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Form 3160-5
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM 023233
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) 505-333-1816	7. If Unit of CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL:1304' FNL & 372' FWL, sec 33, T24N, R8W BHL:297' FSL & 859' FEL, sec 33, T24N, R8W		8. Well Name and No. Chaco 2408-33D #113H
		9. API Well No. 30-045-35602
		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			
☒ 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	<u>LATERAL CHANGE</u>
	☐ 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 recompleate 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 recompleation 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
Signature 		Date 7/1/15
THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by 		Title Petroleum Engineer
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.		Date 07-07-2015
		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)

ADHERE TO PREVIOUS NMOC CONDITIONS OF APPROVAL

Submit one copy to
Appropriate District Office

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

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35002		*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 313755	*Property Name CHACO 2408-33D		*Well Number 113H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 7020'

10 Surface Location

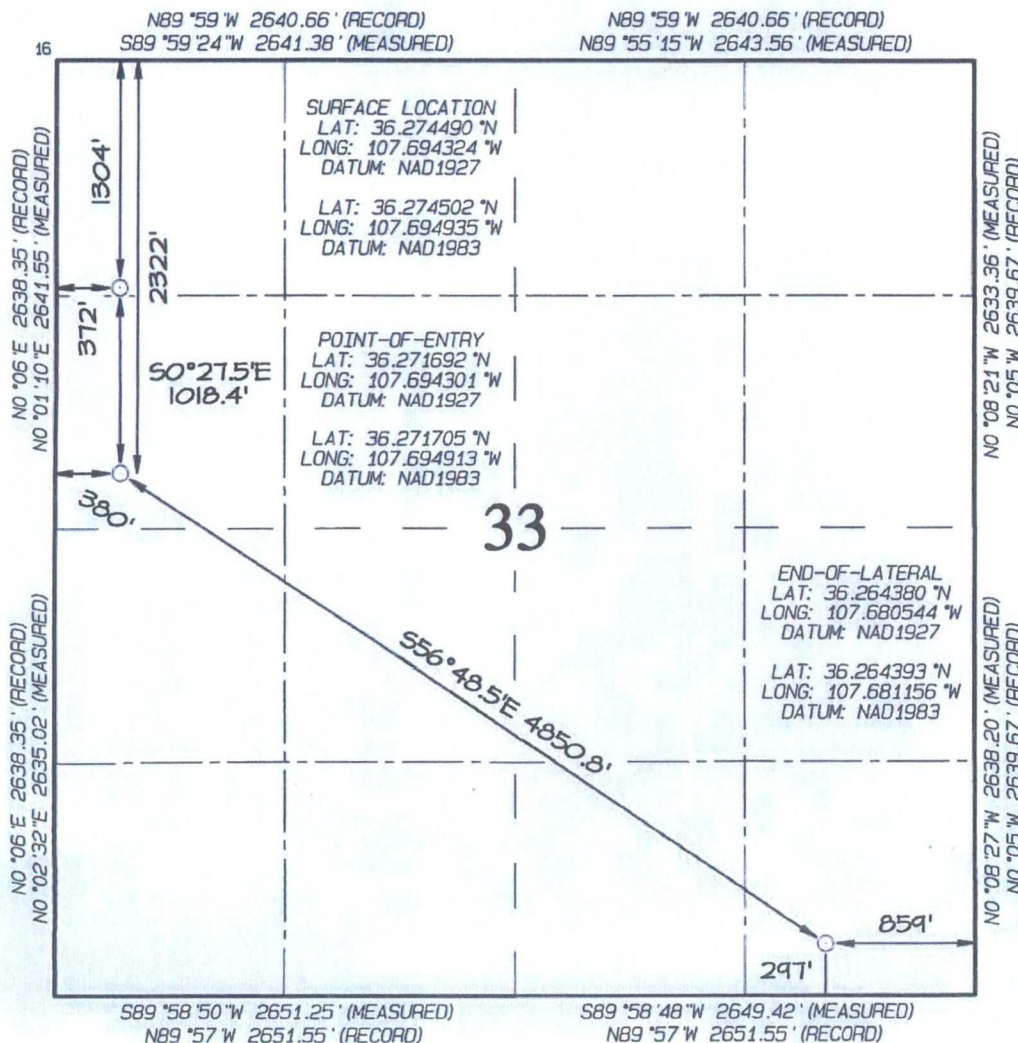
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	24N	8W		1304	NORTH	372	WEST	SAN JUAN

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
P	33	24N	8W		297	SOUTH	859	EAST	SAN JUAN

¹² Dedicated Acres	640.0 Acres Entire Section 33	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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: David Phan
E-mail Address: David.Phan@uconn.edu

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

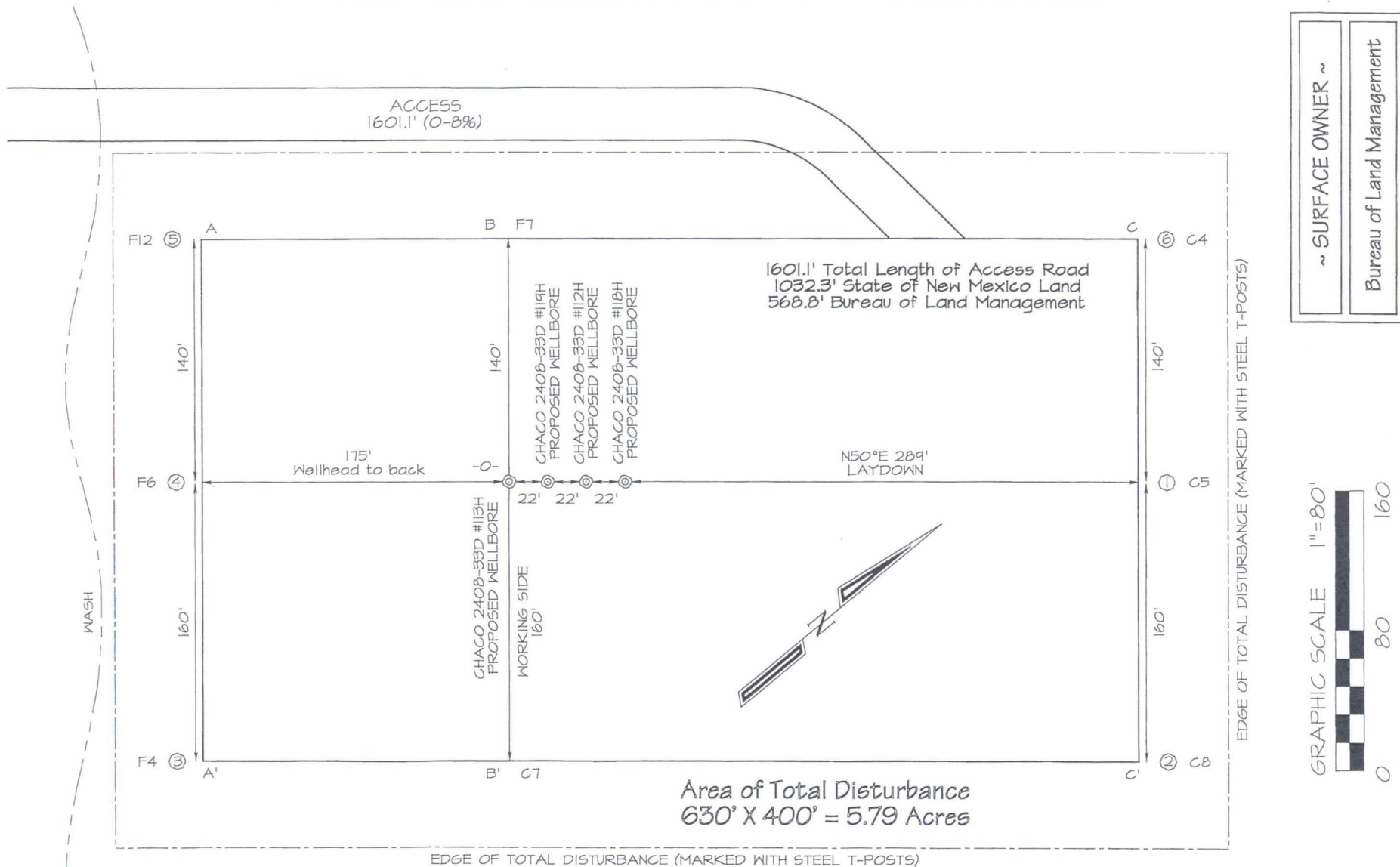
Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

WPX ENERGY PRODUCTION, LLC CHACO 2408-33D #113H
1304' FNL & 372' FWL, SECTION 33, T24N, R8W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 7020'
LAT: 36.27450°N LONG: 107.69494°W DATUM: NAD1983

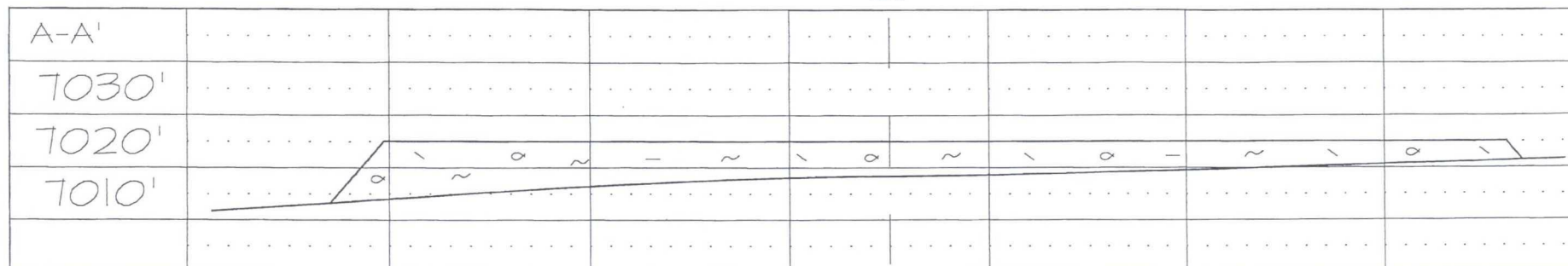


Steel T-Posts have been set to define the Edge of Disturbance limits which are 50' offset from the edge of the staked wellpad.

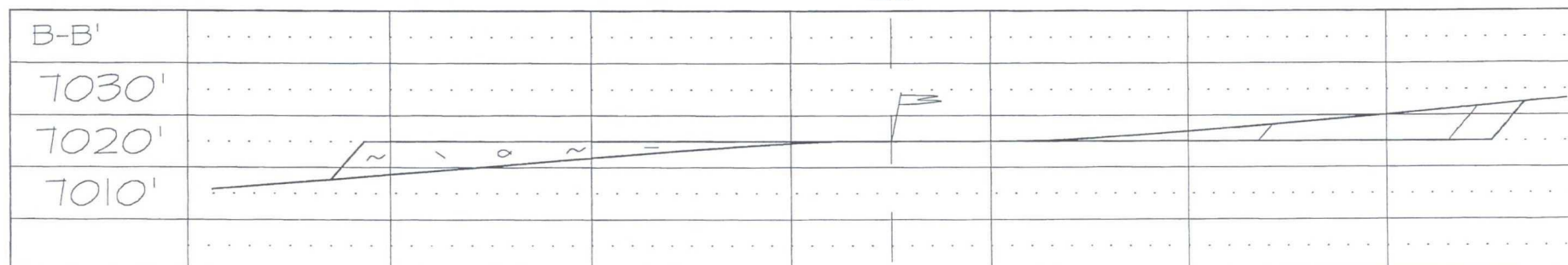
HORIZONTAL SCALE
1" = 40'

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.

GRAPHIC SCALE 1"=1000'

0 1000 2000



REAL-TIME KINEMATIC GPS SURVEY SOLUTION OBTAINED FROM SATELLITES TRACKED ON MARCH 27, 2014 FROM A REFERENCE STATION POSITIONED IN SE/4 NE/4 OF SECTION 32, T24N, R8W

FOUND
1947 GLO
BRASS CAP

PLAT NOTE:

BEFORE ANY CONSTRUCTION BEGINS, CONTRACTOR IS ADVISED TO CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED PIPELINES OR CABLES IN THE AREA OF THE PROJECT

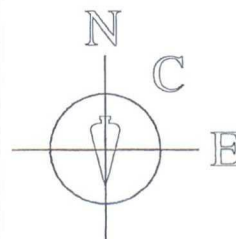


JASON C. EDWARDS

Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

0+00 TO 10+32.3	1032.3 FT / 62.6 RODS
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MPX ENERGY PRODUCTION
P.O. BOX #640
AZTEC, NM 87410



SURVEYS, INC.

Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 325-2654 (Office)
(505) 326-5650 (Fax)

CHECKED BY: JCE
DRAWN BY: SLE

SHEET 4 OF 7
FILENAME: 24033DAI

GRAPHIC SCALE 1"=1000'



FOUND
1947 GLO
BRASS CAP

N89°59'W 2640.66' (RECORD)
N89°55'15"W 2643.56' (MEASURED)

NO°06'E 2638.35' (RECORD)
°02'32"E 2635.02' (MEASURED)

T24N 32 33
T23N 5 4 58°58'50"W 2651.25' (MEASURED)
N89°57'W 2651.55' (RECORD)

TIE FROM NW CORNER OF SECTION 33
50°01'10"W 1330.43'

SECTION LINE X-ING STA 10+32.3
EXIT STATE OF NM, ENTER BLM LAND

N44°31'37"E 74.94'
WASH X-ING (1'DEEP X 1'WIDE) STA 10+94.6

ACCESS Pt2 II+07.3 05°44'08"RT

PROPOSED WPX P/L (20' RT)

N50°15'45"E 365.52'

ACCESS P13 14+72.8 41°02'12"RT

PROPOSED WPX P/L (20' RT)
S88°42'03"E 128.33'

END ACCESS ROAD @ STA 16+01.1
POINT ON EDGE OF PROPOSED WELLPAD

PROPOSED WPX P/L (20' RT)
TIE TO NW CORNER OF SECTION 33

S19°19'38"W 273.19'

ELM RIDGE
FEDERAL 33 #1
WELLHEAD

NO° 08' 21" W	2633.36'	(MEASURED)
NO° 05' W	2639.67'	(RECORD)

08'27"W 2638.20' (MEASURED)
0°05'W 2639.67' (RECORD)

BASIS OF BEARING:

FOUND
1947 GLO
BRASS CAP

PLAT NOTE:

REAL-TIME KINEMATIC GPS SURVEY SOLUTION OBTAINED FROM SATELLITES TRACKED ON MARCH 27, 2014 FROM A REFERENCE STATION POSITIONED IN SE/4 NE/4 OF SECTION 32, T24N, R6W

BEFORE ANY CONSTRUCTION BEGINS, CONTRACTOR IS ADVISED TO CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED PIPELINES OR CABLES IN THE AREA OF THE PROJECT.

FOUND
1947 GLO
BRASS CAP

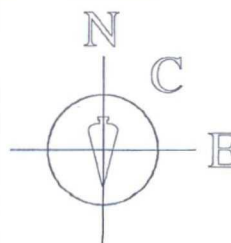


~ SURFACE OWNERSHIP ~
Bureau of Land Management

10+32.3 TO 16+01.1	568.8 FT / 34.5 RODS
--------------------	----------------------

Prepared for:

MPX ENERGY PRODUCTION
P.O. BOX #640
AZTEC, NM 87410



Land Surveyor:
Jason C. Edwards

Mailing Address:
Post Office Box 6612
Farmington, NM 87499

Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 325-2654 (Office)
(505) 326-5650 (Fax)

SURVEYS, INC.

SHEET 5 OF 7	CHECKED BY: JCE
FILENAME: 24833DA2	DRAWN BY: SLE

I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS

Date: June 11, 2014

Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

GRAPHIC SCALE 1"=1000'

0 1000 2000



REAL-TIME KINEMATIC GPS SURVEY SOLUTION OBTAINED FROM SATELLITES TRACKED ON APRIL 16, 2014 FROM A REFERENCE STATION POSITIONED IN SE/4 NE/4 OF SECTION 32, T24N, R6W

FOUND
1947 GLO
BRASS CAP

PLAT NOTE:

BEFORE ANY CONSTRUCTION BEGINS, CONTRACTOR IS ADVISED TO CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED PIPELINES OR CABLES IN THE AREA OF THE PROJECT



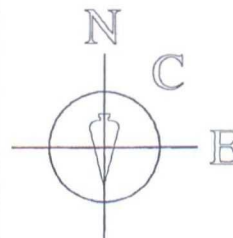
JASON C. EDWARDS

Date: June 11, 2014

0+00 TO 27+28.6	2728.6 FT / 165.4 RODS
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Prepared for:

WPX ENERGY PRODUCTION
P.O. BOX #640
AZTEC, NM 87410



SURVEYS, INC.

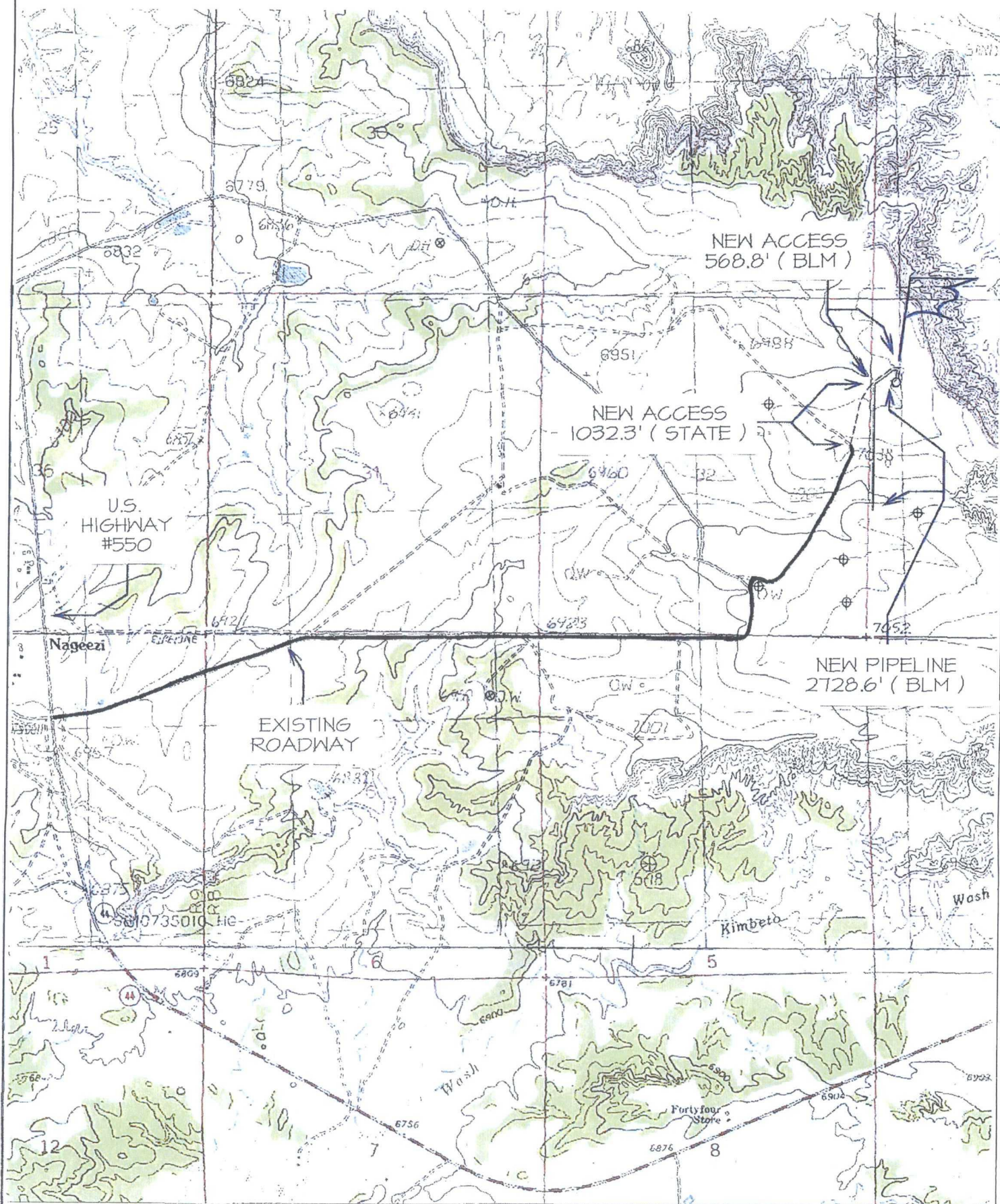
Mailing Address:
Post Office Box 6612
Farmington, NM 87499

Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 325-2654 (Office)
(505) 326-5650 (Fax)

SHEET 6 OF 7	CHECKED BY: JG
FILENAME: 2483PIR	DRAWN BY: SLE

WPX ENERGY PRODUCTION, LLC CHACO 2408-33D #113H

1304' FNL & 372' 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: 6/29/15 **FIELD:** Nageezi Gallup
WELL NAME: Chaco 2408-33D #113H **SURFACE:** BLM
SH Location: NWNW Sec 33 -24N -08W **ELEVATION:** 7020'
BH Location: SESE Sec 33 -24N -08W **MINERALS:** BLM
San Juan Co., NM
MEASURED DEPTH: 10854' **LEASE #:**

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

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

Name	MD	TVD	Name	MD	TVD
Ojo Alamo	1324	1317	Point Lookout	4308	4253
Kirtland	1523	1513	Mancos	4539	4481
Picture Cliffs	1890	1874	Gallup	4895	4835
Lewis	2028	2010	Kickoff Point	4917	4843
Chacra	2310	2287	Top Target	5737	5505
Cliff House	3389	3349	Landing Point	6003	5529
Menefee	3432	3391	Base Target	6003	5529
			TD	10854	5529

- B. **MUD LOGGING PROGRAM:** Mudlogger on location from surface csg to TD.
C. **LOGGING PROGRAM:** LWD GR from surface casing to TD.
D. **NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

II. **DRILLING**

- A. **MUD PROGRAM:** LSND mud (WBM) will be used to drill the 12-1/4" Surface hole, the 8 3/4" Directional Vertical hole, and the curve portion of the wellbore. A LSND (WBM) or (OBM) will be used to drill the lateral portion of well. Treat for lost circulation as necessary. Obtain 100% returns prior to cementing. Notify Engineering of any mud losses.
- B. **BOP TESTING:** While drill pipe is in use, the pipe rams and the blind rams will be function tested once each trip. The anticipated reservoir is expected to be less than 1300 psi, so the BOPE will be tested to **250 psi (Low) for 5 minutes** and **1500 psi (High) for 10 minutes**. Pressure test surface casing to **600 psi for 30 minutes** and intermediate casing to **1500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. The drum brakes will be inspected and tested each tour. **All tests and inspections will be recorded in the tour book as to time and results.**

NOTE: Vertical portion of the well (8-3/4 in.) will be directionally drilled as per attached Directional Plan to +/- 4,965' (MD) / 4,904' (TVD). Curve portion of wellbore will be drilled and landed at +/- 90 deg. at +/- 6,003' (MD) / 5,529' (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 +/- 10,854' (MD) / 5,529' (TVD). Will run 4-1/2 in. Production Liner from +/- 5,853 ft. to TD and cemented. Liner will be tied back to surface w / 4-1/2" Casing for stimulation / testing, then removed from the well.

III. MATERIALS

A. CASING PROGRAM:

<u>CASING TYPE</u>	<u>OH SIZE (IN)</u>	<u>DEPTH (MD) (FT)</u>	<u>CASING SIZE (IN)</u>	<u>WEIGHT(LB)</u>	<u>GRADE</u>
Surface	12.25"	400'+	9.625"	36#	J-55
Intermediate	8.75"	6,003'	7"	23#	K-55
Prod. Liner	6.125"	5,853' - 10,854'	4-1/2"	11.6#	N-80
Tie-Back String	N/A	Surf. - 5,853'	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 + (2) RSI (Sliding Sleeves) positioned inside the 330ft Hard line. Centralizer program will be determined by Wellbore condition and when Lateral is evaluated by Geoscientists and Reservoir Engineers. Set seals on Liner Hanger. Test TOL to 1500 psi for 15 minutes.
4. TIE-BACK CASING: None

C. CEMENTING:

(Note: Volumes may be adjusted onsite due to actual conditions)

1. SURFACE: 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: 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: **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, (399 sx / 542 cu ft. / 96 bbls). **Tail Spacer:** 20 BBL of MMCR. **Displacement:** Displace w/ +/- 140 bbl Fr Water. Total Cement (542 cu ft / 96 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 (~5,800' MD).

- Although this horizontal well will be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 B(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 B(2) NMAC, 19.15.16.15 B(2) NMAC, and 19.15.16.15 B(4) NMAC.

NOTE:

Installation of RSI sleeves at Toe of Lateral.

Proposed Operations:

A 4-1/2" 11.6# N-80 Liner will be run to TD and landed +/- 150 ft. into the 7" 23# K-55 Intermediate casing (set at 6,003 ft. MD) with a Liner Hanger and pack-off assembly then cemented to +/- 300 ft above the liner hanger. TOL will be +/- 5,853 ft. (MD) +/- 78 degree angle.

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

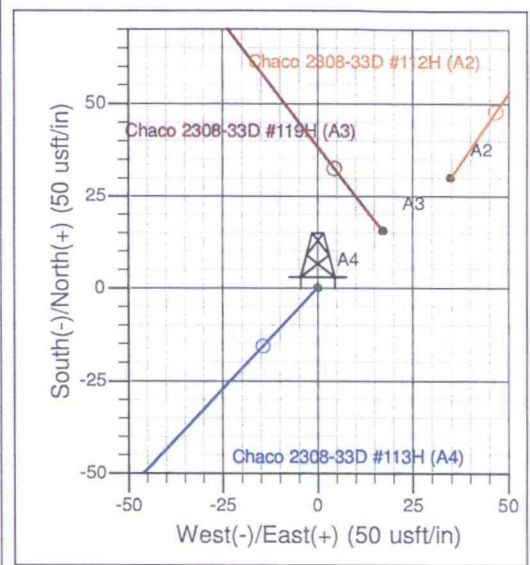
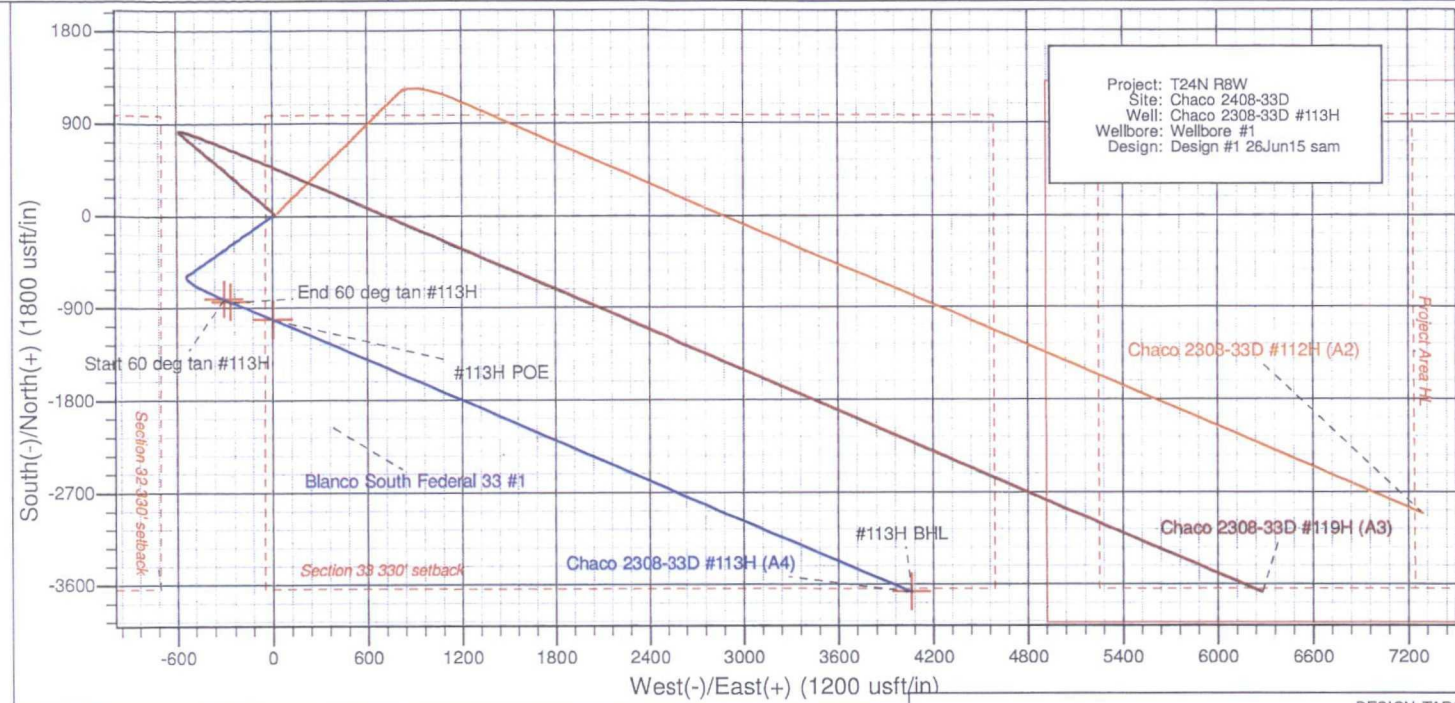
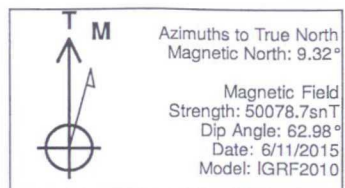
A 4-1/2" 11.6# N-80 tie-back string with seal assembly will be run and stung into the PBR of the liner hanger, tested to 1500 PSI and hung off at the surface.

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.

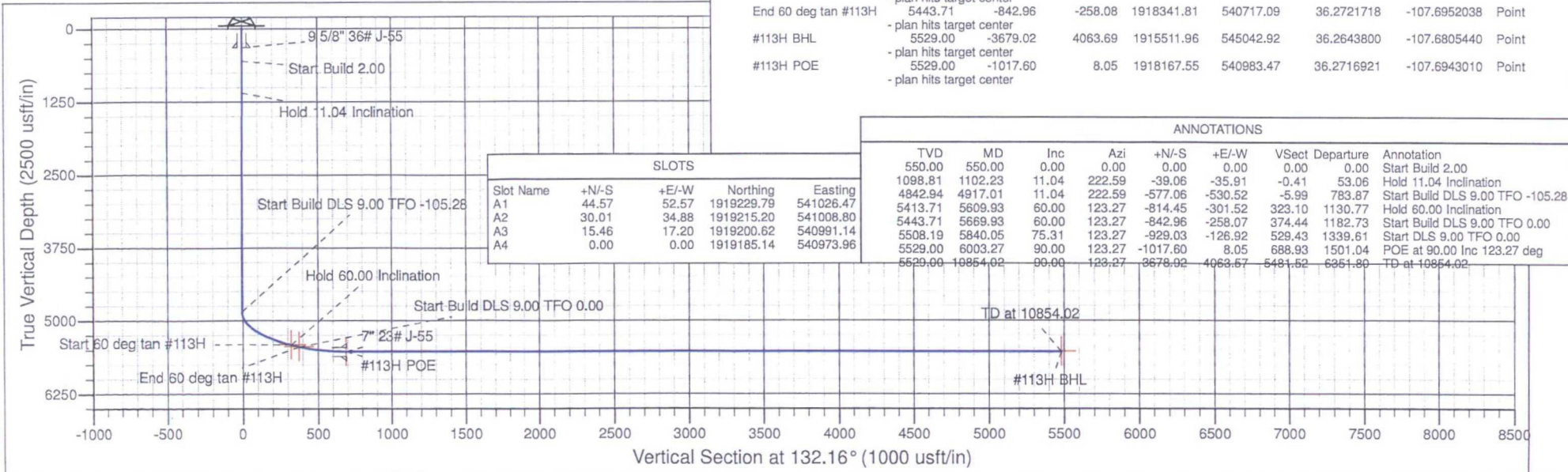


Well Name: Chaco 2308-33D #113H
Surface Location: Chaco 2408-33D
NAD 1927 (NADCON CONUS) , US State Plane 1927 (Exact solution) New Mexico West 3003
Ground Elevation: 7020.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1919185.14 540973.96 36.2744876 -107.6943283 A4
WELL @ 7034.00usft (Aztec 920)



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Start 60 deg tan #113H	5413.71	-814.45	-301.52	1918370.25	540673.61	36.2722501	-107.6953512	Point
End 60 deg tan #113H	5443.71	-842.96	-258.08	1918341.81	540717.09	36.2721718	-107.6952038	Point
#113H BHL	5529.00	-3679.02	4063.69	1915511.96	545042.92	36.2643800	-107.6805440	Point
#113H POE	5529.00	-1017.60	8.05	1918167.55	540983.47	36.2716921	-107.6943010	Point



ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
550.00	550.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
1098.81	1102.23	11.04	222.59	-39.06	-35.91	-0.41	53.06	Hold 11.04 Inclination
4842.94	4917.01	11.04	222.59	-577.06	-530.52	-5.99	783.87	Start Build DLS 9.00 TFO -105.28
5413.71	5609.93	60.00	123.27	-814.45	-301.52	323.10	1130.77	Hold 60.00 Inclination
5443.71	5669.93	60.00	123.27	-842.96	-258.07	374.44	1182.73	Start Build DLS 9.00 TFO 0.00
5508.19	5840.05	75.31	123.27	-929.03	-126.92	529.43	1339.61	Start DLS 9.00 TFO 0.00
5529.00	6003.27	90.00	123.27	-1017.60	8.05	688.93	1501.04	POE at 90.00 Inc 123.27 deg
5529.00	10854.02	90.00	123.27	3678.02	4063.67	5481.52	6351.89	TD at 10854.02

SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
A1	44.57	52.57	1919229.79	541026.47
A2	30.01	34.88	1919215.20	541008.80
A3	15.46	17.20	1919200.62	540991.14
A4	0.00	0.00	1919185.14	540973.96

WPX Energy

T24N R8W

Chaco 2408-33D

Chaco 2308-33D #113H - Slot A4

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 #113H (A4) - Slot A4
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 #113H	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	Latitude:	36.2745700
From:	Lat/Long	Easting:	541,008.80 usft	Longitude:	-107.6942100
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.08 °

Well	Chaco 2308-33D #113H - Slot A4					
Well Position	+N/-S	-30.01 usft	Northing:	1,919,185.14 usft	Latitude:	36.2744875
	+E/-W	-34.88 usft	Easting:	540,973.96 usft	Longitude:	-107.6943284
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,020.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/11/2015	9.32	62.98	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)	Direction (°)
	0.00	0.00	0.00	132.16

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	
1,102.23	11.04	222.59	1,098.81	-39.06	-35.91	2.00	2.00	0.00	222.59	
4,917.01	11.04	222.59	4,842.94	-577.06	-530.52	0.00	0.00	0.00	0.00	
5,609.93	60.00	123.27	5,413.71	-814.45	-301.52	9.00	7.07	-14.33	-105.28	Start 60 deg tan #113
5,669.93	60.00	123.27	5,443.71	-842.96	-258.07	0.00	0.00	0.00	0.00	End 60 deg tan #113
5,840.05	75.31	123.27	5,508.19	-929.03	-126.92	9.00	9.00	0.00	0.00	
6,003.27	90.00	123.27	5,529.00	-1,017.60	8.05	9.00	9.00	0.00	0.00	#113H POE
10,854.18	90.00	123.27	5,529.00	-3,679.02	4,063.69	0.00	0.00	0.00	0.00	#113H BHL

WPX Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2308-33D #113H (A4) - Slot A4
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 #113H	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	222.59	998.15	-25.97	-23.87	-0.27	2.00	2.00	0.00
1,102.23	11.04	222.59	1,098.81	-39.06	-35.91	-0.41	2.00	2.00	0.00
Hold 11.04 Inclination									
1,500.00	11.04	222.59	1,489.22	-95.16	-87.48	-0.99	0.00	0.00	0.00
2,000.00	11.04	222.59	1,979.96	-165.67	-152.31	-1.72	0.00	0.00	0.00
2,500.00	11.04	222.59	2,470.70	-236.19	-217.14	-2.45	0.00	0.00	0.00
3,000.00	11.04	222.59	2,961.44	-306.71	-281.97	-3.18	0.00	0.00	0.00
3,500.00	11.04	222.59	3,452.18	-377.22	-346.79	-3.91	0.00	0.00	0.00
4,000.00	11.04	222.59	3,942.92	-447.74	-411.62	-4.65	0.00	0.00	0.00
4,500.00	11.04	222.59	4,433.65	-518.25	-476.45	-5.38	0.00	0.00	0.00
4,917.01	11.04	222.59	4,842.94	-577.06	-530.52	-5.99	0.00	0.00	0.00
Start Build DLS 9.00 TFO -105.28									
5,000.00	11.56	183.86	4,924.44	-591.23	-536.46	-0.89	9.00	0.62	-46.67
5,500.00	50.36	126.00	5,351.01	-763.33	-375.74	233.76	9.00	7.76	-11.57
5,609.93	60.00	123.27	5,413.71	-814.45	-301.52	323.10	9.00	8.77	-2.48
Hold 60.00 Inclination									
5,669.93	60.00	123.27	5,443.71	-842.96	-258.07	374.44	0.00	0.00	0.00
Start Build DLS 9.00 TFO 0.00									
5,840.05	75.31	123.27	5,508.19	-929.03	-126.92	529.43	9.00	9.00	0.00
Start DLS 9.00 TFO 0.00									
6,000.00	89.71	123.27	5,528.99	-1,015.81	5.32	685.70	9.00	9.00	0.00
6,003.27	90.00	123.27	5,529.00	-1,017.60	8.05	688.93	9.00	9.00	0.00
POE at 90.00 Inc 123.27 deg									
6,008.00	90.00	123.27	5,529.00	-1,020.20	12.01	693.61	0.00	0.00	0.00
7" 23# J-55									
6,500.00	90.00	123.27	5,529.00	-1,290.13	423.35	1,179.71	0.00	0.00	0.00
7,000.00	90.00	123.27	5,529.00	-1,564.45	841.38	1,673.71	0.00	0.00	0.00
7,500.00	90.00	123.27	5,529.00	-1,838.77	1,259.41	2,167.72	0.00	0.00	0.00
8,000.00	90.00	123.27	5,529.00	-2,113.09	1,677.44	2,661.72	0.00	0.00	0.00
8,500.00	90.00	123.27	5,529.00	-2,387.41	2,095.47	3,155.72	0.00	0.00	0.00
9,000.00	90.00	123.27	5,529.00	-2,661.73	2,513.50	3,649.73	0.00	0.00	0.00
9,500.00	90.00	123.27	5,529.00	-2,936.05	2,931.53	4,143.73	0.00	0.00	0.00
10,000.00	90.00	123.27	5,529.00	-3,210.37	3,349.56	4,637.74	0.00	0.00	0.00
10,500.00	90.00	123.27	5,529.00	-3,484.69	3,767.59	5,131.74	0.00	0.00	0.00
10,854.03	90.00	123.27	5,529.00	-3,678.92	4,063.57	5,481.52	0.00	0.00	0.00
TD at 10854.02									
10,854.18	90.00	123.27	5,529.00	-3,679.02	4,063.69	5,481.67	0.00	0.00	0.00

WPX

Planning Report

Database:	COMPASS-SANJUAN	Local Co-ordinate Reference:	Well Chaco 2308-33D #113H (A4) - Slot A4
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 #113H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 26Jun15 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
Start 60 deg tan #113H - plan hits target center - Point	0.00	0.00	5,413.71	-814.45	-301.52	1,918,370.26	540,673.61	36.2722501	-107.6953513
End 60 deg tan #113H - plan hits target center - Point	0.00	0.00	5,443.71	-842.96	-258.08	1,918,341.81	540,717.10	36.2721718	-107.6952039
#113H POE - plan hits target center - Point	0.00	0.00	5,529.00	-1,017.60	8.05	1,918,167.55	540,983.47	36.2716920	-107.6943011
#113H BHL - plan hits target center - Point	0.00	0.00	5,529.00	-3,679.02	4,063.69	1,915,511.96	545,042.93	36.2643800	-107.6805440

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	
6,008.00	5,529.00	7" 23# J-55	7.00	8.75	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
550.00	550.00	0.00	0.00	Start Build 2.00	
1,102.23	1,098.81	-39.06	-35.91	Hold 11.04 Inclination	
4,917.01	4,842.94	-577.06	-530.52	Start Build DLS 9.00 TFO -105.28	
5,609.93	5,413.71	-814.45	-301.52	Hold 60.00 Inclination	
5,669.93	5,443.71	-842.96	-258.07	Start Build DLS 9.00 TFO 0.00	
5,840.05	5,508.19	-929.03	-126.92	Start DLS 9.00 TFO 0.00	
6,003.27	5,529.00	-1,017.60	8.05	POE at 90.00 Inc 123.27 deg	
10,854.03	5,529.00	-3,678.92	4,063.57	TD at 10854.02	