

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

AS DRILLED

CONFIDENTIAL

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-31255		*Pool Code 98088	*Pool Name CHACO UNIT NE HZ (OIL)
*Property Code 313800	*Property Name NE CHACO COM		*Well Number 270H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC		*Elevation 6910'

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	17	23N	6W		1285	NORTH	327	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
F	16	23N	6W		1543	NORTH	1681	WEST	RIO ARriba

¹² Dedicated Acres
466.55

N/2 - Section 17
NW/4 - Section 16

¹³ Joint or Infill

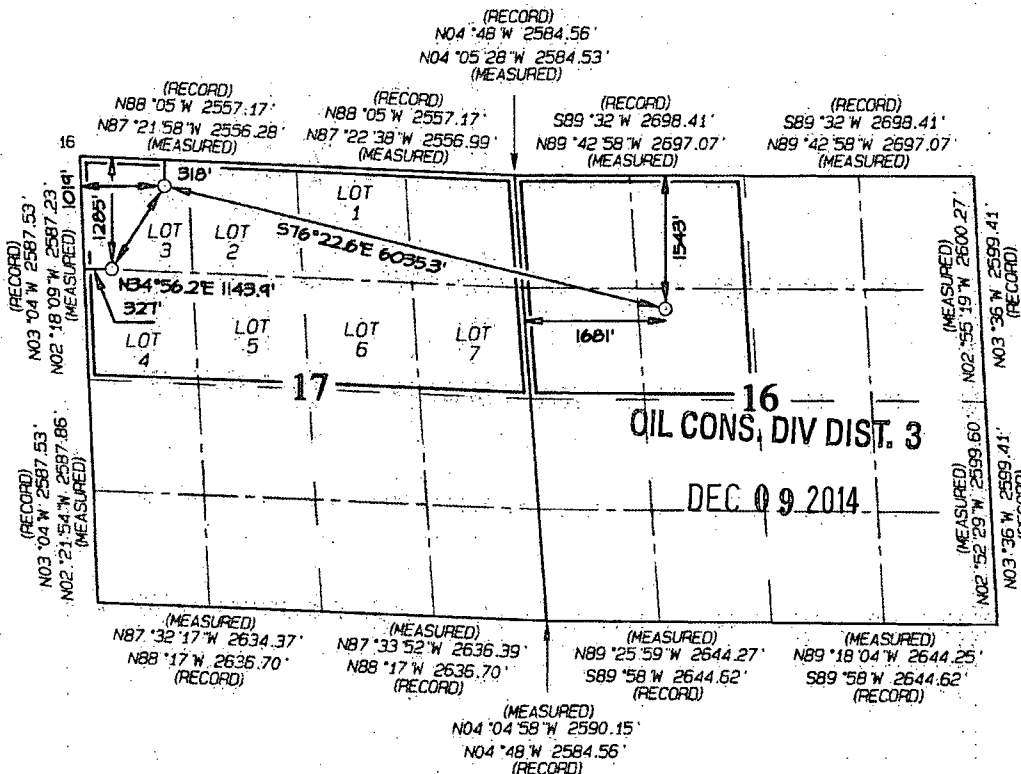
¹⁴ Consolidation Code

¹⁵ Order No.

R-13817-A

Project Area
9,237.3
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.

Lacey Granillo 12/18/14
Signature Date

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: DECEMBER 6, 2014
Survey Date: DECEMBER 10, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

SURFACE LOCATION
1285' FNL 327' FWL
SECTION 17, T23N, R6W
LAT: 36.228651°N
LONG: 107.499470°W
DATUM: NAD1927

POINT-OF-ENTRY
318' FNL 1019' FWL
SECTION 17, T23N, R6W
LAT: 36.231249°N
LONG: 107.497290°W
DATUM: NAD1927

BASE PERFORATION
1522' FNL 1594' FWL
SECTION 16, T23N, R6W
LAT: 36.227606°N
LONG: 107.477646°W
DATUM: NAD1927

END-OF-LATERAL
1543' FNL 1681' FWL
SECTION 16, T23N, R6W
LAT: 36.227551°N
LONG: 107.477346°W
DATUM: NAD1927

LAT: 36.228664°N
LONG: 107.500075°W
DATUM: NAD1983

LAT: 36.231263°N
LONG: 107.497896°W
DATUM: NAD1983

LAT: 36.227620°N
LONG: 107.478251°W
DATUM: NAD1983

LAT: 36.227564°N
LONG: 107.477950°W
DATUM: NAD1983

WPXENERGYSM



WPX Energy Rocky Mountain, LLC

Rio Arriba County, NM NAD27

Chaco 2306-17D

NE Chaco Com #270H

OH

Design: OH

Survey Report - Geographic

24 November, 2014

OIL CONS. DIV DIST. 3

DEC 09 2014

CONFIDENTIAL



Scientific Drilling

www.scientificdrilling.com

TABLE OF CONTENTS

1. Directional Plot and Surveys
2. Daily Drilling Reports
3. BHA Summary Reports and Slide Sheets
4. Graphical Job History
5. Support Staff



Scientific Drilling



Company Name: WPX Energy Rocky Mountain, LLC
 Project: Rio Arriba County, NM NAD27
 Site: Chaco 2306-17D
 Well: NE Chaco Com #270H

WPXENERGY

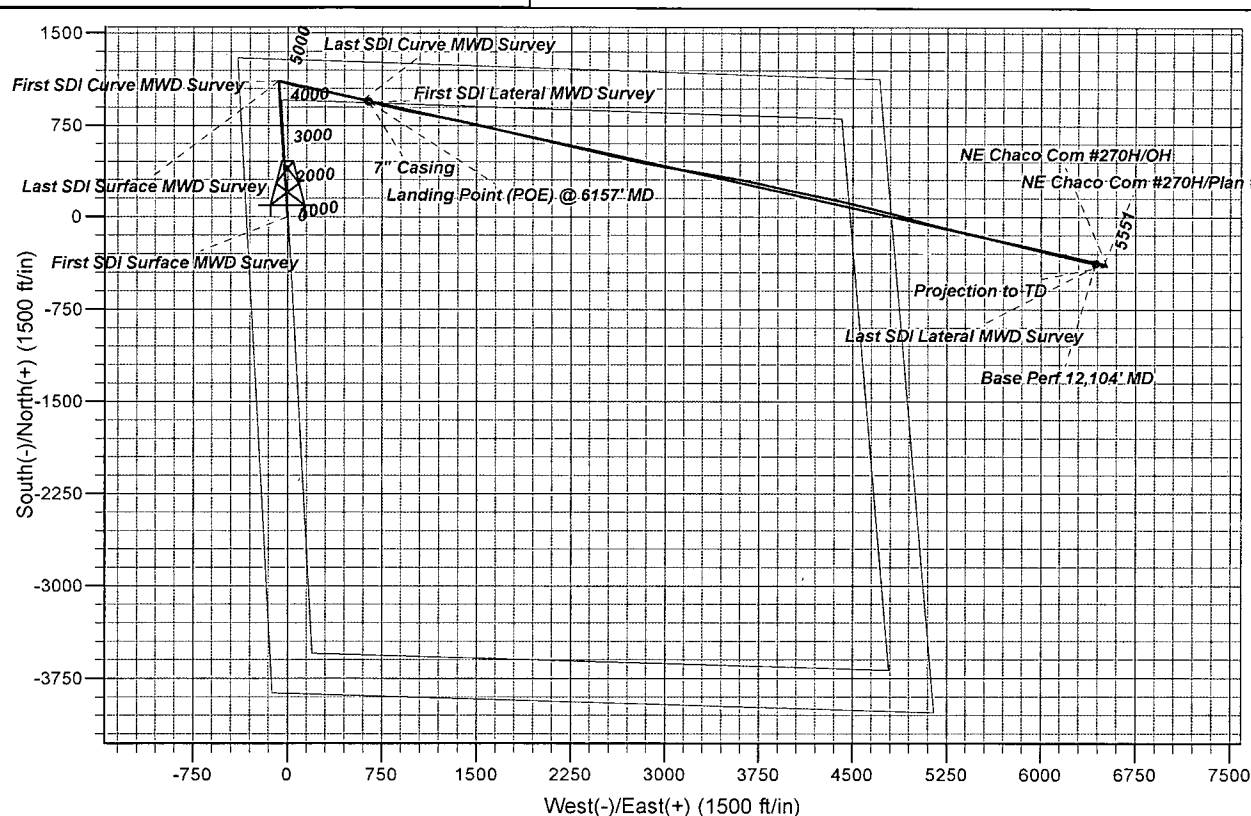
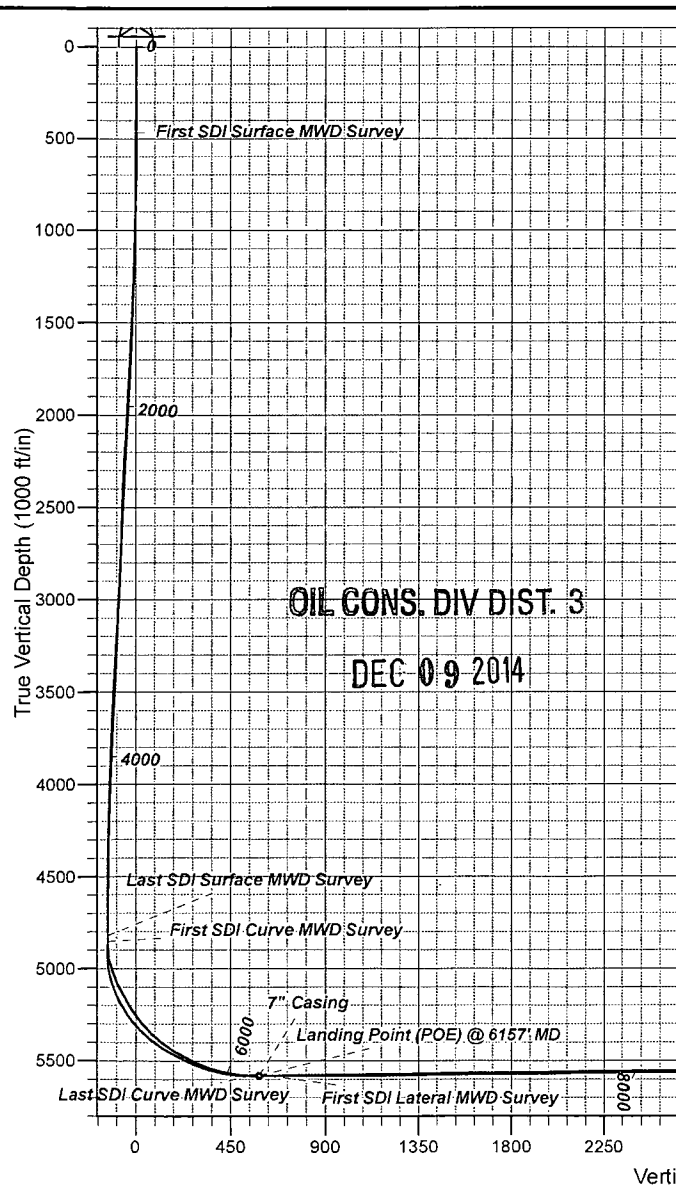


Azimuths to True North
 Magnetic North: 9.40°

Magnetic Field
 Strength: 50047.0snT
 Dip Angle: 63.00°
 Date: 11/6/2014
 Model: BGGM2014

WELL DETAILS: NE Chaco Com #270H

		GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)		6910.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1904813.53	131480.79	36.2286500	-107.4994700



Design: OH (NE Chaco Com #270H/OH)
Created By: Janie Collins Date: 12:28, November 24 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

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #270H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17D	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	NE Chaco Com #270H	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 2306-17D		
Site Position:		Northing:	1,904,813.54 usft
From:	Lat/Long	Easting:	131,480.80 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Grid Convergence:	-0.74 °

Well	NE Chaco Com #270H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Ground Level:	6,910.00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	BGGM2014	11/6/2014	9.40
			Dip Angle
			(°)
			Field Strength
			(nT)
			50,047

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
			(°)
			32.24

Survey Program	Date 11/24/2014		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
468.00	4,990.00	Survey #1 - Surface MWD Survey (OH)	MWD SDI
5,022.00	6,116.00	Survey #2 - Curve MWD (OH)	MWD SDI
6,199.00	12,195.00	Survey #3 - 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	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map	Latitude	Longitude
Depth	(°)	(°)	Depth	(ft)	(ft)	Northing	Easting		
(ft)			(ft)			(usft)	(usft)		
0.00	0.00	0.00	0.00	0.00	0.00	1,904,813.54	131,480.80	36.2286500	-107.4994700
468.00	0.71	153.01	467.99	-2.58	1.32	1,904,810.94	131,482.08	36.2286429	-107.4994656
First SDI Surface MWD Survey									
532.00	0.52	32.65	531.99	-2.69	1.65	1,904,810.82	131,482.41	36.2286426	-107.4994644
595.00	2.11	1.05	594.97	-1.29	1.83	1,904,812.22	131,482.61	36.2286464	-107.4994638
658.00	3.59	0.25	657.89	1.84	1.86	1,904,815.35	131,482.68	36.2286550	-107.4994637
719.00	4.34	355.72	718.74	6.05	1.69	1,904,819.57	131,482.57	36.2286666	-107.4994643
780.00	5.48	350.94	779.52	11.23	1.06	1,904,824.75	131,482.00	36.2286808	-107.4994664
841.00	7.24	349.97	840.14	17.89	-0.07	1,904,831.43	131,480.96	36.2286991	-107.4994703
901.00	8.18	353.29	899.60	25.85	-1.22	1,904,839.41	131,479.91	36.2287210	-107.4994742



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #270H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17D	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	NE Chaco Com #270H	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
962.00	9.06	354.37	959.91	34.94	-2.20	1,904,848.51	131,479.05	36.2287460	-107.4994775
1,024.00	10.95	349.24	1,020.96	45.59	-3.78	1,904,859.17	131,477.60	36.2287752	-107.4994829
1,084.00	11.82	354.42	1,079.78	57.30	-5.44	1,904,870.91	131,476.09	36.2288074	-107.4994885
1,145.00	12.03	357.88	1,139.47	69.87	-6.28	1,904,883.49	131,475.41	36.2288419	-107.4994913
1,206.00	12.57	359.29	1,199.07	82.86	-6.60	1,904,896.48	131,475.26	36.2288776	-107.4994924
1,267.00	14.23	358.73	1,258.40	97.00	-6.85	1,904,910.61	131,475.20	36.2289164	-107.4994933
1,327.00	15.50	358.38	1,316.40	112.38	-7.24	1,904,926.01	131,475.01	36.2289587	-107.4994946
1,388.00	16.28	357.87	1,375.06	129.08	-7.79	1,904,942.70	131,474.67	36.2290045	-107.4994964
1,448.00	16.71	359.29	1,432.59	146.11	-8.21	1,904,959.74	131,474.47	36.2290513	-107.4994979
1,509.00	18.50	358.51	1,490.74	164.55	-8.57	1,904,978.18	131,474.35	36.2291020	-107.4994991
1,570.00	18.36	358.13	1,548.61	183.83	-9.13	1,904,997.47	131,474.03	36.2291549	-107.4995010
1,631.00	19.07	357.21	1,606.38	203.38	-9.93	1,905,017.03	131,473.49	36.2292086	-107.4995037
1,691.00	18.78	356.10	1,663.14	222.81	-11.06	1,905,036.47	131,472.60	36.2292620	-107.4995076
1,751.00	19.46	355.49	1,719.83	242.41	-12.51	1,905,056.09	131,471.41	36.2293158	-107.4995124
1,812.00	19.04	354.46	1,777.42	262.44	-14.27	1,905,076.14	131,469.91	36.2293708	-107.4995184
1,873.00	19.10	355.80	1,835.07	282.30	-15.96	1,905,096.02	131,468.48	36.2294254	-107.4995241
1,933.00	18.78	355.52	1,891.82	301.72	-17.43	1,905,115.45	131,467.25	36.2294787	-107.4995291
1,993.00	18.52	354.95	1,948.67	320.84	-19.03	1,905,134.59	131,465.91	36.2295312	-107.4995345
2,054.00	18.82	354.85	2,006.46	340.29	-20.76	1,905,154.06	131,464.42	36.2295847	-107.4995404
2,115.00	19.33	354.97	2,064.11	360.14	-22.53	1,905,173.94	131,462.91	36.2296392	-107.4995464
2,176.00	18.33	353.49	2,121.85	379.73	-24.50	1,905,193.55	131,461.19	36.2296930	-107.4995531
2,237.00	17.56	351.47	2,179.88	398.36	-26.95	1,905,212.21	131,458.98	36.2297442	-107.4995614
2,297.00	16.74	354.14	2,237.21	415.91	-29.18	1,905,229.79	131,456.98	36.2297924	-107.4995690
2,361.00	16.95	354.76	2,298.47	434.37	-30.97	1,905,248.27	131,455.42	36.2298431	-107.4995750
2,424.00	16.40	353.18	2,358.82	452.34	-32.87	1,905,266.27	131,453.76	36.2298925	-107.4995815
2,487.00	17.20	355.42	2,419.13	470.46	-34.67	1,905,284.41	131,452.20	36.2299422	-107.4995876
2,551.00	18.28	358.90	2,480.09	489.93	-35.62	1,905,303.88	131,451.50	36.2299957	-107.4995908
2,614.00	19.40	359.28	2,539.71	510.27	-35.94	1,905,324.23	131,451.44	36.2300516	-107.4995919
2,678.00	18.51	358.39	2,600.24	531.06	-36.36	1,905,345.02	131,451.29	36.2301087	-107.4995933
2,741.00	18.93	359.35	2,659.91	551.27	-36.75	1,905,365.23	131,451.15	36.2301642	-107.4995946
2,805.00	18.66	0.80	2,720.49	571.89	-36.73	1,905,385.85	131,451.44	36.2302208	-107.4995946
2,868.00	19.17	357.76	2,780.09	592.30	-36.99	1,905,406.27	131,451.44	36.2302769	-107.4995954
2,931.00	19.01	356.36	2,839.63	612.88	-38.05	1,905,426.85	131,450.65	36.2303334	-107.4995990
2,995.00	18.58	356.74	2,900.21	633.46	-39.29	1,905,447.45	131,449.68	36.2303899	-107.4996032
3,058.00	19.38	356.42	2,959.79	653.91	-40.51	1,905,467.92	131,448.72	36.2304461	-107.4996074
3,122.00	19.39	356.01	3,020.16	675.11	-41.91	1,905,489.13	131,447.59	36.2305043	-107.4996121
3,185.00	19.02	355.04	3,079.66	695.77	-43.53	1,905,509.81	131,446.24	36.2305611	-107.4996176
3,248.00	18.43	354.38	3,139.32	715.91	-45.39	1,905,529.97	131,444.64	36.2306164	-107.4996239
3,311.00	18.94	353.75	3,199.00	735.98	-47.48	1,905,550.07	131,442.81	36.2306716	-107.4996310
3,374.00	18.71	353.75	3,258.63	756.19	-49.69	1,905,570.30	131,440.85	36.2307271	-107.4996385
3,438.00	19.57	354.88	3,319.09	777.07	-51.77	1,905,591.21	131,439.05	36.2307844	-107.4996455
3,501.00	19.52	355.84	3,378.46	798.08	-53.47	1,905,612.24	131,437.61	36.2308421	-107.4996513
3,564.00	19.50	355.30	3,437.84	819.05	-55.10	1,905,633.23	131,436.26	36.2308997	-107.4996568
3,628.00	19.47	355.16	3,498.18	840.33	-56.87	1,905,654.53	131,434.76	36.2309582	-107.4996629
3,691.00	19.34	357.13	3,557.60	861.21	-58.28	1,905,675.42	131,433.62	36.2310155	-107.4996676
3,754.00	19.08	357.25	3,617.09	881.91	-59.30	1,905,696.14	131,432.87	36.2310724	-107.4996711
3,818.00	19.09	356.50	3,677.58	902.81	-60.44	1,905,717.05	131,432.00	36.2311298	-107.4996749
3,881.00	19.35	355.70	3,737.06	923.50	-61.85	1,905,737.75	131,430.85	36.2311866	-107.4996797
3,943.00	18.92	356.88	3,795.64	943.78	-63.17	1,905,758.05	131,429.80	36.2312423	-107.4996842
4,007.00	18.26	0.19	3,856.30	964.17	-63.70	1,905,778.44	131,429.53	36.2312983	-107.4996860
4,070.00	16.75	358.70	3,916.38	983.11	-63.87	1,905,797.39	131,429.60	36.2313504	-107.4996866
4,133.00	15.33	356.41	3,976.93	1,000.50	-64.60	1,905,814.79	131,429.10	36.2313981	-107.4996890
4,197.00	14.58	357.49	4,038.76	1,016.99	-65.48	1,905,831.29	131,428.43	36.2314434	-107.4996920
4,260.00	12.49	357.52	4,100.01	1,031.72	-66.12	1,905,846.02	131,427.98	36.2314839	-107.4996942
4,323.00	11.49	357.88	4,161.63	1,044.80	-66.65	1,905,859.11	131,427.62	36.2315198	-107.4996960



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #270H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17D	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	NE Chaco Com #270H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,387.00	11.44	358.38	4,224.35	1,057.51	-67.07	1,905,871.83	131,427.37	36.2315547	-107.4996974
4,451.00	10.29	358.94	4,287.21	1,069.57	-67.35	1,905,883.89	131,427.24	36.2315878	-107.4996984
4,514.00	9.00	354.36	4,349.32	1,080.10	-67.94	1,905,894.43	131,426.78	36.2316168	-107.4997004
4,578.00	8.24	352.98	4,412.59	1,089.64	-68.99	1,905,903.97	131,425.85	36.2316430	-107.4997039
4,642.00	6.50	1.10	4,476.06	1,097.81	-69.48	1,905,912.15	131,425.47	36.2316654	-107.4997056
4,705.00	4.34	359.05	4,538.78	1,103.76	-69.45	1,905,918.10	131,425.57	36.2316818	-107.4997055
4,768.00	2.34	343.78	4,601.67	1,107.38	-69.85	1,905,921.72	131,425.22	36.2316917	-107.4997069
4,832.00	0.96	9.19	4,665.64	1,109.16	-70.13	1,905,923.51	131,424.97	36.2316966	-107.4997078
4,895.00	0.62	68.76	4,728.64	1,109.81	-69.73	1,905,924.15	131,425.38	36.2316984	-107.4997064
4,958.00	0.68	47.26	4,791.63	1,110.19	-69.14	1,905,924.52	131,425.97	36.2316994	-107.4997044
4,990.00	0.79	50.18	4,823.63	1,110.46	-68.83	1,905,924.79	131,426.29	36.2317001	-107.4997034
Last SDI Surface MWD Survey									
5,022.00	0.62	38.86	4,855.63	1,110.73	-68.55	1,905,925.06	131,426.57	36.2317009	-107.4997024
First SDI Curve MWD Survey									
5,053.00	2.55	94.23	4,886.61	1,110.81	-67.76	1,905,925.13	131,427.36	36.2317011	-107.4996998
5,085.00	5.80	104.41	4,918.53	1,110.36	-65.48	1,905,924.64	131,429.63	36.2316999	-107.4996920
5,117.00	9.90	103.07	4,950.22	1,109.33	-61.23	1,905,923.56	131,433.87	36.2316971	-107.4996776
5,149.00	13.47	102.27	4,981.55	1,107.92	-54.91	1,905,922.07	131,440.17	36.2316932	-107.4996562
5,180.00	16.86	105.63	5,011.47	1,105.94	-47.05	1,905,919.99	131,448.00	36.2316877	-107.4996296
5,212.00	19.08	107.92	5,041.90	1,103.08	-37.60	1,905,917.01	131,457.41	36.2316799	-107.4995975
5,244.00	21.96	107.55	5,071.87	1,099.66	-26.92	1,905,913.45	131,468.05	36.2316705	-107.4995613
5,275.00	24.35	107.51	5,100.37	1,095.99	-15.30	1,905,909.63	131,479.63	36.2316604	-107.4995219
5,307.00	26.33	107.19	5,129.29	1,091.91	-2.23	1,905,905.38	131,492.64	36.2316492	-107.4994776
5,339.00	26.58	107.06	5,157.94	1,087.71	11.40	1,905,901.01	131,506.21	36.2316377	-107.4994314
5,370.00	28.18	106.86	5,185.47	1,083.55	25.03	1,905,896.68	131,519.80	36.2316263	-107.4993852
5,402.00	30.00	107.07	5,213.43	1,079.01	39.91	1,905,891.95	131,534.62	36.2316138	-107.4993347
5,434.00	30.84	104.47	5,241.03	1,074.62	55.50	1,905,887.35	131,550.15	36.2316017	-107.4992819
5,466.00	32.81	101.64	5,268.21	1,070.82	71.94	1,905,883.34	131,566.53	36.2315913	-107.4992261
5,497.00	36.02	99.69	5,293.79	1,067.59	89.16	1,905,879.88	131,583.71	36.2315824	-107.4991678
5,529.00	38.30	99.70	5,319.29	1,064.33	108.21	1,905,876.38	131,602.71	36.2315735	-107.4991032
5,561.00	41.35	100.12	5,343.86	1,060.80	128.39	1,905,872.60	131,622.85	36.2315638	-107.4990348
5,592.00	44.18	101.25	5,366.62	1,056.90	149.07	1,905,868.42	131,643.48	36.2315530	-107.4989647
5,624.00	46.78	101.85	5,389.05	1,052.33	171.43	1,905,863.56	131,665.77	36.2315405	-107.4988889
5,656.00	49.17	101.22	5,410.47	1,047.57	194.72	1,905,858.51	131,689.00	36.2315274	-107.4988099
5,688.00	52.85	101.07	5,430.60	1,042.77	219.11	1,905,853.39	131,713.33	36.2315142	-107.4987272
5,719.00	56.26	102.01	5,448.58	1,037.71	243.85	1,905,848.02	131,738.01	36.2315003	-107.4986433
5,751.00	58.46	103.04	5,465.84	1,031.87	270.16	1,905,841.83	131,764.23	36.2314843	-107.4985542
5,782.00	58.44	102.68	5,482.06	1,025.99	295.91	1,905,835.62	131,789.91	36.2314681	-107.4984668
5,815.00	59.85	102.33	5,498.98	1,019.85	323.57	1,905,829.13	131,817.48	36.2314513	-107.4983731
5,847.00	63.10	101.67	5,514.26	1,014.01	351.07	1,905,822.94	131,844.90	36.2314352	-107.4982799
5,879.00	65.85	101.59	5,528.05	1,008.19	379.35	1,905,816.75	131,873.11	36.2314192	-107.4981840
5,910.00	69.09	101.19	5,539.93	1,002.54	407.41	1,905,810.74	131,901.10	36.2314037	-107.4980888
5,942.00	72.99	102.37	5,550.32	996.36	437.03	1,905,804.18	131,930.63	36.2313867	-107.4979884
5,974.00	75.55	102.42	5,559.00	989.75	467.11	1,905,797.18	131,960.63	36.2313686	-107.4978864
6,006.00	77.42	103.35	5,566.47	982.81	497.44	1,905,789.85	131,990.86	36.2313495	-107.4977836
6,038.00	80.18	104.13	5,572.69	975.35	527.93	1,905,782.00	132,021.25	36.2313290	-107.4976803
6,069.00	83.61	103.97	5,577.06	967.90	557.70	1,905,774.17	132,050.92	36.2313086	-107.4975793
6,102.00	87.61	104.33	5,579.58	959.86	589.60	1,905,765.72	132,082.72	36.2312865	-107.4974712
6,116.00	88.22	103.85	5,580.09	956.45	603.17	1,905,762.13	132,096.24	36.2312771	-107.4974252
Last SDI Curve MWD Survey									
6,157.00	89.23	104.71	5,581.01	946.34	642.89	1,905,751.51	132,135.83	36.2312493	-107.4972905
7" Casing - Landing Point (POE) @ 6157' MD									
6,199.00	90.27	105.60	5,581.19	935.36	683.43	1,905,740.01	132,176.22	36.2312192	-107.4971531
First SDI Lateral MWD Survey									

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #270H
Project:	Rio Arriba County NM-NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco.2306-17D	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	NE Chaco Com #270H	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
6,263.00	89.93	105.35	5,581.08	918.28	745.11	1,905,722.14	132,237.68	36.2311723	-107.4969440
6,327.00	90.13	103.26	5,581.04	902.47	807.12	1,905,705.53	132,299.48	36.2311288	-107.4967338
6,390.00	90.03	102.73	5,580.95	888.31	868.50	1,905,690.57	132,360.68	36.2310899	-107.4965257
6,454.00	90.27	102.31	5,580.79	874.43	930.98	1,905,675.89	132,422.97	36.2310518	-107.4963139
6,517.00	90.34	102.06	5,580.45	861.13	992.56	1,905,661.80	132,484.37	36.2310153	-107.4961051
6,580.00	90.57	100.92	5,579.95	848.59	1,054.30	1,905,648.46	132,545.94	36.2309808	-107.4958958
6,644.00	89.69	100.63	5,579.81	836.62	1,117.17	1,905,635.69	132,608.65	36.2309479	-107.4956827
6,704.00	89.90	100.39	5,580.02	825.68	1,176.16	1,905,623.98	132,667.50	36.2309179	-107.4954827
6,765.00	91.01	99.66	5,579.54	815.06	1,236.23	1,905,612.59	132,727.42	36.2308887	-107.4952790
6,826.00	91.81	101.11	5,578.03	804.07	1,296.21	1,905,600.83	132,787.26	36.2308585	-107.4950757
6,886.00	91.85	102.07	5,576.12	792.02	1,354.95	1,905,588.02	132,845.84	36.2308254	-107.4948765
6,947.00	90.44	103.82	5,574.90	778.36	1,414.39	1,905,573.60	132,905.09	36.2307878	-107.4946751
7,008.00	90.13	104.02	5,574.60	763.68	1,473.59	1,905,558.16	132,964.11	36.2307475	-107.4944743
7,069.00	90.23	103.16	5,574.40	749.35	1,532.89	1,905,543.06	133,023.21	36.2307082	-107.4942733
7,130.00	90.31	103.18	5,574.12	735.45	1,592.28	1,905,528.40	133,082.42	36.2306700	-107.4940720
7,190.00	90.67	103.62	5,573.60	721.55	1,650.64	1,905,513.75	133,140.60	36.2306318	-107.4938741
7,251.00	91.11	103.57	5,572.66	707.21	1,709.93	1,905,498.65	133,199.69	36.2305924	-107.4936731
7,312.00	91.07	102.99	5,571.50	693.20	1,769.29	1,905,483.87	133,258.87	36.2305539	-107.4934719
7,373.00	90.87	102.85	5,570.46	679.56	1,828.73	1,905,469.47	133,318.13	36.2305164	-107.4932704
7,434.00	90.40	103.73	5,569.79	665.54	1,888.09	1,905,454.68	133,377.31	36.2304779	-107.4930691
7,494.00	90.00	103.79	5,569.58	651.27	1,946.37	1,905,439.66	133,435.40	36.2304387	-107.4928716
7,554.00	90.94	103.20	5,569.09	637.27	2,004.71	1,905,424.91	133,493.55	36.2304002	-107.4926738
7,614.00	90.91	103.30	5,568.12	623.52	2,063.11	1,905,410.41	133,551.77	36.2303624	-107.4924758
7,676.00	91.14	104.05	5,567.01	608.86	2,123.34	1,905,394.98	133,611.80	36.2303222	-107.4922716
7,737.00	91.54	103.59	5,565.58	594.30	2,182.56	1,905,379.65	133,670.83	36.2302821	-107.4920709
7,798.00	90.80	103.32	5,564.34	580.11	2,241.87	1,905,364.70	133,729.95	36.2302432	-107.4918698
7,858.00	90.37	104.52	5,563.72	565.67	2,300.10	1,905,349.51	133,788.00	36.2302035	-107.4916724
7,918.00	90.94	103.32	5,563.04	551.24	2,358.34	1,905,334.33	133,846.04	36.2301638	-107.4914750
7,980.00	90.30	103.57	5,562.37	536.83	2,418.63	1,905,319.14	133,906.14	36.2301242	-107.4912706
8,040.00	89.83	103.14	5,562.30	522.97	2,477.01	1,905,304.53	133,964.34	36.2300861	-107.4910727
8,099.00	89.83	102.92	5,562.47	509.66	2,534.49	1,905,290.49	134,021.64	36.2300496	-107.4908778
8,160.00	89.97	103.62	5,562.58	495.66	2,593.86	1,905,275.72	134,080.83	36.2300111	-107.4906765
8,221.00	90.23	103.62	5,562.47	481.30	2,653.15	1,905,260.59	134,139.92	36.2299717	-107.4904755
8,282.00	89.96	103.88	5,562.37	466.80	2,712.40	1,905,245.33	134,198.98	36.2299318	-107.4902747
8,342.00	89.87	103.44	5,562.46	452.63	2,770.70	1,905,230.41	134,257.10	36.2298929	-107.4900770
8,403.00	90.13	102.56	5,562.46	438.91	2,830.14	1,905,215.93	134,316.35	36.2298552	-107.4898755
8,464.00	89.87	100.89	5,562.46	426.51	2,889.86	1,905,202.76	134,375.91	36.2298211	-107.4896731
8,528.00	88.81	99.31	5,563.20	415.29	2,952.86	1,905,190.73	134,438.76	36.2297903	-107.4894595
8,591.00	90.57	99.66	5,563.54	404.91	3,015.00	1,905,179.55	134,500.76	36.2297617	-107.4892488
8,654.00	90.50	99.87	5,562.95	394.22	3,077.08	1,905,168.06	134,562.70	36.2297324	-107.4890384
8,719.00	89.93	100.41	5,562.71	382.78	3,141.07	1,905,155.80	134,626.53	36.2297009	-107.4888215
8,782.00	90.70	99.97	5,562.36	371.64	3,203.07	1,905,143.85	134,688.39	36.2296703	-107.4886113
8,846.00	90.40	100.53	5,561.75	360.25	3,266.05	1,905,131.65	134,751.21	36.2296390	-107.4883978
8,909.00	89.78	99.05	5,561.65	349.54	3,328.13	1,905,120.14	134,813.15	36.2296095	-107.4881873
8,972.00	89.80	99.64	5,561.88	339.31	3,390.29	1,905,109.11	134,875.17	36.2295814	-107.4879766
9,035.00	89.78	98.34	5,562.11	329.46	3,452.52	1,905,098.47	134,937.26	36.2295544	-107.4877656
9,098.00	89.96	101.24	5,562.25	318.75	3,514.59	1,905,086.96	134,999.20	36.2295249	-107.4875552
9,162.00	90.07	101.19	5,562.24	306.30	3,577.37	1,905,073.70	135,061.81	36.2294907	-107.4873424
9,225.00	90.30	101.14	5,562.03	294.10	3,639.18	1,905,060.71	135,123.45	36.2294572	-107.4871329
9,288.00	89.78	102.38	5,561.99	281.26	3,700.85	1,905,047.07	135,184.96	36.2294219	-107.4869238
9,352.00	89.70	103.43	5,562.28	266.97	3,763.23	1,905,031.98	135,247.15	36.2293826	-107.4867123
9,415.00	90.34	103.68	5,562.26	252.21	3,824.48	1,905,016.42	135,308.20	36.2293420	-107.4865047
9,478.00	90.37	103.88	5,561.87	237.20	3,885.66	1,905,000.63	135,369.19	36.2293008	-107.4862973
9,542.00	90.13	103.22	5,561.59	222.20	3,947.88	1,904,984.83	135,431.21	36.2292596	-107.4860863
9,605.00	89.97	101.89	5,561.53	208.51	4,009.37	1,904,970.35	135,492.52	36.2292219	-107.4858779

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #270H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17D	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	NE Chaco Com #270H	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
9,669.00	90.13	101.27	5,561.48	195.66	4,072.07	1,904,956.69	135,555.04	36.2291866	-107.4856653
9,732.00	90.64	101.66	5,561.05	183.14	4,133.81	1,904,943.38	135,616.62	36.2291522	-107.4854560
9,794.00	89.80	100.83	5,560.82	171.05	4,194.62	1,904,930.50	135,677.26	36.2291190	-107.4852499
9,857.00	90.17	101.64	5,560.83	158.78	4,256.41	1,904,917.43	135,738.89	36.2290852	-107.4850404
9,920.00	90.94	101.48	5,560.22	146.15	4,318.13	1,904,904.02	135,800.44	36.2290505	-107.4848312
9,984.00	90.94	102.78	5,559.17	132.71	4,380.69	1,904,889.76	135,862.83	36.2290136	-107.4846191
10,047.00	90.64	103.24	5,558.30	118.53	4,442.07	1,904,874.79	135,924.02	36.2289746	-107.4844111
10,110.00	89.80	104.12	5,558.06	103.63	4,503.28	1,904,859.11	135,985.03	36.2289336	-107.4842036
10,174.00	90.48	104.58	5,557.90	87.76	4,565.28	1,904,842.45	136,046.82	36.2288900	-107.4839934
10,237.00	90.70	104.38	5,557.26	72.01	4,626.28	1,904,825.91	136,107.61	36.2288467	-107.4837866
10,300.00	89.69	103.88	5,557.04	56.63	4,687.37	1,904,809.74	136,168.50	36.2288045	-107.4835795
10,364.00	89.87	103.88	5,557.29	41.28	4,749.50	1,904,793.59	136,230.43	36.2287623	-107.4833689
10,427.00	90.13	105.20	5,557.29	25.46	4,810.48	1,904,776.99	136,291.20	36.2287188	-107.4831622
10,490.00	90.22	105.11	5,557.09	8.99	4,871.29	1,904,759.74	136,351.79	36.2286735	-107.4829560
10,553.00	90.17	106.06	5,556.88	-7.93	4,931.97	1,904,742.03	136,412.25	36.2286270	-107.4827503
10,617.00	90.13	106.02	5,556.71	-25.62	4,993.48	1,904,723.56	136,473.52	36.2285784	-107.4825418
10,680.00	90.13	106.16	5,556.57	-43.08	5,054.01	1,904,705.32	136,533.83	36.2285304	-107.4823366
10,744.00	90.13	104.76	5,556.42	-60.14	5,115.70	1,904,687.46	136,595.28	36.2284835	-107.4821275
10,807.00	89.78	105.02	5,556.47	-76.32	5,176.58	1,904,670.49	136,655.95	36.2284390	-107.4819211
10,871.00	90.13	103.62	5,556.52	-92.15	5,238.59	1,904,653.87	136,717.75	36.2283955	-107.4817109
10,934.00	89.78	103.00	5,556.57	-106.66	5,299.90	1,904,638.57	136,778.87	36.2283557	-107.4815031
10,997.00	89.78	102.82	5,556.82	-120.73	5,361.31	1,904,623.71	136,840.09	36.2283170	-107.4812949
11,060.00	89.50	103.76	5,557.21	-135.21	5,422.62	1,904,608.44	136,901.21	36.2282771	-107.4810871
11,124.00	91.19	103.26	5,556.83	-150.16	5,484.84	1,904,592.68	136,963.24	36.2282360	-107.4808761
11,187.00	91.08	103.54	5,555.58	-164.76	5,546.11	1,904,577.30	137,024.31	36.2281959	-107.4806684
11,251.00	91.36	104.05	5,554.22	-180.02	5,608.25	1,904,561.24	137,086.25	36.2281540	-107.4804578
11,314.00	91.80	104.23	5,552.48	-195.40	5,669.32	1,904,545.07	137,147.12	36.2281117	-107.4802508
11,377.00	90.13	104.86	5,551.42	-211.22	5,730.29	1,904,528.47	137,207.88	36.2280682	-107.4800441
11,441.00	89.16	102.74	5,551.81	-226.49	5,792.44	1,904,512.40	137,269.82	36.2280262	-107.4798334
11,504.00	90.04	103.62	5,552.25	-240.85	5,853.78	1,904,497.25	137,330.97	36.2279867	-107.4796255
11,567.00	90.13	103.88	5,552.16	-255.83	5,914.97	1,904,481.49	137,391.97	36.2279456	-107.4794180
11,630.00	90.87	103.92	5,551.61	-270.96	5,976.12	1,904,465.57	137,452.92	36.2279040	-107.4792107
11,694.00	90.57	103.70	5,550.81	-286.24	6,038.27	1,904,449.49	137,514.86	36.2278620	-107.4790001
11,757.00	89.69	102.65	5,550.66	-300.59	6,099.61	1,904,434.34	137,576.01	36.2278225	-107.4787922
11,821.00	89.52	102.82	5,551.10	-314.70	6,162.03	1,904,419.43	137,638.25	36.2277837	-107.4785805
11,885.00	89.87	103.18	5,551.45	-329.10	6,224.39	1,904,404.23	137,700.42	36.2277441	-107.4783692
11,948.00	90.13	104.01	5,551.45	-343.91	6,285.63	1,904,388.64	137,761.45	36.2277034	-107.4781616
12,012.00	90.22	103.00	5,551.25	-358.85	6,347.85	1,904,372.89	137,823.48	36.2276623	-107.4779506
12,075.00	89.87	102.67	5,551.20	-372.85	6,409.28	1,904,358.10	137,884.72	36.2276239	-107.4777424
12,104.00	90.00	102.78	5,551.23	-379.23	6,437.57	1,904,351.35	137,912.93	36.2276063	-107.4776465
Base Perf 12,104' MD									
12,133.00	90.13	102.88	5,551.20	-385.67	6,465.84	1,904,344.55	137,941.12	36.2275886	-107.4775507
Last SDI Lateral MWD Survey									
12,195.00	90.13	102.88	5,551.06	-399.49	6,526.28	1,904,329.95	138,001.38	36.2275506	-107.4773458
Projection to TD									

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well NE Chaco Com #270H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17D	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	NE Chaco Com #270H	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)	
468.00	467.99	-2.58	1.32	First SDI Surface MWD Survey
4,990.00	4,823.63	1,110.46	-68.83	Last SDI Surface MWD Survey
5,022.00	4,855.63	1,110.73	-68.55	First SDI Curve MWD Survey
6,116.00	5,580.09	956.45	603.17	Last SDI Curve MWD Survey
6,157.00	5,581.01	946.34	642.89	7" Casing
6,157.00	5,581.01	946.34	642.89	Landing Point (POE) @ 6157' MD
6,199.00	5,581.19	935.36	683.43	First SDI Lateral MWD Survey
12,104.00	5,551.23	-379.23	6,437.57	Base Perf 12,104' MD
12,133.00	5,551.20	-385.67	6,465.84	Last SDI Lateral MWD Survey
12,195.00	5,551.06	-399.49	6,526.28	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------