:	Chaco 2306-05L	North Reference:	True
Well:	Chaco 2306-05L #254H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
353.00	1.10	274.07	352.93	1.83	-6.33	1,910,427.38	598,294.54	36.2500450	-107.4999715
400.00	1.10	274.07	399.92	1.89	-7.23	1,910,427.44	598,293.64	36.2500452	-107.4999746
443.00	1.10	274.07	442.92	1.95	-8.06	1,910,427.50	598,292.81	36.2500453	-107.4999774
498.00	0.00	0.00	497.91	1.99	-8.58	1,910,427.54	598,292.29	36.2500454	-107.4999792
Start Build 2.00									
500.00	0.04	170.41	499.91	1.99	-8.58	1,910,427.54	598,292.29	36.2500454	-107.4999792
600.00	2.04	170.41	599.89	0.20	-8.28	1,910,425.75	598,292.60	36.2500405	-107.4999781
700.00	4.04	170.41	699.74	-5.03	-7.40	1,910,420.52	598,293.50	36.2500262	-107.4999751
800.00	6.04	170.41	799.35	-13.69	-5.93	1,910,411.86	598,294.99	36.2500024	-107.4999702
900.00	8.04	170.41	898.59	-25.78	-3.89	1,910,399.79	598,297.08	36.2499692	-107.4999632
910.18	8.24	170.41	908.67	-27.20	-3.65	1,910,398.37	598,297.32	36.2499653	-107.4999624
Hold 8.24 Inclination									
1,000.00	8.24	170.41	997.56	-39.90	-1.50	1,910,385.68	598,299.51	36.2499304	-107.4999551
1,100.00	8.24	170.41	1,096.53	-54.03	0.89	1,910,371.55	598,301.95	36.2498915	-107.4999470
1,200.00	8.24	170.41	1,195.50	-68.17	3.28	1,910,357.42	598,304.39	36.2498527	-107.4999389
1,300.00	8.24	170.41	1,294.46	-82.31	5.67	1,910,343.29	598,306.83	36.2498139	-107.4999308
1,400.00	8.24	170.41	1,393.43	-96.45	8.06	1,910,329.16	598,309.26	36.2497750	-107.4999227
1,500.00	8.24	170.41	1,492.40	-110.59	10.45	1,910,315.03	598,311.70	36.2497362	-107.4999146
1,600.00	8.24	170.41	1,591.36	-124.72	12.84	1,910,300.90	598,314.14	36.2496973	-107.4999065
1,700.00	8.24	170.41	1,690.33	-138.86	15.23	1,910,286.77	598,316.58	36.2496585	-107.4998984
1,800.00	8.24	170.41	1,789.30	-153.00	17.62	1,910,272.64	598,319.02	36.2496197	-107.4998903
1,900.00	8.24	170.41	1,888.26	-167.14	20.00	1,910,258.51	598,321.46	36.2495808	-107.4998822
2,000.00	8.24	170.41	1,987.23	-181.27	22.39	1,910,244.38	598,323.90	36.2495420	-107.4998741
2,100.00	8.24	170.41	2,086.20	-195.41	24.78	1,910,230.25	598,326.33	36.2495032	-107.4998660
2,200.00	8.24	170.41	2,185.16	-209.55	27.17	1,910,216.12	598,328.77	36.2494643	-107.4998579
2,300.00	8.24	170.41	2,284.13	-223.69	29.56	1,910,201.99	598,331.21	36.2494255	-107.4998498
2,400.00	8.24	170.41	2,383.10	-237.82	31.95	1,910,187.87	598,333.65	36.2493866	-107.4998417
2,500.00	8.24	170.41	2,482.06	-251.96	34.34	1,910,173.74	598,336.09	36.2493478	-107.4998336
2,600.00	8.24	170.41	2,581.03	-266.10	36.73	1,910,159.61	598,338.53	36.2493090	-107.4998255
2,700.00	8.24	170.41	2,680.00	-280.24	39.12	1,910,145.48	598,340.96	36.2492701	-107.4998174
2,800.00	8.24	170.41	2,778.96	-294.37	41.51	1,910,131.35	598,343.40	36.2492313	-107.4998093
2,900.00	8.24	170.41	2,877.93	-308.51	43.90	1,910,117.22	598,345.84	36.2491925	-107.4998012
3,000.00	8.24	170.41	2,976.90	-322.65	46.29	1,910,103.09	598,348.28	36.2491536	-107.4997930
3,100.00	8.24	170.41	3,075.87	-336.79	48.68	1,910,088.96	598,350.72	36.2491148	-107.4997849
3,200.00	8.24	170.41	3,174.83	-350.93	51.07	1,910,074.83	598,353.16	36.2490759	-107.4997768
3,300.00	8.24	170.41	3,273.80	-365.06	53.46	1,910,060.70	598,355.60	36.2490371	-107.4997687
3,400.00	8.24	170.41	3,372.77	-379.20	55.85	1,910,046.57	598,358.03	36.2489983	-107.4997606
3,500.00	8.24	170.41	3,471.73	-393.34	58.24	1,910,032.44	598,360.47	36.2489594	-107.4997525
3,600.00	8.24	170.41	3,570.70	-407.48	60.63	1,910,018.31	598,362.91	36.2489206	-107.4997444
3,700.00	8.24	170.41	3,669.67	-421.61	63.02	1,910,004.18	598,365.35	36.2488818	-107.4997363
3,800.00	8.24	170.41	3,768.63	-435.75	65.41	1,909,990.05	598,367.79	36.2488429	-107.4997282
3,900.00	8.24	170.41	3,867.60	-449.89	67.80	1,909,975.93	598,370.23	36.2488041	-107.4997201
4,000.00	8.24	170.41	3,966.57	-464.03	70.19	1,909,961.80	598,372.66	36.2487652	-107.4997120
4,100.00	8.24	170.41	4,065.53	-478.16	72.58	1,909,947.67	598,375.10	36.2487264	-107.4997039
4,200.00	8.24	170.41	4,164.50	-492.30	74.97	1,909,933.54	598,377.54	36.2486876	-107.4996958
4,300.00	8.24	170.41	4,263.47	-506.44	77.36	1,909,919.41	598,379.98	36.2486487	-107.4996877
4,400.00	8.24	170.41	4,362.43	-520.58	79.75	1,909,905.28	598,382.42	36.2486099	-107.4996796
4,500.00	8.24	170.41	4,461.40	-534.71	82.14	1,909,891.15	598,384.86	36.2485711	-107.4996715
4,600.00	8.24	170.41	4,560.37	-548.85	84.53	1,909,877.02	598,387.29	36.2485322	-107.4996634
4,700.00	8.24	170.41	4,659.33	-562.99	86.92	1,909,862.89	598,389.73	36.2484934	-107.4996553
4,800.00	8.24	170.41	4,758.30	-577.13	89.31	1,909,848.76	598,392.17	36.2484545	-107.4996472
4,890.05	8.24	170.41	4,847.42	-589.86	91.46	1,909,836.04	598,394.37	36.2484196	-107.4996399
Start Build DLS 9.00 TFO 124.85									
4,900.00	7.77	175.85	4,857.27	-591.23	91.63	1,909,834.66	598,394.54	36.2484158	-107.4996393

Database:	Grand Junction District	Local Co-ordinate Reference:	Well Chaco 2306-05L #254H - Slot A2
Company:	WPX Energy	TVD Reference:	KB @ 6844.00usft (Original Well Elev)
Project:	T23N R6W	MD Reference:	KB @ 6844.00usft (Original Well Elev)
Site:	Chaco 2306-05L	North Reference:	True
Well:	Chaco 2306-05L #254H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,000.00	8.50	243.05	4,956.47	-601.34	85.52	1,909,824.54	598,388.47	36.2483880	-107.4996600
5,100.00	15.66	270.54	5,054.26	-604.57	65.40	1,909,821.24	598,368.35	36.2483792	-107.4997283
5,200.00	24.08	280.16	5,148.25	-600.84	31.75	1,909,824.86	598,334.70	36.2483894	-107.4998424
5,300.00	32.79	284.94	5,236.12	-590.24	-14.59	1,909,835.29	598,288.32	36.2484185	-107.4999995
5,400.00	41.62	287.87	5,315.69	-573.03	-72.47	1,909,852.30	598,230.38	36.2484658	-107.5001958
5,500.00	50.49	289.93	5,385.03	-549.64	-140.48	1,909,875.46	598,162.29	36.2485300	-107.5004265
5,600.00	59.40	291.52	5,442.40	-520.65	-216.94	1,909,904.19	598,085.73	36.2486097	-107.5006858
5,606.73	60.00	291.61	5,445.80	-518.51	-222.35	1,909,906.31	598,080.31	36.2486156	-107.5007041
Start 60.00 Hold - Start 60 tan #254H									
5,666.73	60.00	291.61	5,475.80	-499.37	-270.66	1,909,925.28	598,031.94	36.2486681	-107.5008679
Start Build DLS 9.00 TFO 0.00 - End 60 tan #245H									
5,679.33	58.78	291.61	5,482.21	-495.38	-280.74	1,909,929.24	598,021.85	36.2486791	-107.5009021
5,700.00	60.78	291.61	5,492.62	-488.80	-297.34	1,909,935.76	598,005.22	36.2486972	-107.5009584
5,800.00	70.44	291.61	5,533.86	-455.29	-381.91	1,909,968.98	597,920.53	36.2487892	-107.5012453
5,900.00	80.10	291.61	5,559.26	-419.71	-471.72	1,910,004.25	597,830.60	36.2488870	-107.5015498
6,000.00	89.76	291.61	5,568.09	-383.06	-564.22	1,910,040.58	597,737.98	36.2489876	-107.5018635
6,013.17	91.03	291.61	5,568.00	-378.21	-576.46	1,910,045.39	597,725.72	36.2490010	-107.5019050
POE at 91.03 Inclination - POP Chaco 2306-05L 254H									
6,100.00	91.03	291.61	5,566.44	-346.23	-657.17	1,910,077.09	597,644.90	36.2490888	-107.5021788
6,200.00	91.03	291.61	5,564.64	-309.40	-750.13	1,910,113.60	597,551.82	36.2491900	-107.5024940
6,300.00	91.03	291.61	5,562.84	-272.57	-843.08	1,910,150.10	597,458.74	36.2492911	-107.5028093
6,400.00	91.03	291.61	5,561.05	-235.75	-936.03	1,910,186.61	597,365.66	36.2493923	-107.5031245
6,500.00	91.03	291.61	5,559.25	-198.92	-1,028.99	1,910,223.12	597,272.58	36.2494935	-107.5034398
6,600.00	91.03	291.61	5,557.45	-162.09	-1,121.94	1,910,259.63	597,179.50	36.2495946	-107.5037550
6,700.00	91.03	291.61	5,555.66	-125.26	-1,214.90	1,910,296.14	597,086.42	36.2496958	-107.5040703
6,800.00	91.03	291.61	5,553.86	-88.43	-1,307.85	1,910,332.65	596,993.34	36.2497970	-107.5043855
6,900.00	91.03	291.61	5,552.06	-51.60	-1,400.80	1,910,369.15	596,900.26	36.2498981	-107.5047008
7,000.00	91.03	291.61	5,550.27	-14.78	-1,493.76	1,910,405.66	596,807.18	36.2499993	-107.5050160
7,100.00	91.03	291.61	5,548.47	22.05	-1,586.71	1,910,442.17	596,714.10	36.2501004	-107.5053313
7,200.00	91.03	291.61	5,546.68	58.88	-1,679.67	1,910,478.68	596,621.02	36.2502016	-107.5056465
7,300.00	91.03	291.61	5,544.88	95.71	-1,772.62	1,910,515.19	596,527.94	36.2503027	-107.5059618
7,400.00	91.03	291.61	5,543.08	132.54	-1,865.57	1,910,551.70	596,434.86	36.2504039	-107.5062770
7,500.00	91.03	291.61	5,541.29	169.37	-1,958.53	1,910,588.20	596,341.78	36.2505051	-107.5065923
7,600.00	91.03	291.61	5,539.49	206.19	-2,051.48	1,910,624.71	596,248.70	36.2506062	-107.5069075
7,700.00	91.03	291.61	5,537.70	243.02	-2,144.44	1,910,661.22	596,155.62	36.2507074	-107.5072228
7,800.00	91.03	291.61	5,535.90	279.85	-2,237.39	1,910,697.73	596,062.54	36.2508085	-107.5075381
7,900.00	91.03	291.61	5,534.11	316.68	-2,330.34	1,910,734.24	595,969.46	36.2509097	-107.5078533
8,000.00	91.03	291.61	5,532.31	353.51	-2,423.30	1,910,770.75	595,876.38	36.2510108	-107.5081686
8,100.00	91.03	291.61	5,530.52	390.34	-2,516.25	1,910,807.25	595,783.30	36.2511120	-107.5084838
8,200.00	91.03	291.61	5,528.72	427.16	-2,609.21	1,910,843.76	595,690.22	36.2512131	-107.5087991
8,300.00	91.03	291.61	5,526.93	463.99	-2,702.16	1,910,880.27	595,597.14	36.2513143	-107.5091144
8,400.00	91.03	291.61	5,525.13	500.82	-2,795.11	1,910,916.78	595,504.06	36.2514154	-107.5094296
8,500.00	91.03	291.61	5,523.34	537.65	-2,888.07	1,910,953.29	595,410.98	36.2515166	-107.5097449
8,600.00	91.03	291.61	5,521.55	574.48	-2,981.02	1,910,989.80	595,317.90	36.2516177	-107.5100602
8,700.00	91.03	291.61	5,519.75	611.31	-3,073.98	1,911,026.30	595,224.82	36.2517189	-107.5103754
8,800.00	91.03	291.61	5,517.96	648.13	-3,166.93	1,911,062.81	595,131.74	36.2518200	-107.5106907
8,900.00	91.03	291.61	5,516.16	684.96	-3,259.88	1,911,099.32	595,038.66	36.2519211	-107.5110060
9,000.00	91.03	291.61	5,514.37	721.79	-3,352.84	1,911,135.83	594,945.58	36.2520223	-107.5113212
9,100.00	91.03	291.61	5,512.58	758.62	-3,445.79	1,911,172.34	594,852.50	36.2521234	-107.5116365
9,200.00	91.03	291.61	5,510.78	795.45	-3,538.75	1,911,208.85	594,759.42	36.2522246	-107.5119518
9,300.00	91.03	291.61	5,508.99	832.28	-3,631.70	1,911,245.35	594,666.33	36.2523257	-107.5122671
9,400.00	91.03	291.61	5,507.20	869.10	-3,724.65	1,911,281.86	594,573.25	36.2524268	-107.5125823
9,500.00	91.03	291.61	5,505.41	905.93	-3,817.61	1,911,318.37	594,480.17	36.2525280	-107.5128976
9,600.00	91.03	291.61	5,503.61	942.76	-3,910.56	1,911,354.88	594,387.09	36.2526291	-107.5132129

Database:	Grand Junction District	Local Co-ordinate Reference:	Well Chaco 2306-05L #254H - Slot A2
Company:	WPX Energy	TVD Reference:	KB @ 6844.00usft (Original Well Elev)
Project:	T23N R6W	MD Reference:	KB @ 6844.00usft (Original Well Elev)
Site:	Chaco 2306-05L	North Reference:	True
Well:	Chaco 2306-05L #254H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,700.00	91.03	291.61	5,501.82	979.59	-4,003.52	1,911,391.39	594,294.01	36.2527303	-107.5135281
9,800.00	91.03	291.61	5,500.03	1,016.42	-4,096.47	1,911,427.89	594,200.93	36.2528314	-107.5138434
9,900.00	91.03	291.61	5,498.24	1,053.25	-4,189.42	1,911,464.40	594,107.85	36.2529325	-107.5141587
10,000.00	91.03	291.61	5,496.44	1,090.08	-4,282.38	1,911,500.91	594,014.77	36.2530337	-107.5144740
10,100.00	91.03	291.61	5,494.65	1,126.90	-4,375.33	1,911,537.42	593,921.69	36.2531348	-107.5147893
10,200.00	91.03	291.61	5,492.86	1,163.73	-4,468.29	1,911,573.93	593,828.61	36.2532359	-107.5151045
10,300.00	91.03	291.61	5,491.07	1,200.56	-4,561.24	1,911,610.44	593,735.53	36.2533371	-107.5154198
10,400.00	91.03	291.61	5,489.28	1,237.39	-4,654.19	1,911,646.94	593,642.45	36.2534382	-107.5157351
10,500.00	91.03	291.61	5,487.49	1,274.22	-4,747.15	1,911,683.45	593,549.37	36.2535393	-107.5160504
10,600.00	91.03	291.61	5,485.69	1,311.05	-4,840.10	1,911,719.96	593,456.29	36.2536404	-107.5163657
10,700.00	91.03	291.61	5,483.90	1,347.87	-4,933.06	1,911,756.47	593,363.21	36.2537416	-107.5166809
10,800.00	91.03	291.61	5,482.11	1,384.70	-5,026.01	1,911,792.98	593,270.13	36.2538427	-107.5169962
10,900.00	91.03	291.61	5,480.32	1,421.53	-5,118.97	1,911,829.49	593,177.05	36.2539438	-107.5173115
11,000.00	91.03	291.61	5,478.53	1,458.36	-5,211.92	1,911,865.99	593,083.97	36.2540450	-107.5176268
11,100.00	91.03	291.61	5,476.74	1,495.19	-5,304.87	1,911,902.50	592,990.89	36.2541461	-107.5179421
11,200.00	91.03	291.61	5,474.95	1,532.02	-5,397.83	1,911,939.01	592,897.81	36.2542472	-107.5182574
11,300.00	91.03	291.61	5,473.16	1,568.84	-5,490.78	1,911,975.52	592,804.73	36.2543483	-107.5185727
11,400.00	91.03	291.61	5,471.37	1,605.67	-5,583.74	1,912,012.03	592,711.65	36.2544494	-107.5188880
11,500.00	91.03	291.61	5,469.58	1,642.50	-5,676.69	1,912,048.54	592,618.57	36.2545506	-107.5192032
11,515.33	91.03	291.61	5,469.30	1,648.15	-5,690.94	1,912,054.13	592,604.30	36.2545661	-107.5192516
TD / PBHL Chaco 2306-05L 254H									
11,588.00	91.03	291.61	5,468.00	1,674.91	-5,758.49	1,912,080.66	592,536.66	36.2546396	-107.5194807
TD at 11,588' MD									
11,588.19	91.03	291.61	5,468.00	1,674.98	-5,758.66	1,912,080.73	592,536.48	36.2546397	-107.5194813
BHL Chaco 2306-05L #254H 28apr15 sam									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Start 60 tan #254H	0.00	0.00	5,445.80	-518.51	-222.35	1,909,906.31	598,080.31	36.2486156	-107.5007041
- plan hits target center									
- Point									
BHL Chaco 2306-05L #2	0.00	0.00	5,468.00	1,674.98	-5,758.66	1,912,080.73	592,536.48	36.2546397	-107.5194813
- plan hits target center									
- Point									
End 60 tan #245H	0.00	0.00	5,475.80	-499.37	-270.66	1,909,925.28	598,031.94	36.2486681	-107.5008680
- plan hits target center									
- Point									
POP Chaco 2306-05L 2!	0.00	0.00	5,568.00	-378.21	-576.46	1,910,045.39	597,725.72	36.2490010	-107.5019050
- plan hits target center									
- Point									

Database:	Grand Junction District	Local Co-ordinate Reference:	Well Chaco 2306-05L #254H - Slot A2
Company:	WPX Energy	TVD Reference:	KB @ 6844.00usft (Original Well Elev)
Project:	T23N R6W	MD Reference:	KB @ 6844.00usft (Original Well Elev)
Site:	Chaco 2306-05L	North Reference:	True
Well:	Chaco 2306-05L #254H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
498.00	497.91	1.99	-8.58	Start Build 2.00
910.18	908.67	-27.20	-3.65	Hold 8.24 Inclination
4,890.05	4,847.42	-589.86	91.46	Start Build DLS 9.00 TFO 124.85
5,606.73	5,445.80	-518.51	-222.35	Start 60.00 Hold
5,666.73	5,475.80	-499.37	-270.66	Start Build DLS 9.00 TFO 0.00
6,013.17	5,568.00	-378.21	-576.46	POE at 91.03 Inclination
11,588.00	5,468.00	1,674.91	-5,758.49	TD at 11,588' MD