

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) 476-3452

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

OIL CONS. DIV DIST. 3

AS DRILLED

NOV 20 2014

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31252	² Pool Code 98088	³ Pool Name CHACO NE HZ (OIL)
⁴ Property Code 313800	⁵ Property Name NE CHACO COM	⁶ Well Number 177H
⁷ GRID No. 120782	⁸ Operator Name WPX ENERGY PRODUCTION, LLC	⁹ Elevation 6982'

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	6	23N	6W	4	1132	NORTH	755	WEST	RIO ARriba

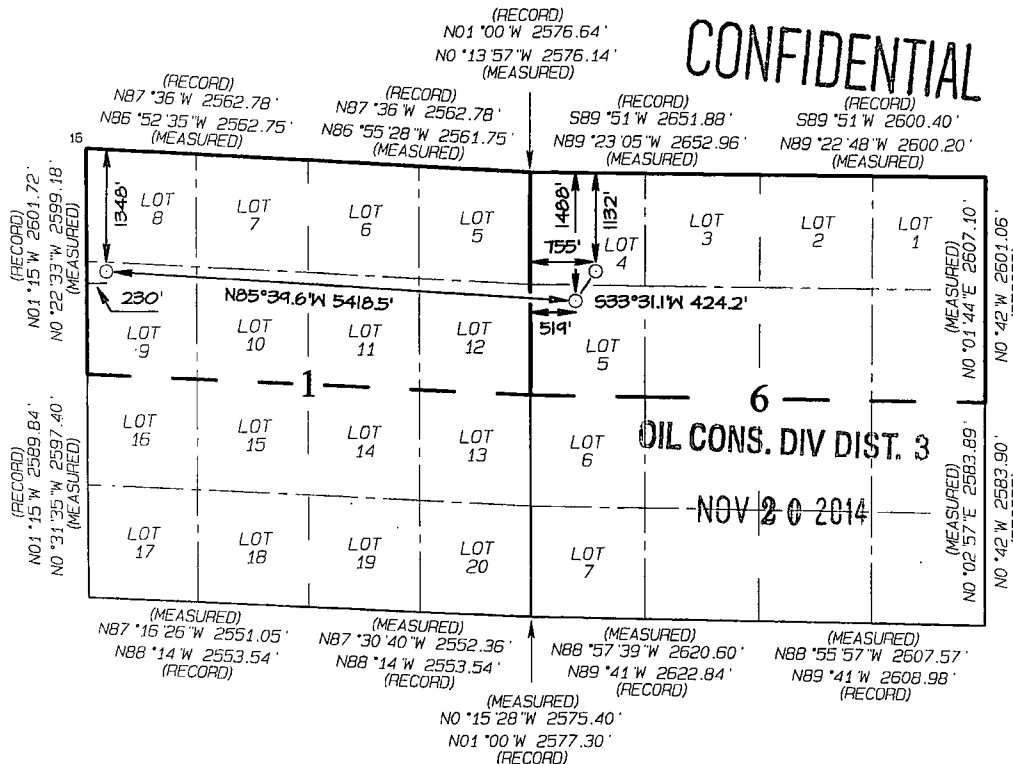
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	1	23N	7W	9	1348	NORTH	230	WEST	RIO ARriba

¹² Dedicated Acres 628.61	N/2 - Section 6, T23N, R6W N/2 - Section 1, T23N, R7W	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13817-A
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Project area
9.237.30 acres

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.

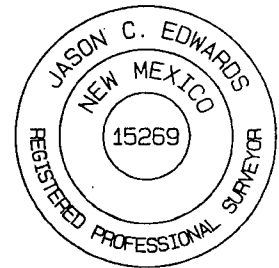
Signature: *Lacey Granillo* Date: 11-20-14

LACEY GRANILLO
Printed Name
lacey.granillo@wpxenergy.com
E-mail Address

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: NOVEMBER 11, 2014
Survey Date: SEPTEMBER 19, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

END-OF-LATERAL
1348' FNL 230' FWL
SECTION 1, T23N, R7W
LAT: 36.257482°N
LONG: 107.535271°W
DATUM: NAD1927

BASE PERFORATION
1349' FNL 337' FWL
SECTION 1, T23N, R7W
LAT: 36.257466°N
LONG: 107.534908°W
DATUM: NAD1927

POINT-OF-ENTRY
1488' FNL 519' FWL
SECTION 6, T23N, R6W
LAT: 36.256552°N
LONG: 107.51931°W
DATUM: NAD1927

SURFACE LOCATION
1132' FNL 755' FWL
SECTION 6, T23N, R6W
LAT: 36.257532°N
LONG: 107.516153°W
DATUM: NAD1927

LAT: 36.257496°N
LONG: 107.535877°W
DATUM: NAD1983

LAT: 36.257479°N
LONG: 107.535515°W
DATUM: NAD1983

LAT: 36.256565°N
LONG: 107.517537°W
DATUM: NAD1983

LAT: 36.257545°N
LONG: 107.516758°W
DATUM: NAD1983

AV

WPXENERGYSM



WPX Energy Rocky Mountain, LLC

Rio Arriba County, NM NAD27

Chaco 2306-06D

NE Chaco Com #177H

OH

Design: OH

Survey Report - Geographic

10 November, 2014



Scientific Drilling

www.scientificdrilling.com

CONFIDENTIAL

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CONFIDENTIAL



Scientific Drilling



Company Name: WPX Energy Rocky Mountain, LLC
 Project: Rio Arriba County, NM NAD27
 Site: Chaco 2306-06D
 Well: NE Chaco Com #177H

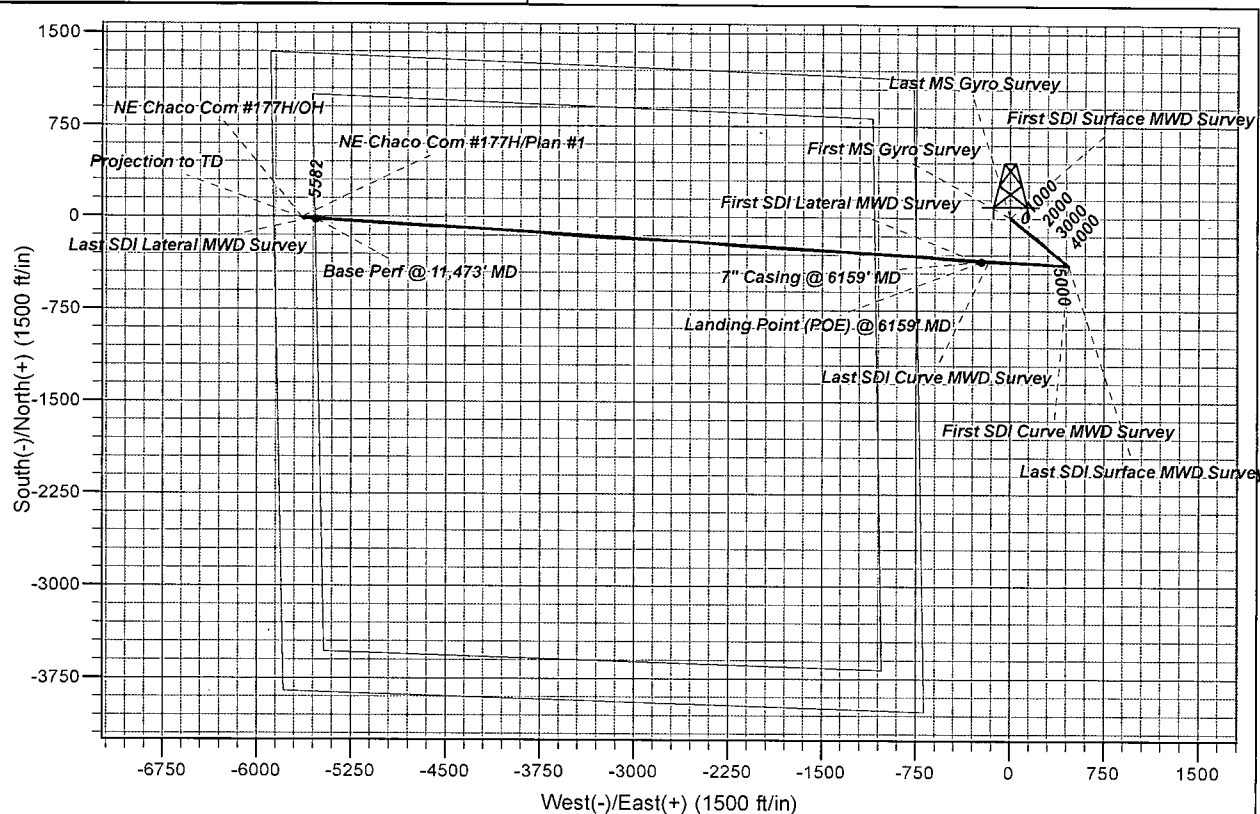
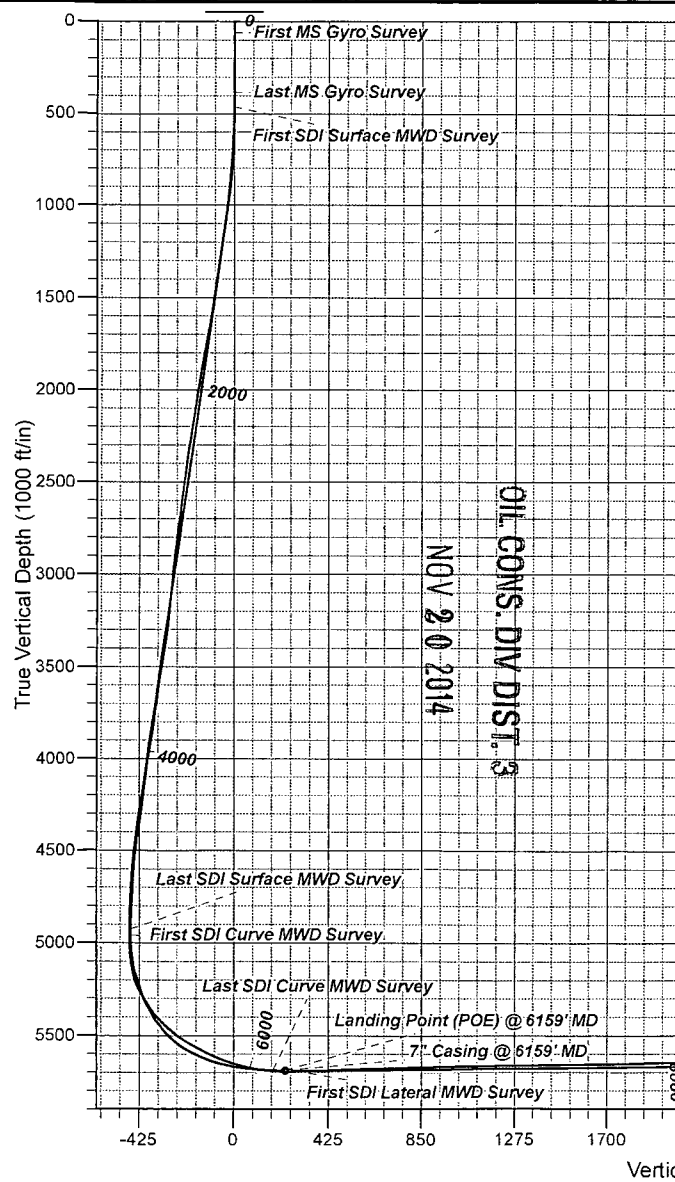


Azimuths to True North
 Magnetic North: 9.41°

Magnetic Field
 Strength: 50067.7snT
 Dip Angle: 63.03°
 Date: 10/17/2014
 Model: BGGM2014

WELL DETAILS: NE Chaco Com #177H

GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)		6982.00	
+N/-S	+E/-W	Northing	Easting
0.00	0.00	1915390.69	126698.32
		Latitude	Longitude
		36.2575300	-107.5161500



Design: OH (NE Chaco Com #177H/OH)
Created By: Janie Collins Date: 10:52, November 10 2014
PROJECT DETAILS: Rio Arriba County, NM NAD27
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico Central 3002
System Datum: Mean Sea Level
Local North: True



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Corn #177H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Site:	Chaco 2306-06D	MD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Well:	NE Chaco Corn #177H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Project	Rio Arriba County, NM NAD27		
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		

Site	Chaco 2306-06D		
Site Position:		Northing:	1,915,390.69 usft
From:	Lat/Long	Easting:	126,698.33 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	36.2575300
		Longitude:	-107.5161500
		Grid Convergence:	-0.75 °

Well	NE Chaco Corn #177H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	36.2575300
		Longitude:	-107.5161500
		Ground Level:	6,982.00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2014	10/17/2014	9.41
			Dip Angle (°)
			63.03
			Field Strength (nT)
			50,068

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction (°)
			129.39

Survey Program	Date 11/10/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
64.00	386.00	Survey #1 - Gyro Survey (OH)	Gyro
464.00	4,974.00	Survey #2 - Surface MWD Surveys (OH)	MWD SDI
5,006.00	6,105.00	Survey #3 - Curve MWD Survey (OH)	MWD SDI
6,201.00	11,580.00	Survey #4 - Lateral MWD Survey (OH)	MWD SDI
			Description
			MWD - Standard ver 1.0.1
			MWD - Standard ver 1.0.1
			MWD - Standard ver 1.0.1

Survey	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
	0.00	0.00	0.00	0.00	0.00	0.00	1,915,390.69	126,698.33	36.2575300	-107.5161500
	64.00	0.41	267.43	64.00	-0.01	-0.23	1,915,390.68	126,698.10	36.2575299	-107.5161508
First MS Gyro Survey										
	114.00	0.30	315.65	114.00	0.08	-0.50	1,915,390.77	126,697.83	36.2575302	-107.5161517
	164.00	0.23	287.25	164.00	0.20	-0.69	1,915,390.90	126,697.64	36.2575305	-107.5161524
	214.00	0.21	326.80	214.00	0.31	-0.83	1,915,391.01	126,697.50	36.2575308	-107.5161529
	264.00	0.22	0.06	264.00	0.48	-0.88	1,915,391.18	126,697.45	36.2575313	-107.5161530
	314.00	0.29	71.68	314.00	0.61	-0.76	1,915,391.32	126,697.57	36.2575317	-107.5161526
	364.00	0.34	9.86	364.00	0.80	-0.62	1,915,391.50	126,697.72	36.2575322	-107.5161521



Survey Report - Geographic



Company:	WPX Energy, Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #177H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Site:	Chaco 2306-06D	MD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Well:	NE Chaco Com #177H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
386.00	0.27	48.09	386.00	0.90	-0.57	1,915,391.60	126,697.77	36.2575324	-107.5161520
Last MS Gyro Survey									
464.00	0.50	61.48	463.99	1.18	-0.13	1,915,391.88	126,698.21	36.2575332	-107.5161505
First SDI Surface MWD Survey									
495.00	0.50	88.63	494.99	1.25	0.12	1,915,391.94	126,698.46	36.2575334	-107.5161496
558.00	1.23	106.08	557.99	1.07	1.05	1,915,391.75	126,699.39	36.2575329	-107.5161465
621.00	2.78	107.20	620.95	0.43	3.16	1,915,391.08	126,701.49	36.2575312	-107.5161393
684.00	3.20	116.33	683.86	-0.80	6.19	1,915,389.81	126,704.51	36.2575278	-107.5161290
746.00	3.31	120.38	745.76	-2.47	9.29	1,915,388.10	126,707.58	36.2575232	-107.5161185
809.00	4.27	125.03	808.62	-4.74	12.78	1,915,385.79	126,711.04	36.2575170	-107.5161067
904.00	5.77	123.30	903.25	-9.39	19.66	1,915,381.04	126,717.87	36.2575042	-107.5160834
967.00	6.68	130.81	965.88	-13.52	25.09	1,915,376.84	126,723.23	36.2574928	-107.5160650
1,030.00	8.22	132.38	1,028.35	-18.96	31.19	1,915,371.33	126,729.26	36.2574779	-107.5160443
1,093.00	8.86	132.03	1,090.65	-25.24	38.12	1,915,364.96	126,736.11	36.2574606	-107.5160208
1,157.00	9.08	131.06	1,153.87	-31.86	45.59	1,915,358.24	126,743.49	36.2574425	-107.5159955
1,217.00	9.18	131.14	1,213.11	-38.11	52.76	1,915,351.89	126,750.58	36.2574253	-107.5159711
1,309.00	9.35	129.85	1,303.91	-47.73	64.02	1,915,342.13	126,761.72	36.2573989	-107.5159329
1,370.00	9.22	127.51	1,364.11	-53.88	71.70	1,915,335.88	126,769.32	36.2573820	-107.5159069
1,431.00	9.37	124.98	1,424.31	-59.71	79.65	1,915,329.95	126,777.19	36.2573660	-107.5158799
1,492.00	9.65	132.20	1,484.47	-65.99	87.51	1,915,323.57	126,784.96	36.2573487	-107.5158533
1,553.00	10.05	135.92	1,544.57	-73.24	95.00	1,915,316.21	126,792.36	36.2573288	-107.5158279
1,613.00	10.30	135.34	1,603.63	-80.82	102.41	1,915,308.54	126,799.67	36.2573080	-107.5158027
1,674.00	11.07	128.85	1,663.57	-88.37	110.80	1,915,300.88	126,807.96	36.2572872	-107.5157743
1,734.00	11.38	125.49	1,722.43	-95.42	120.11	1,915,293.71	126,817.18	36.2572679	-107.5157427
1,795.00	11.20	127.58	1,782.25	-102.53	129.70	1,915,286.47	126,826.68	36.2572483	-107.5157102
1,855.00	10.94	128.69	1,841.13	-109.64	138.77	1,915,279.24	126,835.65	36.2572288	-107.5156794
1,916.00	10.32	130.36	1,901.08	-116.80	147.45	1,915,271.97	126,844.23	36.2572092	-107.5156500
1,978.00	9.55	129.09	1,962.15	-123.64	155.67	1,915,265.03	126,852.37	36.2571904	-107.5156221
2,039.00	9.19	128.09	2,022.34	-129.84	163.43	1,915,258.73	126,860.05	36.2571734	-107.5155958
2,100.00	8.97	126.96	2,082.57	-135.70	171.07	1,915,252.77	126,867.60	36.2571572	-107.5155699
2,160.00	9.03	125.99	2,141.84	-141.28	178.61	1,915,247.09	126,875.08	36.2571419	-107.5155443
2,221.00	9.32	127.39	2,202.06	-147.09	186.41	1,915,241.18	126,882.80	36.2571260	-107.5155179
2,282.00	9.04	123.37	2,262.27	-152.73	194.34	1,915,235.44	126,890.65	36.2571105	-107.5154910
2,343.00	8.45	123.24	2,322.57	-157.82	202.09	1,915,230.24	126,898.33	36.2570965	-107.5154647
2,404.00	8.73	129.22	2,382.88	-163.20	209.42	1,915,224.77	126,905.60	36.2570817	-107.5154398
2,465.00	8.11	129.61	2,443.22	-168.87	216.33	1,915,219.01	126,912.42	36.2570661	-107.5154164
2,527.00	7.90	128.14	2,504.62	-174.29	223.05	1,915,213.50	126,919.07	36.2570512	-107.5153936
2,587.00	8.05	130.18	2,564.04	-179.55	229.50	1,915,208.16	126,925.46	36.2570368	-107.5153718
2,648.00	8.14	133.03	2,624.43	-185.25	235.92	1,915,202.37	126,931.80	36.2570211	-107.5153500
2,711.00	8.03	129.63	2,686.81	-191.10	242.57	1,915,196.43	126,938.37	36.2570051	-107.5153274
2,774.00	8.13	135.24	2,749.18	-197.07	249.09	1,915,190.38	126,944.82	36.2569887	-107.5153053
2,837.00	7.99	137.08	2,811.56	-203.44	255.21	1,915,183.93	126,950.86	36.2569712	-107.5152845
2,900.00	7.35	135.84	2,874.00	-209.54	261.00	1,915,177.76	126,956.57	36.2569544	-107.5152649
2,963.00	7.24	135.03	2,936.49	-215.24	266.61	1,915,171.99	126,962.10	36.2569388	-107.5152459
3,025.00	7.29	130.29	2,997.99	-220.55	272.38	1,915,166.60	126,967.80	36.2569242	-107.5152263
3,088.00	6.90	137.21	3,060.51	-225.91	278.00	1,915,161.17	126,973.34	36.2569095	-107.5152073
3,151.00	7.14	139.38	3,123.04	-231.66	283.12	1,915,155.35	126,978.39	36.2568937	-107.5151899
3,214.00	7.39	136.72	3,185.53	-237.58	288.44	1,915,149.36	126,983.64	36.2568774	-107.5151719
3,277.00	8.83	139.55	3,247.90	-244.21	294.36	1,915,142.66	126,989.47	36.2568592	-107.5151518
3,340.00	9.39	134.35	3,310.10	-251.48	301.17	1,915,135.30	126,996.18	36.2568392	-107.5151287
3,403.00	9.58	128.14	3,372.24	-258.31	308.97	1,915,128.36	127,003.89	36.2568205	-107.5151023
3,465.00	9.06	127.19	3,433.43	-264.45	316.91	1,915,122.12	127,011.76	36.2568036	-107.5150753
3,528.00	9.04	126.48	3,495.64	-270.39	324.85	1,915,116.08	127,019.61	36.2567873	-107.5150484
3,591.00	8.43	126.88	3,557.91	-276.10	332.52	1,915,110.27	127,027.21	36.2567716	-107.5150224
3,655.00	8.19	125.48	3,621.24	-281.57	339.98	1,915,104.71	127,034.60	36.2567566	-107.5149971



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #177H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Site:	Chaco 2306-06D	MD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Well:	NE Chaco Com #177H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
	3,717.00	8.83	126.55	3,682.56	-286.96	347.40	1,915,099.21	127,041.95	36.2567418	-107.5149719
	3,780.00	9.25	128.00	3,744.77	-292.96	355.28	1,915,093.11	127,049.74	36.2567253	-107.5149452
	3,843.00	8.34	127.50	3,807.03	-298.86	362.89	1,915,087.12	127,057.28	36.2567091	-107.5149194
	3,905.00	8.46	127.08	3,868.37	-304.35	370.10	1,915,081.54	127,064.41	36.2566940	-107.5148949
	3,968.00	8.69	124.32	3,930.66	-309.82	377.73	1,915,075.96	127,071.97	36.2566790	-107.5148691
	4,031.00	9.03	125.73	3,992.91	-315.39	385.67	1,915,070.28	127,079.84	36.2566637	-107.5148421
	4,094.00	8.82	133.49	4,055.15	-321.60	393.19	1,915,063.98	127,087.28	36.2566466	-107.5148166
	4,157.00	8.56	134.60	4,117.43	-328.22	400.03	1,915,057.27	127,094.03	36.2566284	-107.5147934
	4,220.00	8.61	135.08	4,179.72	-334.85	406.70	1,915,050.55	127,100.61	36.2566102	-107.5147708
	4,283.00	8.75	133.03	4,242.00	-341.46	413.53	1,915,043.85	127,107.36	36.2565921	-107.5147477
	4,345.00	8.74	131.92	4,303.28	-347.83	420.48	1,915,037.40	127,114.23	36.2565746	-107.5147241
	4,408.00	8.58	132.95	4,365.56	-354.23	427.49	1,915,030.91	127,121.14	36.2565570	-107.5147003
	4,471.00	8.29	129.76	4,427.88	-360.33	434.42	1,915,024.71	127,127.99	36.2565402	-107.5146768
	4,534.00	7.32	127.76	4,490.30	-365.70	441.08	1,915,019.26	127,134.59	36.2565255	-107.5146542
	4,597.00	5.91	125.75	4,552.87	-370.05	446.89	1,915,014.83	127,140.34	36.2565135	-107.5146345
	4,660.00	5.07	127.21	4,615.59	-373.63	451.74	1,915,011.19	127,145.14	36.2565037	-107.5146181
	4,723.00	3.59	125.76	4,678.40	-376.46	455.55	1,915,008.31	127,148.92	36.2564959	-107.5146051
	4,786.00	2.88	116.01	4,741.30	-378.31	458.58	1,915,006.42	127,151.92	36.2564908	-107.5145949
	4,848.00	2.60	120.03	4,803.23	-379.70	461.19	1,915,005.00	127,154.52	36.2564870	-107.5145860
	4,910.00	1.23	113.14	4,865.20	-380.66	463.02	1,915,004.01	127,156.33	36.2564844	-107.5145798
	4,974.00	0.57	125.21	4,929.19	-381.12	463.92	1,915,003.55	127,157.22	36.2564831	-107.5145768
Last SDI Surface MWD Survey										
	5,006.00	0.62	145.99	4,961.19	-381.35	464.14	1,915,003.31	127,157.44	36.2564825	-107.5145760
First SDI Curve MWD Survey										
	5,037.00	1.23	253.48	4,992.18	-381.58	463.92	1,915,003.08	127,157.21	36.2564818	-107.5145768
	5,069.00	5.04	266.77	5,024.13	-381.76	462.18	1,915,002.92	127,155.48	36.2564814	-107.5145827
	5,100.00	6.92	270.68	5,054.96	-381.82	458.96	1,915,002.91	127,152.25	36.2564812	-107.5145936
	5,132.00	7.39	266.49	5,086.71	-381.92	454.98	1,915,002.86	127,148.27	36.2564809	-107.5146071
	5,163.00	8.32	265.72	5,117.42	-382.21	450.75	1,915,002.62	127,144.04	36.2564801	-107.5146214
	5,195.00	11.42	266.14	5,148.94	-382.59	445.28	1,915,002.31	127,138.56	36.2564791	-107.5146400
	5,226.00	13.86	266.44	5,179.19	-383.03	438.51	1,915,001.96	127,131.79	36.2564779	-107.5146630
	5,258.00	14.95	271.06	5,210.18	-383.19	430.56	1,915,001.90	127,123.83	36.2564774	-107.5146899
	5,289.00	15.73	274.73	5,240.08	-382.77	422.37	1,915,002.43	127,115.65	36.2564786	-107.5147177
	5,321.00	17.59	271.59	5,270.74	-382.28	413.21	1,915,003.04	127,106.50	36.2564799	-107.5147487
	5,351.00	18.30	270.41	5,299.28	-382.12	403.97	1,915,003.32	127,097.27	36.2564804	-107.5147801
	5,382.00	20.14	271.77	5,328.55	-381.92	393.77	1,915,003.66	127,087.07	36.2564809	-107.5148147
	5,414.00	23.83	271.85	5,358.22	-381.54	381.80	1,915,004.19	127,075.10	36.2564820	-107.5148553
	5,445.00	28.18	273.59	5,386.07	-380.88	368.23	1,915,005.03	127,061.54	36.2564838	-107.5149013
	5,477.00	29.99	274.75	5,414.03	-379.75	352.71	1,915,006.37	127,046.04	36.2564869	-107.5149539
	5,508.00	32.45	277.21	5,440.54	-378.06	336.74	1,915,008.26	127,030.09	36.2564915	-107.5150081
	5,540.00	33.97	276.21	5,467.32	-376.02	319.33	1,915,010.53	127,012.72	36.2564971	-107.5150671
	5,571.00	37.72	276.95	5,492.44	-373.93	301.30	1,915,012.85	126,994.71	36.2565029	-107.5151283
	5,602.00	41.82	276.61	5,516.26	-371.59	281.61	1,915,015.45	126,975.06	36.2565093	-107.5151950
	5,634.00	46.96	276.25	5,539.12	-369.09	259.38	1,915,018.24	126,952.86	36.2565162	-107.5152704
	5,665.00	51.66	273.14	5,559.33	-367.19	235.96	1,915,020.45	126,929.47	36.2565214	-107.5153498
	5,697.00	55.57	270.80	5,578.31	-366.32	210.22	1,915,021.66	126,903.74	36.2565238	-107.5154371
	5,729.00	57.92	269.09	5,595.86	-366.35	183.47	1,915,021.98	126,876.99	36.2565237	-107.5155279
	5,760.00	61.64	270.01	5,611.46	-366.56	156.68	1,915,022.12	126,850.20	36.2565231	-107.5156187
	5,792.00	64.74	270.20	5,625.89	-366.50	128.13	1,915,022.55	126,821.65	36.2565233	-107.5157155
	5,823.00	69.03	271.15	5,638.06	-366.16	99.63	1,915,023.26	126,793.16	36.2565242	-107.5158122
	5,855.00	71.62	271.44	5,648.83	-365.48	69.50	1,915,024.33	126,763.05	36.2565261	-107.5159143
	5,886.00	75.18	272.21	5,657.69	-364.53	39.82	1,915,025.67	126,733.37	36.2565287	-107.5160150
	5,917.00	77.24	271.44	5,665.07	-363.58	9.73	1,915,027.02	126,703.30	36.2565313	-107.5161171
	5,949.00	79.93	271.68	5,671.41	-362.72	-21.63	1,915,028.28	126,671.96	36.2565337	-107.5162234
	5,980.00	81.88	271.56	5,676.31	-361.86	-52.22	1,915,029.55	126,641.38	36.2565360	-107.5163271

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #177H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Site:	Chaco 2306-06D	MD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Well:	NE Chaco Com #177H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,011.00	83.01	271.68	5,680.38	-360.99	-82.94	1,915,030.82	126,610.67	36.2565384	-107.5164313
6,043.00	83.02	270.95	5,684.27	-360.26	-114.69	1,915,031.96	126,578.93	36.2565404	-107.5165390
6,074.00	85.36	271.71	5,687.41	-359.54	-145.52	1,915,033.08	126,548.11	36.2565424	-107.5166436
6,105.00	88.16	272.66	5,689.16	-358.36	-176.45	1,915,034.67	126,517.21	36.2565456	-107.5167484
Last SDI Curve MWD Survey									
6,159.00	88.78	272.25	5,690.61	-356.05	-230.38	1,915,037.68	126,463.31	36.2565520	-107.5169313
7" Casing @ 6159' MD - Landing Point (POE) @ 6159' MD									
6,201.00	89.26	271.93	5,691.33	-354.52	-272.35	1,915,039.76	126,421.37	36.2565562	-107.5170736
First SDI Lateral MWD Survey									
6,261.00	91.11	275.24	5,691.13	-350.77	-332.22	1,915,044.30	126,361.55	36.2565665	-107.5172767
6,322.00	92.32	275.66	5,689.31	-344.98	-392.91	1,915,050.88	126,300.94	36.2565824	-107.5174825
6,382.00	92.82	275.74	5,686.62	-339.02	-452.56	1,915,057.61	126,241.38	36.2565988	-107.5176848
6,443.00	92.72	274.76	5,683.67	-333.45	-513.23	1,915,063.98	126,180.78	36.2566141	-107.5178905
6,505.00	91.55	274.31	5,681.36	-328.55	-574.99	1,915,069.69	126,119.09	36.2566275	-107.5181000
6,566.00	92.01	274.16	5,679.46	-324.05	-635.79	1,915,074.98	126,058.35	36.2566399	-107.5183062
6,627.00	92.08	273.89	5,677.29	-319.77	-696.60	1,915,080.06	125,997.60	36.2566516	-107.5185124
6,687.00	90.67	274.13	5,675.85	-315.57	-756.44	1,915,085.03	125,937.83	36.2566631	-107.5187153
6,748.00	91.31	273.99	5,674.79	-311.26	-817.28	1,915,090.15	125,877.05	36.2566750	-107.5189216
6,809.00	92.25	273.81	5,672.90	-307.11	-878.10	1,915,095.09	125,816.28	36.2566864	-107.5191279
6,870.00	92.42	273.38	5,670.41	-303.29	-938.93	1,915,099.70	125,755.51	36.2566969	-107.5193342
6,931.00	91.17	273.37	5,668.50	-299.70	-999.80	1,915,104.09	125,694.70	36.2567067	-107.5195406
6,992.00	91.08	272.83	5,667.30	-296.40	-1,060.70	1,915,108.18	125,633.85	36.2567158	-107.5197471
7,054.00	90.34	273.36	5,666.54	-293.05	-1,122.60	1,915,112.34	125,571.99	36.2567250	-107.5199571
7,114.00	90.74	273.51	5,665.97	-289.46	-1,182.49	1,915,116.72	125,512.16	36.2567348	-107.5201602
7,175.00	90.67	273.72	5,665.22	-285.61	-1,243.36	1,915,121.36	125,451.34	36.2567454	-107.5203666
7,238.00	90.17	273.46	5,664.76	-281.67	-1,306.24	1,915,126.12	125,388.52	36.2567562	-107.5205798
7,301.00	90.60	273.25	5,664.34	-277.98	-1,369.13	1,915,130.63	125,325.68	36.2567663	-107.5207931
7,364.00	91.28	272.66	5,663.30	-274.73	-1,432.04	1,915,134.70	125,262.82	36.2567753	-107.5210065
7,427.00	91.41	272.97	5,661.82	-271.64	-1,494.94	1,915,138.62	125,199.96	36.2567837	-107.5212198
7,490.00	91.68	273.22	5,660.12	-268.24	-1,557.83	1,915,142.84	125,137.13	36.2567931	-107.5214330
7,553.00	91.27	273.10	5,658.50	-264.77	-1,620.71	1,915,147.13	125,074.30	36.2568026	-107.5216463
7,616.00	91.28	273.02	5,657.10	-261.41	-1,683.60	1,915,151.32	125,011.45	36.2568118	-107.5218596
7,679.00	90.74	272.59	5,655.99	-258.32	-1,746.52	1,915,155.22	124,948.58	36.2568203	-107.5220730
7,742.00	91.51	273.34	5,654.75	-255.07	-1,809.42	1,915,159.30	124,885.73	36.2568292	-107.5222863
7,806.00	91.75	273.37	5,652.93	-251.32	-1,873.29	1,915,163.88	124,821.92	36.2568395	-107.5225029
7,869.00	91.94	273.39	5,650.90	-247.61	-1,936.14	1,915,168.41	124,759.11	36.2568497	-107.5227160
7,932.00	91.65	273.50	5,648.93	-243.83	-1,999.00	1,915,173.02	124,696.31	36.2568601	-107.5229292
7,994.00	91.38	274.36	5,647.29	-239.58	-2,060.83	1,915,178.07	124,634.54	36.2568717	-107.5231389
8,057.00	91.21	274.00	5,645.87	-234.99	-2,123.65	1,915,183.48	124,571.79	36.2568843	-107.5233519
8,120.00	89.90	274.37	5,645.26	-230.39	-2,186.47	1,915,188.90	124,509.03	36.2568969	-107.5235650
8,182.00	90.37	274.74	5,645.11	-225.47	-2,248.28	1,915,194.63	124,447.30	36.2569104	-107.5237746
8,245.00	90.57	274.83	5,644.60	-220.21	-2,311.06	1,915,200.71	124,384.59	36.2569249	-107.5239875
8,307.00	90.94	275.36	5,643.78	-214.70	-2,372.81	1,915,207.02	124,322.92	36.2569400	-107.5241969
8,371.00	90.20	274.82	5,643.14	-209.03	-2,436.55	1,915,213.53	124,259.26	36.2569556	-107.5244130
8,433.00	90.30	274.90	5,642.87	-203.77	-2,498.33	1,915,219.59	124,197.55	36.2569700	-107.5246225
8,495.00	90.34	274.22	5,642.52	-198.85	-2,560.13	1,915,225.33	124,135.82	36.2569835	-107.5248321
8,558.00	90.13	272.77	5,642.27	-195.00	-2,623.01	1,915,229.99	124,073.00	36.2569940	-107.5250454
8,621.00	90.17	271.64	5,642.10	-192.58	-2,685.96	1,915,233.24	124,010.08	36.2570007	-107.5252589
8,684.00	93.67	272.24	5,639.99	-190.45	-2,748.88	1,915,236.19	123,947.20	36.2570065	-107.5254722
8,745.00	94.11	272.36	5,635.85	-188.01	-2,809.69	1,915,239.43	123,886.42	36.2570132	-107.5256785
8,808.00	93.81	272.38	5,631.50	-185.41	-2,872.49	1,915,242.85	123,823.67	36.2570203	-107.5258914
8,871.00	91.82	273.02	5,628.41	-182.44	-2,935.34	1,915,246.63	123,760.86	36.2570284	-107.5261046
8,934.00	89.63	272.22	5,627.61	-179.57	-2,998.26	1,915,250.33	123,697.98	36.2570363	-107.5263180
8,997.00	90.77	272.40	5,627.39	-177.03	-3,061.21	1,915,253.69	123,635.07	36.2570433	-107.5265314
9,060.00	89.70	271.80	5,627.13	-174.72	-3,124.16	1,915,256.83	123,572.15	36.2570496	-107.5267449



Survey Report - Geographic



Company:	WPX Energy/Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #177H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Site:	Chaco 2306-06D	MD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Well:	NE Chaco Com #177H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,123.00	90.24	272.45	5,627.17	-172.38	-3,187.12	1,915,259.98	123,509.23	36.2570560	-107.5269584
9,187.00	92.66	273.75	5,625.55	-168.92	-3,251.00	1,915,264.28	123,445.40	36.2570655	-107.5271751
9,249.00	93.16	273.63	5,622.40	-164.94	-3,312.79	1,915,269.07	123,383.67	36.2570764	-107.5273846
9,312.00	92.39	273.24	5,619.35	-161.17	-3,375.60	1,915,273.66	123,320.91	36.2570868	-107.5275976
9,375.00	90.64	274.31	5,617.68	-157.02	-3,438.44	1,915,278.63	123,258.13	36.2570981	-107.5278107
9,438.00	90.80	275.46	5,616.89	-151.66	-3,501.21	1,915,284.81	123,195.44	36.2571128	-107.5280236
9,500.00	92.45	276.04	5,615.13	-145.45	-3,562.87	1,915,291.83	123,133.87	36.2571299	-107.5282327
9,563.00	92.79	275.56	5,612.25	-139.09	-3,625.48	1,915,299.01	123,071.34	36.2571473	-107.5284450
9,626.00	91.68	274.60	5,609.80	-133.51	-3,688.18	1,915,305.40	123,008.72	36.2571626	-107.5286577
9,689.00	91.45	274.18	5,608.08	-128.69	-3,750.98	1,915,311.04	122,946.00	36.2571758	-107.5288706
9,752.00	89.60	273.49	5,607.50	-124.48	-3,813.83	1,915,316.07	122,883.20	36.2571874	-107.5290838
9,814.00	90.71	274.24	5,607.33	-120.30	-3,875.69	1,915,321.06	122,821.41	36.2571988	-107.5292936
9,877.00	90.00	273.64	5,606.94	-115.97	-3,938.53	1,915,326.21	122,758.62	36.2572107	-107.5295067
9,940.00	90.44	274.08	5,606.70	-111.73	-4,001.39	1,915,331.27	122,695.82	36.2572223	-107.5297199
10,003.00	89.80	273.41	5,606.57	-107.62	-4,064.26	1,915,336.21	122,633.02	36.2572336	-107.5299331
10,066.00	90.57	273.81	5,606.36	-103.65	-4,127.13	1,915,341.00	122,570.20	36.2572445	-107.5301463
10,129.00	90.07	273.56	5,606.01	-99.60	-4,190.00	1,915,345.87	122,507.39	36.2572556	-107.5303595
10,192.00	90.87	273.24	5,605.49	-95.86	-4,252.88	1,915,350.43	122,444.56	36.2572658	-107.5305728
10,255.00	90.40	273.17	5,604.80	-92.34	-4,315.78	1,915,354.77	122,381.71	36.2572755	-107.5307861
10,318.00	90.27	271.86	5,604.43	-89.58	-4,378.72	1,915,358.36	122,318.82	36.2572830	-107.5309995
10,380.00	90.94	271.47	5,603.77	-87.78	-4,440.69	1,915,360.97	122,256.88	36.2572879	-107.5312097
10,443.00	94.15	271.70	5,600.98	-86.04	-4,503.59	1,915,363.53	122,194.00	36.2572927	-107.5314230
10,506.00	90.57	273.70	5,598.38	-83.07	-4,566.46	1,915,367.32	122,131.18	36.2573008	-107.5316362
10,568.00	90.91	273.35	5,597.58	-79.26	-4,628.33	1,915,371.94	122,069.36	36.2573113	-107.5318460
10,631.00	90.77	272.74	5,596.66	-75.91	-4,691.24	1,915,376.11	122,006.50	36.2573204	-107.5320594
10,695.00	92.25	273.17	5,594.97	-72.61	-4,755.13	1,915,380.24	121,942.66	36.2573294	-107.5322760
10,758.00	92.02	273.23	5,592.62	-69.10	-4,817.99	1,915,384.57	121,879.86	36.2573391	-107.5324892
10,821.00	91.18	273.92	5,590.87	-65.17	-4,880.84	1,915,389.32	121,817.06	36.2573498	-107.5327023
10,884.00	91.61	274.04	5,589.33	-60.80	-4,943.67	1,915,394.52	121,754.29	36.2573618	-107.5329154
10,946.00	89.63	274.42	5,588.66	-56.23	-5,005.49	1,915,399.90	121,692.53	36.2573743	-107.5331251
11,009.00	90.92	274.93	5,588.36	-51.09	-5,068.28	1,915,405.85	121,629.82	36.2573884	-107.5333380
11,071.00	90.75	273.88	5,587.45	-46.33	-5,130.09	1,915,411.42	121,568.08	36.2574015	-107.5335476
11,134.00	90.48	273.35	5,586.78	-42.36	-5,192.96	1,915,416.21	121,505.26	36.2574123	-107.5337609
11,196.00	89.34	273.17	5,586.88	-38.84	-5,254.86	1,915,420.55	121,443.42	36.2574220	-107.5339708
11,259.00	89.96	273.61	5,587.26	-35.11	-5,317.75	1,915,425.09	121,380.58	36.2574322	-107.5341840
11,322.00	90.00	273.30	5,587.28	-31.31	-5,380.63	1,915,429.71	121,317.75	36.2574426	-107.5343973
11,385.00	90.50	273.13	5,587.01	-27.78	-5,443.53	1,915,434.07	121,254.90	36.2574523	-107.5346106
11,449.00	91.31	273.27	5,586.00	-24.21	-5,507.43	1,915,438.47	121,191.07	36.2574620	-107.5348273
11,473.00	91.42	273.27	5,585.42	-22.84	-5,531.38	1,915,440.16	121,167.13	36.2574658	-107.5349085
Base Perf @ 11,473' MD									
11,516.00	91.63	273.26	5,584.28	-20.39	-5,574.29	1,915,443.16	121,124.25	36.2574725	-107.5350541
Last SDI Lateral MWD Survey									
11,580.00	91.63	273.26	5,582.46	-16.76	-5,638.17	1,915,447.64	121,060.43	36.2574824	-107.5352707
Projection to TD									



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #177H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Site:	Chaco 2306-06D	MD Reference:	GL 6982' & RKB 14' @ 6996.00ft (Aztec 730)
Well:	NE Chaco Com #177H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
64.00	64.00	-0.01	-0.23	First MS Gyro Survey
386.00	386.00	0.90	-0.57	Last MS Gyro Survey
464.00	463.99	1.18	-0.13	First SDI Surface MWD Survey
4,974.00	4,929.19	-381.12	463.92	Last SDI Surface MWD Survey
5,006.00	4,961.19	-381.35	464.14	First SDI Curve MWD Survey
6,105.00	5,689.16	-358.36	-176.45	Last SDI Curve MWD Survey
6,159.00	5,690.61	-356.05	-230.38	7" Casing @ 6159' MD
6,159.00	5,690.61	-356.05	-230.38	Landing Point (POE) @ 6159' MD
6,201.00	5,691.33	-354.52	-272.35	First SDI Lateral MWD Survey
11,473.00	5,585.42	-22.84	-5,531.38	Base Perf @ 11,473' MD
11,516.00	5,584.28	-20.39	-5,574.29	Last SDI Lateral MWD Survey
11,580.00	5,582.46	-16.76	-5,638.17	Projection to TD

Checked By: _____ Approved By: _____ Date: _____