

District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

Certificate Number 15269



Scientific Drilling

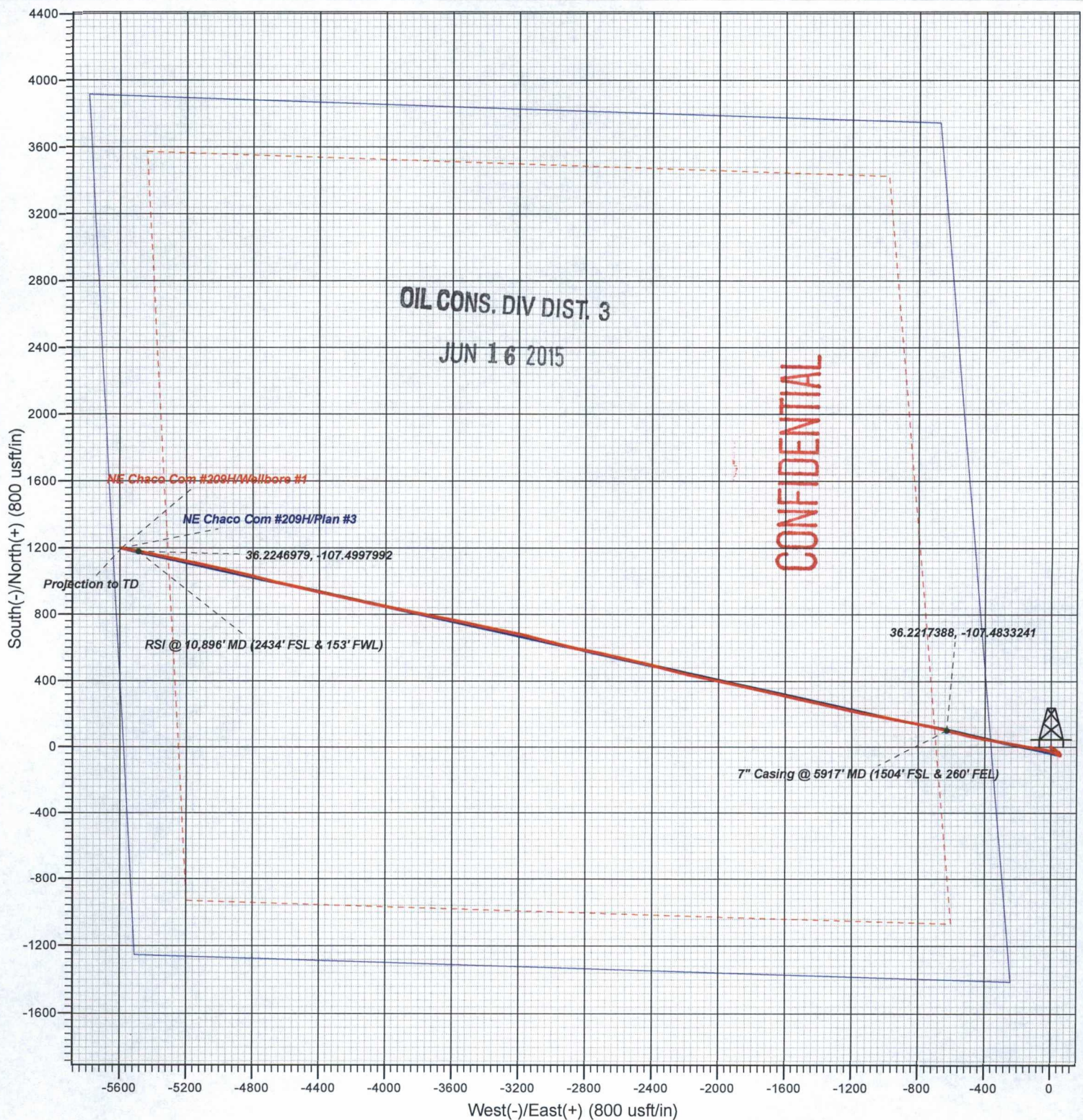
Company: WPX Energy
Project: T23N R6W (NM Central)
Site: Chaco 2306-16L



Well Details: NE Chaco Com #209H

TVD Reference: KB @ 6886.00usft (Aztec 1000)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1902128.25	136838.74	36.2214630	-107.4811920	A3



Plan: Wellbore #1

15:56, May 19 2015

Created By: Janie Collins



JUN 16 2015

Survey Report - Geographic



Company:	WPX Energy	Local Co-ordinate Reference:	Well NE Chaco Com #209H - Slot A3
Project:	T23N R6W (NM Central)	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Well:	NE Chaco Com #209H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Project	T23N R6W (NM Central)		
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		Using geodetic scale factor

Site		Chaco 2306-16L			
Site Position:		Northing:	1,902,127.16 usft	Latitude:	36.2214600
From:	Lat/Long	Easting:	136,839.32 usft	Longitude:	-107.4811900
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-0.73 °

Well	NE Chaco Com #209H - Slot A3					
Well Position	+N/-S	0.00 usft	Northing:	1,902,128.25 usft	Latitude:	36.2214630
	+E/-W	0.00 usft	Easting:	136,838.74 usft	Longitude:	-107.4811920
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,861.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	4/23/2015	9.34	62.99	49,986

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	282.10	

Survey Program	Date 5/6/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
25.00	295.00	Survey #1 (Wellbore #1)	GYRO-NS	Gyrocompass Gyro
360.00	4,825.00	Survey #2 - Surface MWD Survey (Wellbo	SDI MWD	SDI MWD - Standard ver 1.0.1
4,871.00	5,870.00	Survey #3 - Curve MWD Survey (Wellbore	SDI MWD	SDI MWD - Standard ver 1.0.1
5,953.00	10,999.00	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	1,902,128.25	136,838.74	36.2214630	-107.4811920
25.00	0.00	0.00	25.00	0.00	0.00	1,902,128.25	136,838.74	36.2214630	-107.4811920
55.00	0.31	217.12	55.00	-0.06	-0.05	1,902,128.19	136,838.69	36.2214628	-107.4811922
85.00	0.38	250.20	85.00	-0.16	-0.19	1,902,128.09	136,838.55	36.2214625	-107.4811927
115.00	0.45	265.35	115.00	-0.21	-0.40	1,902,128.05	136,838.34	36.2214624	-107.4811934
145.00	0.37	228.65	145.00	-0.28	-0.59	1,902,127.98	136,838.15	36.2214622	-107.4811941
175.00	0.56	243.13	175.00	-0.41	-0.80	1,902,127.85	136,837.94	36.2214618	-107.4811947
205.00	0.53	234.84	205.00	-0.56	-1.04	1,902,127.71	136,837.70	36.2214614	-107.4811956
235.00	0.45	243.85	234.99	-0.69	-1.26	1,902,127.58	136,837.47	36.2214611	-107.4811963

Company:	WPX Energy	Local Co-ordinate Reference:	Well NE Chaco Com #209H - Slot A3
Project:	T23N R6W (NM Central)	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Well:	NE Chaco Com #209H	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
265.00	0.47	271.29	264.99	-0.74	-1.49	1,902,127.53	136,837.25	36.2214609	-107.4811971
295.00	0.57	288.01	294.99	-0.69	-1.75	1,902,127.59	136,836.98	36.2214611	-107.4811980
360.00	0.64	306.49	359.99	-0.37	-2.35	1,902,127.91	136,836.39	36.2214619	-107.4812000
First SDI Surface MWD Survey									
451.00	0.47	99.02	450.99	-0.13	-2.39	1,902,128.15	136,836.35	36.2214626	-107.4812002
542.00	0.55	95.01	541.98	-0.23	-1.59	1,902,128.05	136,837.15	36.2214624	-107.4811974
633.00	1.11	128.78	632.97	-0.82	-0.47	1,902,127.44	136,838.27	36.2214607	-107.4811936
725.00	1.08	128.82	724.96	-1.92	0.90	1,902,126.32	136,839.62	36.2214577	-107.4811890
816.00	1.16	116.37	815.94	-2.86	2.40	1,902,125.36	136,841.10	36.2214551	-107.4811839
907.00	0.97	119.90	906.92	-3.66	3.89	1,902,124.55	136,842.59	36.2214529	-107.4811789
998.00	0.78	125.15	997.91	-4.40	5.06	1,902,123.79	136,843.75	36.2214509	-107.4811749
1,090.00	0.86	158.40	1,089.90	-5.40	5.83	1,902,122.78	136,844.50	36.2214481	-107.4811723
1,181.00	0.78	165.15	1,180.90	-6.63	6.24	1,902,121.54	136,844.90	36.2214447	-107.4811709
1,273.00	1.14	121.58	1,272.88	-7.72	7.18	1,902,120.44	136,845.83	36.2214418	-107.4811677
1,363.00	0.59	157.16	1,362.87	-8.61	8.12	1,902,119.54	136,846.76	36.2214393	-107.4811645
1,454.00	0.88	128.07	1,453.87	-9.48	8.86	1,902,118.66	136,847.48	36.2214369	-107.4811620
1,546.00	1.20	116.28	1,545.85	-10.34	10.28	1,902,117.78	136,848.89	36.2214346	-107.4811572
1,637.00	1.46	108.10	1,636.83	-11.12	12.23	1,902,116.98	136,850.83	36.2214324	-107.4811506
1,728.00	1.13	98.41	1,727.80	-11.61	14.22	1,902,116.46	136,852.82	36.2214311	-107.4811438
1,819.00	1.54	96.25	1,818.78	-11.88	16.32	1,902,116.17	136,854.92	36.2214303	-107.4811367
1,910.00	1.39	115.86	1,909.75	-12.49	18.53	1,902,115.53	136,857.12	36.2214287	-107.4811292
2,001.00	1.44	110.97	2,000.72	-13.38	20.59	1,902,114.61	136,859.17	36.2214262	-107.4811222
2,091.00	1.32	113.65	2,090.70	-14.20	22.60	1,902,113.76	136,861.16	36.2214240	-107.4811154
2,182.00	1.95	141.37	2,181.66	-15.83	24.53	1,902,112.11	136,863.07	36.2214195	-107.4811089
2,274.00	1.56	139.23	2,273.62	-18.00	26.32	1,902,109.91	136,864.83	36.2214135	-107.4811028
2,365.00	2.04	147.56	2,364.57	-20.31	28.00	1,902,107.59	136,866.48	36.2214072	-107.4810971
2,455.00	1.53	130.59	2,454.53	-22.44	29.77	1,902,105.43	136,868.23	36.2214013	-107.4810911
2,546.00	1.86	137.74	2,545.49	-24.33	31.69	1,902,103.52	136,870.12	36.2213961	-107.4810846
2,637.00	1.14	132.83	2,636.46	-26.03	33.34	1,902,101.80	136,871.75	36.2213915	-107.4810790
2,728.00	1.11	118.17	2,727.44	-27.07	34.78	1,902,100.75	136,873.18	36.2213886	-107.4810741
2,819.00	0.95	141.47	2,818.42	-28.07	36.03	1,902,099.72	136,874.42	36.2213859	-107.4810699
2,910.00	1.01	113.07	2,909.41	-28.98	37.24	1,902,098.80	136,875.61	36.2213834	-107.4810658
3,002.00	0.62	113.38	3,001.40	-29.49	38.44	1,902,098.27	136,876.81	36.2213820	-107.4810617
3,093.00	0.99	98.59	3,092.39	-29.80	39.67	1,902,097.94	136,878.03	36.2213811	-107.4810576
3,184.00	0.68	107.02	3,183.38	-30.08	40.96	1,902,097.65	136,879.32	36.2213803	-107.4810532
3,275.00	0.80	105.37	3,274.38	-30.41	42.09	1,902,097.31	136,880.45	36.2213794	-107.4810493
3,366.00	0.84	110.31	3,365.37	-30.81	43.33	1,902,096.90	136,881.68	36.2213783	-107.4810451
3,457.00	0.13	113.60	3,456.36	-31.08	44.05	1,902,096.61	136,882.40	36.2213776	-107.4810427
3,549.00	0.34	129.55	3,548.36	-31.30	44.36	1,902,096.39	136,882.70	36.2213770	-107.4810417
3,640.00	0.38	124.60	3,639.36	-31.64	44.81	1,902,096.05	136,883.15	36.2213761	-107.4810401
3,732.00	0.91	125.89	3,731.35	-32.24	45.66	1,902,095.43	136,883.99	36.2213744	-107.4810373
3,823.00	1.06	130.31	3,822.34	-33.21	46.89	1,902,094.45	136,885.20	36.2213717	-107.4810331
3,914.00	1.23	130.83	3,913.32	-34.39	48.27	1,902,093.25	136,886.57	36.2213685	-107.4810284
4,005.00	0.88	141.36	4,004.31	-35.58	49.44	1,902,092.05	136,887.73	36.2213652	-107.4810244
4,096.00	1.11	144.82	4,095.29	-36.84	50.39	1,902,090.77	136,888.66	36.2213618	-107.4810212
4,188.00	1.17	152.97	4,187.27	-38.41	51.33	1,902,089.19	136,889.58	36.2213575	-107.4810181
4,279.00	1.17	153.40	4,278.26	-40.07	52.16	1,902,087.53	136,890.40	36.2213529	-107.4810152
4,370.00	1.22	154.44	4,369.24	-41.77	53.00	1,902,085.81	136,891.21	36.2213482	-107.4810124
4,461.00	1.06	159.20	4,460.22	-43.43	53.71	1,902,084.14	136,891.90	36.2213437	-107.4810100
4,552.00	1.07	162.21	4,551.20	-45.03	54.27	1,902,082.54	136,892.44	36.2213393	-107.4810081
4,643.00	1.00	163.08	4,642.19	-46.60	54.76	1,902,080.96	136,892.91	36.2213350	-107.4810064
4,734.00	1.06	167.30	4,733.17	-48.18	55.18	1,902,079.38	136,893.31	36.2213306	-107.4810050
4,779.00	0.87	192.48	4,778.17	-48.92	55.20	1,902,078.64	136,893.32	36.2213286	-107.4810049
4,825.00	1.90	272.13	4,824.16	-49.23	54.36	1,902,078.34	136,892.48	36.2213277	-107.4810078
Last SDI Surface MWD Survey									



Survey Report - Geographic



Company:	WPX Energy	Local Co-ordinate Reference:	Well NE Chaco Com #209H - Slot A3
Project:	T23N R6W (NM Central)	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Well:	NE Chaco Com #209H	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
4,871.00	4.01	282.43	4,870.09	-48.85	52.03	1,902,078.74	136,890.15	36.2213288	-107.4810157
First SDI Curve MWD Survey									
4,916.00	7.16	290.17	4,914.87	-47.55	47.86	1,902,080.10	136,885.99	36.2213324	-107.4810298
4,962.00	10.91	296.88	4,960.30	-44.59	41.28	1,902,083.14	136,879.46	36.2213405	-107.4810521
5,007.00	14.39	295.53	5,004.20	-40.25	32.43	1,902,087.59	136,870.66	36.2213524	-107.4810821
5,053.00	18.12	294.98	5,048.35	-34.77	20.79	1,902,093.22	136,859.09	36.2213675	-107.4811216
5,098.00	21.40	291.14	5,090.70	-28.85	6.78	1,902,099.32	136,845.16	36.2213837	-107.4811690
5,144.00	24.51	286.23	5,133.05	-23.15	-10.21	1,902,105.23	136,828.24	36.2213994	-107.4812267
5,190.00	27.34	283.64	5,174.42	-17.99	-29.64	1,902,110.63	136,808.87	36.2214135	-107.4812925
5,235.00	32.57	278.43	5,213.40	-13.78	-51.69	1,902,115.13	136,786.88	36.2214251	-107.4813673
5,281.00	37.82	278.06	5,250.98	-9.98	-77.92	1,902,119.26	136,760.70	36.2214355	-107.4814562
5,326.00	43.40	278.06	5,285.13	-5.88	-106.91	1,902,123.73	136,731.77	36.2214468	-107.4815544
5,372.00	49.72	279.48	5,316.74	-0.77	-139.89	1,902,129.26	136,698.84	36.2214609	-107.4816663
5,417.00	56.51	281.89	5,343.74	5.93	-175.23	1,902,136.41	136,663.59	36.2214793	-107.4817861
5,463.00	60.04	281.32	5,367.92	13.80	-213.55	1,902,144.76	136,625.37	36.2215009	-107.4819160
5,508.00	59.68	281.09	5,390.52	21.36	-251.73	1,902,152.81	136,587.30	36.2215216	-107.4820454
5,554.00	59.56	280.74	5,413.78	28.88	-290.69	1,902,160.82	136,548.43	36.2215423	-107.4821775
5,599.00	63.07	281.44	5,435.38	36.47	-329.42	1,902,168.91	136,509.79	36.2215632	-107.4823088
5,645.00	66.11	281.19	5,455.12	44.62	-370.16	1,902,177.58	136,469.16	36.2215855	-107.4824469
5,690.00	69.63	281.51	5,472.07	52.83	-411.03	1,902,186.30	136,428.40	36.2216081	-107.4825854
5,736.00	75.02	281.50	5,486.03	61.57	-453.96	1,902,195.58	136,385.58	36.2216321	-107.4827309
5,781.00	80.55	282.54	5,495.54	70.73	-496.96	1,902,205.29	136,342.70	36.2216572	-107.4828767
5,827.00	83.20	282.41	5,502.04	80.56	-541.42	1,902,215.69	136,298.37	36.2216843	-107.4830274
5,870.00	86.05	282.42	5,506.07	89.76	-583.22	1,902,225.42	136,256.68	36.2217095	-107.4831691
Last SDI Curve MWD Survey									
5,917.00	89.37	283.77	5,507.95	100.40	-628.95	1,902,236.64	136,211.08	36.2217388	-107.4833242
36.2217388, -107.4833241 - 7" Casing @ 5917' MD									
5,953.00	91.91	284.80	5,507.55	109.28	-663.84	1,902,245.96	136,176.31	36.2217631	-107.4834424
First SDI Lateral MWD Survey									
6,044.00	90.13	282.66	5,505.93	130.88	-752.21	1,902,268.68	136,088.21	36.2218225	-107.4837420
6,136.00	90.54	282.45	5,505.39	150.87	-842.01	1,902,289.82	135,998.67	36.2218774	-107.4840464
6,227.00	90.70	282.26	5,504.41	170.34	-930.90	1,902,310.41	135,910.04	36.2219309	-107.4843478
6,318.00	90.13	281.38	5,503.75	188.98	-1,019.97	1,902,330.18	135,821.21	36.2219820	-107.4846497
6,409.00	90.34	280.55	5,503.37	206.29	-1,109.30	1,902,348.63	135,732.09	36.2220296	-107.4849525
6,500.00	90.40	281.75	5,502.79	223.89	-1,198.58	1,902,367.36	135,643.04	36.2220779	-107.4852552
6,591.00	90.30	282.76	5,502.23	243.20	-1,287.51	1,902,387.80	135,554.36	36.2221310	-107.4855567
6,681.00	90.27	282.56	5,501.78	262.93	-1,375.32	1,902,408.64	135,466.81	36.2221851	-107.4858543
6,772.00	91.25	282.74	5,500.58	282.86	-1,464.10	1,902,429.69	135,378.28	36.2222399	-107.4861553
6,864.00	91.45	282.16	5,498.41	302.68	-1,553.91	1,902,450.66	135,288.72	36.2222943	-107.4864598
6,955.00	90.60	282.71	5,496.78	322.28	-1,642.76	1,902,471.38	135,200.13	36.2223481	-107.4867610
7,045.00	90.30	283.06	5,496.07	342.34	-1,730.49	1,902,492.56	135,112.65	36.2224032	-107.4870584
7,136.00	91.17	282.82	5,494.91	362.72	-1,819.17	1,902,514.07	135,024.23	36.2224592	-107.4873590
7,227.00	91.85	282.19	5,492.51	382.42	-1,907.98	1,902,534.89	134,935.68	36.2225133	-107.4876601
7,318.00	91.28	281.97	5,490.02	401.45	-1,996.93	1,902,555.06	134,846.97	36.2225655	-107.4879616
7,409.00	91.44	281.24	5,487.86	419.76	-2,086.05	1,902,574.49	134,758.09	36.2226158	-107.4882637
7,500.00	91.01	282.90	5,485.92	438.78	-2,175.01	1,902,594.64	134,669.37	36.2226680	-107.4885653
7,592.00	90.04	284.53	5,485.07	460.59	-2,264.38	1,902,617.59	134,580.28	36.2227279	-107.4888683
7,683.00	90.84	283.96	5,484.38	482.98	-2,352.58	1,902,641.10	134,492.37	36.2227894	-107.4891673
7,774.00	91.30	284.10	5,482.68	505.04	-2,440.85	1,902,664.27	134,404.38	36.2228500	-107.4894665
7,865.00	90.23	282.25	5,481.46	525.78	-2,529.44	1,902,686.14	134,316.06	36.2229069	-107.4897669
7,956.00	90.75	283.65	5,480.68	546.17	-2,618.12	1,902,707.65	134,227.64	36.2229629	-107.4900675
8,047.00	90.07	280.98	5,480.03	565.57	-2,707.01	1,902,728.19	134,138.99	36.2230162	-107.4903688
8,139.00	90.24	280.85	5,479.78	582.99	-2,797.35	1,902,746.76	134,048.88	36.2230640	-107.4906751
8,230.00	90.13	283.48	5,479.49	602.17	-2,886.30	1,902,767.06	133,960.18	36.2231167	-107.4909766

Company:	WPX Energy	Local Co-ordinate Reference:	Well NE Chaco Com #209H - Slot A3
Project:	T23N R6W (NM Central)	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Well:	NE Chaco Com #209H	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
8,321.00	90.30	284.08	5,479.15	623.84	-2,974.68	1,902,789.86	133,872.08	36.2231762	-107.4912762
8,412.00	90.20	284.64	5,478.75	646.41	-3,062.83	1,902,813.55	133,784.21	36.2232382	-107.4915751
8,503.00	90.84	284.02	5,477.92	668.94	-3,151.00	1,902,837.19	133,696.34	36.2233000	-107.4918740
8,595.00	90.67	282.40	5,476.71	689.96	-3,240.55	1,902,859.34	133,607.05	36.2233577	-107.4921776
8,686.00	90.50	282.01	5,475.78	709.19	-3,329.49	1,902,879.71	133,518.36	36.2234105	-107.4924791
8,777.00	89.66	281.37	5,475.66	727.63	-3,418.60	1,902,899.28	133,429.48	36.2234612	-107.4927812
8,868.00	90.57	282.03	5,475.47	746.09	-3,507.71	1,902,918.86	133,340.61	36.2235118	-107.4930833
8,959.00	91.07	282.14	5,474.17	765.14	-3,596.68	1,902,939.04	133,251.88	36.2235641	-107.4933849
9,050.00	90.57	279.44	5,472.87	782.17	-3,686.06	1,902,957.21	133,162.73	36.2236109	-107.4936879
9,141.00	90.54	281.84	5,471.99	798.97	-3,775.48	1,902,975.15	133,073.52	36.2236570	-107.4939911
9,232.00	89.97	281.91	5,471.58	817.69	-3,864.53	1,902,995.00	132,984.71	36.2237084	-107.4942930
9,323.00	90.20	282.34	5,471.45	836.81	-3,953.50	1,903,015.24	132,895.99	36.2237609	-107.4945946
9,414.00	89.90	282.80	5,471.37	856.61	-4,042.32	1,903,036.18	132,807.42	36.2238152	-107.4948957
9,505.00	90.64	282.31	5,470.94	876.39	-4,131.14	1,903,057.09	132,718.85	36.2238695	-107.4951968
9,596.00	90.07	282.13	5,470.38	895.65	-4,220.08	1,903,077.48	132,630.17	36.2239224	-107.4954983
9,687.00	90.74	281.99	5,469.73	914.67	-4,309.07	1,903,097.62	132,541.42	36.2239746	-107.4958000
9,778.00	89.83	282.14	5,469.28	933.69	-4,398.05	1,903,117.77	132,452.68	36.2240268	-107.4961017
9,869.00	91.14	283.42	5,468.51	953.82	-4,486.79	1,903,139.02	132,364.20	36.2240821	-107.4964025
9,960.00	89.96	282.86	5,467.64	974.50	-4,575.40	1,903,160.83	132,275.85	36.2241389	-107.4967029
10,051.00	89.97	283.03	5,467.69	994.89	-4,664.09	1,903,182.34	132,187.42	36.2241948	-107.4970036
10,143.00	90.04	284.27	5,467.68	1,016.60	-4,753.49	1,903,205.19	132,098.30	36.2242544	-107.4973067
10,234.00	91.27	285.35	5,466.64	1,039.86	-4,841.46	1,903,229.56	132,010.63	36.2243183	-107.4976049
10,325.00	91.54	282.33	5,464.41	1,061.61	-4,929.78	1,903,252.44	131,922.59	36.2243780	-107.4979043
10,416.00	89.96	282.51	5,463.22	1,081.18	-5,018.64	1,903,273.14	131,833.98	36.2244317	-107.4982056
10,507.00	90.91	281.95	5,462.53	1,100.46	-5,107.57	1,903,293.55	131,745.30	36.2244846	-107.4985071
10,598.00	90.44	281.32	5,461.46	1,118.81	-5,196.70	1,903,313.03	131,656.41	36.2245350	-107.4988092
10,690.00	91.11	281.67	5,460.21	1,137.14	-5,286.84	1,903,332.51	131,566.50	36.2245853	-107.4991148
10,781.00	89.69	281.54	5,459.58	1,155.45	-5,375.98	1,903,351.94	131,477.60	36.2246355	-107.4994170
10,871.00	90.30	281.29	5,459.59	1,173.26	-5,464.20	1,903,370.87	131,389.61	36.2246844	-107.4997161
10,896.00	90.40	281.39	5,459.43	1,178.18	-5,488.71	1,903,376.10	131,365.16	36.2246979	-107.4997992
RSI @ 10,896' MD - 36.2246979, -107.4997992									
10,942.00	90.57	281.57	5,459.05	1,187.33	-5,533.79	1,903,385.83	131,320.20	36.2247230	-107.4999520
Last SDI Lateral MWD Survey									
10,999.00	90.57	281.57	5,458.48	1,198.76	-5,589.62	1,903,397.97	131,264.51	36.2247544	-107.5001413
Projection to TD									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Chaco 2306-16L #209H	0.00	0.00	5,375.74	22.04	-261.28	1,902,153.61	136,577.75	36.2215235	-107.4820778
- hit/miss target									
- Shape									
- actual wellpath misses target center by 17.60usft at 5508.73usft MD (5390.89 TVD, 21.48 N, -252.34 E)									
- Point									
Chaco 2306-16L #209H	0.00	0.00	5,405.74	33.24	-312.02	1,902,165.45	136,527.15	36.2215543	-107.4822498
- hit/miss target									
- Shape									
- actual wellpath misses target center by 17.82usft at 5569.24usft MD (5421.37 TVD, 31.37 N, -303.67 E)									
- Point									



Survey Report - Geographic



Company:	WPX Energy	Local Co-ordinate Reference:	Well NE Chaco Com #209H - Slot A3
Project:	T23N R6W (NM Central)	TVD Reference:	KB @ 6886.00usft (Aztec 1000)
Site:	Chaco 2306-16L	MD Reference:	KB @ 6886.00usft (Aztec 1000)
Well:	NE Chaco Com #209H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
360.00	359.99	-0.37	-2.35	First SDI Surface MWD Survey
4,825.00	4,824.16	-49.23	54.36	Last SDI Surface MWD Survey
4,871.00	4,870.09	-48.85	52.03	First SDI Curve MWD Survey
5,870.00	5,506.07	89.76	-583.22	Last SDI Curve MWD Survey
5,917.00	5,507.95	100.40	-628.95	36.2217388, -107.4833241
5,917.00	5,507.95	100.40	-628.95	7" Casing @ 5917' MD
5,953.00	5,507.55	109.28	-663.84	First SDI Lateral MWD Survey
10,896.00	5,459.43	1,178.18	-5,488.71	RSI @ 10,896' MD
10,896.00	5,459.43	1,178.18	-5,488.71	36.2246979, -107.4997992
10,942.00	5,459.05	1,187.33	-5,533.79	Last SDI Lateral MWD Survey
10,999.00	5,458.48	1,198.76	-5,589.62	Projection to TD

Checked By: _____ Approved By: _____ Date: _____