

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: (505) 748-1283 Fax: (505) 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31254	² Pool Code 98088	³ Pool Name CHACO UNIT NE HZ (OIL)
⁴ Property Code 313800	⁵ Property Name NE CHACO COM	⁶ Well Number 202H
⁷ GRID No. 120782	⁸ Operator Name WPX ENERGY PRODUCTION, LLC	⁹ 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
E	17	23N	6W	4	1329	NORTH	315	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
A	13	23N	7W		1099	NORTH	798	EAST	RIO ARriba

¹² Dedicated Acres 641.32	N/2 - Sec 13, T23N, R7W N/2 - Sec 18, T23N, R6W	¹³ Joint or Infill	¹⁴ Consolidation Code R-13817-A	¹⁵ Order No. Project Area 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

END-OF-LATERAL
1099' FNL 798' FEL
SECTION 13, T23N, R7W
LAT: 36.229376°N
LONG: 107.520818°W
DATUM: NAD1927

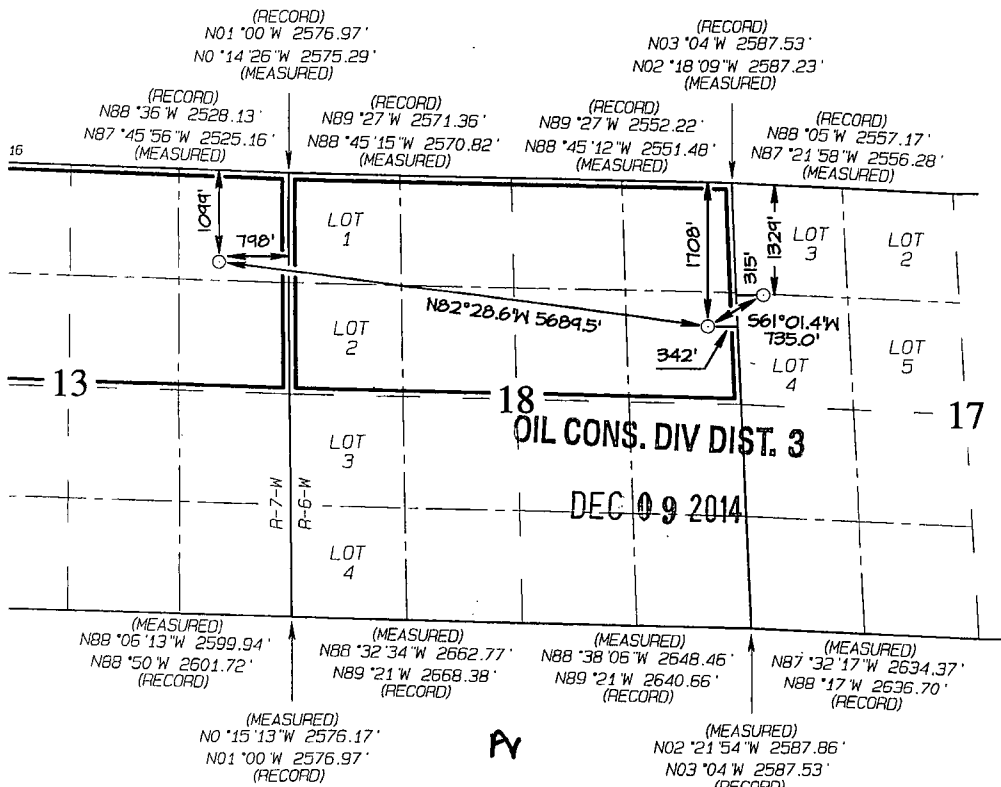
LAT: 36.229390°N
LONG: 107.521423°W
DATUM: NAD1983

POINT-OF-ENTRY
1708' FNL 342' FEL
SECTION 18, T23N, R6W
LAT: 36.227532°N
LONG: 107.501665°W
DATUM: NAD1927

LAT: 36.227545°N
LONG: 107.502270°W
DATUM: NAD1983

SURFACE LOCATION
1329' FNL 315' FWL
SECTION 17, T23N, R6W
LAT: 36.228532°N
LONG: 107.499501°W
DATUM: NAD1927

LAT: 36.228546°N
LONG: 107.500106°W
DATUM: NAD1983



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: 12/18/14
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 4, 2014
Survey Date: JANUARY 30, 2014

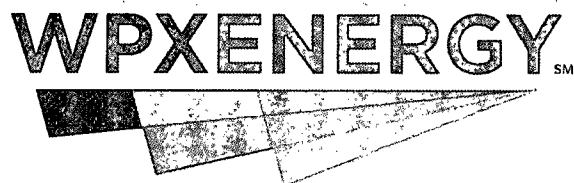
Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

CONFIDENTIAL



WPX Energy Rocky Mountain, LLC

Rio Arriba County, NM NAD27

Chaco 2306-17E

Chaco 2306-17E #202H

OH

OIL CONS. DIV DIST. 3

DEC 09 2014

Design: OH

Survey Report - Geographic

24 October, 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

OIL CONS. DIV DIST. 3

DEC 09 2014



Scientific Drilling



Company Name: WPX Energy Rocky Mountain, LLC
 Project: Rio Arriba County, NM NAD27
 Site: Chaco 2306-17E
 Well: Chaco 2306-17E #202H

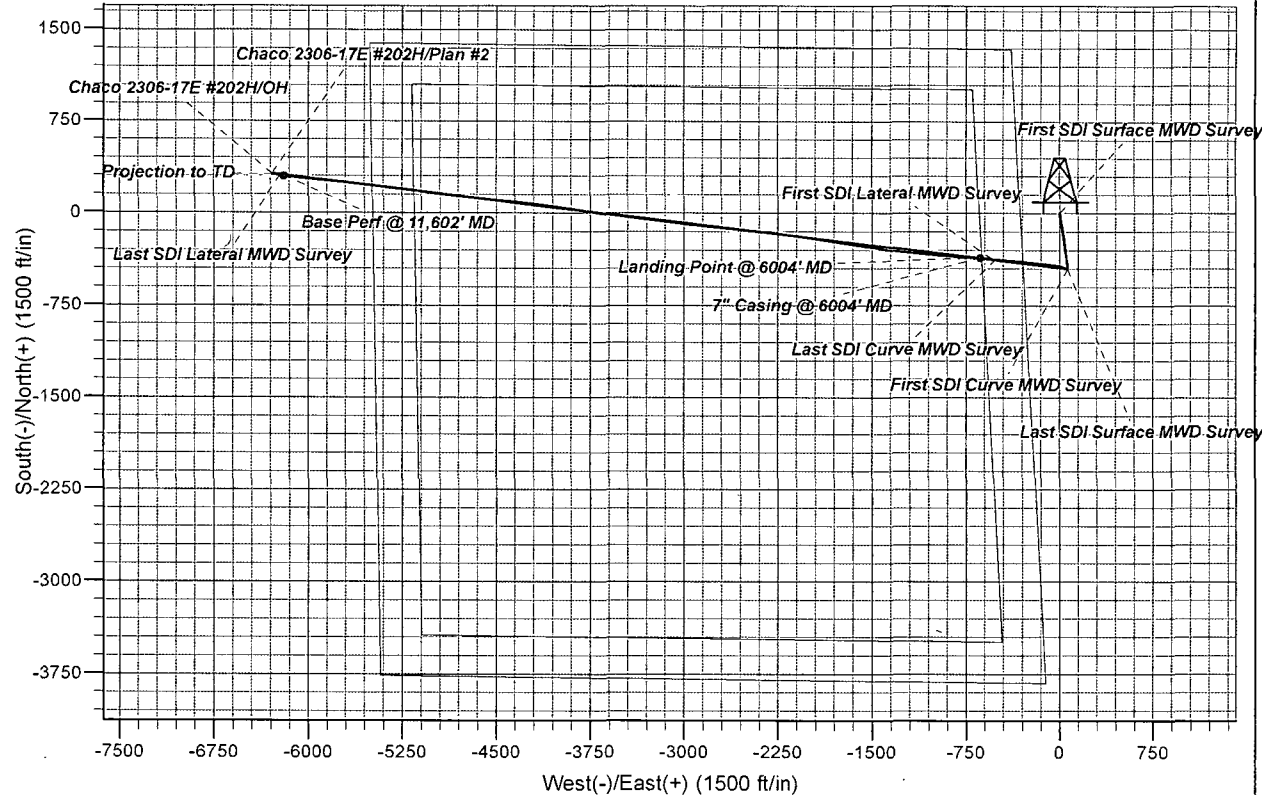
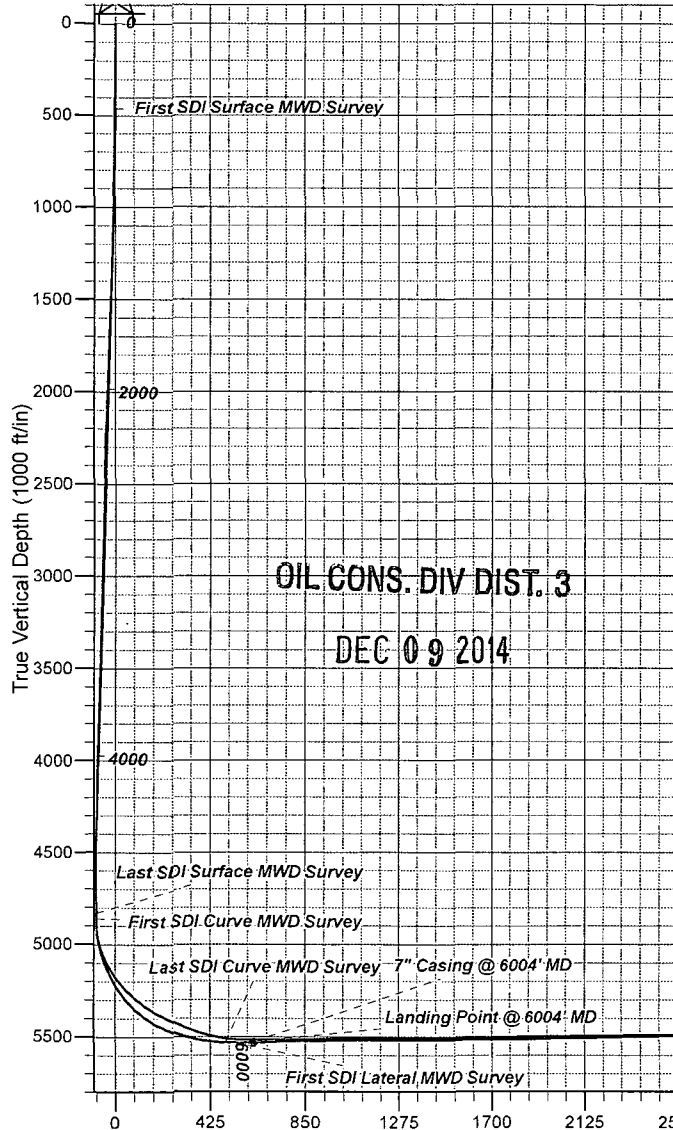
WPXENERGY



Azimuths to True North
 Magnetic North: 9.41°
 Magnetic Field
 Strength: 50058.9nT
 Dip Angle: 63.01°
 Date: 10/3/2014
 Model: BGGM2014

WELL DETAILS: Chaco 2306-17E #202H

+N/-S	+E/-W	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)	6910.00
0.00	0.00	Northing	Easting
		1904769.97	131471.38
		Latitude	Longitude
		36.2285300	-107.4995000



Vertical Section at 272.76° (850 ft/in)

Design: OH (Chaco 2306-17E #202H/OH)
Created By: Janie Collins Date: 16:33, October 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 Chaco 2306-17E #202H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17E	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	Chaco 2306-17E #202H	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 2306-17E		
Site Position:		Northing:	1,904,791.77 usft
From:	Lat/Long	Easting:	131,474.62 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Grid Convergence:	-0.74 °

Well	Chaco 2306-17E #202H		
Well Position	+N-S	0.00 ft	Northing: 1,904,769.97 usft
	+E-W	0.00 ft	Easting: 131,471.38 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Ground Level:	6,910.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	10/3/2014	9.41	63.01	50,059

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)	
	0.00	0.00	0.00	272.76	

Survey Program	Date	10/24/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
466.00	4,860.00	Survey #1 - Surface MWD Survey (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
4,891.00	5,879.00	Survey #2 - Curve MWD Survey (OH)	MWD SDI	MWD - Standard ver 1.0.1	
5,910.00	11,696.00	Survey #3 - Lateral MWD Survey (OH)	MWD-SDI		

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	1,904,769.97	131,471.38	36.2285300	-107.4995000
466.00	0.78	323.90	465.99	2.56	-1.87	1,904,772.55	131,469.55	36.2285370	-107.4995064
First SDI Surface MWD Survey									
497.00	0.83	322.10	496.98	2.91	-2.13	1,904,772.91	131,469.29	36.2285380	-107.4995073
529.00	0.76	318.78	528.98	3.25	-2.41	1,904,773.25	131,469.01	36.2285389	-107.4995082
561.00	1.08	187.81	560.98	3.11	-2.59	1,904,773.11	131,468.83	36.2285385	-107.4995088
592.00	2.95	182.31	591.96	2.03	-2.67	1,904,772.03	131,468.74	36.2285355	-107.4995091
624.00	3.80	182.94	623.90	0.15	-2.75	1,904,770.15	131,468.63	36.2285304	-107.4995094
656.00	4.00	184.62	655.83	-2.03	-2.90	1,904,767.98	131,468.46	36.2285244	-107.4995099
716.00	6.13	168.88	715.59	-7.26	-2.45	1,904,762.74	131,468.84	36.2285100	-107.4995083



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-17E #202H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17E	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	Chaco 2306-17E #202H	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
776.00	6.89	162.64	775.21	-13.83	-0.76	1,904,756.14	131,470.45	36.2284920	-107.4995026
837.00	6.67	163.86	835.78	-20.73	1.32	1,904,749.22	131,472.44	36.2284730	-107.4994956
897.00	5.58	158.37	895.44	-26.79	3.36	1,904,743.14	131,474.40	36.2284564	-107.4994886
958.00	5.57	167.51	956.15	-32.44	5.10	1,904,737.47	131,476.06	36.2284409	-107.4994828
1,019.00	5.88	174.67	1,016.85	-38.44	6.03	1,904,731.46	131,476.92	36.2284244	-107.4994796
1,079.00	5.35	168.71	1,076.56	-44.24	6.86	1,904,725.64	131,477.67	36.2284085	-107.4994768
1,140.00	5.08	176.01	1,137.31	-49.72	7.61	1,904,720.15	131,478.35	36.2283934	-107.4994743
1,201.00	5.40	178.58	1,198.05	-55.29	7.86	1,904,714.58	131,478.54	36.2283781	-107.4994734
1,262.00	5.95	170.90	1,258.75	-61.28	8.44	1,904,708.59	131,479.03	36.2283617	-107.4994714
1,323.00	6.40	163.97	1,319.40	-67.67	9.87	1,904,702.18	131,480.39	36.2283441	-107.4994666
1,383.00	6.43	164.87	1,379.02	-74.13	11.67	1,904,695.70	131,482.10	36.2283264	-107.4994605
1,444.00	6.57	163.66	1,439.63	-80.77	13.55	1,904,689.03	131,483.89	36.2283081	-107.4994541
1,505.00	6.81	165.21	1,500.22	-87.62	15.45	1,904,682.16	131,485.71	36.2282893	-107.4994477
1,565.00	6.72	163.14	1,559.80	-94.42	17.38	1,904,675.34	131,487.55	36.2282706	-107.4994411
1,626.00	7.31	173.09	1,620.34	-101.68	18.88	1,904,668.05	131,488.95	36.2282507	-107.4994360
1,686.00	7.62	172.42	1,679.84	-109.42	19.87	1,904,660.30	131,489.84	36.2282294	-107.4994327
1,748.00	7.61	171.46	1,741.29	-117.55	21.02	1,904,652.15	131,490.88	36.2282071	-107.4994288
1,809.00	7.60	171.70	1,801.75	-125.54	22.20	1,904,644.15	131,491.96	36.2281852	-107.4994248
1,869.00	7.46	171.28	1,861.23	-133.31	23.36	1,904,636.36	131,493.03	36.2281638	-107.4994208
1,930.00	7.34	170.93	1,921.73	-141.08	24.58	1,904,628.59	131,494.14	36.2281425	-107.4994167
1,990.00	7.33	171.16	1,981.24	-148.64	25.77	1,904,621.00	131,495.24	36.2281217	-107.4994127
2,051.00	7.46	172.33	2,041.73	-156.41	26.90	1,904,613.22	131,496.26	36.2281003	-107.4994089
2,112.00	7.19	170.15	2,102.23	-164.10	28.08	1,904,605.52	131,497.34	36.2280792	-107.4994049
2,173.00	6.98	170.16	2,162.76	-171.51	29.36	1,904,598.09	131,498.54	36.2280589	-107.4994005
2,233.00	6.54	167.38	2,222.35	-178.44	30.73	1,904,591.15	131,499.82	36.2280398	-107.4993959
2,294.00	6.73	170.30	2,282.94	-185.35	32.10	1,904,584.22	131,501.09	36.2280209	-107.4993912
2,357.00	6.26	173.36	2,345.53	-192.40	33.11	1,904,577.16	131,502.02	36.2280015	-107.4993878
2,421.00	6.63	172.79	2,409.13	-199.53	33.98	1,904,570.01	131,502.79	36.2279819	-107.4993848
2,484.00	7.00	172.50	2,471.68	-206.95	34.94	1,904,562.59	131,503.65	36.2279615	-107.4993816
2,547.00	6.92	172.26	2,534.22	-214.51	35.95	1,904,555.01	131,504.57	36.2279408	-107.4993782
2,610.00	6.91	170.28	2,596.76	-222.01	37.10	1,904,547.50	131,505.62	36.2279202	-107.4993743
2,673.00	6.71	167.71	2,659.32	-229.34	38.53	1,904,540.15	131,506.95	36.2279000	-107.4993694
2,738.00	6.87	171.48	2,723.86	-236.90	39.91	1,904,532.58	131,508.24	36.2278793	-107.4993647
2,801.00	6.91	173.90	2,786.41	-244.39	40.87	1,904,525.07	131,509.10	36.2278587	-107.4993615
2,864.00	6.89	173.10	2,848.95	-251.91	41.73	1,904,517.54	131,509.86	36.2278380	-107.4993586
2,926.00	6.57	173.11	2,910.52	-259.12	42.60	1,904,510.32	131,510.64	36.2278182	-107.4993556
2,990.00	6.46	174.61	2,974.11	-266.34	43.38	1,904,503.09	131,511.32	36.2277984	-107.4993530
3,053.00	6.36	173.77	3,036.72	-273.34	44.09	1,904,496.08	131,511.95	36.2277792	-107.4993506
3,116.00	6.46	173.20	3,099.32	-280.33	44.89	1,904,489.08	131,512.65	36.2277600	-107.4993479
3,180.00	6.54	172.20	3,162.91	-287.51	45.81	1,904,481.89	131,513.48	36.2277402	-107.4993448
3,243.00	6.63	172.32	3,225.50	-294.67	46.78	1,904,474.72	131,514.36	36.2277206	-107.4993415
3,307.00	6.49	173.35	3,289.08	-301.93	47.69	1,904,467.45	131,515.18	36.2277007	-107.4993384
3,370.00	6.20	173.58	3,351.69	-308.84	48.49	1,904,460.52	131,515.89	36.2276817	-107.4993357
3,434.00	6.14	175.67	3,415.32	-315.69	49.13	1,904,453.67	131,516.44	36.2276628	-107.4993335
3,497.00	6.21	173.18	3,477.96	-322.43	49.79	1,904,446.92	131,517.01	36.2276443	-107.4993313
3,561.00	6.07	174.05	3,541.59	-329.24	50.55	1,904,440.11	131,517.69	36.2276256	-107.4993287
3,624.00	7.13	173.15	3,604.17	-336.43	51.36	1,904,432.90	131,518.41	36.2276059	-107.4993259
3,688.00	7.84	172.20	3,667.62	-344.70	52.43	1,904,424.62	131,519.37	36.2275832	-107.4993223
3,751.00	8.04	170.83	3,730.02	-353.31	53.72	1,904,416.00	131,520.54	36.2275595	-107.4993180
3,815.00	8.27	172.22	3,793.37	-362.29	55.05	1,904,407.00	131,521.76	36.2275349	-107.4993134
3,878.00	7.88	172.53	3,855.75	-371.06	56.23	1,904,398.22	131,522.82	36.2275108	-107.4993094
3,941.00	7.56	172.14	3,918.18	-379.44	57.35	1,904,389.82	131,523.84	36.2274877	-107.4993056
4,005.00	7.34	170.27	3,981.64	-387.64	58.62	1,904,381.60	131,525.00	36.2274652	-107.4993013
4,068.00	6.98	172.03	4,044.15	-395.40	59.83	1,904,373.83	131,526.11	36.2274439	-107.4992972
4,131.00	6.35	171.70	4,106.72	-402.64	60.87	1,904,366.58	131,527.05	36.2274240	-107.4992937

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-17E #202H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17E	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	Chaco 2306-17E #202H	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
4,195.00	6.19	172.79	4,170.34	-409.57	61.81	1,904,359.64	131,527.91	36.2274050	-107.4992905
4,258.00	6.05	171.50	4,232.98	-416.22	62.73	1,904,352.98	131,528.74	36.2273867	-107.4992874
4,322.00	6.02	173.06	4,296.62	-422.89	63.63	1,904,346.30	131,529.56	36.2273684	-107.4992843
4,385.00	5.82	173.28	4,359.29	-429.34	64.40	1,904,339.84	131,530.25	36.2273507	-107.4992817
4,448.00	5.40	170.96	4,421.99	-435.44	65.24	1,904,333.73	131,531.01	36.2273339	-107.4992789
4,511.00	4.57	171.28	4,484.75	-440.85	66.09	1,904,328.31	131,531.79	36.2273191	-107.4992760
4,574.00	3.37	183.54	4,547.59	-445.18	66.36	1,904,323.97	131,532.00	36.2273072	-107.4992751
4,606.00	3.17	186.86	4,579.54	-446.99	66.19	1,904,322.16	131,531.81	36.2273022	-107.4992757
4,638.00	2.02	194.74	4,611.51	-448.42	65.94	1,904,320.74	131,531.54	36.2272983	-107.4992765
4,670.00	1.41	213.75	4,643.50	-449.29	65.58	1,904,319.87	131,531.17	36.2272959	-107.4992777
4,701.00	1.76	216.56	4,674.48	-449.99	65.09	1,904,319.18	131,530.66	36.2272940	-107.4992794
4,733.00	2.29	220.69	4,706.46	-450.87	64.38	1,904,318.31	131,529.94	36.2272915	-107.4992818
4,765.00	2.14	222.06	4,738.44	-451.80	63.56	1,904,317.39	131,529.11	36.2272890	-107.4992846
4,796.00	2.21	221.83	4,769.42	-452.67	62.77	1,904,316.53	131,528.32	36.2272866	-107.4992872
4,828.00	2.08	225.39	4,801.39	-453.54	61.95	1,904,315.67	131,527.48	36.2272842	-107.4992900
4,860.00	0.97	237.36	4,833.38	-454.09	61.31	1,904,315.12	131,526.83	36.2272827	-107.4992922
Last SDI Surface MWD Survey									
4,891.00	1.25	16.86	4,864.38	-453.91	61.18	1,904,315.31	131,526.71	36.2272832	-107.4992926
First SDI Curve MWD Survey									
4,923.00	2.68	350.55	4,896.36	-452.84	61.16	1,904,316.38	131,526.70	36.2272861	-107.4992927
4,955.00	5.22	328.19	4,928.28	-450.86	60.27	1,904,318.37	131,525.84	36.2272916	-107.4992957
4,987.00	8.32	305.89	4,960.06	-448.27	57.63	1,904,320.99	131,523.23	36.2272987	-107.4993047
5,018.00	11.03	297.09	4,990.62	-445.60	53.17	1,904,323.72	131,518.80	36.2273060	-107.4993198
5,050.00	13.60	294.09	5,021.88	-442.67	47.01	1,904,326.73	131,512.68	36.2273141	-107.4993407
5,081.00	15.05	293.75	5,051.92	-439.56	40.00	1,904,329.93	131,505.71	36.2273226	-107.4993645
5,113.00	17.33	288.81	5,082.65	-436.35	31.68	1,904,333.24	131,497.44	36.2273314	-107.4993926
5,145.00	18.77	285.36	5,113.07	-433.45	22.20	1,904,336.27	131,488.00	36.2273394	-107.4994248
5,177.00	21.24	282.73	5,143.14	-430.81	11.58	1,904,339.04	131,477.41	36.2273466	-107.4994608
5,208.00	22.75	281.37	5,171.88	-428.39	0.23	1,904,341.61	131,466.09	36.2273533	-107.4994993
5,243.00	24.97	279.58	5,203.89	-425.83	-13.69	1,904,344.35	131,452.20	36.2273603	-107.4995465
5,275.00	27.21	279.64	5,232.63	-423.48	-27.57	1,904,346.88	131,438.36	36.2273668	-107.4995935
5,307.00	29.61	278.72	5,260.77	-421.05	-42.60	1,904,349.50	131,423.36	36.2273734	-107.4996444
5,339.00	32.68	276.56	5,288.16	-418.87	-59.00	1,904,351.90	131,406.99	36.2273794	-107.4997000
5,371.00	35.88	275.62	5,314.60	-416.96	-76.92	1,904,354.03	131,389.10	36.2273847	-107.4997608
5,402.00	39.48	275.14	5,339.13	-415.19	-95.78	1,904,356.05	131,370.26	36.2273895	-107.4998247
5,434.00	42.69	276.25	5,363.24	-413.10	-116.70	1,904,358.41	131,349.37	36.2273953	-107.4998957
5,466.00	46.35	276.99	5,386.06	-410.51	-138.98	1,904,361.29	131,327.12	36.2274024	-107.4999712
5,498.00	50.12	276.89	5,407.37	-407.62	-162.67	1,904,364.48	131,303.47	36.2274103	-107.5000515
5,529.00	54.38	277.56	5,426.34	-404.54	-186.98	1,904,367.88	131,279.20	36.2274188	-107.5001339
5,561.00	58.72	276.39	5,443.98	-401.30	-213.48	1,904,371.45	131,252.75	36.2274277	-107.5002237
5,593.00	64.15	275.85	5,459.27	-398.31	-241.41	1,904,374.80	131,224.86	36.2274359	-107.5003184
5,612.00	65.47	275.51	5,467.36	-396.61	-258.52	1,904,376.73	131,207.77	36.2274406	-107.5003764
5,624.00	66.30	275.30	5,472.26	-395.58	-269.43	1,904,377.90	131,196.88	36.2274434	-107.5004134
5,656.00	66.65	274.84	5,485.03	-392.98	-298.65	1,904,380.87	131,167.69	36.2274505	-107.5005125
5,688.00	68.68	274.34	5,497.19	-390.62	-328.15	1,904,383.61	131,138.22	36.2274570	-107.5006125
5,720.00	72.89	273.38	5,507.72	-388.59	-358.30	1,904,386.03	131,108.11	36.2274626	-107.5007147
5,751.00	76.16	273.94	5,515.99	-386.68	-388.11	1,904,388.33	131,078.33	36.2274679	-107.5008157
5,783.00	80.08	274.47	5,522.58	-384.38	-419.33	1,904,391.02	131,047.13	36.2274742	-107.5009216
5,815.00	82.25	276.41	5,527.49	-381.38	-450.81	1,904,394.43	131,015.70	36.2274824	-107.5010283
5,847.00	84.39	276.38	5,531.22	-377.84	-482.39	1,904,398.38	130,984.17	36.2274921	-107.5011353
5,879.00	88.35	275.99	5,533.24	-374.40	-514.13	1,904,402.22	130,952.47	36.2275016	-107.5012430
Last SDI Curve MWD Survey									
5,910.00	90.34	274.70	5,533.60	-371.52	-544.99	1,904,405.51	130,921.65	36.2275095	-107.5013476
First SDI Lateral MWD Survey									

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-17E #202H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17E	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	Chaco 2306-17E #202H	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
5,942.00	91.61	275.42	5,533.05	-368.69	-576.86	1,904,408.74	130,889.82	36.2275172	-107.5014556
5,960.00	91.95	275.25	5,532.49	-367.02	-594.78	1,904,410.64	130,871.93	36.2275218	-107.5015163
6,004.00	92.10	274.02	5,530.94	-363.47	-638.60	1,904,414.76	130,828.15	36.2275316	-107.5016649
7" Casing @ 6004' MD - Landing Point @ 6004' MD - 36.2276658, -107.5036910									
6,076.00	92.35	272.00	5,528.14	-359.69	-710.45	1,904,419.46	130,756.36	36.2275420	-107.5019085
6,139.00	91.64	272.60	5,525.95	-357.17	-773.36	1,904,422.80	130,693.49	36.2275489	-107.5021217
6,202.00	91.01	274.33	5,524.49	-353.36	-836.22	1,904,427.42	130,630.68	36.2275593	-107.5023349
6,265.00	91.10	274.13	5,523.33	-348.71	-899.04	1,904,432.87	130,567.93	36.2275721	-107.5025478
6,329.00	90.57	275.28	5,522.40	-343.46	-962.82	1,904,438.94	130,504.22	36.2275865	-107.5027640
6,389.00	90.40	275.35	5,521.89	-337.91	-1,022.56	1,904,445.27	130,444.56	36.2276018	-107.5029665
6,451.00	90.30	276.22	5,521.51	-331.66	-1,084.24	1,904,452.32	130,382.96	36.2276189	-107.5031756
6,512.00	90.40	276.23	5,521.14	-325.04	-1,144.88	1,904,459.71	130,322.41	36.2276371	-107.5033812
6,573.00	90.40	276.65	5,520.71	-318.20	-1,205.49	1,904,467.33	130,261.89	36.2276559	-107.5035867
6,633.00	90.13	276.86	5,520.43	-311.14	-1,265.07	1,904,475.16	130,202.41	36.2276753	-107.5037887
6,693.00	90.34	277.13	5,520.19	-303.84	-1,324.63	1,904,483.23	130,142.95	36.2276953	-107.5039906
6,753.00	90.67	277.51	5,519.66	-296.19	-1,384.14	1,904,491.64	130,083.55	36.2277163	-107.5041923
6,814.00	90.40	277.54	5,519.09	-288.20	-1,444.61	1,904,500.41	130,023.18	36.2277382	-107.5043973
6,874.00	90.34	277.99	5,518.70	-280.10	-1,504.06	1,904,509.28	129,963.85	36.2277605	-107.5045988
6,935.00	90.57	278.57	5,518.22	-271.31	-1,564.42	1,904,518.84	129,903.60	36.2277846	-107.5048035
6,996.00	90.47	278.30	5,517.66	-262.37	-1,624.76	1,904,528.57	129,843.39	36.2278092	-107.5050080
7,057.00	90.60	278.29	5,517.10	-253.57	-1,685.11	1,904,538.15	129,783.14	36.2278334	-107.5052126
7,117.00	90.84	279.70	5,516.34	-244.19	-1,744.37	1,904,548.29	129,724.01	36.2278591	-107.5054135
7,178.00	90.84	279.65	5,515.45	-233.94	-1,804.50	1,904,559.31	129,664.03	36.2278873	-107.5056173
7,238.00	90.87	279.65	5,514.55	-223.88	-1,863.64	1,904,570.13	129,605.02	36.2279149	-107.5058178
7,299.00	90.66	279.23	5,513.74	-213.87	-1,923.81	1,904,580.91	129,544.98	36.2279423	-107.5060218
7,360.00	91.01	277.89	5,512.85	-204.80	-1,984.12	1,904,590.76	129,484.79	36.2279673	-107.5062263
7,421.00	91.88	277.43	5,511.31	-196.67	-2,044.56	1,904,599.67	129,424.47	36.2279896	-107.5064312
7,482.00	91.82	277.49	5,509.34	-188.75	-2,105.01	1,904,608.37	129,364.12	36.2280113	-107.5066361
7,542.00	91.75	277.80	5,507.47	-180.77	-2,164.45	1,904,617.11	129,304.79	36.2280332	-107.5068376
7,603.00	91.65	277.01	5,505.66	-172.92	-2,224.91	1,904,625.75	129,244.43	36.2280548	-107.5070426
7,664.00	91.65	276.47	5,503.91	-165.76	-2,285.46	1,904,633.68	129,183.98	36.2280744	-107.5072478
7,725.00	91.58	276.16	5,502.19	-159.05	-2,346.07	1,904,641.17	129,123.46	36.2280928	-107.5074533
7,786.00	91.64	275.92	5,500.47	-152.64	-2,406.71	1,904,648.37	129,062.91	36.2281104	-107.5076589
7,847.00	91.95	276.03	5,498.56	-146.29	-2,467.35	1,904,655.50	129,002.36	36.2281279	-107.5078644
7,907.00	90.77	275.22	5,497.14	-140.41	-2,527.04	1,904,662.14	128,942.75	36.2281440	-107.5080668
7,967.00	90.30	275.98	5,496.58	-134.56	-2,586.75	1,904,668.77	128,883.12	36.2281601	-107.5082692
8,031.00	90.30	275.60	5,496.24	-128.10	-2,650.42	1,904,676.04	128,819.54	36.2281778	-107.5084851
8,095.00	89.73	275.56	5,496.23	-121.88	-2,714.12	1,904,683.09	128,755.93	36.2281949	-107.5087010
8,158.00	90.34	276.07	5,496.19	-115.49	-2,776.79	1,904,690.28	128,693.34	36.2282124	-107.5089135
8,222.00	90.44	276.25	5,495.75	-108.63	-2,840.42	1,904,697.96	128,629.80	36.2282312	-107.5091292
8,286.00	90.37	276.40	5,495.30	-101.58	-2,904.03	1,904,705.83	128,566.29	36.2282506	-107.5093448
8,350.00	90.44	276.00	5,494.85	-94.66	-2,967.66	1,904,713.57	128,502.76	36.2282695	-107.5095605
8,413.00	90.54	276.59	5,494.31	-87.76	-3,030.27	1,904,721.28	128,440.24	36.2282885	-107.5097728
8,476.00	90.20	277.47	5,493.90	-80.05	-3,092.80	1,904,729.80	128,377.82	36.2283097	-107.5099848
8,540.00	90.30	276.98	5,493.62	-72.00	-3,156.29	1,904,738.66	128,314.44	36.2283317	-107.5102000
8,603.00	90.07	276.92	5,493.42	-64.37	-3,218.83	1,904,747.09	128,252.00	36.2283527	-107.5104120
8,667.00	90.57	277.55	5,493.06	-56.31	-3,282.31	1,904,755.97	128,188.62	36.2283748	-107.5106272
8,730.00	90.67	277.51	5,492.38	-48.06	-3,344.77	1,904,765.03	128,126.28	36.2283974	-107.5108390
8,793.00	90.97	276.63	5,491.48	-40.31	-3,407.28	1,904,773.59	128,063.87	36.2284187	-107.5110509
8,856.00	90.37	276.47	5,490.74	-33.12	-3,469.87	1,904,781.58	128,001.39	36.2284384	-107.5112631
8,919.00	90.69	277.41	5,490.16	-25.51	-3,532.40	1,904,790.00	127,938.96	36.2284593	-107.5114751
8,982.00	91.65	277.95	5,488.87	-17.09	-3,594.82	1,904,799.22	127,876.65	36.2284824	-107.5116867
9,046.00	91.48	278.29	5,487.12	-8.05	-3,658.16	1,904,809.07	127,813.44	36.2285072	-107.5119014
9,109.00	91.01	279.05	5,485.75	1.44	-3,720.42	1,904,819.37	127,751.30	36.2285333	-107.5121125
9,172.00	90.50	279.03	5,484.92	11.34	-3,782.63	1,904,830.06	127,689.22	36.2285604	-107.5123234

Company:	WPX Energy/Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-17E #202H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17E	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	Chaco 2306-17E #202H	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
9,236.00	90.30	278.69	5,484.48	21.20	-3,845.87	1,904,840.74	127,626.12	36.2285875	-107.5125377
9,300.00	90.91	278.56	5,483.80	30.79	-3,909.14	1,904,851.15	127,562.97	36.2286138	-107.5127522
9,362.00	90.84	278.59	5,482.86	40.04	-3,970.44	1,904,861.18	127,501.80	36.2286392	-107.5129601
9,426.00	91.01	278.26	5,481.82	49.41	-4,033.74	1,904,871.37	127,438.62	36.2286649	-107.5131747
9,489.00	90.97	277.39	5,480.73	57.99	-4,096.14	1,904,880.75	127,376.34	36.2286885	-107.5133862
9,552.00	90.84	277.11	5,479.74	65.94	-4,158.63	1,904,889.51	127,313.96	36.2287103	-107.5135981
9,616.00	91.11	276.52	5,478.65	73.53	-4,222.17	1,904,897.92	127,250.52	36.2287311	-107.5138135
9,679.00	91.61	275.79	5,477.15	80.28	-4,284.79	1,904,905.48	127,187.99	36.2287496	-107.5140257
9,743.00	92.15	275.89	5,475.05	86.79	-4,348.42	1,904,912.81	127,124.45	36.2287675	-107.5142415
9,806.00	92.65	275.53	5,472.42	93.05	-4,411.05	1,904,919.87	127,061.90	36.2287847	-107.5144538
9,870.00	91.11	275.65	5,470.32	99.29	-4,474.71	1,904,926.93	126,998.33	36.2288017	-107.5146696
9,933.00	91.35	276.01	5,468.96	105.68	-4,537.37	1,904,934.13	126,935.76	36.2288193	-107.5148820
9,997.00	90.71	275.64	5,467.81	112.18	-4,601.03	1,904,941.44	126,872.19	36.2288371	-107.5150978
10,060.00	90.77	275.56	5,467.00	118.32	-4,663.73	1,904,948.40	126,809.58	36.2288540	-107.5153104
10,124.00	90.94	275.14	5,466.05	124.29	-4,727.44	1,904,955.19	126,745.95	36.2288703	-107.5155264
10,252.00	91.24	276.35	5,463.61	137.10	-4,854.77	1,904,969.64	126,618.79	36.2289054	-107.5159580
10,315.00	90.81	278.03	5,462.48	144.98	-4,917.26	1,904,978.33	126,556.41	36.2289271	-107.5161699
10,379.00	89.70	278.41	5,462.20	154.14	-4,980.60	1,904,988.29	126,493.19	36.2289522	-107.5163846
10,443.00	89.80	278.54	5,462.48	163.57	-5,043.91	1,904,998.54	126,430.02	36.2289780	-107.5165992
10,506.00	90.31	277.91	5,462.42	172.58	-5,106.26	1,905,008.35	126,367.79	36.2290028	-107.5168106
10,570.00	90.67	276.96	5,461.87	180.86	-5,169.72	1,905,017.45	126,304.44	36.2290255	-107.5170258
10,633.00	90.87	277.13	5,461.02	188.59	-5,232.23	1,905,025.98	126,242.03	36.2290467	-107.5172377
10,696.00	90.30	277.39	5,460.38	196.55	-5,294.73	1,905,034.75	126,179.64	36.2290685	-107.5174496
10,760.00	90.67	277.61	5,459.84	204.90	-5,358.18	1,905,043.92	126,116.31	36.2290914	-107.5176647
10,823.00	90.20	276.38	5,459.36	212.57	-5,420.70	1,905,052.40	126,053.88	36.2291125	-107.5178766
10,886.00	90.13	276.38	5,459.18	219.57	-5,483.31	1,905,060.21	125,991.37	36.2291317	-107.5180889
10,949.00	90.54	276.06	5,458.81	226.40	-5,545.94	1,905,067.84	125,928.83	36.2291504	-107.5183012
11,012.00	90.84	276.18	5,458.05	233.12	-5,608.58	1,905,075.36	125,866.29	36.2291688	-107.5185136
11,076.00	90.87	275.87	5,457.10	239.83	-5,672.22	1,905,082.90	125,802.74	36.2291872	-107.5187293
11,139.00	91.04	275.91	5,456.05	246.30	-5,734.88	1,905,090.17	125,740.17	36.2292049	-107.5189417
11,202.00	90.81	275.54	5,455.03	252.58	-5,797.55	1,905,097.26	125,677.58	36.2292222	-107.5191542
11,266.00	90.67	275.13	5,454.20	258.53	-5,861.27	1,905,104.03	125,613.95	36.2292385	-107.5193702
11,329.00	90.47	275.99	5,453.58	264.63	-5,923.97	1,905,110.94	125,551.33	36.2292552	-107.5195828
11,393.00	90.57	276.41	5,453.00	271.55	-5,987.59	1,905,118.67	125,487.80	36.2292741	-107.5197985
11,456.00	90.34	276.24	5,452.50	278.49	-6,050.21	1,905,126.42	125,425.28	36.2292932	-107.5200107
11,518.00	90.34	276.46	5,452.13	285.34	-6,111.83	1,905,134.07	125,363.76	36.2293120	-107.5202196
11,581.00	91.01	277.30	5,451.39	292.89	-6,174.37	1,905,142.42	125,301.32	36.2293327	-107.5204317
11,602.91	91.19	277.63	5,450.96	295.73	-6,196.09	1,905,145.55	125,279.64	36.2293405	-107.5205053
Base Perf @ 11,602' MD - 36.2293405 -107.5205053									
11,634.00	91.45	278.09	5,450.25	299.98	-6,226.88	1,905,150.19	125,248.90	36.2293521	-107.5206097
Last SDI Lateral MWD Survey									
11,696.00	91.45	278.09	5,448.68	308.71	-6,288.24	1,905,159.71	125,187.66	36.2293760	-107.5208177
Projection to TD									



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-17E #202H
Project:	Rio Arriba County, NM NAD27	TVD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Site:	Chaco 2306-17E	MD Reference:	GL 6910' & RKB 13' @ 6923.00ft (Aztec 222)
Well:	Chaco 2306-17E #202H	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)	
466.00	465.99	2.56	-1.87	First SDI Surface MWD Survey
4,860.00	4,833.38	-454.09	61.31	Last SDI Surface MWD Survey
4,891.00	4,864.38	-453.91	61.18	First SDI Curve MWD Survey
5,879.00	5,533.24	-374.40	-514.13	Last SDI Curve MWD Survey
5,910.00	5,533.60	-371.52	-544.99	First SDI Lateral MWD Survey
6,004.00	5,530.94	-363.47	-638.60	7" Casing @ 6004' MD
6,004.00	5,530.94	-363.47	-638.60	Landing Point @ 6004' MD
6,004.00	5,530.94	-363.47	-638.60	36.2276658, -107.5036910
11,602.91	5,450.96	295.73	-6,196.09	Base Perf @ 11,602' MD
11,602.91	5,450.96	295.73	-6,196.09	36.2293405, -107.5205053
11,634.00	5,450.25	299.98	-6,226.88	Last SDI Lateral MWD Survey
11,696.00	5,448.68	308.71	-6,288.24	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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