

District IV
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AS DRILLED

Certificate Number 15269



WPX Energy

T23N R7W

Chaco 2307-07N

MC 8 COM #409H - Slot A3

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

02 February, 2016

OIL CONS. DIV DIST. 3
MAR 02 2016



CONFIDENTIAL



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Scientific Drilling

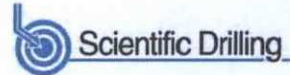


OIL CONS. DIV DIST. 3

MAR 02 2016



Company Name: WPX Energy
Project: T23N R7W
Site: Chaco 2307-07N
Well: MC 8 COM #409H

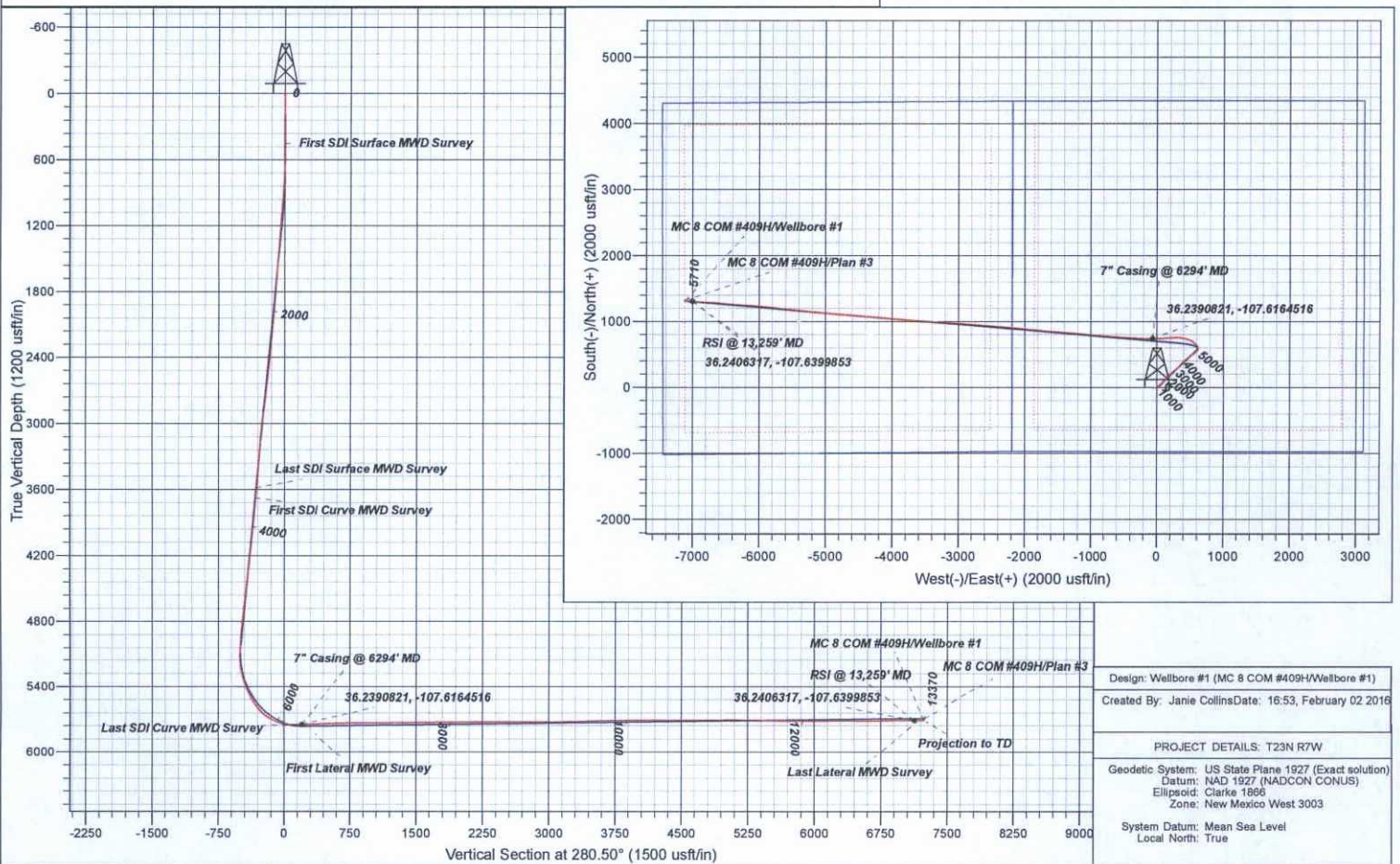


Azimuths to True North
Magnetic North: 9.05°

Magnetic Field
Strength: 49793.5nT
Dip Angle: 62.93°
Date: 1/20/2016
Model: HDGM

WELL DETAILS: MC 8 COM #409H

+N/-S	+E/-W	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)	7307.00	
		Northing	Easting	Latitude
0.00	0.00	1905594.54	564024.40	36.2370360
				Longitude
				-107.6162330
				A3



Design: Wellbore #1 (MC 8 COM #409H/Wellbore #1)
Created By: Janie Collins Date: 16:53, February 02 2016
PROJECT DETAILS: T23N R7W
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level
Local North: True



Survey Report - Geographic



Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 8 COM #409H - Slot A3
Project:	T23N R7W	TVD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Site:	Chaco 2307-07N	MD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Well:	MC 8 COM #409H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

OIL CONS. DIV DIST. 3

MAR 02 2016

Project		T23N R7W	
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 2307-07N			
Site Position:		Northing:	1,905,594.54 usft	Latitude:	36.2370360
From:	Lat/Long	Easting:	564,024.40 usft	Longitude:	-107.6162330
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.13 °

Well	MC 8 COM #409H - Slot A3					
Well Position	+N/-S	0.00 usft	Northing:	1,905,594.54 usft	Latitude:	36.2370360
	+E/-W	0.00 usft	Easting:	564,024.40 usft	Longitude:	-107.6162330
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,307.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/20/2016	9.05	62.93	49,794

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	280.50	

Survey Program		Date	2/2/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
55.00	295.00	Surface gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
451.00	3,640.00	Survey #2 - Surface MWD Survey (Wellbo	SDI MWD	SDI MWD - Standard ver 1.0.1	
3,731.00	6,249.00	Survey #3 - Curve MWD Survey (Wellbore	SDI MWD	SDI MWD - Standard ver 1.0.1	
6,337.00	13,370.00	Survey #4 - Lateral MWD Survey (Wellbor	SDI MWD	SDI MWD - Standard ver 1.0.1	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	1,905,594.54	564,024.40	36.2370360	-107.6162330
55.00	0.38	30.00	55.00	0.16	0.09	1,905,594.70	564,024.49	36.2370364	-107.6162327
85.00	0.47	60.00	85.00	0.31	0.25	1,905,594.85	564,024.65	36.2370368	-107.6162322
115.00	0.72	90.00	115.00	0.37	0.54	1,905,594.91	564,024.94	36.2370370	-107.6162312
145.00	0.52	120.00	145.00	0.30	0.85	1,905,594.84	564,025.25	36.2370368	-107.6162302
175.00	0.46	149.99	174.99	0.13	1.03	1,905,594.67	564,025.43	36.2370363	-107.6162295
205.00	0.48	179.99	204.99	-0.10	1.09	1,905,594.44	564,025.49	36.2370357	-107.6162293
235.00	0.37	209.99	234.99	-0.31	1.04	1,905,594.23	564,025.44	36.2370351	-107.6162295
265.00	0.52	239.99	264.99	-0.46	0.87	1,905,594.08	564,025.28	36.2370347	-107.6162301

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 8 COM #409H - Slot A3
Project:	T23N R7W	TVD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Site:	Chaco 2307-07N	MD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Well:	MC 8 COM #409H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
295.00	0.44	269.99	294.99	-0.53	0.64	1,905,594.01	564,025.04	36.2370345	-107.6162309
451.00	0.53	231.74	450.99	-0.98	-0.53	1,905,593.56	564,023.88	36.2370333	-107.6162348
First SDI Surface MWD Survey									
542.00	0.62	92.89	541.98	-1.27	-0.36	1,905,593.28	564,024.04	36.2370325	-107.6162343
634.00	2.55	79.74	633.94	-0.93	2.15	1,905,593.62	564,026.55	36.2370334	-107.6162258
724.00	4.14	69.90	723.79	0.55	7.17	1,905,595.11	564,031.57	36.2370375	-107.6162087
816.00	6.17	65.38	815.41	3.75	14.78	1,905,598.32	564,039.18	36.2370463	-107.6161829
907.00	7.21	54.67	905.80	9.09	23.89	1,905,603.68	564,048.27	36.2370609	-107.6161520
998.00	8.64	44.01	995.93	17.31	33.30	1,905,611.93	564,057.66	36.2370835	-107.6161201
1,090.00	8.68	47.34	1,086.88	26.98	43.20	1,905,621.62	564,067.54	36.2371101	-107.6160865
1,181.00	10.06	44.42	1,176.66	37.31	53.82	1,905,631.98	564,078.13	36.2371385	-107.6160505
1,272.00	10.13	41.15	1,266.26	49.02	64.64	1,905,643.70	564,088.94	36.2371706	-107.6160138
1,363.00	10.36	41.49	1,355.81	61.17	75.33	1,905,655.88	564,099.60	36.2372040	-107.6159776
1,455.00	10.16	41.45	1,446.33	73.45	86.18	1,905,668.18	564,110.42	36.2372378	-107.6159408
1,546.00	10.88	41.48	1,535.80	85.90	97.18	1,905,680.66	564,121.39	36.2372720	-107.6159035
1,637.00	11.43	42.28	1,625.08	99.00	108.94	1,905,693.79	564,133.12	36.2373080	-107.6158636
1,728.00	12.00	41.72	1,714.19	112.74	121.30	1,905,707.55	564,145.45	36.2373457	-107.6158217
1,819.00	11.41	42.41	1,803.30	126.44	133.67	1,905,721.29	564,157.79	36.2373833	-107.6157798
1,911.00	12.09	41.03	1,893.37	140.43	146.13	1,905,735.30	564,170.22	36.2374218	-107.6157375
2,002.00	11.49	33.33	1,982.45	155.19	157.37	1,905,750.09	564,181.42	36.2374623	-107.6156994
2,093.00	11.61	39.06	2,071.61	169.88	168.12	1,905,764.80	564,192.14	36.2375027	-107.6156630
2,184.00	11.14	44.11	2,160.83	183.30	180.01	1,905,778.25	564,204.00	36.2375395	-107.6156226
2,276.00	11.76	51.38	2,251.00	195.53	193.52	1,905,790.51	564,217.48	36.2375731	-107.6155768
2,366.00	11.96	48.11	2,339.08	207.48	207.63	1,905,802.49	564,231.56	36.2376060	-107.6155290
2,456.00	12.17	45.74	2,427.09	220.33	221.36	1,905,815.37	564,245.27	36.2376413	-107.6154824
2,548.00	11.63	44.54	2,517.12	233.71	234.81	1,905,828.78	564,258.69	36.2376780	-107.6154368
2,639.00	11.90	49.50	2,606.21	246.34	248.38	1,905,841.44	564,272.23	36.2377127	-107.6153908
2,730.00	12.54	51.19	2,695.14	258.63	263.21	1,905,853.76	564,287.03	36.2377465	-107.6153405
2,821.00	12.86	51.26	2,783.92	271.15	278.81	1,905,866.32	564,302.60	36.2377809	-107.6152876
2,912.00	13.24	50.95	2,872.57	284.06	294.80	1,905,879.26	564,318.57	36.2378163	-107.6152334
3,003.00	13.86	51.84	2,961.03	297.36	311.46	1,905,892.60	564,335.20	36.2378529	-107.6151769
3,094.00	13.31	44.71	3,049.49	311.54	327.40	1,905,906.81	564,351.11	36.2378918	-107.6151228
3,185.00	12.08	38.44	3,138.27	326.44	340.70	1,905,921.75	564,364.37	36.2379328	-107.6150778
3,276.00	12.22	39.32	3,227.23	341.35	352.72	1,905,936.68	564,376.35	36.2379737	-107.6150370
3,367.00	11.89	38.70	3,316.23	356.12	364.68	1,905,951.48	564,388.29	36.2380143	-107.6149964
3,458.00	11.22	45.37	3,405.39	369.65	376.84	1,905,965.04	564,400.42	36.2380515	-107.6149552
3,549.00	9.79	48.61	3,494.86	380.99	388.95	1,905,976.40	564,412.50	36.2380826	-107.6149141
3,640.00	9.76	48.62	3,584.54	391.20	400.54	1,905,986.64	564,424.07	36.2381107	-107.6148748
Last SDI Surface MWD Survey									
3,731.00	10.38	48.78	3,674.14	401.70	412.50	1,905,997.17	564,436.00	36.2381395	-107.6148343
First SDI Curve MWD Survey									
3,822.00	10.17	47.97	3,763.68	412.48	424.63	1,906,007.98	564,448.11	36.2381691	-107.6147931
3,912.00	10.11	45.84	3,852.27	423.31	436.20	1,906,018.83	564,459.65	36.2381989	-107.6147539
4,003.00	11.37	53.11	3,941.68	434.26	449.10	1,906,029.81	564,472.53	36.2382289	-107.6147101
4,094.00	11.03	51.68	4,030.95	445.04	463.11	1,906,040.62	564,486.51	36.2382586	-107.6146627
4,185.00	12.17	51.58	4,120.09	456.40	477.45	1,906,052.01	564,500.83	36.2382898	-107.6146140
4,276.00	11.87	48.97	4,209.09	468.50	492.03	1,906,064.15	564,515.38	36.2383230	-107.6145646
4,367.00	11.90	48.61	4,298.14	480.85	506.13	1,906,076.53	564,529.45	36.2383569	-107.6145168
4,458.00	12.27	48.98	4,387.12	493.40	520.46	1,906,089.11	564,543.76	36.2383914	-107.6144682
4,549.00	11.34	49.48	4,476.20	505.56	534.56	1,906,101.30	564,557.83	36.2384248	-107.6144204
4,640.00	11.78	51.59	4,565.35	517.14	548.64	1,906,112.91	564,571.88	36.2384566	-107.6143726
4,731.00	11.87	52.03	4,654.42	528.67	563.30	1,906,124.48	564,586.51	36.2384883	-107.6143229
4,822.00	12.31	49.83	4,743.40	540.69	578.09	1,906,136.52	564,601.28	36.2385213	-107.6142728
4,913.00	12.08	47.33	4,832.35	553.40	592.50	1,906,149.27	564,615.66	36.2385562	-107.6142239
5,004.00	11.43	45.26	4,921.44	566.20	605.91	1,906,162.10	564,629.04	36.2385914	-107.6141784

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 8 COM #409H - Slot A3
Project:	T23N R7W	TVD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Site:	Chaco 2307-07N	MD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Well:	MC 8 COM #409H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,049.00	10.90	44.29	4,965.59	572.38	612.04	1,906,168.30	564,635.16	36.2386084	-107.6141576
5,095.00	10.46	35.56	5,010.80	578.90	617.51	1,906,174.82	564,640.61	36.2386263	-107.6141391
5,140.00	10.17	22.69	5,055.08	585.88	621.42	1,906,181.82	564,644.51	36.2386455	-107.6141258
5,186.00	10.85	7.81	5,100.31	593.92	623.57	1,906,189.86	564,646.64	36.2386676	-107.6141185
5,231.00	12.16	349.93	5,144.42	602.79	623.32	1,906,198.73	564,646.37	36.2386919	-107.6141194
5,277.00	14.22	338.52	5,189.21	612.82	620.40	1,906,208.75	564,643.43	36.2387195	-107.6141293
5,322.00	18.29	331.78	5,232.41	624.19	615.04	1,906,220.11	564,638.04	36.2387507	-107.6141475
5,368.00	20.93	325.02	5,275.74	637.29	606.91	1,906,233.19	564,629.89	36.2387867	-107.6141750
5,413.00	22.96	316.93	5,317.49	650.29	596.31	1,906,246.16	564,619.25	36.2388224	-107.6142110
5,459.00	25.60	312.74	5,359.42	663.59	582.88	1,906,259.44	564,605.79	36.2388589	-107.6142565
5,504.00	29.41	311.39	5,399.33	677.50	567.44	1,906,273.31	564,590.33	36.2388971	-107.6143089
5,550.00	33.07	309.88	5,438.65	693.02	549.33	1,906,288.79	564,572.18	36.2389398	-107.6143703
5,594.00	34.82	302.96	5,475.16	707.56	529.57	1,906,303.28	564,552.39	36.2389797	-107.6144373
5,640.00	35.97	294.69	5,512.68	720.35	506.26	1,906,316.03	564,529.05	36.2390149	-107.6145163
5,685.00	39.48	288.54	5,548.28	730.43	480.68	1,906,326.05	564,503.44	36.2390426	-107.6146031
5,731.00	44.27	284.67	5,582.53	739.15	451.26	1,906,334.70	564,474.00	36.2390665	-107.6147028
5,777.00	49.86	282.39	5,613.85	747.00	418.52	1,906,342.47	564,441.25	36.2390881	-107.6148138
5,822.00	55.15	278.96	5,641.24	753.57	383.45	1,906,348.97	564,406.17	36.2391061	-107.6149328
5,868.00	59.88	274.30	5,665.95	758.00	344.93	1,906,353.32	564,367.64	36.2391183	-107.6150634
5,913.00	61.54	272.57	5,687.97	760.35	305.76	1,906,355.58	564,328.46	36.2391248	-107.6151962
5,959.00	67.08	268.85	5,707.90	760.83	264.34	1,906,355.96	564,287.03	36.2391261	-107.6153367
6,004.00	72.17	267.11	5,723.57	759.34	222.19	1,906,354.37	564,244.89	36.2391220	-107.6154796
6,050.00	76.15	265.95	5,736.12	756.65	178.03	1,906,351.59	564,200.74	36.2391146	-107.6156293
6,095.00	81.83	265.93	5,744.71	753.53	133.99	1,906,348.37	564,156.70	36.2391060	-107.6157787
6,141.00	86.26	266.31	5,749.48	750.43	88.35	1,906,345.17	564,111.07	36.2390975	-107.6159334
6,187.00	89.60	267.18	5,751.14	747.82	42.46	1,906,342.46	564,065.19	36.2390904	-107.6160890
6,249.00	91.10	268.59	5,750.77	745.53	-19.49	1,906,340.03	564,003.24	36.2390841	-107.6162991
Last SDI Curve MWD Survey									
6,294.00	91.41	269.61	5,749.78	744.83	-64.47	1,906,339.22	563,958.26	36.2390821	-107.6164517
7" Casing @ 6294' MD - 36.2390821, -107.6164516									
6,337.00	91.71	270.58	5,748.61	744.90	-107.46	1,906,339.20	563,915.28	36.2390823	-107.6165974
First Lateral MWD Survey									
6,394.00	91.91	270.99	5,746.81	745.68	-164.42	1,906,339.85	563,858.31	36.2390845	-107.6167906
6,485.00	92.72	271.57	5,743.13	747.71	-255.32	1,906,341.68	563,767.41	36.2390900	-107.6170988
6,577.00	91.51	271.99	5,739.74	750.56	-347.21	1,906,344.33	563,675.51	36.2390979	-107.6174104
6,668.00	90.94	273.15	5,737.79	754.64	-438.10	1,906,348.20	563,584.61	36.2391091	-107.6177186
6,759.00	91.21	275.98	5,736.08	761.88	-528.79	1,906,355.24	563,493.91	36.2391290	-107.6180261
6,850.00	90.77	275.26	5,734.51	770.79	-619.33	1,906,363.95	563,403.34	36.2391534	-107.6183332
6,941.00	89.80	274.05	5,734.06	778.18	-710.03	1,906,371.13	563,312.63	36.2391737	-107.6186407
7,032.00	90.47	274.64	5,733.84	785.07	-800.77	1,906,377.82	563,221.88	36.2391927	-107.6189484
7,123.00	90.70	274.50	5,732.91	792.32	-891.47	1,906,384.87	563,131.16	36.2392126	-107.6192560
7,214.00	90.44	274.35	5,732.01	799.34	-982.20	1,906,391.69	563,040.42	36.2392318	-107.6195636
7,305.00	90.34	273.91	5,731.39	805.90	-1,072.96	1,906,398.04	562,949.64	36.2392498	-107.6198714
7,396.00	90.87	275.82	5,730.43	813.62	-1,163.62	1,906,405.55	562,858.96	36.2392710	-107.6201789
7,487.00	90.17	275.25	5,729.60	822.39	-1,254.19	1,906,414.12	562,768.37	36.2392951	-107.6204860
7,578.00	90.54	275.53	5,729.04	830.94	-1,344.79	1,906,422.47	562,677.76	36.2393186	-107.6207932
7,669.00	90.77	275.16	5,728.00	839.42	-1,435.39	1,906,430.74	562,587.14	36.2393419	-107.6211004
7,760.00	90.13	274.79	5,727.28	847.31	-1,526.04	1,906,438.43	562,496.47	36.2393635	-107.6214078
7,851.00	90.23	275.08	5,727.00	855.14	-1,616.70	1,906,446.05	562,405.79	36.2393850	-107.6217153
7,943.00	90.27	275.04	5,726.60	863.25	-1,708.34	1,906,453.96	562,314.13	36.2394073	-107.6220260
8,034.00	90.22	275.45	5,726.21	871.57	-1,798.96	1,906,462.08	562,223.49	36.2394301	-107.6223333
8,126.00	90.23	275.62	5,725.85	880.44	-1,890.53	1,906,470.75	562,131.90	36.2394545	-107.6226438
8,217.00	90.04	275.89	5,725.63	889.57	-1,981.07	1,906,479.67	562,041.34	36.2394796	-107.6229508
8,308.00	90.31	275.89	5,725.35	898.91	-2,071.59	1,906,488.81	561,950.80	36.2395052	-107.6232578
8,399.00	90.64	276.26	5,724.60	908.54	-2,162.08	1,906,498.23	561,860.30	36.2395316	-107.6235646

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 8 COM #409H - Slot A3
Project:	T23N RTW	TVD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Site:	Chaco 2307-07N	MD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Well:	MC 8 COM #409H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,490.00	90.67	275.70	5,723.56	918.02	-2,252.58	1,906,507.51	561,769.78	36.2395577	-107.6238715
8,581.00	90.23	274.96	5,722.84	926.47	-2,343.18	1,906,515.76	561,679.15	36.2395809	-107.6241787
8,672.00	90.13	274.30	5,722.56	933.81	-2,433.88	1,906,522.90	561,588.44	36.2396010	-107.6244863
8,763.00	89.43	273.39	5,722.91	939.92	-2,524.67	1,906,528.80	561,497.63	36.2396178	-107.6247942
8,854.00	89.63	274.39	5,723.65	946.09	-2,615.46	1,906,534.77	561,406.83	36.2396347	-107.6251021
8,946.00	90.10	274.74	5,723.87	953.41	-2,707.17	1,906,541.89	561,315.11	36.2396548	-107.6254130
9,037.00	89.29	273.66	5,724.36	960.08	-2,797.92	1,906,548.35	561,224.34	36.2396731	-107.6257208
9,128.00	89.53	274.95	5,725.29	966.91	-2,888.66	1,906,554.98	561,133.59	36.2396918	-107.6260285
9,220.00	91.81	274.20	5,724.22	974.24	-2,980.35	1,906,562.11	561,041.88	36.2397119	-107.6263394
9,311.00	91.51	273.76	5,721.58	980.56	-3,071.09	1,906,568.22	560,951.12	36.2397293	-107.6266471
9,401.00	91.71	273.68	5,719.05	986.39	-3,160.87	1,906,573.85	560,861.33	36.2397453	-107.6269515
9,492.00	91.24	272.82	5,716.71	991.55	-3,251.69	1,906,578.81	560,770.50	36.2397594	-107.6272595
9,583.00	91.45	273.78	5,714.57	996.79	-3,342.51	1,906,583.84	560,679.67	36.2397738	-107.6275675
9,674.00	92.05	274.24	5,711.79	1,003.15	-3,433.25	1,906,590.00	560,588.92	36.2397912	-107.6278752
9,765.00	90.57	274.16	5,709.71	1,009.81	-3,523.98	1,906,596.46	560,498.17	36.2398095	-107.6281829
9,856.00	89.90	273.54	5,709.34	1,015.92	-3,614.77	1,906,602.36	560,407.37	36.2398262	-107.6284907
9,947.00	89.87	275.36	5,709.52	1,022.98	-3,705.49	1,906,609.22	560,316.63	36.2398456	-107.6287984
10,038.00	90.67	275.09	5,709.10	1,031.27	-3,796.11	1,906,617.31	560,225.99	36.2398683	-107.6291057
10,129.00	90.40	274.24	5,708.25	1,038.67	-3,886.80	1,906,624.50	560,135.28	36.2398886	-107.6294132
10,220.00	90.20	273.77	5,707.77	1,045.03	-3,977.58	1,906,630.66	560,044.49	36.2399061	-107.6297211
10,312.00	90.10	275.29	5,707.53	1,052.29	-4,069.29	1,906,637.72	559,952.77	36.2399260	-107.6300320
10,403.00	90.50	274.91	5,707.05	1,060.38	-4,159.93	1,906,645.60	559,862.11	36.2399482	-107.6303394
10,494.00	90.04	274.22	5,706.62	1,067.62	-4,250.64	1,906,652.64	559,771.38	36.2399680	-107.6306470
10,585.00	89.50	275.28	5,706.99	1,075.16	-4,341.32	1,906,659.97	559,680.68	36.2399887	-107.6309545
10,676.00	89.50	274.29	5,707.78	1,082.75	-4,432.00	1,906,667.36	559,589.99	36.2400095	-107.6312620
10,767.00	90.44	275.79	5,707.83	1,090.74	-4,522.65	1,906,675.15	559,499.33	36.2400314	-107.6315694
10,859.00	90.13	276.37	5,707.37	1,100.49	-4,614.13	1,906,684.69	559,407.82	36.2400582	-107.6318796
10,950.00	90.60	275.63	5,706.79	1,110.00	-4,704.62	1,906,694.00	559,317.30	36.2400842	-107.6321865
11,041.00	90.97	274.77	5,705.55	1,118.25	-4,795.24	1,906,702.04	559,226.67	36.2401069	-107.6324938
11,132.00	89.93	274.76	5,704.83	1,125.80	-4,885.92	1,906,709.40	559,135.97	36.2401276	-107.6328013
11,222.00	89.46	273.60	5,705.31	1,132.36	-4,975.68	1,906,715.76	559,046.20	36.2401456	-107.6331057
11,313.00	89.87	275.21	5,705.84	1,139.35	-5,066.41	1,906,722.54	558,955.46	36.2401647	-107.6334133
11,404.00	89.46	274.91	5,706.37	1,147.38	-5,157.05	1,906,730.37	558,864.80	36.2401867	-107.6337207
11,494.00	88.37	275.97	5,708.08	1,155.91	-5,246.63	1,906,738.70	558,775.20	36.2402101	-107.6340245
11,585.00	87.76	275.80	5,711.15	1,165.23	-5,337.09	1,906,747.82	558,684.71	36.2402357	-107.6343313
11,676.00	88.64	276.06	5,714.01	1,174.63	-5,427.56	1,906,757.01	558,594.22	36.2402614	-107.6346380
11,767.00	89.93	276.66	5,715.15	1,184.71	-5,517.99	1,906,766.89	558,503.77	36.2402891	-107.6349447
11,859.00	89.53	276.06	5,715.58	1,194.90	-5,609.42	1,906,776.88	558,412.32	36.2403170	-107.6352548
11,950.00	90.50	276.49	5,715.55	1,204.85	-5,699.88	1,906,786.62	558,321.84	36.2403443	-107.6355615
12,040.00	90.34	275.99	5,714.90	1,214.63	-5,789.34	1,906,796.20	558,232.35	36.2403711	-107.6358649
12,132.00	90.10	275.52	5,714.54	1,223.86	-5,880.88	1,906,805.22	558,140.80	36.2403964	-107.6361753
12,223.00	90.37	275.14	5,714.17	1,232.31	-5,971.48	1,906,813.47	558,050.17	36.2404196	-107.6364825
12,314.00	90.50	274.65	5,713.48	1,240.07	-6,062.15	1,906,821.03	557,959.49	36.2404409	-107.6367900
12,405.00	90.34	273.80	5,712.81	1,246.78	-6,152.90	1,906,827.53	557,868.73	36.2404592	-107.6370977
12,496.00	90.30	272.94	5,712.30	1,252.13	-6,243.74	1,906,832.68	557,777.88	36.2404739	-107.6374058
12,587.00	89.50	275.33	5,712.46	1,258.69	-6,334.49	1,906,839.04	557,687.11	36.2404918	-107.6377135
12,678.00	88.96	274.60	5,713.68	1,266.56	-6,425.14	1,906,846.71	557,596.44	36.2405134	-107.6380209
12,769.00	90.57	275.48	5,714.06	1,274.56	-6,515.79	1,906,854.50	557,505.78	36.2405353	-107.6383283
12,861.00	90.17	274.80	5,713.46	1,282.80	-6,607.41	1,906,862.54	557,414.13	36.2405579	-107.6386390
12,951.00	91.28	274.79	5,712.32	1,290.32	-6,697.09	1,906,869.86	557,324.44	36.2405785	-107.6389431
13,042.00	90.74	274.11	5,710.72	1,297.38	-6,787.80	1,906,876.72	557,233.71	36.2405979	-107.6392507
13,133.00	90.47	273.46	5,709.76	1,303.39	-6,878.60	1,906,882.52	557,142.90	36.2406143	-107.6395586
13,224.00	90.07	272.61	5,709.33	1,308.21	-6,969.47	1,906,887.13	557,052.02	36.2406275	-107.6398668
13,259.00	89.85	272.38	5,709.35	1,309.73	-7,004.43	1,906,888.58	557,017.05	36.2406316	-107.6399854

RSI @ 13,259' MD - 36.2406317, -107.6399853

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 8 COM #409H - Slot A3
Project:	T23N R7W	TVD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Site:	Chaco 2307-07N	MD Reference:	GL 7307' & RKB 25' @ 7332.00usft (Aztec 1000)
Well:	MC 8 COM #409H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,315.00	89.50	272.02	5,709.67	1,311.88	-7,060.39	1,906,890.61	556,961.09	36.2406375	-107.6401751
Last Lateral MWD Survey									
13,370.00	89.50	272.02	5,710.15	1,313.82	-7,115.35	1,906,892.42	556,906.12	36.2406428	-107.6403615
Projection to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
451.00	450.99	-0.98	-0.53	First SDI Surface MWD Survey
3,640.00	3,584.54	391.20	400.54	Last SDI Surface MWD Survey
3,731.00	3,674.14	401.70	412.50	First SDI Curve MWD Survey
6,249.00	5,750.77	745.53	-19.49	Last SDI Curve MWD Survey
6,294.00	5,749.78	744.83	-64.47	7" Casing @ 6294' MD
6,294.00	5,749.78	744.83	-64.47	36.2390821, -107.6164516
6,337.00	5,748.61	744.90	-107.46	First Lateral MWD Survey
13,259.00	5,709.35	1,309.73	-7,004.43	RSI @ 13,259' MD
13,259.00	5,709.35	1,309.73	-7,004.43	36.2406317, -107.6399853
13,315.00	5,709.67	1,311.88	-7,060.39	Last Lateral MWD Survey
13,370.00	5,710.15	1,313.82	-7,115.35	Projection to TD

Checked By: _____ Approved By: _____ Date: _____