

APR 13 2015

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 08 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.

5. Lease Serial No.

NMSF078359

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.
132829

8. Well Name and No.

NE CHACO COM #209H

9. API Well No.

30-039-31292

10. Field and Pool or Exploratory Area
Chaco Unit NE HZ11. Country or Parish, State
Rio Arriba, NM

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: 1410' FSL & 361' FWL SEC 16 23N 6W

BHL: 2450' FSL & 53' FWL SEC 17 23N 6W

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	
	☐ 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 recomplate 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 recomplate 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 extended the proposed lateral length please note the attached updated C102, Ops and Directional plans.

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations

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

14. I hereby certify that the foregoing is true and correct.

Name (Printed/Typed)

LACEY GRANILLO

Title PERMITTING TECH III

Signature

Date 4/8/15

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

William Tambekou

Petroleum

Title Engineer

Date 4-9-15

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 PFO

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)

NMOCDV

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 08 2015

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-31292	*Pool Code 98088	*Pool Name Farmington Field Office
*Property Code 313800	*Property Name NE CHACO COM	*Well Number 209H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6858'

10 Surface Location

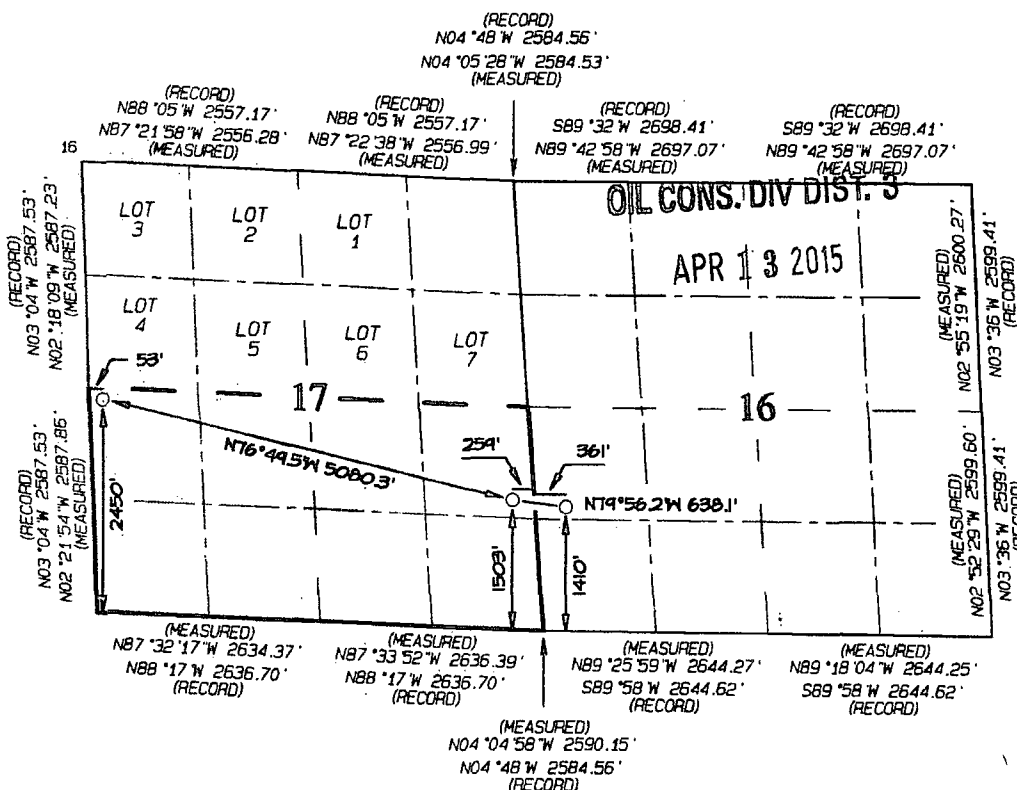
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	16	23N	6W		1410	SOUTH	361	WEST	RIO ARriba

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	17	23N	6W		2450	SOUTH	53	WEST	RIO ARriba

12 Dedicated Acres 320.0 Acres S/2 - Section 17	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



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: 4-8-15
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: APRIL 2, 2015
Survey Date: SEPTEMBER 4, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number: 15269

END-OF-LATERAL
2450' FSL 53' FWL
SECTION 17, T23N, R6W
LAT: 36.224753°N
LONG: 107.500142°W
DATUM: NAD1927

POINT-OF-ENTRY
1503' FSL 259' FWL
SECTION 17, T23N, R6W
LAT: 36.221747°N
LONG: 107.483325°W
DATUM: NAD1927

SURFACE LOCATION
1410' FSL 361' FWL
SECTION 16, T23N, R6W
LAT: 36.221463°N
LONG: 107.481192°W
DATUM: NAD1927

LAT: 36.224767°N
LONG: 107.500747°W
DATUM: NAD1983

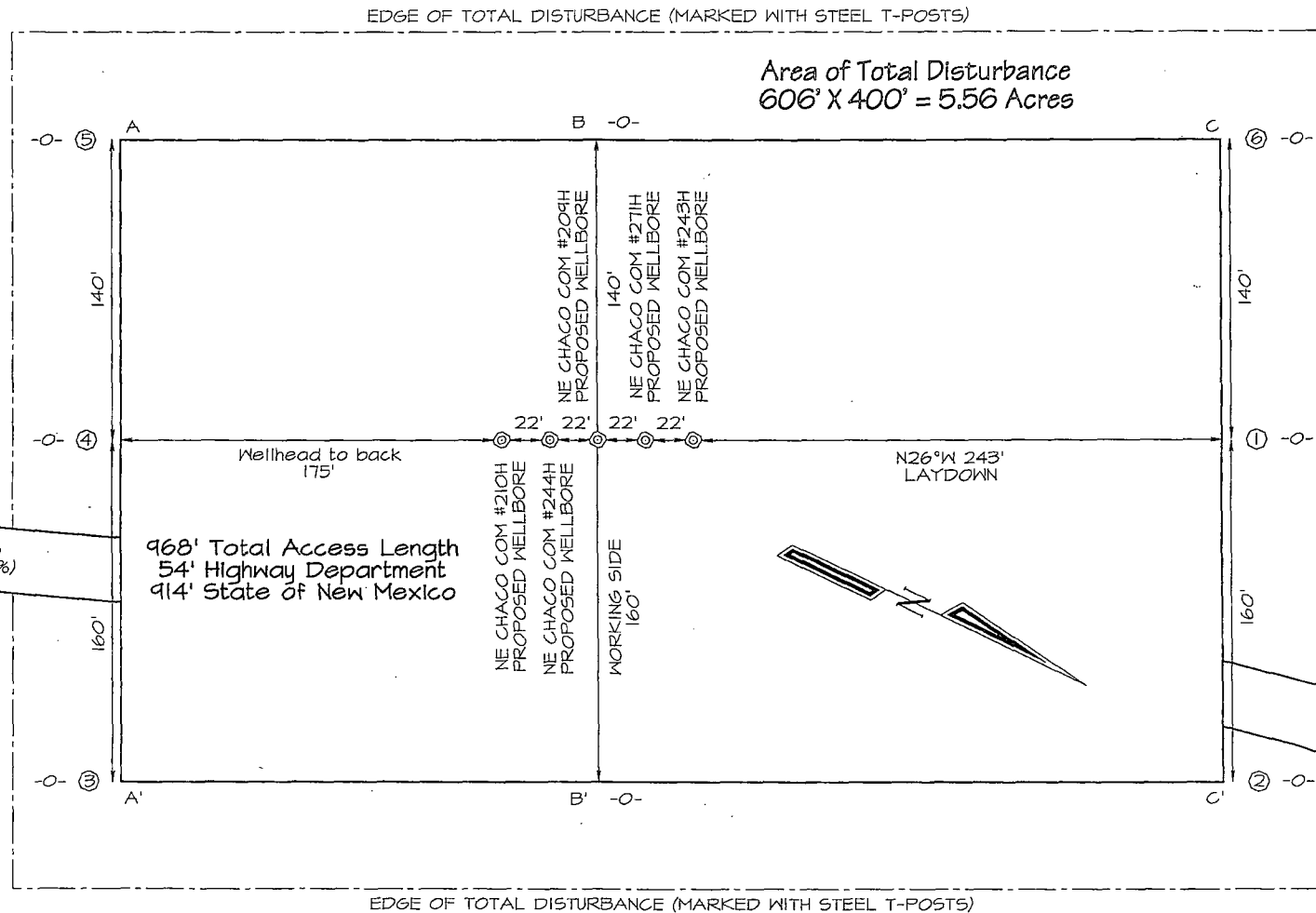
LAT: 36.221761°N
LONG: 107.483930°W
DATUM: NAD1983

LAT: 36.221476°N
LONG: 107.481797°W
DATUM: NAD1983

WPX ENERGY PRODUCTION, LLC NE CHACO COM #209H
 1410' FSL & 361' FWL, SECTION 16, T23N, R6W, NMPM
 RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6858'
 LAT: 36.221476°N LONG: 107.481797°W DATUM: NAD1983

~ SURFACE OWNER ~
 State of New Mexico Land

ACCESS
 968' (0-8%)



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

WPX ENERGY PRODUCTION, LLC NE CHACO COM #209H
 1410' FSL & 361' FWL, SECTION 16, T23N, R6W, NMPM
 RIO ARriba COUNTY, NEW MEXICO ELEVATION: 6858'

HORIZONTAL SCALE
 1"=40'

C/L

VERTICAL SCALE
 1"=30'

A-A'								
6868'								
6858'								
6848'								

C/L

B-B'								
6868'								
6858'								
6848'								

C/L

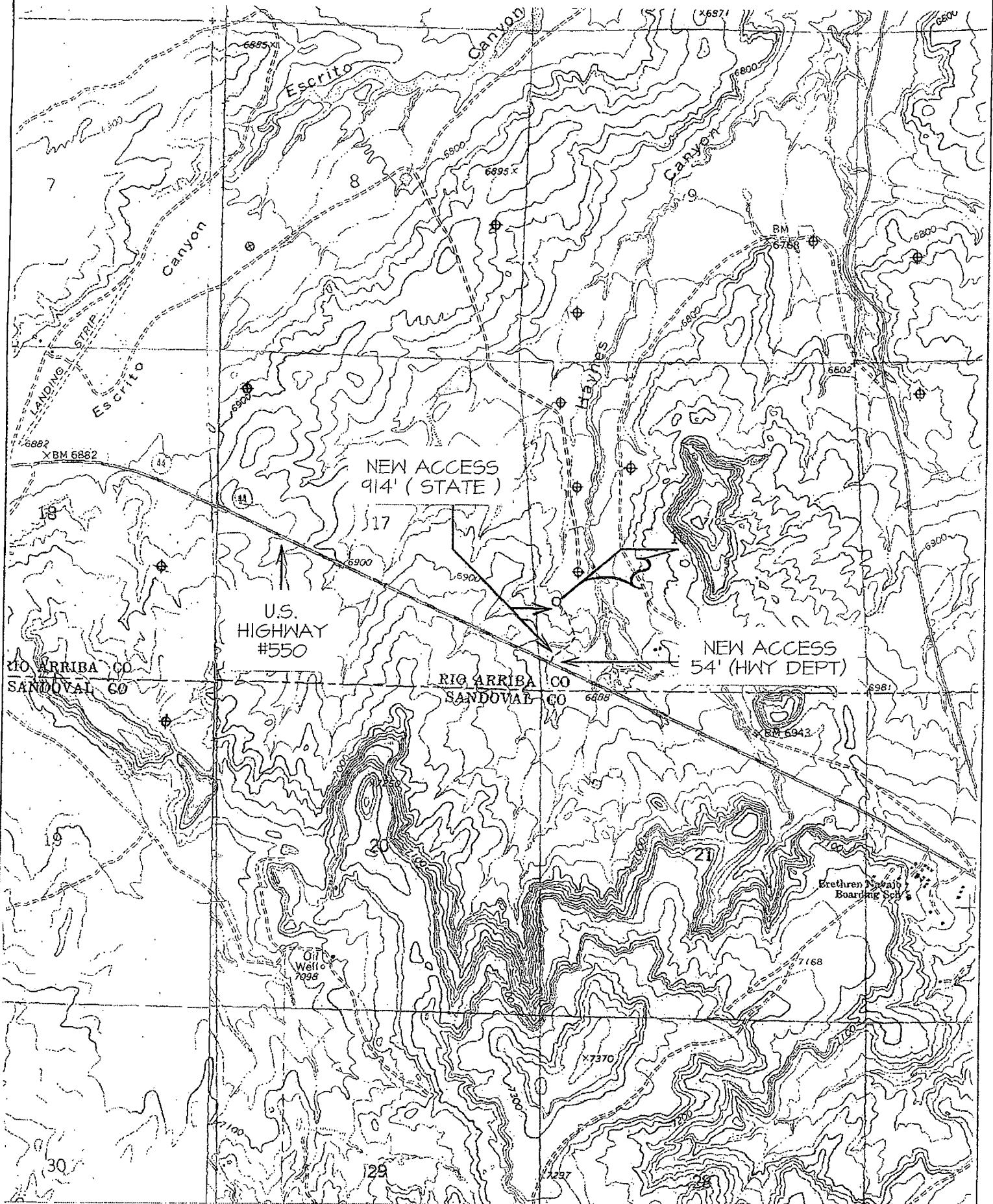
C-C'								
6868'								
6858'								
6848'								

NCE SURVEYS IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

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 NE CHACO COM #209H

1410' FSL & 361' FWL, SECTION 16, T23N, R6W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to WPX Energy Production, LLC NE Chaco COM #209H

1410' FSL & 361' FWL, Section 16, T23N, R6W, N.M.P.M., Rio Arriba County, NM

Latitude: 36.221476°N Longitude: 107.481797°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 52.1 miles to Mile Marker 99.1 to new access on left-hand side of highway which continues for 968' to staked WPX NE Chaco COM #209H location.

WPX ENERGY**Operations Plan***(Note: This procedure will be adjusted on site based upon actual conditions)*

DATE: 3/30/15 **FIELD:** Chaco Unit NE HZ (oil)

WELL NAME: NE Chaco COM #209H **SURFACE:** STATE

SH Location: NWSW Sec 16-23N-6W **ELEVATION:** 6,858' GR

BH Location: NESE Sec 17-23N-6W
Rio Arriba Co, NM **MINERALS:** BLM

MEASURED DEPTH: 10,972' **LEASE #:** NMSF 078359

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

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1351	1351	Point Lookout	4192	4192
Kirtland	1474	1474	Mancos	4391	4391
Picture Cliffs	1918	1918	Kickoff Point	4816	4815
Lewis	1954	1954	Top Target	5713	5468
Chacra	2242	2242	Landing Point	5891	5491
Cliff House	3444	3444	Base Target	5891	5491
Menefee	3467	3467			
			TD	10,972	5,439

B. MUD LOGGING PROGRAM: Mudlogger on location from surface csg to TD.**C. LOGGING PROGRAM:** LWD GR from surface casing to TD. LWD GR / E- Sonic will be run 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 the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, the curve portion of the wellbore. 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 +/- 4,816' (MD) / 4,815' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 5,891 (MD) / 5,491' (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 +/- 10,972' (MD) / 5,439' (TVD). Will run 4-1/2 in. Production Liner from

+/- 5,741 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"	+/-320	9 5/8	36#	J-55
Intermediate	8.75"	5,891'	7	23#	K-55
Prod. Liner	6.125"	5,741' - 10,661'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5,741'	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 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: 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: (900 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 +/- 5,724 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. 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 (~6,000' 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 5,909ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,759' ft. (MD) +/- 78 degree angle. TOC: +/- 5,459 ft. (MD).

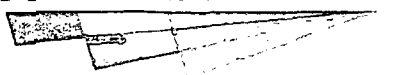
After cementing and TOL clean up operations are complete, the TOL will be tested to 1500 psi (per BLM).

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.

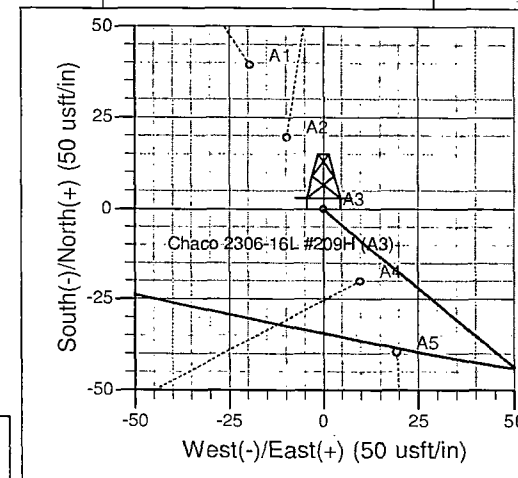
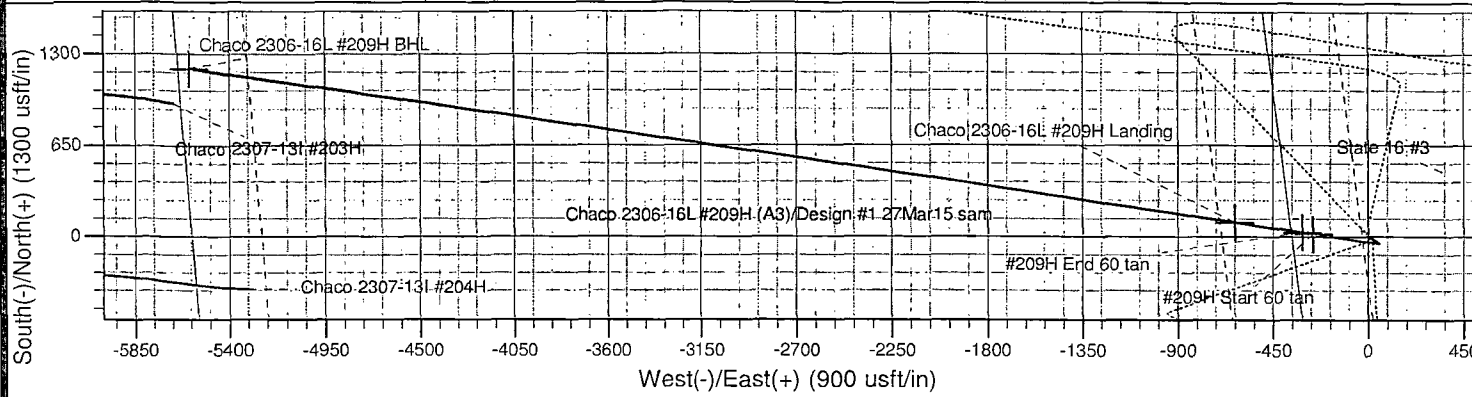
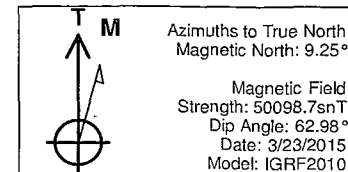
After Stimulation and Testing operations are complete the 4-1/2" tie-back string will be removed from the well.

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

WPX ENERGY

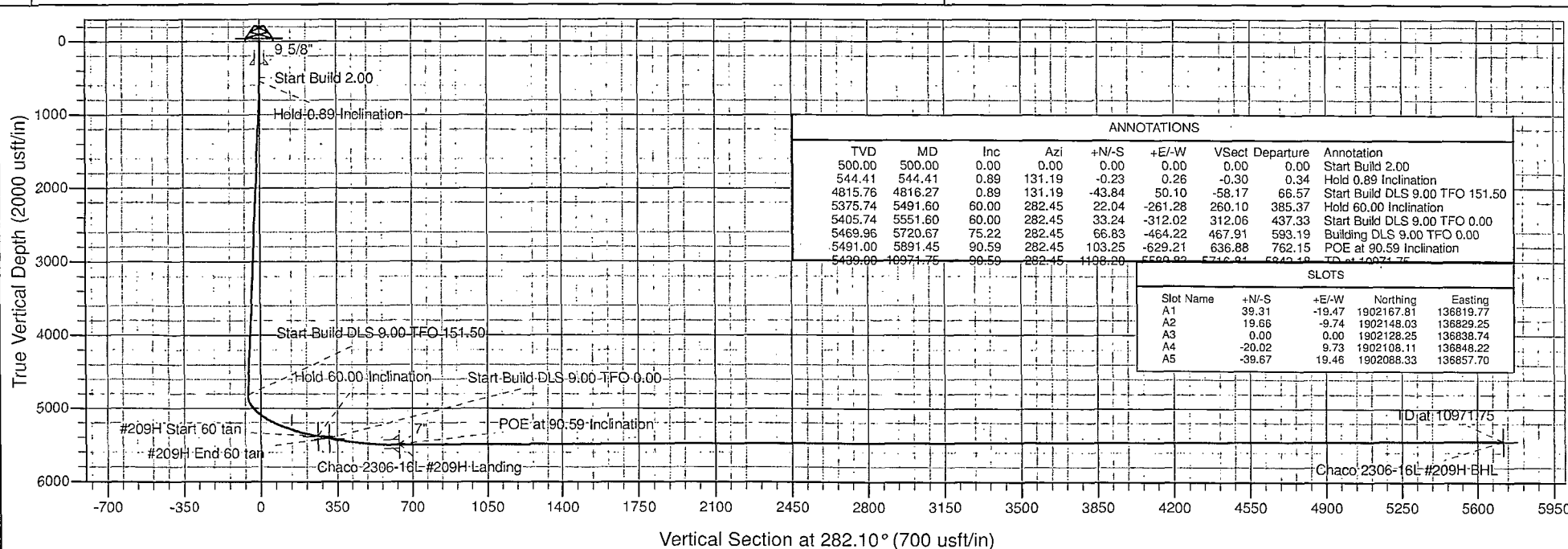


Well Name: Chaco 2306-16L #209H
 Surface Location: Chaco 2306-16L
 NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico Central 3002
 Ground Elevation: 6861.00
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.00 0.00 1902128.25 136838.74 36.2214630 -107.4811920 A3
 KB @ 6886.00usft (Aztec 1000)



DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
Chaco 2306-16L #209H Start 60 tan	5375.74	22.04	-261.28	1902153.61	136577.75	36.2215235	-107.4820777	Point	
- plan hits target center									
Chaco 2306-16L #209H End 60 tan	5405.74	33.24	-312.02	1902165.45	136527.15	36.2215543	-107.4822497	Point	
- plan hits target center									
Chaco 2306-16L #209H Landing	5491.00	103.25	-629.21	1902239.49	136210.86	36.2217466	-107.4833250	Point	
- plan hits target center									
Chaco 2306-16L #209H BHL	5439.00	1198.20	-5589.83	1903397.41	131264.29	36.2247529	-107.5001420	Point	
- plan hits target center									

Project: T23N R6W (NM Central)
 Site: Chaco 2306-16L
 Well: Chaco 2306-16L #209H
 Design #1 27Mar15 sam



WPX Energy

T23N R6W (NM Central)

Chaco 2306-16L

Chaco 2306-16L #209H - Slot A3

Wellbore #1

Plan: Design #1 27Mar15 sam

Standard Planning Report

28 March, 2015

WPX

Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2306-16L #209H (A3) - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Project:	T23N R6W (NM Central)	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	North Reference:	True
Well:	Chaco 2306-16L #209H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 27Mar15 sam		

Project	T23N R6W (NM Central)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico Central 3002		Using geodetic scale factor

Site	Chaco 2306-16L		
Site Position:		Northing:	1,902,127.16 usft
From:	Lat/Long	Easting:	136,839.32 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Grid Convergence:	-0.73 °

Well	Chaco 2306-16L #209H - Slot A3		
Well Position	+N/-S	1.09 usft	Northing:
	+E/-W	-0.59 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Ground Level:	6,861.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	3/23/2015	9.25
			Dip Angle
			(°)
			Field Strength
			(nT)
			50,099

Design	Design #1 27Mar15 sam		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			282.10

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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
544.41	0.89	131.19	544.41	-0.23	0.26	2.00	2.00	0.00	131.19	
4,816.27	0.89	131.19	4,815.76	-43.84	50.10	0.00	0.00	0.00	0.00	
5,491.60	60.00	282.45	5,375.74	22.04	-261.28	9.00	8.75	22.40	151.50	Chaco 2306-16L #209H
5,551.60	60.00	282.45	5,405.74	33.24	-312.02	0.00	0.00	0.00	0.00	Chaco 2306-16L #209H
5,720.67	75.22	282.45	5,469.96	66.83	-464.22	9.00	9.00	0.00	0.00	
5,891.45	90.59	282.45	5,491.00	103.25	-629.21	9.00	9.00	0.00	0.00	Chaco 2306-16L #209H
10,971.75	90.59	282.45	5,439.00	1,198.20	-5,589.83	0.00	0.00	0.00	0.00	Chaco 2306-16L #209H

WPX
Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2306-16L #209H (A3) - Slot A3
Company:	WPX Energy	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Project:	T23N R6W (NM Central)	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	North Reference:	True
Well:	Chaco 2306-16L #209H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 27Mar15 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"									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
544.41	0.89	131.19	544.41	-0.23	0.26	-0.30	2.00	2.00	0.00
Hold 0.89 Inclination									
1,000.00	0.89	131.19	999.94	-4.88	5.57	-6.47	0.00	0.00	0.00
1,500.00	0.89	131.19	1,499.88	-9.98	11.41	-13.25	0.00	0.00	0.00
2,000.00	0.89	131.19	1,999.82	-15.09	17.24	-20.02	0.00	0.00	0.00
2,500.00	0.89	131.19	2,499.76	-20.19	23.07	-26.79	0.00	0.00	0.00
3,000.00	0.89	131.19	2,999.70	-25.30	28.91	-33.57	0.00	0.00	0.00
3,500.00	0.89	131.19	3,499.64	-30.40	34.74	-40.34	0.00	0.00	0.00
4,000.00	0.89	131.19	3,999.58	-35.51	40.57	-47.11	0.00	0.00	0.00
4,500.00	0.89	131.19	4,499.52	-40.61	46.41	-53.89	0.00	0.00	0.00
4,816.27	0.89	131.19	4,815.76	-43.84	50.10	-58.17	0.00	0.00	0.00
Start Build DLS 9.00 TFO 151.50									
5,000.00	15.76	281.19	4,997.28	-39.91	26.53	-34.30	9.00	8.09	81.64
5,491.60	60.00	282.45	5,375.74	22.04	-261.28	260.10	9.00	9.00	0.26
Hold 60.00 Inclination									
5,500.00	60.00	282.45	5,379.94	23.61	-268.38	267.37	0.00	0.00	0.00
5,551.60	60.00	282.45	5,405.74	33.24	-312.02	312.06	0.00	0.00	0.00
Start Build DLS 9.00 TFO 0.00									
5,720.67	75.22	282.45	5,469.96	66.83	-464.22	467.91	9.00	9.00	0.00
Building DLS 9.00 TFO 0.00									
5,891.00	90.55	282.45	5,491.00	103.15	-628.77	636.42	9.00	9.00	0.00
7"									
5,891.45	90.59	282.45	5,491.00	103.25	-629.21	636.88	9.00	9.00	0.00
POE at 90.59 Inclination									
6,000.00	90.59	282.45	5,489.89	126.65	-735.20	745.42	0.00	0.00	0.00
6,500.00	90.59	282.45	5,484.77	234.41	-1,223.42	1,245.38	0.00	0.00	0.00
7,000.00	90.59	282.45	5,479.65	342.18	-1,711.64	1,745.34	0.00	0.00	0.00
7,500.00	90.59	282.45	5,474.54	449.94	-2,199.87	2,245.31	0.00	0.00	0.00
8,000.00	90.59	282.45	5,469.42	557.71	-2,688.09	2,745.27	0.00	0.00	0.00
8,500.00	90.59	282.45	5,464.30	665.47	-3,176.31	3,245.24	0.00	0.00	0.00
9,000.00	90.59	282.45	5,459.18	773.23	-3,664.53	3,745.20	0.00	0.00	0.00
9,500.00	90.59	282.45	5,454.06	881.00	-4,152.75	4,245.17	0.00	0.00	0.00
10,000.00	90.59	282.45	5,448.95	988.76	-4,640.98	4,745.13	0.00	0.00	0.00
10,500.00	90.59	282.45	5,443.83	1,096.53	-5,129.20	5,245.10	0.00	0.00	0.00
10,971.75	90.59	282.45	5,439.00	1,198.20	-5,589.83	5,716.81	0.00	0.00	0.00
TD at 10971.75									

WPX
Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2306-16L #209H (A3) - Slot A3
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Project:	T23N R6W (NM Central)	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	North Reference:	True
Well:	Chaco 2306-16L #209H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 27Mar15 sam		

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
Chaco 2306-16L #209H - plan hits target center - Point	0.00	0.00	5,375.74	22.04	-261.28	1,902,153.61	136,577.75	36.2215235	-107.4820778
Chaco 2306-16L #209H - plan hits target center - Point	0.00	0.00	5,405.74	33.24	-312.02	1,902,165.45	136,527.15	36.2215543	-107.4822498
Chaco 2306-16L #209H - plan hits target center - Point	0.00	0.00	5,439.00	1,198.20	-5,589.83	1,903,397.41	131,264.29	36.2247529	-107.5001420
Chaco 2306-16L #209H - plan hits target center - Point	0.00	0.00	5,491.00	103.25	-629.21	1,902,239.49	136,210.86	36.2217466	-107.4833250

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
320.00	320.00	9 5/8"	9.62	12.25
5,891.00	5,491.00	7"	7.00	8.75

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	Start Build 2.00
544.41	544.41	-0.23	0.26	Hold 0.89 Inclination
4,816.27	4,815.76	-43.84	50.10	Start Build DLS 9.00 TFO 151.50
5,491.60	5,375.74	22.04	-261.28	Hold 60.00 Inclination
5,551.60	5,405.74	-33.24	-312.02	Start Build DLS 9.00 TFO 0.00
5,720.67	5,469.96	66.83	-464.22	Building DLS 9.00 TFO 0.00
5,891.45	5,491.00	103.25	-629.21	POE at 90.59 Inclination
10,971.75	5,439.00	1,198.20	-5,589.83	TD at 10971.75