

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach, 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 3160-4 or 3160-5 form.

Operator Signature Date: 7/1/15

Well information:

API WELL #	Well Name	Well #	Operator Name	Type	Stat	County	Surf_Owner	UL	Sec	Twp	N/S	Rng	W/E
30-045-35601-00-00	CHACO 2408 33D	119H	WPX ENERGY PRODUCTION, LLC	O	N	San Juan	F	D	33	24	N	8	W

Drilling/Casing Change

Conditions of Approval:

(See the below checked and additional 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
- ☐ Ensure compliance with 19.15.17
- ☐ 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.
- ✓ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.

Additional requirements

NMOCD Approved by Signature

7-14-15
Date

RECEIVED

Form 3160-5
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JUL 02 2015

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

Farmington Field Office

Bureau of Land Management

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.

Case Serial No.

NMNM 023233

119786

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

WPX Energy Production, LLC

3a. Address

PO Box 640 Aztec, NM 87410

3b. Phone No. (include area code)

505-333-1816

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SHL:1290' FNL & 388' FWL, sec 33, T24N, R8W

BHL:297' FSL & 1357' FWL, sec 34, T24N, R8W

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

Chaco 2408-33D #119H

9. API Well No.

30-045-35601

10. Field and Pool or Exploratory Area
Basin mc

11. Country or Parish, State

San Juan, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>LATERAL CHANGE</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 requests to change the orientation of the lateral. Updated directional, ops plans and C102 are attached.

OIL CONS. DIV DIST. 3

JUL 10 2015

14. I hereby certify that the foregoing is true and correct.	
Name (Printed/Typed) LACEY GRANILLO	Title PERMITTING TECH III
Signature	Date 7/1/15
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved by William Tambekou	Petroleum Title Engineer Date 07-07-15
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.

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30.045-33001		*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 313755	*Property Name CHACO 2408-33D		*Well Number 119H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 7020'

10 Surface Location

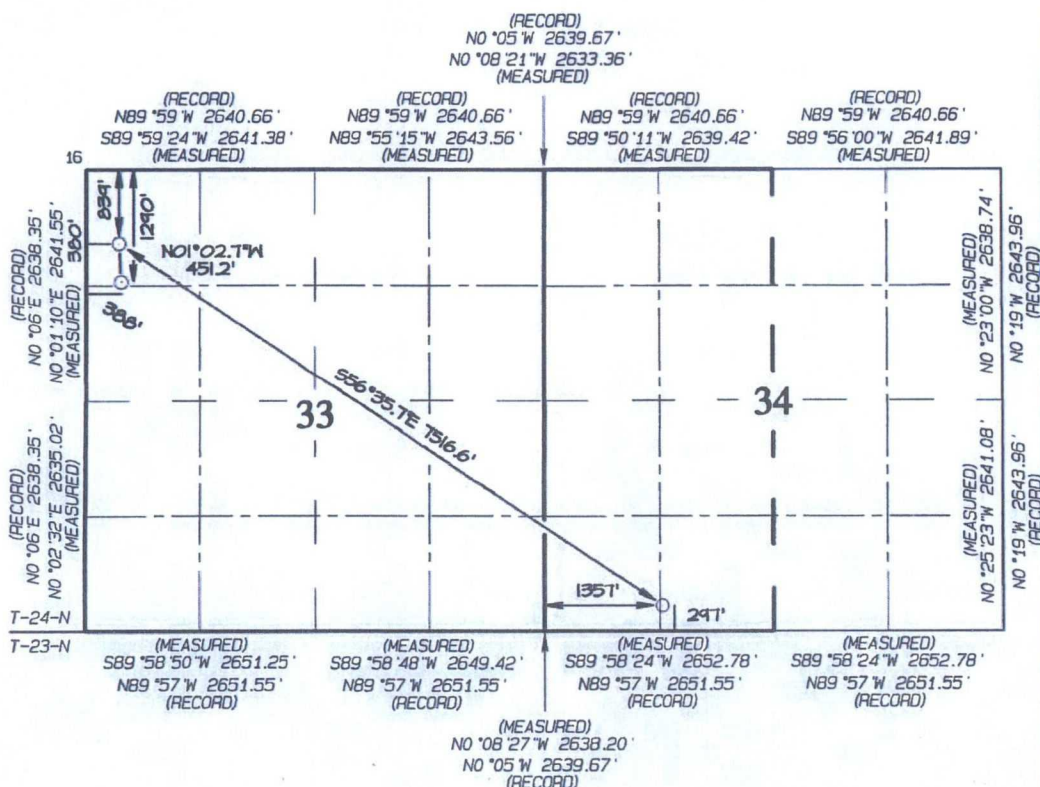
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	24N	8W		1290	NORTH	388	WEST	SAN JUAN

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
N	34	24N	8W		297	SOUTH	1357	WEST	SAN JUAN

*Dedicated Acres 960.0	Entire Section 33 W/2 - Section 34	*Joint or Infill	*Consolidation Code	*Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE
BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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.

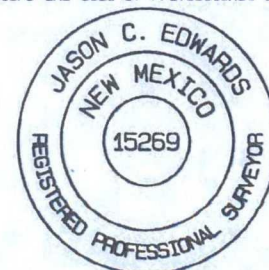
Signature: [Signature]
Date: 7/1/15
Printed Name: [Name]
E-mail Address: [Email]

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: JUNE 30, 2015
Survey Date: DECEMBER 12, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

SURFACE LOCATION
1290' FNL 388' FWL
SECTION 33, T24N, R8W
LAT: 36.274528°N
LONG: 107.694266°W
DATUM: NAD1927

POINT-OF-ENTRY
839' FNL 380' FWL
SECTION 33, T24N, R8W
LAT: 36.275768°N
LONG: 107.694292°W
DATUM: NAD1927

END-OF-LATERAL
297' FSL 1357' FWL
SECTION 34, T24N, R8W
LAT: 36.264373°N
LONG: 107.673028°W
DATUM: NAD1927

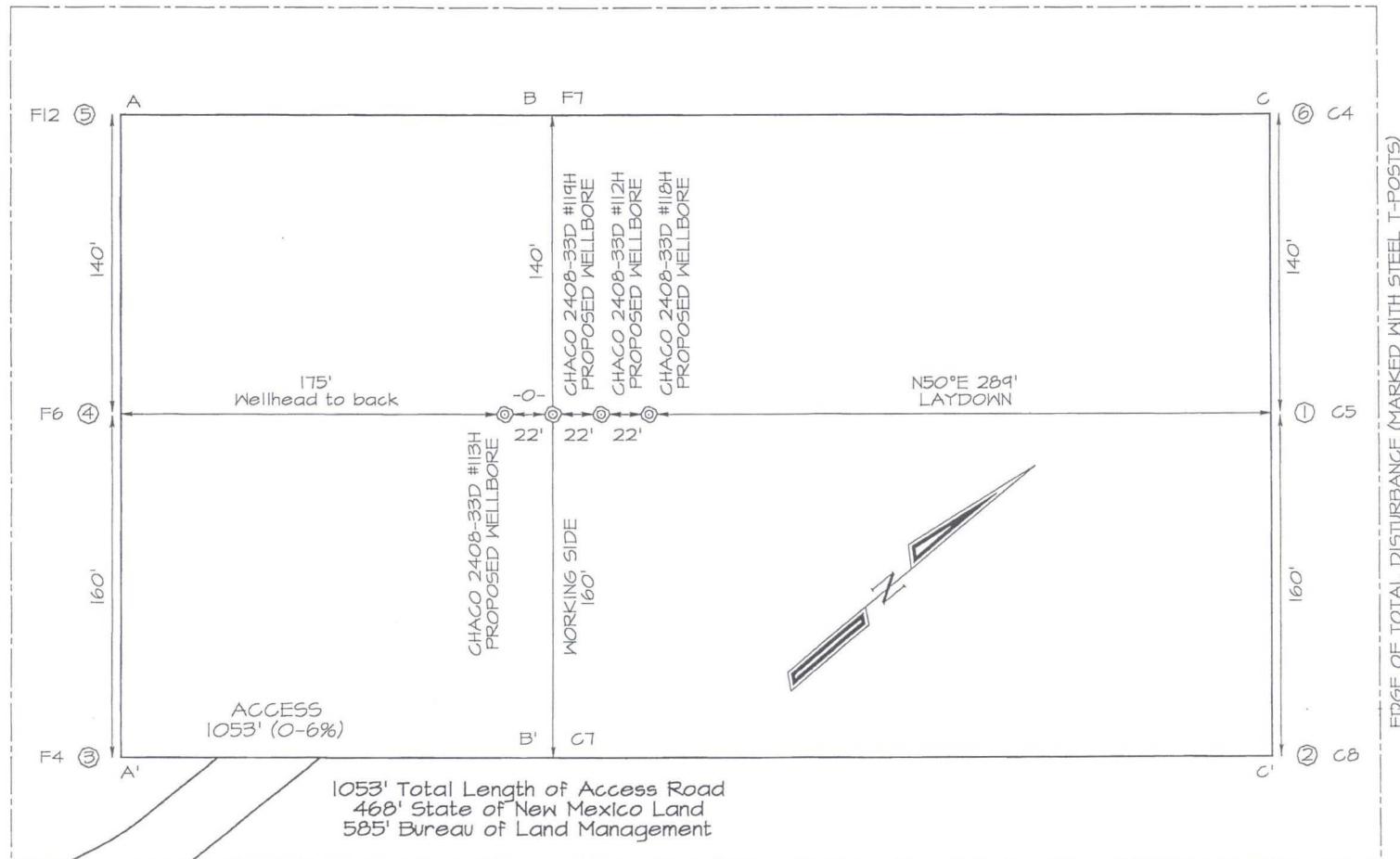
LAT: 36.274541°N
LONG: 107.694878°W
DATUM: NAD1983

LAT: 36.275780°N
LONG: 107.694904°W
DATUM: NAD1983

LAT: 36.264385°N
LONG: 107.673639°W
DATUM: NAD1983

WFC LATERAL H-28
PRELIM P/L SURVEY

EDGE OF TOTAL DISTURBANCE (MARKED WITH STEEL T-POSTS)



GRAPHIC SCALE 1"=80'



0 80 160

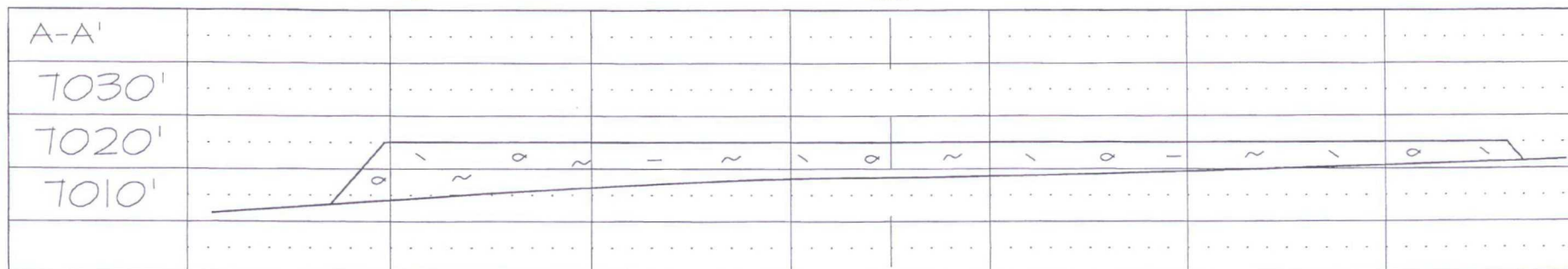
~ SURFACE OWNER ~
Bureau of Land Management

Steel T-Posts have been set to define the Edge of Disturbance limits which are 50' offset from the edge of the staked wellpad.

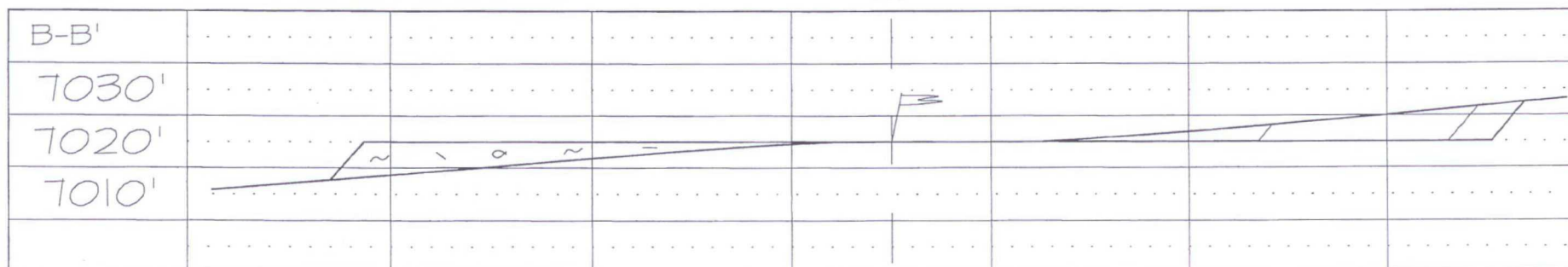
HORIZONTAL SCALE
1"=40'

C/L

VERTICAL SCALE
1"=30'



C/L



C/L



CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

WPX ENERGY PRODUCTION, LLC CHACO 2408-33D #119H

1290' FNL & 388' FWL, SECTION 33, T24N, R8W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO



NAME OF TOPO MAP : CROW MESA WEST

⊕ PRODUCING WELL

⊗ PLUGGED & ABANDONED WELL



WPX ENERGY

Operations Plan

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

DATE: 6/29/2015 FIELD: Basin Mancos
WELL NAME: Chaco 2408-33D #119H SURFACE:
SH Location: NWNW Sec 33 -24N -08W ELEVATION: 7020' GR
BH Location: SESW Sec 34 -24N -08W MINERALS:
San Juan Co., NM

MEASURED DEPTH: 13,594'

I. GEOLOGY: Surface formation – Nacimiento

A. FORMATION TOPS: (KB)

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1288	1281	Point Lookout	4307	4241
Kirtland	1393	1384	Mancos	4522	4452
Picture Cliffs	1907	1888	Gallup	4892	4814
Lewis	2021	2000	Kickoff Point	4864	4744
Chacra	2274	2248	Top Target	5635	5424
Cliff House	3352	3305	Landing Point	6076	5536
Menefee	3410	3361	Base Target	6076	5536
			TD	13594	5549

- 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:

<u>CASING TYPE</u>	<u>OH SIZE (IN)</u>	<u>DEPTH (MD) (FT)</u>	<u>CASING SIZE (IN)</u>	<u>WEIGHT(LB)</u>	<u>GRADE</u>
Surface	12.25"	400'+	9.625"	36#	J-55
Intermediate	8.75"	6,076'	7"	23#	K-55
Prod. Liner	6.125"	5,926-13,594'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5,926'	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. 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). WOC 12 hrs. 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.
3. 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 TM System. Yield 1.36 cu ft/sk, 13.5 ppg, (610 sx / 830 cu ft. / 148 bbls). **Tail Spacer:** 20 BBL of MMCR. **Displacement:** Displace w/ +/- 182 bbl Fr Water. Total Cement (830 cu ft / 148 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.

- 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:

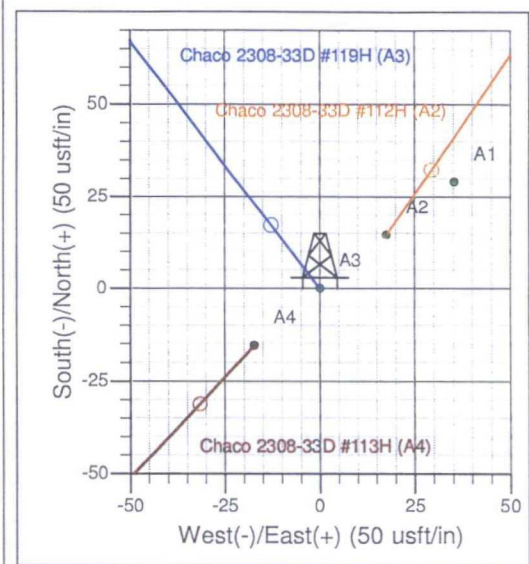
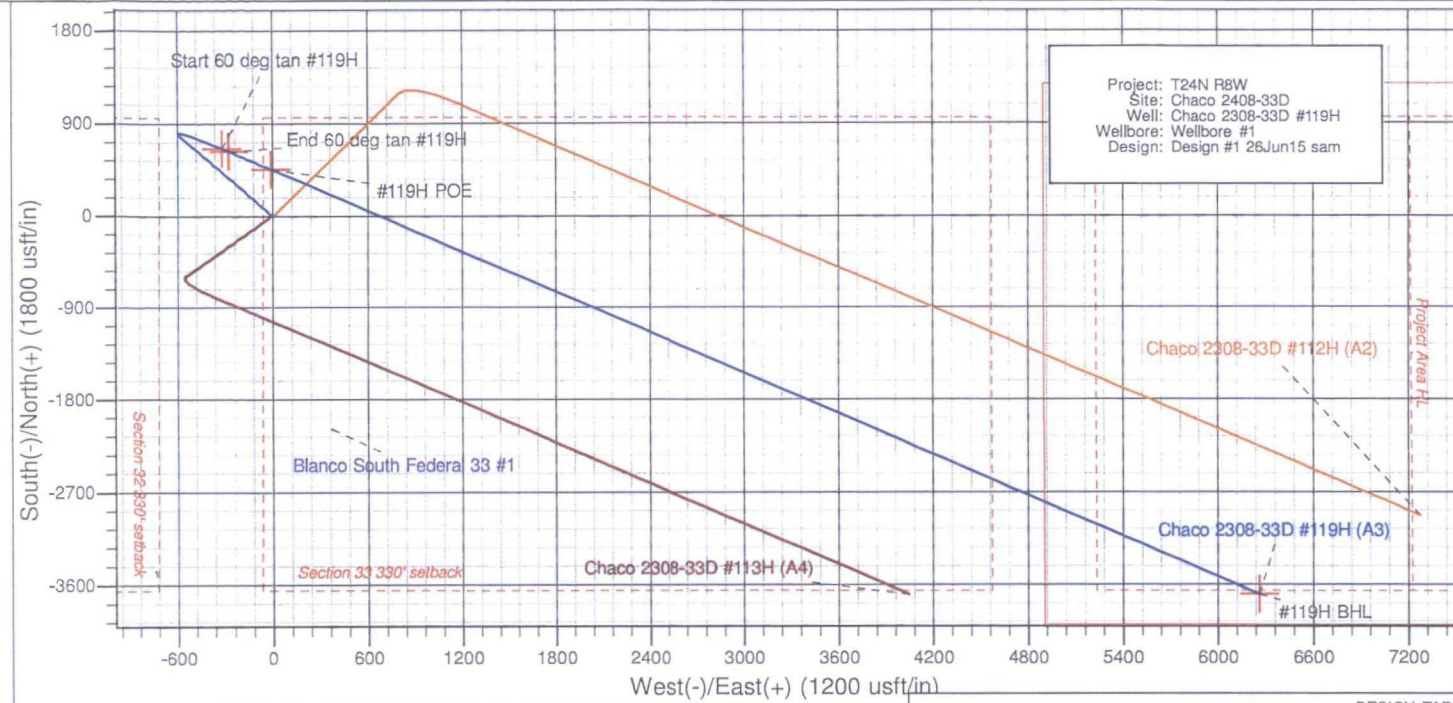
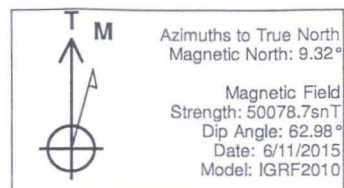
A 4-1/2" 11.6# N-80 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# K-55 Intermediate casing with a Liner Hanger and pack-off assembly then cemented to top of liner hanger.

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. After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

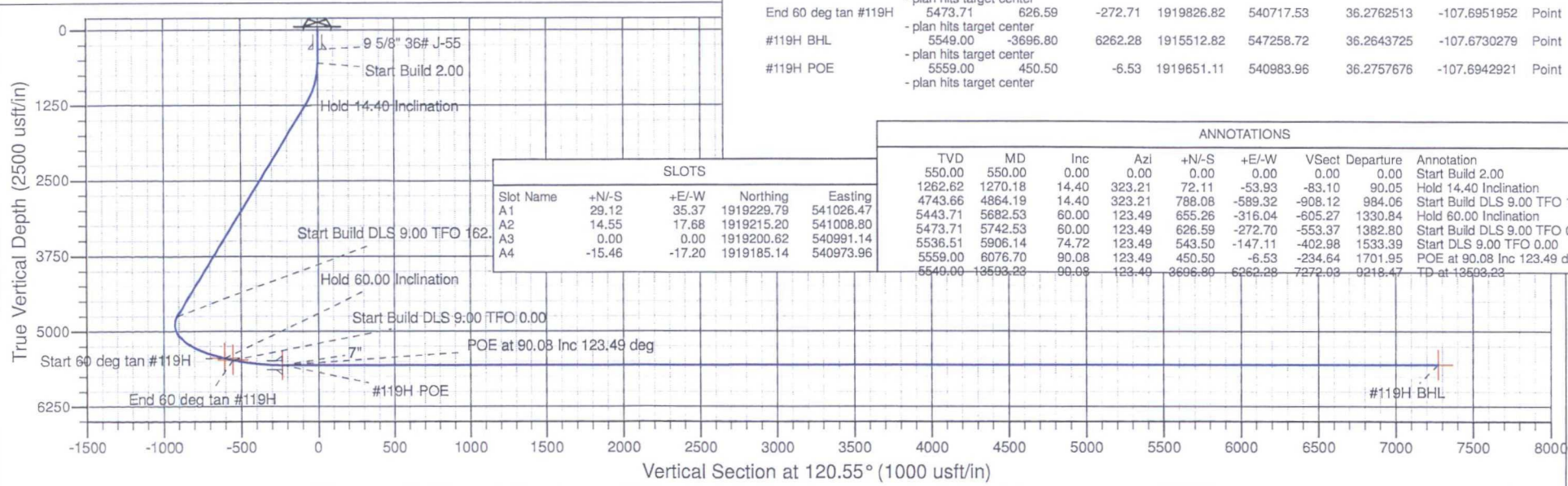


Well Name: Chaco 2308-33D #119H
Surface Location: Chaco 2408-33D
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 7020.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1919200.62 540991.14 36.2745300 -107.6942700 A3
WELL @ 7034.00usft (Aztec 920)



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Start 60 deg tan #119H	5443.71	655.26	-316.04	1919855.43	540674.16	36.2763301	-107.6953422	Point
End 60 deg tan #119H	5473.71	626.59	-272.71	1919826.82	540717.53	36.2762513	-107.6951952	Point
#119H BHL	5549.00	-3696.80	6262.28	1915512.82	547258.72	36.2643725	-107.6730279	Point
#119H POE	5559.00	450.50	-6.53	1919651.11	540983.96	36.2757676	-107.6942921	Point
- plan hits target center								



SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
A1	29.12	35.37	1919229.79	541026.47
A2	14.55	17.68	1919215.20	541008.80
A3	0.00	0.00	1919200.62	540991.14
A4	-15.46	-17.20	1919185.14	540973.96

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	V/Sect	Departure	Annotation
550.00	550.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1262.62	1270.18	14.40	323.21	72.11	-53.93	-83.10	90.05	Hold 14.40 Inclination
4743.66	4864.19	14.40	323.21	788.08	-589.32	-908.12	984.06	Start Build DLS 9:00 TFO 162.27
5443.71	5682.53	60.00	123.49	655.26	-316.04	-605.27	1330.84	Hold 60.00 Inclination
5473.71	5742.53	60.00	123.49	626.59	-272.70	-553.37	1382.80	Start Build DLS 9:00 TFO 0.00
5536.51	5906.14	74.72	123.49	543.50	-147.11	-402.98	1533.39	Start DLS 9:00 TFO 0.00
5559.00	6076.70	90.08	123.49	450.50	-6.53	-234.64	1701.95	POE at 90.03 Inc 123.49 deg
5549.00	13593.23	90.08	123.49	3696.80	6262.28	7272.03	9218.47	TD at 13593.23

WPX Energy

T24N R8W

Chaco 2408-33D

Chaco 2308-33D #119H - Slot A3

Wellbore #1

Plan: Design #1 26Jun15 sam

Standard Planning Report

29 June, 2015

WPX

Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2308-33D #119H (A3) - Slot A3
Company:	WPX Energy	TVD Reference:	WELL @ 7034.00usft (Aztec 920)
Project:	T24N R8W	MD Reference:	WELL @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	North Reference:	True
Well:	Chaco 2308-33D #119H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 26Jun15 sam		

Project	T24N R8W		
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 2408-33D		
Site Position:		Northing:	1,919,215.20 usft
From:	Lat/Long	Easting:	541,008.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	36.2745700
		Longitude:	-107.6942100
		Grid Convergence:	0.08 °

Well	Chaco 2308-33D #119H - Slot A3		
Well Position	+N/-S	-14.56 usft	Northing:
	+E/-W	-17.68 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36.2745300
		Longitude:	-107.6942700
		Ground Level:	7,020.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	6/11/2015	9.32
			Dip Angle (°)
			62.98
			Field Strength (nT)
			50,079

Design	Design #1 26Jun15 sam		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			120.55

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
550.00	0.00	0.00	550.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,270.18	14.40	323.21	1,262.62	72.11	-53.93	2.00	2.00	0.00	323.21	
4,864.19	14.40	323.21	4,743.66	788.08	-589.32	0.00	0.00	0.00	0.00	
5,682.53	60.00	123.49	5,443.71	655.26	-316.04	9.00	5.57	19.59	162.27	Start 60 deg tan #119
5,742.53	60.00	123.49	5,473.71	626.59	-272.70	0.00	0.00	0.00	0.00	End 60 deg tan #119
5,906.14	74.72	123.49	5,536.51	543.50	-147.11	9.00	9.00	0.00	0.00	
6,076.70	90.08	123.49	5,559.00	450.50	-6.53	9.00	9.00	0.00	0.00	#119H POE
13,593.23	90.08	123.49	5,549.00	-3,696.80	6,262.28	0.00	0.00	0.00	0.00	#119H BHL

WPX

Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2308-33D #119H (A3) - Slot A3
Company:	WPX Energy	TVD Reference:	WELL @ 7034.00usft (Aztec 920)
Project:	T24N R8W	MD Reference:	WELL @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	North Reference:	True
Well:	Chaco 2308-33D #119H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 26Jun15 sam		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
320.00	0.00	0.00	320.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8" 36# J-55									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
550.00	0.00	0.00	550.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,000.00	9.00	323.21	998.15	28.25	-21.12	-32.55	2.00	2.00	0.00
1,270.18	14.40	323.21	1,262.62	72.11	-53.93	-83.10	2.00	2.00	0.00
Hold 14.40 Inclination									
1,500.00	14.40	323.21	1,485.21	117.90	-88.16	-135.85	0.00	0.00	0.00
2,000.00	14.40	323.21	1,969.50	217.50	-162.65	-250.63	0.00	0.00	0.00
2,500.00	14.40	323.21	2,453.78	317.11	-237.13	-365.41	0.00	0.00	0.00
3,000.00	14.40	323.21	2,938.07	416.71	-311.62	-480.19	0.00	0.00	0.00
3,500.00	14.40	323.21	3,422.35	516.32	-386.10	-594.97	0.00	0.00	0.00
4,000.00	14.40	323.21	3,906.63	615.93	-460.59	-709.74	0.00	0.00	0.00
4,500.00	14.40	323.21	4,390.92	715.53	-535.07	-824.52	0.00	0.00	0.00
4,864.19	14.40	323.21	4,743.66	788.08	-589.32	-908.12	0.00	0.00	0.00
Start Build DLS 9.00 TFO 162.27									
5,000.00	4.60	16.67	4,877.62	806.90	-597.91	-925.08	9.00	-7.22	39.36
5,500.00	43.65	121.43	5,331.27	732.26	-436.53	-748.17	9.00	7.81	20.95
5,682.53	60.00	123.49	5,443.71	655.26	-316.04	-605.27	9.00	8.96	1.13
Hold 60.00 Inclination									
5,742.53	60.00	123.49	5,473.71	626.59	-272.70	-553.37	0.00	0.00	0.00
Start Build DLS 9.00 TFO 0.00									
5,906.14	74.72	123.49	5,536.51	543.50	-147.11	-402.98	9.00	9.00	0.00
Start DLS 9.00 TFO 0.00									
6,000.00	83.17	123.49	5,554.49	492.72	-70.35	-311.06	9.00	9.00	0.00
6,076.00	90.01	123.49	5,559.00	450.89	-7.12	-235.34	9.00	9.00	0.00
7"									
6,076.70	90.08	123.49	5,559.00	450.50	-6.53	-234.64	9.00	9.00	0.00
POE at 90.08 Inc 123.49 deg									
6,500.00	90.08	123.49	5,558.44	216.94	346.50	188.10	0.00	0.00	0.00
7,000.00	90.08	123.49	5,557.77	-58.94	763.50	687.45	0.00	0.00	0.00
7,500.00	90.08	123.49	5,557.11	-334.82	1,180.50	1,186.79	0.00	0.00	0.00
8,000.00	90.08	123.49	5,556.44	-610.70	1,597.51	1,686.14	0.00	0.00	0.00
8,500.00	90.08	123.49	5,555.78	-886.57	2,014.51	2,185.48	0.00	0.00	0.00
9,000.00	90.08	123.49	5,555.11	-1,162.45	2,431.51	2,684.83	0.00	0.00	0.00
9,500.00	90.08	123.49	5,554.45	-1,438.33	2,848.51	3,184.17	0.00	0.00	0.00
10,000.00	90.08	123.49	5,553.78	-1,714.21	3,265.51	3,683.51	0.00	0.00	0.00
10,500.00	90.08	123.49	5,553.12	-1,990.09	3,682.51	4,182.86	0.00	0.00	0.00
11,000.00	90.08	123.49	5,552.45	-2,265.97	4,099.52	4,682.20	0.00	0.00	0.00
11,500.00	90.08	123.49	5,551.78	-2,541.85	4,516.52	5,181.55	0.00	0.00	0.00
12,000.00	90.08	123.49	5,551.12	-2,817.73	4,933.52	5,680.89	0.00	0.00	0.00
12,500.00	90.08	123.49	5,550.45	-3,093.61	5,350.52	6,180.24	0.00	0.00	0.00
13,000.00	90.08	123.49	5,549.79	-3,369.48	5,767.52	6,679.58	0.00	0.00	0.00
13,500.00	90.08	123.49	5,549.12	-3,645.36	6,184.52	7,178.93	0.00	0.00	0.00
13,593.23	90.08	123.49	5,549.00	-3,696.80	6,262.28	7,272.03	0.00	0.00	0.00
TD at 13593.23									

WPX Planning Report

Database: COMPASS-SANJUAN
Company: WPX Energy
Project: T24N R8W
Site: Chaco 2408-33D
Well: Chaco 2308-33D #119H
Wellbore: Wellbore #1
Design: Design #1 26Jun15 sam

Local Co-ordinate Reference: Well Chaco 2308-33D #119H (A3) - Slot A3
TVD Reference: WELL @ 7034.00usft (Aztec 920)
MD Reference: WELL @ 7034.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Start 60 deg tan #119H - plan hits target center - Point	0.00	0.00	5,443.71	655.26	-316.04	1,919,855.43	540,674.16	36.2763301	-107.6953422
End 60 deg tan #119H - plan hits target center - Point	0.00	0.00	5,473.71	626.59	-272.71	1,919,826.83	540,717.53	36.2762513	-107.6951952
#119H BHL - plan hits target center - Point	0.00	0.00	5,549.00	-3,696.80	6,262.28	1,915,512.82	547,258.72	36.2643725	-107.6730279
#119H POE - plan hits target center - Point	0.00	0.00	5,559.00	450.50	-6.53	1,919,651.11	540,983.96	36.2757676	-107.6942922

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8" 36# J-55	9.62	12.25
6,076.00	5,559.00	7"	7.00	8.75

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
550.00	550.00	0.00	0.00	Start Build 2.00
1,270.18	1,262.62	72.11	-53.93	Hold 14.40 Inclination
4,864.19	4,743.66	788.08	-589.32	Start Build DLS 9.00 TFO 162.27
5,682.53	5,443.71	655.26	-316.04	Hold 60.00 Inclination
5,742.53	5,473.71	626.59	-272.70	Start Build DLS 9.00 TFO 0.00
5,906.14	5,536.51	543.50	-147.11	Start DLS 9.00 TFO 0.00
6,076.70	5,559.00	450.50	-6.53	POE at 90.08 Inc 123.49 deg
13,593.23	5,549.00	-3,696.80	6,262.28	TD at 13593.23