

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6151 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

OIL CONS. DIV. DIST. 3

☐ AMENDED REPORT

AUG 13 2014

as drilled

CONFIDENTIAL

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-043-21204	*Pool Code 42289	*Pool Name LYBROOK GALLUP
*Property Code 40021	*Property Name CHACO 2306-19E	*Well Number 205H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6965'

¹⁰ Surface Location

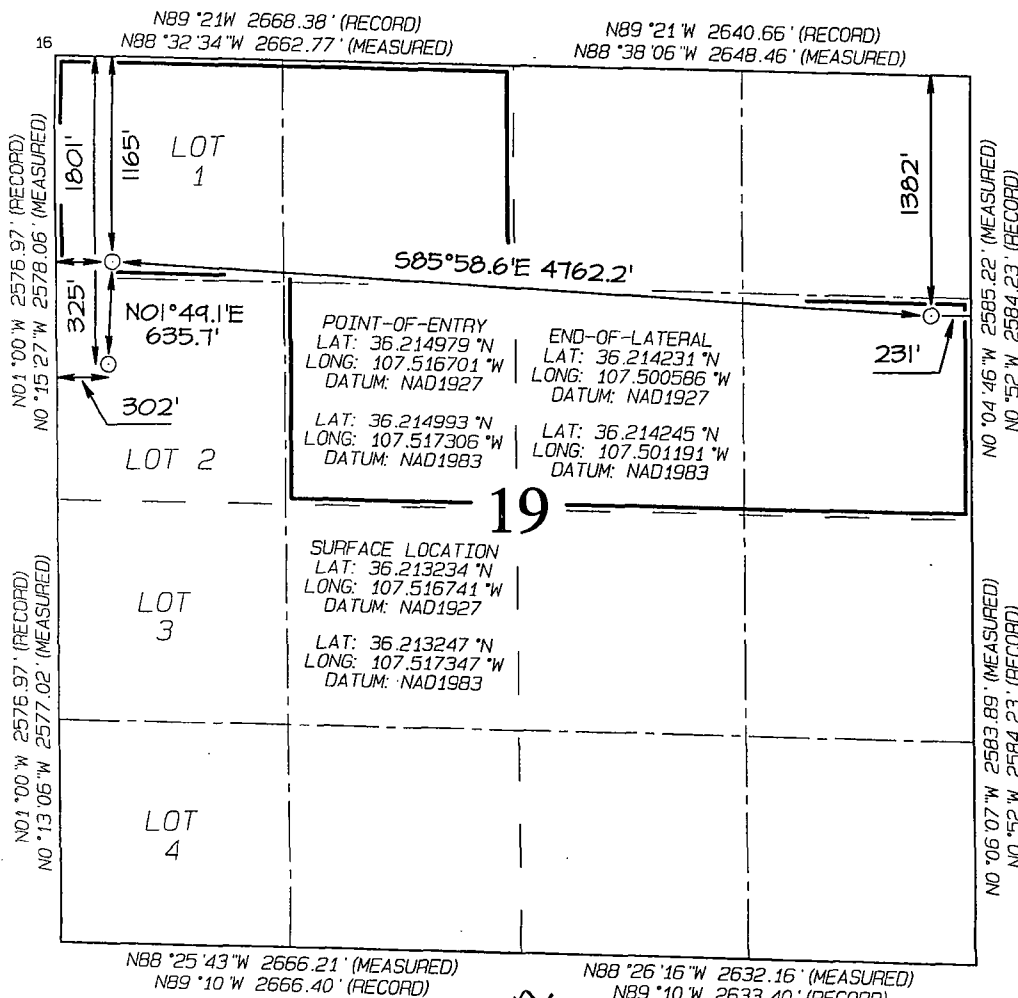
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	19	23N	6W	2	1801	NORTH	302	WEST	SANDOVAL

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
H	19	23N	6W		1382	NORTH	231	EAST	SANDOVAL

¹² Dedicated Acres 200.86 Acres - Section 19 N/2 NW/4 - S/2 NE/4 - SE/4 NW/4	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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



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 *Larry Higgins* Date 8/11/14

Printed Name larry.higgins@wpxenergy.com

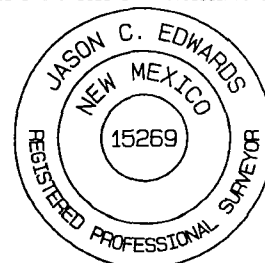
E-mail Address

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: JULY 25, 2014
Date of Survey: JULY 10, 2012

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269



Company Name: WPX Energy Rocky Mountain, LLC
Project: Sandoval County, NM NAD27
Site: Chaco 2306-19E
Well: Chaco 2306-19E #205H

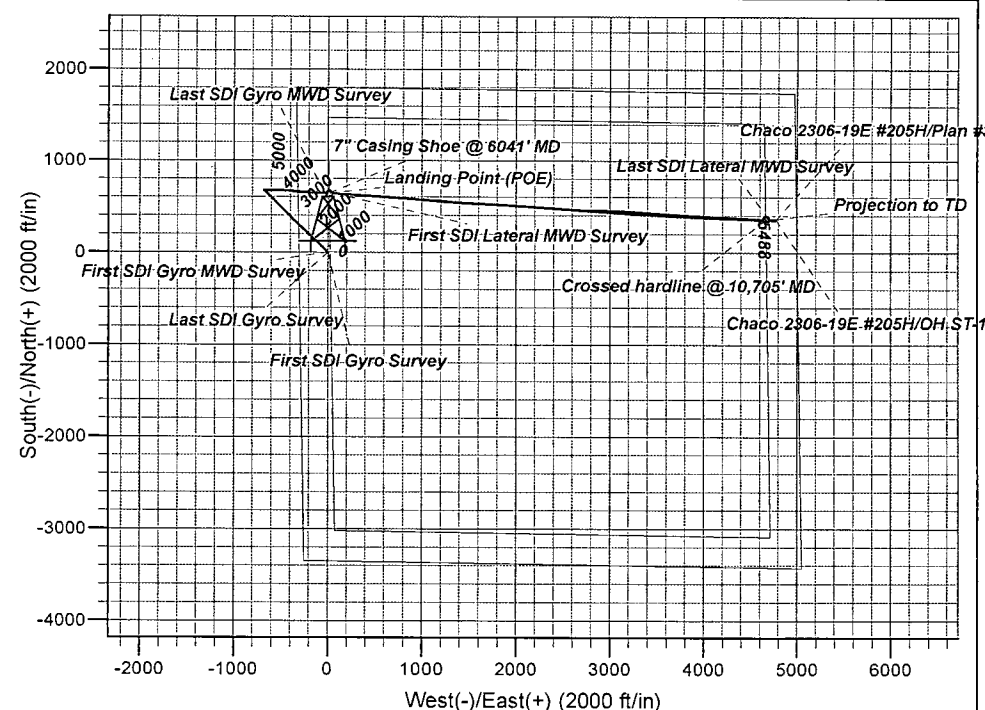
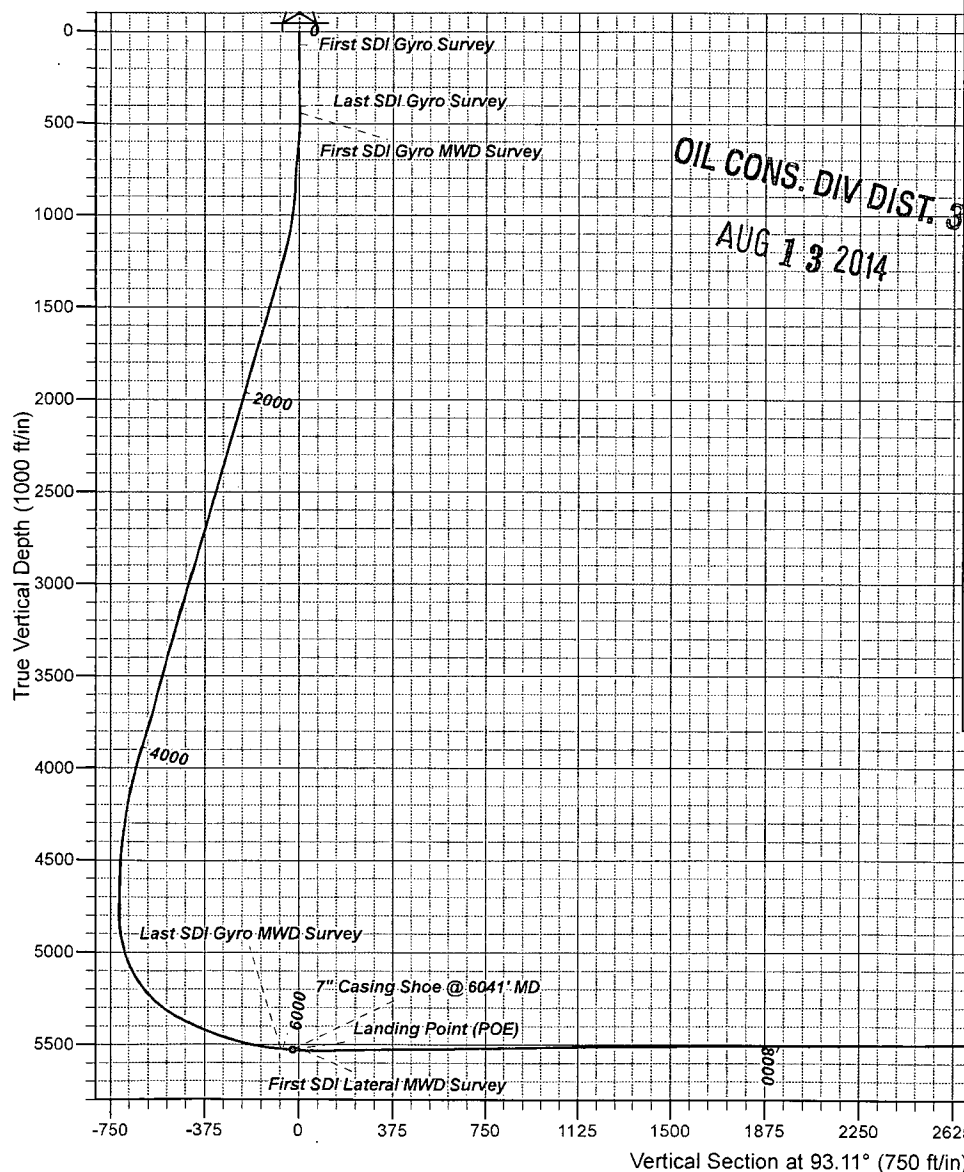


Azimuths to True North
Magnetic North: 9.41°

Magnetic Field
Strength: 50090.0snT
Dip Angle: 62.99°
Date: 6/29/2014
Model: BGGM2013

WELL DETAILS: Chaco 2306-19E #205H

GL 6965' & RKB 14' @ 6979.00ft
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1899266.26 126313.58 36° 12' 47.628 N 107° 31' 0.264 W



CONFIDENTIAL

Design: OH ST-1 (Chaco 2306-19E #205H/OH ST-1)

Created By: Janie Collins Date: 10:52, July 24 2014

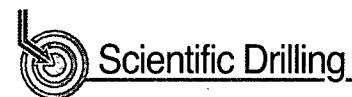
PROJECT DETAILS: Sandoval County, NM NAD27

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico Central 3002

System Datum: Mean Sea Level
Local North: True



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-19E #205H
Project:	Sandoval County, NM NAD27	TVD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Site:	Chaco 2306-19E	MD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Well:	Chaco 2306-19E #205H	North Reference:	True
Wellbore:	OH ST-1	Survey Calculation Method:	Minimum Curvature
Design:	OH ST-1	Database:	Grand Junction District

Project	Sandoval 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 2306-19E		
Site Position:		Northing:	1,899,266.26 usft
From:	Lat/Long	Easting:	126,313.58 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	36° 12' 47.628 N
		Longitude:	107° 31' 0.264 W
		Grid Convergence:	-0.75 °

Well	Chaco 2306-19E #205H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	36° 12' 47.628 N
		Longitude:	107° 31' 0.264 W
		Ground Level:	6,965.00 ft

Wellbore	OH ST-1		
Magnetics	Model Name	Sample Date	Declination
	BGGM2013	6/29/2014	(°)
			9.41
			Dip Angle
			(°)
			62.99
			Field Strength
			(nT)
			50,090

Design	OH ST-1		
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
			(°)
			93.11

Survey Program	Date 7/24/2014		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		Description
74.67	403.44	Survey #1 - Gyro Survey (OH ST-1)	SDI Standard Keeper 103
442.00	5,992.00	Survey #2 - Gyro MWD Survey (OH ST-1)	SDI Gyro MWD 104
6,084.00	10,805.00	Survey #3 - Lateral MWD Survey (OH ST-1)	MWD SDI
			SDI Standard Wireline Keeper ver 1.0.3
			SDI Gyro MWD Error Model Ver 1.0.4
			MWD - Standard ver 1.0.1

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map			
Depth	(°)	(°)	Depth	(ft)	(ft)	Northing	Easting	Latitude	Longitude	
(ft)			(ft)			(usft)	(usft)			
0.00	0.00	0.00	0.00	0.00	0.00	1,899,266.26	126,313.58	36° 12' 47.628 N	107° 31' 0.264 W	
74.67	0.37	88.31	74.67	0.01	0.24	1,899,266.27	126,313.82	36° 12' 47.628 N	107° 31' 0.261 W	
First SDI Gyro Survey										
99.90	0.39	82.85	99.90	0.02	0.41	1,899,266.28	126,313.99	36° 12' 47.628 N	107° 31' 0.259 W	
124.56	0.43	81.90	124.56	0.04	0.58	1,899,266.30	126,314.16	36° 12' 47.628 N	107° 31' 0.257 W	
149.76	0.45	92.11	149.76	0.05	0.78	1,899,266.31	126,314.35	36° 12' 47.629 N	107° 31' 0.255 W	
174.85	0.59	83.16	174.85	0.07	1.00	1,899,266.32	126,314.58	36° 12' 47.629 N	107° 31' 0.252 W	
199.62	0.52	85.97	199.62	0.09	1.24	1,899,266.34	126,314.82	36° 12' 47.629 N	107° 31' 0.249 W	
224.91	0.61	92.13	224.90	0.09	1.49	1,899,266.34	126,315.07	36° 12' 47.629 N	107° 31' 0.246 W	
249.44	0.76	89.73	249.43	0.09	1.78	1,899,266.33	126,315.36	36° 12' 47.629 N	107° 31' 0.242 W	



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-19E #205H
Project:	Sandoval County, NM NAD27	TVD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Site:	Chaco 2306-19E	MD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Well:	Chaco 2306-19E #205H	North Reference:	True
Wellbore:	OH ST-1	Survey Calculation Method:	Minimum Curvature
Design:	OH ST-1	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
273.90	0.81	93.66	273.89	0.08	2.12	1,899,266.31	126,315.70	36° 12' 47.629 N	107° 31' 0.238 W
299.66	0.85	91.63	299.65	0.06	2.49	1,899,266.29	126,316.07	36° 12' 47.629 N	107° 31' 0.234 W
324.87	0.95	94.91	324.85	0.04	2.89	1,899,266.26	126,316.46	36° 12' 47.628 N	107° 31' 0.229 W
348.93	1.07	100.30	348.91	-0.02	3.31	1,899,266.20	126,316.88	36° 12' 47.628 N	107° 31' 0.224 W
373.99	1.29	103.71	373.97	-0.13	3.81	1,899,266.08	126,317.39	36° 12' 47.627 N	107° 31' 0.218 W
400.56	1.58	95.92	400.53	-0.24	4.46	1,899,265.97	126,318.04	36° 12' 47.626 N	107° 31' 0.210 W
403.44	1.61	96.47	403.41	-0.25	4.54	1,899,265.96	126,318.12	36° 12' 47.626 N	107° 31' 0.209 W
Last SDI Gyro Survey									
442.00	1.06	88.51	441.96	-0.30	5.44	1,899,265.89	126,319.01	36° 12' 47.625 N	107° 31' 0.198 W
First SDI Gyro MWD Survey									
473.00	0.88	344.62	472.95	-0.06	5.66	1,899,266.13	126,319.24	36° 12' 47.627 N	107° 31' 0.195 W
505.00	2.29	335.30	504.94	0.76	5.33	1,899,266.95	126,318.92	36° 12' 47.635 N	107° 31' 0.199 W
536.00	4.13	322.65	535.89	2.21	4.39	1,899,268.41	126,318.00	36° 12' 47.650 N	107° 31' 0.210 W
568.00	4.66	317.46	567.80	4.08	2.82	1,899,270.31	126,316.45	36° 12' 47.668 N	107° 31' 0.230 W
631.00	5.28	297.07	630.56	7.29	-1.50	1,899,273.57	126,312.18	36° 12' 47.700 N	107° 31' 0.282 W
694.00	4.84	303.57	693.32	10.07	-6.29	1,899,276.42	126,307.42	36° 12' 47.728 N	107° 31' 0.341 W
725.00	4.13	301.46	724.22	11.38	-8.33	1,899,277.75	126,305.39	36° 12' 47.741 N	107° 31' 0.366 W
757.00	2.73	294.43	756.17	12.30	-10.01	1,899,278.69	126,303.73	36° 12' 47.750 N	107° 31' 0.386 W
788.00	1.76	262.71	787.14	12.54	-11.15	1,899,278.95	126,302.59	36° 12' 47.752 N	107° 31' 0.400 W
820.00	1.85	254.71	819.13	12.34	-12.14	1,899,278.76	126,301.60	36° 12' 47.750 N	107° 31' 0.412 W
851.00	2.20	307.53	850.11	12.57	-13.10	1,899,279.01	126,300.65	36° 12' 47.752 N	107° 31' 0.424 W
883.00	3.17	319.83	882.07	13.62	-14.15	1,899,280.07	126,299.60	36° 12' 47.763 N	107° 31' 0.437 W
914.00	4.57	319.31	913.00	15.22	-15.51	1,899,281.68	126,298.27	36° 12' 47.778 N	107° 31' 0.453 W
945.00	5.81	317.02	943.88	17.30	-17.39	1,899,283.79	126,296.42	36° 12' 47.799 N	107° 31' 0.476 W
967.00	6.46	318.50	965.75	19.04	-18.97	1,899,285.55	126,294.86	36° 12' 47.816 N	107° 31' 0.495 W
998.00	7.78	316.16	996.51	21.86	-21.57	1,899,288.40	126,292.29	36° 12' 47.844 N	107° 31' 0.527 W
1,030.00	8.82	315.79	1,028.17	25.18	-24.79	1,899,291.77	126,289.12	36° 12' 47.877 N	107° 31' 0.566 W
1,061.00	10.02	316.23	1,058.76	28.83	-28.31	1,899,295.46	126,285.65	36° 12' 47.913 N	107° 31' 0.609 W
1,093.00	11.13	317.20	1,090.21	33.11	-32.33	1,899,299.79	126,281.68	36° 12' 47.955 N	107° 31' 0.659 W
1,124.00	12.35	317.04	1,120.56	37.73	-36.63	1,899,304.47	126,277.45	36° 12' 48.001 N	107° 31' 0.711 W
1,155.00	13.45	316.44	1,150.78	42.77	-41.37	1,899,309.57	126,272.77	36° 12' 48.051 N	107° 31' 0.769 W
1,187.00	14.52	315.97	1,181.83	48.35	-46.72	1,899,315.22	126,267.49	36° 12' 48.106 N	107° 31' 0.834 W
1,218.00	14.98	316.40	1,211.81	54.05	-52.19	1,899,320.99	126,262.10	36° 12' 48.162 N	107° 31' 0.901 W
1,308.00	15.20	315.56	1,298.71	70.89	-68.47	1,899,338.05	126,246.04	36° 12' 48.329 N	107° 31' 1.099 W
1,367.00	15.39	315.21	1,355.62	81.97	-79.40	1,899,349.27	126,235.26	36° 12' 48.439 N	107° 31' 1.233 W
1,430.00	15.74	315.12	1,416.31	93.96	-91.32	1,899,361.41	126,223.50	36° 12' 48.557 N	107° 31' 1.378 W
1,491.00	16.18	314.95	1,474.95	105.83	-103.17	1,899,373.43	126,211.80	36° 12' 48.674 N	107° 31' 1.523 W
1,552.00	16.03	314.44	1,533.56	117.73	-115.20	1,899,385.49	126,199.93	36° 12' 48.792 N	107° 31' 1.670 W
1,614.00	16.18	314.24	1,593.13	129.75	-127.50	1,899,397.67	126,187.78	36° 12' 48.911 N	107° 31' 1.820 W
1,673.00	16.00	314.57	1,649.82	141.19	-139.18	1,899,409.26	126,176.25	36° 12' 49.024 N	107° 31' 1.962 W
1,734.00	16.18	313.81	1,708.43	152.97	-151.30	1,899,421.20	126,164.28	36° 12' 49.141 N	107° 31' 2.110 W
1,795.00	15.74	311.97	1,767.07	164.39	-163.59	1,899,432.78	126,152.15	36° 12' 49.254 N	107° 31' 2.260 W
1,857.00	15.71	313.59	1,826.75	175.80	-175.92	1,899,444.35	126,139.97	36° 12' 49.366 N	107° 31' 2.411 W
1,918.00	15.60	314.40	1,885.49	187.24	-187.76	1,899,455.94	126,128.28	36° 12' 49.479 N	107° 31' 2.555 W
1,979.00	15.42	313.34	1,944.27	198.54	-199.52	1,899,467.39	126,116.67	36° 12' 49.591 N	107° 31' 2.699 W
2,041.00	15.64	313.70	2,004.01	209.97	-211.56	1,899,478.98	126,104.78	36° 12' 49.704 N	107° 31' 2.845 W
2,102.00	15.16	312.23	2,062.82	221.01	-223.41	1,899,490.18	126,093.08	36° 12' 49.813 N	107° 31' 2.990 W
2,163.00	15.95	313.91	2,121.58	232.19	-235.35	1,899,501.50	126,081.28	36° 12' 49.924 N	107° 31' 3.136 W
2,224.00	16.00	313.21	2,180.23	243.76	-247.52	1,899,513.23	126,069.26	36° 12' 50.038 N	107° 31' 3.284 W
2,284.00	15.04	311.45	2,238.04	254.57	-259.38	1,899,524.20	126,057.54	36° 12' 50.145 N	107° 31' 3.429 W
2,346.00	14.86	313.11	2,297.94	265.33	-271.22	1,899,535.11	126,045.85	36° 12' 50.252 N	107° 31' 3.573 W
2,406.00	15.33	314.15	2,355.87	276.11	-282.52	1,899,546.04	126,034.69	36° 12' 50.358 N	107° 31' 3.711 W
2,466.00	15.30	313.18	2,413.74	287.05	-293.99	1,899,557.13	126,023.37	36° 12' 50.466 N	107° 31' 3.851 W
2,527.00	16.30	314.98	2,472.43	298.61	-305.91	1,899,568.85	126,011.59	36° 12' 50.581 N	107° 31' 3.997 W
2,590.00	16.62	315.83	2,532.85	311.32	-318.44	1,899,581.72	125,999.23	36° 12' 50.706 N	107° 31' 4.150 W

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well, Chaco 2306-19E #205H
Project:	Sandoval County, NM NAD27	TVD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Site:	Chaco 2306-19E	MD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Well:	Chaco 2306-19E #205H	North Reference:	True
Wellbore:	OH ST-1	Survey Calculation Method:	Minimum Curvature
Design:	OH ST-1	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
2,653.00	16.16	312.81	2,593.29	323.74	-331.15	1,899,594.31	125,986.68	36° 12' 50.829 N	107° 31' 4.305 W
2,716.00	15.86	315.49	2,653.85	335.84	-343.62	1,899,606.56	125,974.38	36° 12' 50.949 N	107° 31' 4.457 W
2,779.00	16.16	316.59	2,714.41	348.35	-355.68	1,899,619.23	125,962.48	36° 12' 51.073 N	107° 31' 4.604 W
2,843.00	16.32	315.92	2,775.85	361.28	-368.05	1,899,632.32	125,950.28	36° 12' 51.200 N	107° 31' 4.755 W
2,906.00	16.72	316.22	2,836.25	374.18	-380.48	1,899,645.38	125,938.02	36° 12' 51.328 N	107° 31' 4.907 W
2,970.00	16.71	315.65	2,897.55	387.41	-393.28	1,899,658.77	125,925.39	36° 12' 51.459 N	107° 31' 5.063 W
3,032.00	16.37	315.05	2,956.98	399.96	-405.69	1,899,671.49	125,913.15	36° 12' 51.583 N	107° 31' 5.214 W
3,096.00	16.20	314.27	3,018.42	412.58	-418.45	1,899,684.27	125,900.55	36° 12' 51.708 N	107° 31' 5.370 W
3,159.00	16.00	313.81	3,078.94	424.72	-431.01	1,899,696.58	125,888.15	36° 12' 51.828 N	107° 31' 5.523 W
3,222.00	15.63	312.39	3,139.56	436.46	-443.54	1,899,708.48	125,875.77	36° 12' 51.944 N	107° 31' 5.676 W
3,285.00	15.88	314.75	3,200.19	448.25	-455.93	1,899,720.43	125,863.54	36° 12' 52.060 N	107° 31' 5.827 W
3,348.00	16.16	316.78	3,260.75	460.70	-468.06	1,899,733.04	125,851.58	36° 12' 52.184 N	107° 31' 5.975 W
3,410.00	15.79	315.59	3,320.35	473.02	-479.87	1,899,745.51	125,839.93	36° 12' 52.305 N	107° 31' 6.119 W
3,474.00	15.48	313.97	3,381.99	485.17	-492.11	1,899,757.82	125,827.85	36° 12' 52.425 N	107° 31' 6.269 W
3,537.00	15.78	318.02	3,442.66	497.37	-503.89	1,899,770.17	125,816.23	36° 12' 52.546 N	107° 31' 6.412 W
3,599.00	15.35	319.26	3,502.38	509.86	-514.89	1,899,782.80	125,805.40	36° 12' 52.670 N	107° 31' 6.547 W
3,662.00	15.08	317.46	3,563.18	522.21	-525.87	1,899,795.30	125,794.58	36° 12' 52.792 N	107° 31' 6.681 W
3,726.00	15.80	318.13	3,624.87	534.84	-537.31	1,899,808.07	125,783.30	36° 12' 52.917 N	107° 31' 6.820 W
3,789.00	15.43	316.60	3,685.54	547.31	-548.80	1,899,820.70	125,771.98	36° 12' 53.040 N	107° 31' 6.960 W
3,853.00	16.48	316.30	3,747.07	560.06	-560.92	1,899,833.60	125,760.02	36° 12' 53.166 N	107° 31' 7.108 W
3,916.00	17.52	315.58	3,807.32	573.29	-573.73	1,899,847.00	125,747.39	36° 12' 53.297 N	107° 31' 7.265 W
3,980.00	17.40	316.78	3,868.37	587.15	-587.03	1,899,861.03	125,734.27	36° 12' 53.434 N	107° 31' 7.427 W
4,042.00	16.46	316.68	3,927.68	600.29	-599.40	1,899,874.34	125,722.07	36° 12' 53.564 N	107° 31' 7.578 W
4,105.00	14.58	315.66	3,988.38	612.46	-611.07	1,899,886.65	125,710.57	36° 12' 53.684 N	107° 31' 7.720 W
4,168.00	13.36	314.70	4,049.52	623.25	-621.78	1,899,897.58	125,699.99	36° 12' 53.791 N	107° 31' 7.851 W
4,232.00	12.06	313.14	4,111.95	633.03	-631.92	1,899,907.49	125,689.98	36° 12' 53.888 N	107° 31' 7.975 W
4,295.00	10.01	311.49	4,173.78	641.15	-640.82	1,899,915.73	125,681.19	36° 12' 53.968 N	107° 31' 8.083 W
4,358.00	9.00	313.19	4,235.92	648.15	-648.52	1,899,922.83	125,673.58	36° 12' 54.037 N	107° 31' 8.177 W
4,421.00	8.49	313.37	4,298.18	654.72	-655.49	1,899,929.49	125,666.70	36° 12' 54.102 N	107° 31' 8.262 W
4,484.00	6.95	309.85	4,360.61	660.36	-661.80	1,899,935.21	125,660.46	36° 12' 54.158 N	107° 31' 8.339 W
4,547.00	5.67	308.38	4,423.23	664.73	-667.16	1,899,939.65	125,655.16	36° 12' 54.201 N	107° 31' 8.405 W
4,610.00	3.62	307.56	4,486.02	667.88	-671.18	1,899,942.85	125,651.18	36° 12' 54.232 N	107° 31' 8.454 W
4,673.00	2.11	316.53	4,548.94	669.93	-673.56	1,899,944.93	125,648.83	36° 12' 54.252 N	107° 31' 8.483 W
4,736.00	1.05	325.92	4,611.91	671.25	-674.68	1,899,946.27	125,647.73	36° 12' 54.265 N	107° 31' 8.496 W
4,799.00	0.29	318.41	4,674.91	671.85	-675.11	1,899,946.87	125,647.31	36° 12' 54.271 N	107° 31' 8.502 W
4,860.00	0.49	299.20	4,735.91	672.09	-675.44	1,899,947.12	125,646.98	36° 12' 54.274 N	107° 31' 8.506 W
4,892.00	0.29	323.99	4,767.91	672.22	-675.60	1,899,947.25	125,646.82	36° 12' 54.275 N	107° 31' 8.508 W
4,923.00	0.67	288.70	4,798.91	672.34	-675.82	1,899,947.38	125,646.60	36° 12' 54.276 N	107° 31' 8.510 W
4,955.00	1.06	77.98	4,830.90	672.47	-675.71	1,899,947.50	125,646.71	36° 12' 54.278 N	107° 31' 8.509 W
4,986.00	4.01	87.87	4,861.87	672.57	-674.34	1,899,947.58	125,648.08	36° 12' 54.278 N	107° 31' 8.492 W
5,018.00	6.60	88.45	4,893.73	672.66	-671.39	1,899,947.63	125,651.04	36° 12' 54.279 N	107° 31' 8.456 W
5,049.00	7.85	87.67	4,924.48	672.79	-667.49	1,899,947.72	125,654.93	36° 12' 54.281 N	107° 31' 8.409 W
5,081.00	9.16	87.43	4,956.13	672.99	-662.76	1,899,947.86	125,659.66	36° 12' 54.283 N	107° 31' 8.351 W
5,112.00	11.68	88.86	4,986.62	673.17	-657.16	1,899,947.96	125,665.27	36° 12' 54.284 N	107° 31' 8.283 W
5,144.00	14.27	91.92	5,017.80	673.10	-649.98	1,899,947.80	125,672.45	36° 12' 54.284 N	107° 31' 8.195 W
5,176.00	16.48	93.85	5,048.65	672.66	-641.51	1,899,947.25	125,680.91	36° 12' 54.279 N	107° 31' 8.092 W
5,207.00	19.17	95.84	5,078.16	671.85	-632.05	1,899,946.31	125,690.36	36° 12' 54.271 N	107° 31' 7.976 W
5,239.00	21.19	95.84	5,108.20	670.73	-621.07	1,899,945.05	125,701.32	36° 12' 54.260 N	107° 31' 7.842 W
5,270.00	23.83	92.50	5,136.83	669.88	-609.24	1,899,944.05	125,713.14	36° 12' 54.252 N	107° 31' 7.698 W
5,301.00	26.38	89.51	5,164.90	669.67	-596.10	1,899,943.66	125,726.28	36° 12' 54.250 N	107° 31' 7.538 W
5,333.00	29.58	86.59	5,193.16	670.20	-581.10	1,899,944.00	125,741.29	36° 12' 54.255 N	107° 31' 7.355 W
5,364.00	32.59	86.21	5,219.71	671.21	-565.13	1,899,944.79	125,757.27	36° 12' 54.265 N	107° 31' 7.160 W
5,396.00	36.12	87.97	5,246.12	672.11	-547.09	1,899,945.46	125,775.31	36° 12' 54.274 N	107° 31' 6.940 W
5,427.00	39.02	88.71	5,270.69	672.65	-528.20	1,899,945.76	125,794.21	36° 12' 54.279 N	107° 31' 6.709 W
5,459.00	43.28	90.21	5,294.78	672.84	-507.15	1,899,945.67	125,815.26	36° 12' 54.281 N	107° 31' 6.452 W

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-19E #205H
Project:	Sandoval County, NM.NAD27	TVD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Site:	Chaco 2306-19E	MD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Well:	Chaco 2306-19E #205H	North Reference:	True
Wellbore:	OH ST-1	Survey Calculation Method:	Minimum Curvature
Design:	OH ST-1	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
5,490.00	46.71	91.32	5,316.70	672.54	-485.24	1,899,945.09	125,837.17	36° 12' 54.278 N	107° 31' 6.185 W
5,521.00	50.76	94.31	5,337.14	671.38	-461.98	1,899,943.62	125,860.41	36° 12' 54.267 N	107° 31' 5.901 W
5,553.00	53.10	95.50	5,356.87	669.22	-436.88	1,899,941.13	125,885.48	36° 12' 54.245 N	107° 31' 5.595 W
5,584.00	55.31	96.03	5,375.00	666.69	-411.87	1,899,938.28	125,910.46	36° 12' 54.220 N	107° 31' 5.290 W
5,615.00	57.97	95.44	5,392.05	664.11	-386.10	1,899,935.36	125,936.18	36° 12' 54.195 N	107° 31' 4.975 W
5,646.00	59.83	95.72	5,408.06	661.53	-359.69	1,899,932.43	125,962.56	36° 12' 54.169 N	107° 31' 4.653 W
5,678.00	60.36	95.05	5,424.01	658.92	-332.07	1,899,929.47	125,990.14	36° 12' 54.144 N	107° 31' 4.316 W
5,710.00	62.20	94.02	5,439.39	656.71	-304.10	1,899,926.89	126,018.09	36° 12' 54.122 N	107° 31' 3.975 W
5,741.00	64.95	93.33	5,453.19	654.93	-276.40	1,899,924.75	126,045.76	36° 12' 54.104 N	107° 31' 3.637 W
5,773.00	67.72	93.59	5,466.03	653.16	-247.14	1,899,922.60	126,074.99	36° 12' 54.087 N	107° 31' 3.280 W
5,804.00	69.54	92.82	5,477.32	651.55	-218.32	1,899,920.61	126,103.79	36° 12' 54.071 N	107° 31' 2.928 W
5,836.00	71.20	93.05	5,488.07	650.01	-188.22	1,899,918.67	126,133.86	36° 12' 54.055 N	107° 31' 2.561 W
5,867.00	73.81	93.54	5,497.39	648.31	-158.71	1,899,916.59	126,163.35	36° 12' 54.039 N	107° 31' 2.201 W
5,899.00	75.19	94.94	5,505.95	646.02	-127.96	1,899,913.90	126,194.07	36° 12' 54.016 N	107° 31' 1.825 W
5,931.00	77.61	94.19	5,513.47	643.55	-96.96	1,899,911.02	126,225.04	36° 12' 53.992 N	107° 31' 1.447 W
5,962.00	80.34	94.23	5,519.40	641.32	-66.61	1,899,908.39	126,255.35	36° 12' 53.970 N	107° 31' 1.077 W
5,992.00	82.22	93.18	5,523.95	639.40	-37.02	1,899,906.09	126,284.91	36° 12' 53.951 N	107° 31' 0.716 W
Last SDI Gyro MWD Survey									
6,041.00	84.88	92.76	5,529.45	636.88	11.60	1,899,902.93	126,333.49	36° 12' 53.926 N	107° 31' 0.122 W
7" Casing Shoe @ 6041' MD									
6,064.00	87.21	92.40	5,532.42	634.95	54.45	1,899,900.44	126,376.32	36° 12' 53.907 N	107° 30' 59.600 W
First SDI Lateral MWD Survey									
6,145.00	89.69	91.18	5,534.07	633.04	115.39	1,899,897.74	126,437.23	36° 12' 53.888 N	107° 30' 58.856 W
6,207.00	91.48	92.30	5,533.43	631.16	177.35	1,899,895.05	126,499.16	36° 12' 53.869 N	107° 30' 58.100 W
6,269.00	92.32	94.06	5,531.38	627.72	239.22	1,899,890.81	126,560.98	36° 12' 53.835 N	107° 30' 57.345 W
6,328.00	92.22	94.32	5,529.04	623.41	298.02	1,899,885.73	126,619.71	36° 12' 53.793 N	107° 30' 56.628 W
6,388.00	90.20	94.86	5,527.77	618.61	357.81	1,899,880.15	126,679.44	36° 12' 53.745 N	107° 30' 55.898 W
6,450.00	90.27	94.64	5,527.52	613.48	419.60	1,899,874.21	126,741.15	36° 12' 53.694 N	107° 30' 55.144 W
6,512.00	90.87	93.93	5,526.90	608.85	481.42	1,899,868.77	126,802.91	36° 12' 53.648 N	107° 30' 54.390 W
6,573.00	90.94	94.03	5,525.94	604.62	542.26	1,899,863.74	126,863.69	36° 12' 53.607 N	107° 30' 53.647 W
6,635.00	91.18	93.87	5,524.79	600.34	604.11	1,899,858.66	126,925.47	36° 12' 53.564 N	107° 30' 52.893 W
6,696.00	91.24	93.98	5,523.50	596.17	664.95	1,899,853.70	126,986.26	36° 12' 53.523 N	107° 30' 52.150 W
6,757.00	91.21	94.03	5,522.20	591.91	725.79	1,899,848.64	127,047.03	36° 12' 53.481 N	107° 30' 51.408 W
6,818.00	91.24	93.47	5,520.90	587.92	786.64	1,899,843.86	127,107.83	36° 12' 53.441 N	107° 30' 50.665 W
6,878.00	91.75	93.89	5,519.33	584.07	846.50	1,899,839.23	127,167.63	36° 12' 53.403 N	107° 30' 49.935 W
6,939.00	92.02	94.15	5,517.32	579.80	907.31	1,899,834.16	127,228.39	36° 12' 53.361 N	107° 30' 49.193 W
7,000.00	91.99	94.62	5,515.19	575.14	968.10	1,899,828.70	127,289.10	36° 12' 53.315 N	107° 30' 48.451 W
7,060.00	91.28	94.70	5,513.48	570.26	1,027.87	1,899,823.05	127,348.81	36° 12' 53.267 N	107° 30' 47.722 W
7,121.00	90.30	95.52	5,512.64	564.83	1,088.63	1,899,816.83	127,409.49	36° 12' 53.213 N	107° 30' 46.981 W
7,184.00	90.44	95.64	5,512.23	558.71	1,151.33	1,899,809.88	127,472.10	36° 12' 53.152 N	107° 30' 46.215 W
7,247.00	90.47	95.83	5,511.73	552.41	1,214.01	1,899,802.77	127,534.70	36° 12' 53.090 N	107° 30' 45.451 W
7,310.00	90.13	94.17	5,511.40	546.92	1,276.77	1,899,796.46	127,597.38	36° 12' 53.036 N	107° 30' 44.685 W
7,374.00	90.44	93.26	5,511.08	542.77	1,340.63	1,899,791.48	127,661.18	36° 12' 52.995 N	107° 30' 43.906 W
7,437.00	90.87	92.69	5,510.36	539.50	1,403.54	1,899,787.39	127,724.04	36° 12' 52.962 N	107° 30' 43.138 W
7,500.00	90.04	93.38	5,509.86	536.17	1,466.45	1,899,783.23	127,786.90	36° 12' 52.929 N	107° 30' 42.370 W
7,563.00	90.60	93.37	5,509.51	532.46	1,529.34	1,899,778.70	127,849.74	36° 12' 52.893 N	107° 30' 41.603 W
7,625.00	90.00	92.48	5,509.18	529.30	1,591.26	1,899,774.73	127,911.61	36° 12' 52.861 N	107° 30' 40.847 W
7,688.00	90.24	92.58	5,509.05	526.52	1,654.19	1,899,771.12	127,974.51	36° 12' 52.834 N	107° 30' 40.079 W
7,751.00	90.84	92.32	5,508.46	523.82	1,717.13	1,899,767.61	128,037.40	36° 12' 52.807 N	107° 30' 39.312 W
7,813.00	91.28	92.66	5,507.31	521.13	1,779.06	1,899,764.11	128,099.29	36° 12' 52.781 N	107° 30' 38.556 W
7,876.00	91.36	93.46	5,505.86	517.77	1,841.96	1,899,759.92	128,162.14	36° 12' 52.747 N	107° 30' 37.788 W
7,939.00	90.10	93.81	5,505.06	513.77	1,904.82	1,899,755.11	128,224.95	36° 12' 52.708 N	107° 30' 37.021 W
8,002.00	90.24	94.25	5,504.87	509.35	1,967.67	1,899,749.86	128,287.73	36° 12' 52.664 N	107° 30' 36.255 W
8,065.00	90.57	94.05	5,504.43	504.79	2,030.50	1,899,744.48	128,350.50	36° 12' 52.619 N	107° 30' 35.488 W
8,128.00	90.10	94.23	5,504.06	500.24	2,093.33	1,899,739.11	128,413.27	36° 12' 52.574 N	107° 30' 34.721 W



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well Chaco 2306-19E #205H
Project:	Sandoval County, NM NAD27	TVD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Site:	Chaco 2306-19E	MD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Well:	Chaco 2306-19E #205H	North Reference:	True
Wellbore:	OH ST-1	Survey Calculation Method:	Minimum Curvature
Design:	OH ST-1	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	
8,191.00	90.04	93.64	5,503.98	495.92	2,156.19	1,899,733.97	128,476.05	36° 12' 52.531 N	107° 30' 33.954 W	
8,254.00	90.04	94.25	5,503.94	491.58	2,219.04	1,899,728.81	128,538.84	36° 12' 52.488 N	107° 30' 33.187 W	
8,318.00	90.50	94.25	5,503.63	486.84	2,282.86	1,899,723.24	128,602.60	36° 12' 52.441 N	107° 30' 32.409 W	
8,381.00	90.47	94.15	5,503.10	482.22	2,345.69	1,899,717.80	128,665.36	36° 12' 52.395 N	107° 30' 31.642 W	
8,444.00	90.67	94.28	5,502.47	477.59	2,408.51	1,899,712.35	128,728.12	36° 12' 52.350 N	107° 30' 30.875 W	
8,507.00	90.84	94.52	5,501.64	472.76	2,471.32	1,899,706.70	128,790.86	36° 12' 52.302 N	107° 30' 30.109 W	
8,569.00	90.67	95.04	5,500.83	467.60	2,533.10	1,899,700.73	128,852.57	36° 12' 52.251 N	107° 30' 29.355 W	
8,633.00	90.04	93.38	5,500.43	462.90	2,596.93	1,899,695.20	128,916.32	36° 12' 52.204 N	107° 30' 28.576 W	
8,696.00	90.57	91.97	5,500.10	459.96	2,659.85	1,899,691.43	128,979.21	36° 12' 52.175 N	107° 30' 27.808 W	
8,759.00	90.74	91.98	5,499.38	457.79	2,722.81	1,899,688.44	129,042.13	36° 12' 52.153 N	107° 30' 27.040 W	
8,822.00	90.04	90.21	5,498.95	456.58	2,785.80	1,899,686.41	129,105.10	36° 12' 52.141 N	107° 30' 26.272 W	
8,885.00	90.04	90.39	5,498.90	456.25	2,848.80	1,899,685.26	129,168.09	36° 12' 52.138 N	107° 30' 25.503 W	
8,948.00	90.48	89.16	5,498.62	456.50	2,911.79	1,899,684.69	129,231.08	36° 12' 52.141 N	107° 30' 24.734 W	
9,011.00	90.22	91.27	5,498.23	456.26	2,974.79	1,899,683.63	129,294.07	36° 12' 52.138 N	107° 30' 23.966 W	
9,074.00	91.14	92.13	5,497.48	454.39	3,037.75	1,899,680.93	129,357.00	36° 12' 52.120 N	107° 30' 23.197 W	
9,137.00	90.04	92.94	5,496.84	451.61	3,100.69	1,899,677.33	129,419.90	36° 12' 52.092 N	107° 30' 22.429 W	
9,200.00	90.13	94.52	5,496.74	447.51	3,163.55	1,899,672.41	129,482.70	36° 12' 52.051 N	107° 30' 21.662 W	
9,263.00	90.04	94.08	5,496.65	442.79	3,226.38	1,899,666.86	129,545.46	36° 12' 52.005 N	107° 30' 20.896 W	
9,326.00	89.96	93.90	5,496.65	438.40	3,289.22	1,899,661.66	129,608.24	36° 12' 51.961 N	107° 30' 20.129 W	
9,389.00	89.60	93.55	5,496.89	434.31	3,352.09	1,899,656.75	129,671.05	36° 12' 51.921 N	107° 30' 19.362 W	
9,451.00	90.13	92.76	5,497.04	430.90	3,413.99	1,899,652.52	129,732.90	36° 12' 51.887 N	107° 30' 18.607 W	
9,513.00	91.04	93.40	5,496.40	427.57	3,475.90	1,899,648.39	129,794.76	36° 12' 51.854 N	107° 30' 17.851 W	
9,575.00	90.57	93.93	5,495.53	423.60	3,537.77	1,899,643.61	129,856.57	36° 12' 51.815 N	107° 30' 17.096 W	
9,639.00	90.57	93.90	5,494.90	419.23	3,601.61	1,899,638.41	129,920.35	36° 12' 51.771 N	107° 30' 16.317 W	
9,702.00	90.84	93.69	5,494.12	415.06	3,664.47	1,899,633.42	129,983.15	36° 12' 51.730 N	107° 30' 15.550 W	
9,765.00	90.24	93.74	5,493.53	410.98	3,727.34	1,899,628.52	130,045.96	36° 12' 51.690 N	107° 30' 14.783 W	
9,828.00	90.40	93.60	5,493.18	406.95	3,790.21	1,899,623.66	130,108.77	36° 12' 51.650 N	107° 30' 14.016 W	
9,891.00	90.81	93.82	5,492.51	402.87	3,853.07	1,899,618.77	130,171.57	36° 12' 51.609 N	107° 30' 13.249 W	
9,955.00	90.64	94.41	5,491.70	398.28	3,916.90	1,899,613.34	130,235.34	36° 12' 51.564 N	107° 30' 12.470 W	
10,018.00	90.66	90.65	5,490.99	395.50	3,979.82	1,899,609.74	130,298.22	36° 12' 51.536 N	107° 30' 11.702 W	
10,081.00	90.04	92.41	5,490.60	393.82	4,042.80	1,899,607.24	130,361.17	36° 12' 51.519 N	107° 30' 10.934 W	
10,144.00	90.61	92.55	5,490.24	391.09	4,105.74	1,899,603.69	130,424.06	36° 12' 51.492 N	107° 30' 10.166 W	
10,207.00	90.50	92.76	5,489.63	388.18	4,168.67	1,899,599.95	130,486.95	36° 12' 51.463 N	107° 30' 9.398 W	
10,270.00	90.17	92.95	5,489.26	385.04	4,231.59	1,899,595.99	130,549.82	36° 12' 51.432 N	107° 30' 8.630 W	
10,334.00	90.30	92.86	5,489.00	381.79	4,295.50	1,899,591.91	130,613.69	36° 12' 51.400 N	107° 30' 7.850 W	
10,397.00	90.66	93.20	5,488.47	378.46	4,358.41	1,899,587.76	130,676.55	36° 12' 51.367 N	107° 30' 7.083 W	
10,460.00	90.04	94.61	5,488.09	374.17	4,421.26	1,899,582.65	130,739.34	36° 12' 51.325 N	107° 30' 6.316 W	
10,522.00	90.04	93.20	5,488.05	369.95	4,483.12	1,899,577.62	130,801.14	36° 12' 51.283 N	107° 30' 5.561 W	
10,585.00	89.96	92.67	5,488.05	366.73	4,546.04	1,899,573.57	130,864.01	36° 12' 51.251 N	107° 30' 4.793 W	
10,648.00	89.96	91.18	5,488.09	364.61	4,609.00	1,899,570.63	130,926.94	36° 12' 51.230 N	107° 30' 4.025 W	
10,711.00	89.96	90.56	5,488.13	363.65	4,671.99	1,899,568.85	130,989.91	36° 12' 51.220 N	107° 30' 3.257 W	
10,736.00	90.22	89.07	5,488.09	363.73	4,696.99	1,899,568.61	131,014.91	36° 12' 51.221 N	107° 30' 2.952 W	
Last SDI Lateral MWD Survey										
10,805.00	90.22	89.07	5,487.83	364.85	4,765.98	1,899,568.82	131,083.91	36° 12' 51.232 N	107° 30' 2.110 W	
Projection to TD										



Survey Report - Geographic



Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well: Chaco 2306-19E #205H
Project:	Sandoval County, NM NAD27	TVD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Site:	Chaco 2306-19E	MD Reference:	GL 6965' & RKB 14' @ 6979.00ft
Well:	Chaco 2306-19E #205H	North Reference:	True
Wellbore:	OH ST-1	Survey Calculation Method:	Minimum Curvature
Design:	OH ST-1	Database:	Grand Junction District

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
74.67	74.67	0.01	0.24	First SDI Gyro Survey
403.44	403.41	-0.25	4.54	Last SDI Gyro Survey
442.00	441.96	-0.30	5.44	First SDI Gyro MWD Survey
5,992.00	5,523.95	639.40	-37.02	Last SDI Gyro MWD Survey
6,041.00	5,529.45	636.88	11.60	7" Casing Shoe @ 6041' MD
6,084.00	5,532.42	634.95	54.45	First SDI Lateral MWD Survey
10,736.00	5,488.09	363.73	4,696.99	Last SDI Lateral MWD Survey
10,805.00	5,487.83	364.85	4,765.98	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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