



Scientific Drilling

WPX Energy Rocky Mountain, LLC

Rio Blanco County, CO NAD83

RGU 42-26-198 Pad

RGU 343-26-198 - Slot B05

Wellbore #1

Design: Wellbore #1

Standard Survey Report

22 April, 2015



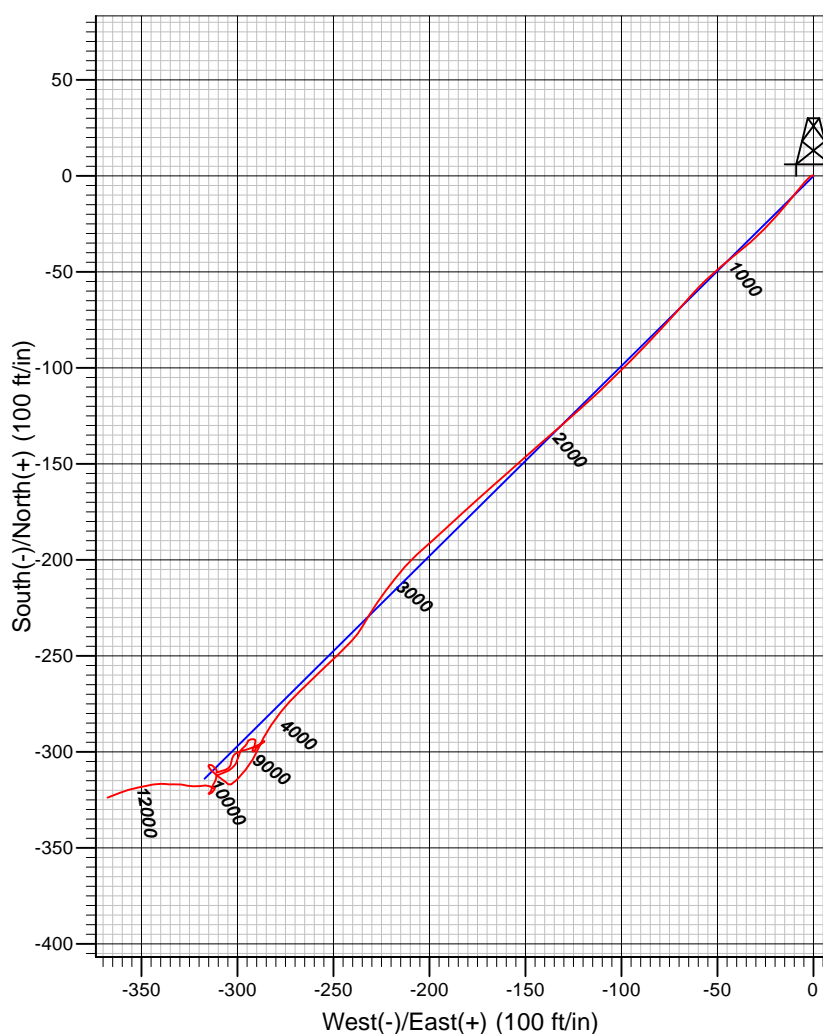
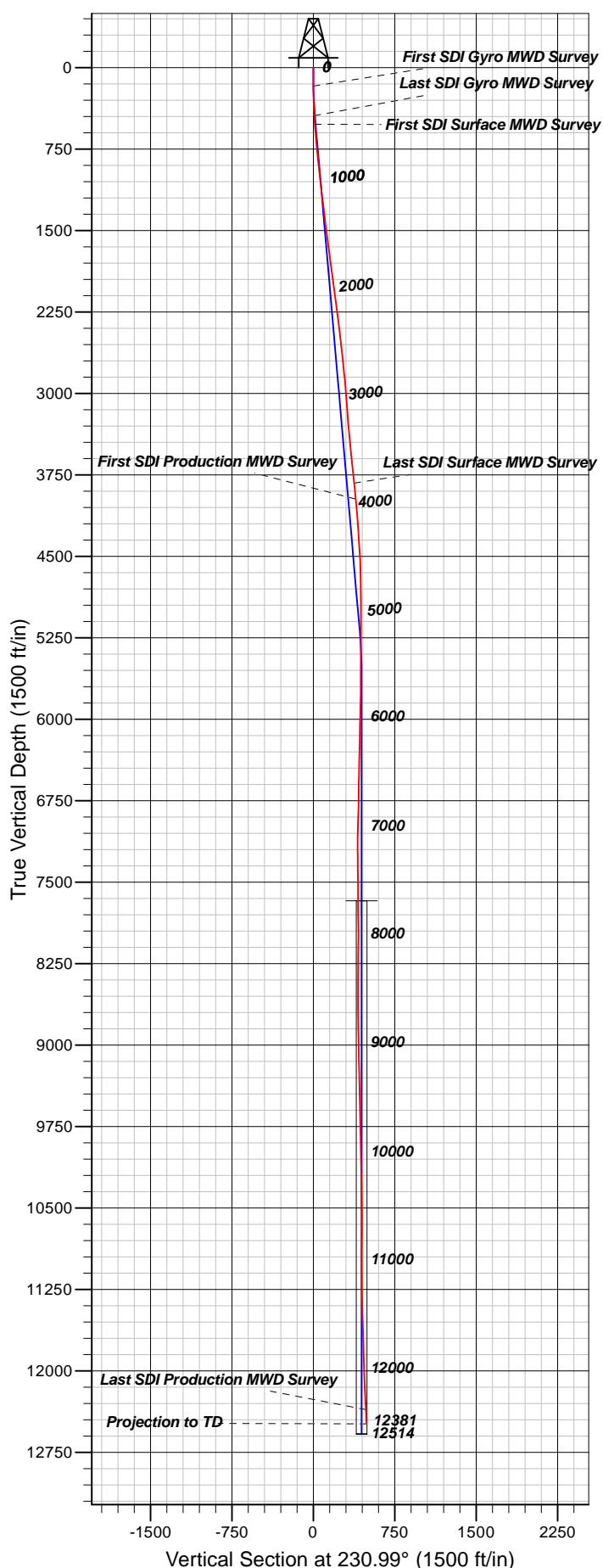
Scientific Drilling



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Well Details: RGU 343-26-198

TVD Reference: GL & KB 24' @ 6646.01ft (H&P 318) and Level: 6622.01						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1778084.69	2199590.30	39.9351329	-108.3545940	B05

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well RGU 343-26-198 - Slot B05, True North
 Vertical (TVD) Reference: GL & KB 24' @ 6646.01ft (H&P 318)
 Section (VS) Reference: Slot - B05(0.00N, 0.00E)
 Measured Depth Reference: GL & KB 24' @ 6646.01ft (H&P 318)
 Calculation Method: Minimum Curvature

PROJECT DETAILS: Rio Blanco County, CO NAD83

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Central Zone

System Datum: Mean Sea Level

Plan: Wellbore #1

11:33, April 22 2015
 Created By: Mel Mireles

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well RGU 343-26-198 - Slot B05
Project:	Rio Blanco County, CO NAD83	TVD Reference:	GL & KB 24' @ 6646.01ft (H&P 318)
Site:	RGU 42-26-198 Pad	MD Reference:	GL & KB 24' @ 6646.01ft (H&P 318)
Well:	RGU 343-26-198	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Project	Rio Blanco County, CO NAD83, Rio Blanco County, CO, NAD 1983		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site	RGU 42-26-198 Pad		
Site Position:		Northing:	1,778,121.89 usft
From:	Map	Easting:	2,199,615.70 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	39.9352372
		Longitude:	-108.3545077
		Grid Convergence:	-1.80 °

Well	RGU 343-26-198 - Slot B05		
Well Position	+N/-S	0.00 ft	Northing: 1,778,084.69 usft
	+E/-W	0.00 ft	Easting: 2,199,590.30 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft
		Latitude:	39.9351329
		Longitude:	-108.3545941
		Ground Level:	6,622.01 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/24/2013	10.36	65.99	52,274

Design	Wellbore #1				
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	230.99	

Survey Program	Date	4/19/2015			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
170.00	443.00	Survey #1 - Gyro Survey (Wellbore #1)	SDI Gyro MWD 104	SDI Gyro MWD Error Model Ver 1.0.4	
521.00	3,846.00	Survey #2 - Surface MWD (Wellbore #1)	MWD SDI	MWD - Standard ver 1.0.1	
3,995.00	12,514.00	Survey #3 - Production MWD (Wellbore #1)	MWD SDI	MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
170.00	0.35	297.42	170.00	0.24	-0.46	0.21	0.21	0.21	0.00	
First SDI Gyro MWD Survey										
261.00	0.97	233.26	260.99	-0.09	-1.32	1.09	0.96	0.68	-70.51	
353.00	1.94	226.41	352.96	-1.63	-3.08	3.42	1.07	1.05	-7.45	
443.00	3.17	218.32	442.87	-4.64	-5.72	7.37	1.42	1.37	-8.99	
Last SDI Gyro MWD Survey										
521.00	4.14	219.24	520.71	-8.51	-8.84	12.23	1.25	1.24	1.18	

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Site:	RGU 42-26-198 Pad	MD Reference:	GL & KB 24' @ 6646.01ft (H&P 318)
Well:	RGU 343-26-198	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
First SDI Surface MWD Survey									
612.00	5.21	218.95	611.41	-14.27	-13.52	19.48	1.18	1.18	-0.32
704.00	5.62	223.14	703.00	-20.80	-19.22	28.03	0.62	0.45	4.55
794.00	6.44	222.97	792.50	-27.71	-25.68	37.39	0.91	0.91	-0.19
886.00	5.83	229.84	883.97	-34.50	-32.76	47.18	1.04	-0.66	7.47
977.00	5.84	230.37	974.50	-40.43	-39.86	56.43	0.06	0.01	0.58
1,072.00	6.75	230.34	1,068.93	-47.08	-47.88	66.84	0.96	0.96	-0.03
1,166.00	6.58	226.29	1,162.29	-54.33	-56.03	77.73	0.53	-0.18	-4.31
1,260.00	7.61	222.34	1,255.57	-62.65	-64.11	89.25	1.21	1.10	-4.20
1,355.00	6.86	220.06	1,349.82	-71.64	-72.00	101.04	0.85	-0.79	-2.40
1,449.00	6.51	224.28	1,443.18	-79.75	-79.34	111.85	0.64	-0.37	4.49
1,543.00	7.21	222.87	1,536.50	-87.89	-87.07	122.98	0.77	0.74	-1.50
1,637.00	7.47	224.98	1,629.73	-96.54	-95.40	134.90	0.40	0.28	2.24
1,732.00	7.91	225.86	1,723.88	-105.46	-104.46	147.55	0.48	0.46	0.93
1,805.00	7.97	226.16	1,796.18	-112.46	-111.71	157.59	0.10	0.08	0.41
1,899.00	8.35	229.13	1,889.23	-121.44	-121.58	170.91	0.60	0.40	3.16
1,994.00	7.93	228.60	1,983.27	-130.29	-131.71	184.35	0.45	-0.44	-0.56
2,088.00	7.96	228.82	2,076.37	-138.86	-141.47	197.33	0.05	0.03	0.23
2,183.00	7.34	227.86	2,170.52	-147.26	-150.92	209.97	0.67	-0.65	-1.01
2,277.00	6.86	228.91	2,263.80	-154.98	-159.60	221.57	0.53	-0.51	1.12
2,371.00	6.58	228.12	2,357.15	-162.27	-167.85	232.56	0.31	-0.30	-0.84
2,465.00	6.30	228.54	2,450.56	-169.28	-175.72	243.09	0.30	-0.30	0.45
2,560.00	6.43	227.21	2,544.98	-176.34	-183.53	253.61	0.21	0.14	-1.40
2,654.00	6.22	228.05	2,638.40	-183.32	-191.18	263.95	0.24	-0.22	0.89
2,748.00	6.30	227.67	2,731.84	-190.20	-198.78	274.18	0.10	0.09	-0.40
2,842.00	6.33	227.69	2,825.27	-197.16	-206.43	284.50	0.03	0.03	0.02
2,937.00	4.98	219.95	2,919.81	-203.85	-212.95	293.78	1.63	-1.42	-8.15
3,031.00	4.86	218.69	3,013.46	-210.08	-218.06	301.67	0.17	-0.13	-1.34
3,125.00	4.66	216.91	3,107.14	-216.25	-222.84	309.27	0.26	-0.21	-1.89
3,219.00	4.40	215.10	3,200.85	-222.25	-227.20	316.44	0.32	-0.28	-1.93
3,313.00	4.24	210.51	3,294.58	-228.19	-231.04	323.16	0.41	-0.17	-4.88
3,408.00	5.10	210.15	3,389.26	-234.87	-234.95	330.40	0.91	0.91	-0.38
3,502.00	6.08	222.98	3,482.82	-242.12	-240.44	339.23	1.68	1.04	13.65
3,596.00	6.18	226.28	3,576.28	-249.26	-247.49	349.21	0.39	0.11	3.51
3,691.00	6.41	227.05	3,670.71	-256.41	-255.07	359.59	0.26	0.24	0.81
3,785.00	6.35	225.16	3,764.13	-263.65	-262.59	370.00	0.23	-0.06	-2.01
3,846.00	6.27	226.05	3,824.76	-268.34	-267.38	376.67	0.21	-0.13	1.46
Last SDI Surface MWD Survey									
3,995.00	5.35	218.53	3,972.99	-279.42	-277.57	391.56	0.80	-0.62	-5.05
First SDI Production MWD Survey									
4,090.00	4.75	213.17	4,067.62	-286.18	-282.48	399.63	0.80	-0.63	-5.64
4,184.00	4.43	209.33	4,161.32	-292.60	-286.39	406.71	0.47	-0.34	-4.09
4,278.00	3.65	201.50	4,255.09	-298.55	-289.26	412.69	1.01	-0.83	-8.33
4,373.00	3.82	212.74	4,349.89	-304.03	-292.08	418.33	0.79	0.18	11.83

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Well:	RGU 343-26-198	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,467.00	4.01	216.85	4,443.67	-309.29	-295.75	424.49	0.36	0.20	4.37	
4,562.00	3.72	226.07	4,538.45	-314.09	-299.96	430.78	0.72	-0.31	9.71	
4,656.00	1.65	238.39	4,632.35	-316.91	-303.31	435.16	2.27	-2.20	13.11	
4,750.00	0.90	331.92	4,726.33	-316.97	-304.81	436.36	2.05	-0.80	99.50	
4,844.00	1.29	303.55	4,820.31	-315.73	-306.04	436.54	0.70	0.41	-30.18	
4,939.00	1.85	304.29	4,915.28	-314.28	-308.19	437.30	0.59	0.59	0.78	
5,033.00	2.76	311.82	5,009.20	-311.92	-311.13	438.10	1.02	0.97	8.01	
5,127.00	2.06	316.15	5,103.12	-309.19	-313.99	438.60	0.77	-0.74	4.61	
5,221.00	0.47	0.41	5,197.09	-307.58	-315.16	438.50	1.87	-1.69	47.09	
5,316.00	0.68	38.01	5,292.09	-306.75	-314.81	437.70	0.44	0.22	39.58	
5,410.00	1.76	121.01	5,386.07	-307.05	-313.23	436.67	1.92	1.15	88.30	
5,504.00	1.71	145.07	5,480.03	-308.95	-311.19	436.27	0.77	-0.05	25.60	
5,598.00	0.56	218.35	5,574.01	-310.46	-310.67	436.82	1.74	-1.22	77.96	
5,692.00	0.05	73.51	5,668.01	-310.81	-310.92	437.23	0.64	-0.54	-154.09	
5,787.00	1.11	72.23	5,763.00	-310.51	-310.00	436.34	1.12	1.12	-1.35	
5,881.00	1.61	73.04	5,856.98	-309.85	-307.87	434.26	0.53	0.53	0.86	
5,976.00	1.59	64.17	5,951.94	-308.89	-305.41	431.74	0.26	-0.02	-9.34	
6,070.00	1.06	25.14	6,045.92	-307.53	-303.86	429.69	1.08	-0.56	-41.52	
6,164.00	1.46	11.99	6,139.89	-305.57	-303.25	427.98	0.52	0.43	-13.99	
6,258.00	1.57	16.30	6,233.86	-303.17	-302.64	425.99	0.17	0.12	4.59	
6,353.00	1.14	48.75	6,328.83	-301.29	-301.56	423.97	0.91	-0.45	34.16	
6,447.00	1.32	68.78	6,422.81	-300.29	-299.85	422.01	0.49	0.19	21.31	
6,541.00	1.50	70.55	6,516.78	-299.48	-297.68	419.82	0.20	0.19	1.88	
6,636.00	1.06	82.73	6,611.76	-298.96	-295.63	417.90	0.54	-0.46	12.82	
6,730.00	0.44	63.16	6,705.75	-298.69	-294.45	416.81	0.70	-0.66	-20.82	
6,824.00	1.37	67.04	6,799.74	-298.08	-293.09	415.37	0.99	0.99	4.13	
6,919.00	1.73	67.41	6,894.70	-297.09	-290.72	412.91	0.38	0.38	0.39	
7,013.00	1.94	63.07	6,988.66	-295.83	-287.99	409.99	0.27	0.22	-4.62	
7,107.00	0.66	43.63	7,082.63	-294.71	-286.20	407.90	1.42	-1.36	-20.68	
7,201.00	0.15	242.98	7,176.63	-294.38	-285.94	407.48	0.85	-0.54	-170.90	
7,296.00	0.37	228.51	7,271.63	-294.64	-286.28	407.91	0.24	0.23	-15.23	
7,390.00	0.64	229.91	7,365.62	-295.18	-286.91	408.74	0.29	0.29	1.49	
7,462.00	1.23	226.55	7,437.61	-295.97	-287.78	409.91	0.82	0.82	-4.67	
7,557.00	0.70	258.89	7,532.60	-296.78	-289.09	411.44	0.78	-0.56	34.04	
7,651.00	0.32	154.80	7,626.60	-297.13	-289.54	412.01	0.89	-0.40	-110.73	
7,745.00	0.62	249.23	7,720.60	-297.55	-289.90	412.55	0.77	0.32	100.46	
7,840.00	0.79	185.68	7,815.59	-298.38	-290.45	413.50	0.80	0.18	-66.89	
7,933.00	1.14	224.70	7,908.58	-299.67	-291.16	414.87	0.78	0.38	41.96	
8,028.00	0.79	317.78	8,003.57	-299.86	-292.27	415.85	1.50	-0.37	97.98	
8,122.00	1.13	42.89	8,097.56	-298.70	-292.07	414.97	1.41	0.36	90.54	
8,216.00	1.23	13.68	8,191.54	-297.04	-291.20	413.25	0.64	0.11	-31.07	
8,310.00	0.44	23.40	8,285.53	-295.73	-290.82	412.13	0.85	-0.84	10.34	
8,405.00	0.97	0.14	8,380.52	-294.59	-290.67	411.29	0.62	0.56	-24.48	

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Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,499.00	0.13	299.83	8,474.52	-293.74	-290.76	410.83	0.97	-0.89	-64.16
8,593.00	0.75	289.68	8,568.51	-293.48	-291.43	411.19	0.66	0.66	-10.80
8,688.00	0.26	238.44	8,663.51	-293.39	-292.20	411.73	0.65	-0.52	-53.94
8,782.00	0.97	269.53	8,757.50	-293.51	-293.18	412.56	0.81	0.76	33.07
8,876.00	0.88	210.38	8,851.49	-294.13	-294.34	413.86	0.97	-0.10	-62.93
8,970.00	0.97	198.16	8,945.48	-295.51	-294.95	415.20	0.23	0.10	-13.00
9,064.00	1.05	227.48	9,039.47	-296.85	-295.84	416.73	0.55	0.09	31.19
9,159.00	1.55	228.58	9,134.44	-298.29	-297.44	418.88	0.53	0.53	1.16
9,253.00	1.76	193.68	9,228.41	-300.53	-298.74	421.30	1.08	0.22	-37.13
9,348.00	1.84	204.61	9,323.36	-303.34	-299.72	423.83	0.37	0.08	11.51
9,442.00	0.86	193.09	9,417.33	-305.40	-300.51	425.74	1.08	-1.04	-12.26
9,536.00	1.06	224.18	9,511.32	-306.71	-301.27	427.16	0.58	0.21	33.07
9,631.00	1.58	221.10	9,606.30	-308.32	-302.74	429.32	0.55	0.55	-3.24
9,725.00	1.23	246.24	9,700.27	-309.71	-304.52	431.57	0.75	-0.37	26.74
9,842.00	1.28	244.24	9,817.24	-310.78	-306.85	434.05	0.06	0.04	-1.71
9,936.00	1.12	254.80	9,911.22	-311.48	-308.68	435.92	0.29	-0.17	11.23
10,031.00	1.25	236.52	10,006.20	-312.29	-310.44	437.80	0.42	0.14	-19.24
10,124.00	0.70	161.45	10,099.19	-313.39	-311.10	439.00	1.36	-0.59	-80.72
10,218.00	1.20	205.95	10,193.18	-314.82	-311.35	440.10	0.91	0.53	47.34
10,312.00	1.87	211.95	10,287.14	-317.01	-312.59	442.44	0.73	0.71	6.38
10,411.00	1.00	177.49	10,386.11	-319.24	-313.41	444.48	1.20	-0.88	-34.81
10,505.00	1.09	225.05	10,480.10	-320.69	-314.01	445.86	0.90	0.10	50.60
10,600.00	0.67	226.57	10,575.09	-321.71	-315.05	447.31	0.44	-0.44	1.60
10,694.00	0.97	80.55	10,669.08	-321.96	-314.67	447.16	1.67	0.32	-155.34
10,788.00	1.11	39.79	10,763.07	-321.13	-313.30	445.58	0.78	0.15	-43.36
10,882.00	1.02	44.23	10,857.05	-319.83	-312.13	443.86	0.13	-0.10	4.72
10,977.00	0.37	297.65	10,952.05	-319.08	-311.81	443.14	1.24	-0.68	-112.19
11,071.00	0.93	292.40	11,046.04	-318.65	-312.79	443.62	0.60	0.60	-5.59
11,166.00	1.16	298.44	11,141.02	-317.90	-314.35	444.36	0.27	0.24	6.36
11,260.00	1.79	266.10	11,234.99	-317.55	-316.65	445.93	1.09	0.67	-34.40
11,354.00	1.99	264.98	11,328.94	-317.79	-319.74	448.48	0.22	0.21	-1.19
11,449.00	1.83	267.99	11,423.89	-317.99	-322.90	451.06	0.20	-0.17	3.17
11,543.00	1.90	285.51	11,517.84	-317.62	-325.90	453.16	0.61	0.07	18.64
11,637.00	2.18	274.20	11,611.78	-317.07	-329.18	455.37	0.52	0.30	-12.03
11,732.00	2.16	268.60	11,706.71	-316.99	-332.77	458.11	0.22	-0.02	-5.89
11,814.00	2.27	274.78	11,788.65	-316.89	-335.94	460.50	0.32	0.13	7.54
11,909.00	2.26	271.54	11,883.58	-316.68	-339.69	463.28	0.14	-0.01	-3.41
12,003.00	2.42	259.95	11,977.50	-316.98	-343.49	466.43	0.53	0.17	-12.33
12,098.00	2.82	260.99	12,072.40	-317.69	-347.78	470.21	0.42	0.42	1.09
12,192.00	2.82	255.54	12,166.29	-318.63	-352.30	474.31	0.29	0.00	-5.80
12,287.00	2.85	253.79	12,261.17	-319.88	-356.83	478.62	0.10	0.03	-1.84
12,381.00	2.92	249.01	12,355.05	-321.39	-361.31	483.05	0.27	0.07	-5.09
Last SDI Production MWD Survey									
12,514.00	2.92	249.01	12,487.88	-323.81	-367.63	489.49	0.00	0.00	0.00

Company:	WPX Energy Rocky Mountain, LLC	Local Co-ordinate Reference:	Well RGU 343-26-198 - Slot B05
Project:	Rio Blanco County, CO NAD83	TVD Reference:	GL & KB 24' @ 6646.01ft (H&P 318)
Site:	RGU 42-26-198 Pad	MD Reference:	GL & KB 24' @ 6646.01ft (H&P 318)
Well:	RGU 343-26-198	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Projection to TD									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
170.00	170.00	0.24	-0.46	First SDI Gyro MWD Survey
443.00	442.87	-4.64	-5.72	Last SDI Gyro MWD Survey
521.00	520.71	-8.51	-8.84	First SDI Surface MWD Survey
3,846.00	3,824.76	-268.34	-267.38	Last SDI Surface MWD Survey
3,995.00	3,972.99	-279.42	-277.57	First SDI Production MWD Survey
12,381.00	12,355.05	-321.39	-361.31	Last SDI Production MWD Survey
12,514.00	12,487.88	-323.81	-367.63	Projection to TD

Checked By: _____ Approved By: _____ Date: _____