



## Directional Survey Certification

2948 I-70 Business Loop  
Grand Junction, CO 81504  
(970)-245-9447 Fax (970)-245-9454

<b>Operator</b>	WPX Energy Rocky Mountain, LLC.
<b>Well Name &amp; No.</b>	RU 543-7
<b>County &amp; State</b>	Garfield County, CO
<b>SDI Job No.</b>	420215DEFK253674
<b>Rig</b>	Nabors 576

I, Mel Mireles Jr., having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 0 feet to a measured depth of 9,990 feet is true and correct as determined from all available records.

  
Signature

20-Feb-15  
Date

### **Mel Mireles Jr.**

Grand Junction Assistant Well Planner  
Scientific Drilling - Colorado District

<b>Company:</b>	WPX Energy Rocky Mountain, LLC	<b>Local Co-ordinate Reference:</b>	Well RU 543-7 - Slot B02
<b>Project:</b>	Garfield County, CO NAD83	<b>TVD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Site:</b>	RU 44-7 Pad	<b>MD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Well:</b>	RU 543-7	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Grand Junction District

<b>Project</b>	Garfield County, CO NAD83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		RU 44-7 Pad			
Site Position:		Northing:	1,598,795.69 usft	Latitude:	39° 27' 16.858 N
From:	Map	Easting:	2,347,575.10 usft	Longitude:	107° 48' 38.926 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.46 °

Well	RU 543-7 - Slot B02					
Well Position	+N/-S	0.00 ft	Northing:	1,598,868.09 usft	Latitude:	39° 27' 17.574 N
	+E/-W	0.00 ft	Easting:	2,347,579.80 usft	Longitude:	107° 48' 38.890 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	7,917.02 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	1/15/2015	9.80	65.64	51,874

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	49.92	

<b>Survey Program</b>	<b>Date</b>	2/20/2015			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
87.00	541.00	Survey #1 - Gyro Survey (Wellbore #1)	SDI Gyro MWD 104	SDI Gyro MWD Error Model Ver 1.0.4	
611.00	1,256.00	Survey #2 - Surface MWD (Wellbore #1)	MWD SDI	MWD - Standard ver 1.0.1	
1,351.00	9,990.00	Survey #3 - Production MWD (Wellbore #1)	MWD SDI	MWD - Standard ver 1.0.1	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
87.00	0.70	30.50	87.00	0.46	0.27	0.50	0.80	0.80	0.00	
<b>First SDI Gyro MWD Survey</b>										
176.00	2.55	52.29	175.96	2.14	2.11	2.99	2.15	2.08	24.48	
267.00	3.17	62.75	266.85	4.53	5.95	7.47	0.89	0.68	11.49	
358.00	3.34	55.81	357.70	7.17	10.38	12.56	0.47	0.19	-7.63	
449.00	4.05	60.47	448.51	10.24	15.37	18.35	0.85	0.78	5.12	

<b>Company:</b>	WPX Energy Rocky Mountain, LLC	<b>Local Co-ordinate Reference:</b>	Well RU 543-7 - Slot B02
<b>Project:</b>	Garfield County, CO NAD83	<b>TVD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Site:</b>	RU 44-7 Pad	<b>MD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Well:</b>	RU 543-7	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
541.00	3.78	49.22	540.30	13.83	20.49	24.58	0.88	-0.29	-12.23
<b>Last SDI Gyro MWD Survey</b>									
611.00	4.16	43.11	610.13	17.19	23.97	29.41	0.81	0.54	-8.73
<b>First SDI Surface MWD Survey</b>									
702.00	4.84	48.20	700.85	22.15	29.09	36.52	0.87	0.75	5.59
792.00	4.94	47.82	790.52	27.29	34.79	44.19	0.12	0.11	-0.42
884.00	5.31	53.23	882.15	32.50	41.14	52.40	0.66	0.40	5.88
974.00	5.76	54.26	971.73	37.63	48.14	61.06	0.51	0.50	1.14
1,066.00	6.16	51.87	1,063.24	43.37	55.77	70.60	0.51	0.43	-2.60
1,161.00	5.63	57.84	1,157.73	49.00	63.73	80.31	0.85	-0.56	6.28
1,256.00	6.00	59.38	1,252.24	54.01	71.94	89.82	0.42	0.39	1.62
<b>Last SDI Surface MWD Survey</b>									
1,351.00	6.24	59.49	1,346.70	59.16	80.66	99.81	0.25	0.25	0.12
<b>First SDI Production MWD Survey</b>									
1,446.00	4.84	51.36	1,441.26	64.28	88.24	108.91	1.69	-1.47	-8.56
1,541.00	4.63	50.36	1,535.93	69.23	94.33	116.75	0.24	-0.22	-1.05
1,636.00	4.62	51.24	1,630.63	74.07	100.26	124.41	0.08	-0.01	0.93
1,731.00	4.70	47.71	1,725.31	79.09	106.13	132.12	0.31	0.08	-3.72
1,827.00	4.74	45.76	1,820.99	84.50	111.88	140.01	0.17	0.04	-2.03
1,922.00	4.61	48.49	1,915.67	89.77	117.55	147.74	0.27	-0.14	2.87
2,017.00	4.42	49.60	2,010.37	94.67	123.19	155.22	0.22	-0.20	1.17
2,112.00	4.41	48.66	2,105.09	99.46	128.72	162.53	0.08	-0.01	-0.99
2,208.00	4.10	47.78	2,200.83	104.20	134.04	169.65	0.33	-0.32	-0.92
2,303.00	5.19	57.30	2,295.52	108.80	140.17	177.30	1.40	1.15	10.02
2,397.00	5.07	56.35	2,389.14	113.40	147.20	185.65	0.16	-0.13	-1.01
2,492.00	5.04	54.18	2,483.77	118.17	154.08	193.98	0.20	-0.03	-2.28
2,587.00	4.88	52.60	2,578.41	123.07	160.67	202.18	0.22	-0.17	-1.66
2,682.00	4.56	50.45	2,673.09	127.93	166.80	209.99	0.38	-0.34	-2.26
2,778.00	4.57	47.93	2,768.79	132.92	172.58	217.63	0.21	0.01	-2.63
2,873.00	4.40	46.18	2,863.50	137.98	178.02	225.05	0.23	-0.18	-1.84
2,969.00	4.45	44.32	2,959.21	143.19	183.28	232.43	0.16	0.05	-1.94
3,064.00	4.76	54.16	3,053.91	148.14	189.05	240.03	0.89	0.33	10.36
3,159.00	4.74	53.88	3,148.58	152.76	195.41	247.87	0.03	-0.02	-0.29
3,254.00	4.63	53.07	3,243.26	157.38	201.65	255.62	0.14	-0.12	-0.85
3,349.00	4.63	53.95	3,337.95	161.94	207.81	263.27	0.07	0.00	0.93
3,445.00	4.45	51.62	3,433.65	166.53	213.87	270.86	0.27	-0.19	-2.43
3,540.00	4.31	51.89	3,528.37	171.02	219.56	278.11	0.15	-0.15	0.28
3,636.00	4.22	50.04	3,624.11	175.51	225.11	285.25	0.17	-0.09	-1.93
3,731.00	4.90	52.04	3,718.81	180.26	230.99	292.80	0.73	0.72	2.11
3,826.00	4.84	49.60	3,813.46	185.35	237.24	300.86	0.23	-0.06	-2.57
3,919.00	4.06	46.65	3,906.18	190.15	242.62	308.07	0.87	-0.84	-3.17
4,014.00	5.04	55.70	4,000.88	194.81	248.51	315.58	1.28	1.03	9.53
4,109.00	5.22	53.68	4,095.50	199.72	255.44	324.04	0.27	0.19	-2.13

<b>Company:</b>	WPX Energy Rocky Mountain, LLC	<b>Local Co-ordinate Reference:</b>	Well RU 543-7 - Slot B02
<b>Project:</b>	Garfield County, CO NAD83	<b>TVD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Site:</b>	RU 44-7 Pad	<b>MD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Well:</b>	RU 543-7	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
4,204.00	5.40	52.60	4,190.09	205.00	262.48	332.82	0.22	0.19	-1.14
4,299.00	5.30	51.21	4,284.68	210.46	269.45	341.67	0.17	-0.11	-1.46
4,394.00	5.54	62.62	4,379.26	215.32	276.94	350.53	1.16	0.25	12.01
4,488.00	5.36	62.13	4,472.83	219.46	284.85	359.25	0.20	-0.19	-0.52
4,584.00	5.06	60.67	4,568.44	223.63	292.50	367.79	0.34	-0.31	-1.52
4,679.00	4.26	58.61	4,663.12	227.52	299.17	375.40	0.86	-0.84	-2.17
4,775.00	4.78	53.60	4,758.82	231.75	305.43	382.91	0.68	0.54	-5.22
4,870.00	4.87	51.40	4,853.49	236.61	311.77	390.89	0.22	0.09	-2.32
4,966.00	4.66	51.98	4,949.16	241.56	318.03	398.86	0.22	-0.22	0.60
5,061.00	4.45	50.16	5,043.86	246.30	323.90	406.41	0.27	-0.22	-1.92
5,157.00	4.24	46.18	5,139.58	251.14	329.32	413.67	0.38	-0.22	-4.15
5,252.00	5.08	49.06	5,234.27	256.33	335.03	421.38	0.92	0.88	3.03
5,348.00	5.01	51.01	5,329.89	261.75	341.50	429.82	0.19	-0.07	2.03
5,444.00	4.89	49.98	5,425.54	267.02	347.89	438.10	0.16	-0.13	-1.07
5,539.00	4.84	48.46	5,520.19	272.28	353.99	446.16	0.15	-0.05	-1.60
5,635.00	4.65	45.22	5,615.86	277.71	359.78	454.09	0.34	-0.20	-3.38
5,730.00	4.56	42.98	5,710.56	283.18	365.09	461.67	0.21	-0.09	-2.36
5,825.00	4.91	45.32	5,805.23	288.80	370.55	469.47	0.42	0.37	2.46
5,920.00	4.78	44.54	5,899.89	294.48	376.22	477.47	0.15	-0.14	-0.82
6,015.00	4.83	44.03	5,994.56	300.18	381.78	485.39	0.07	0.05	-0.54
6,110.00	4.85	45.63	6,089.22	305.86	387.43	493.37	0.14	0.02	1.68
6,206.00	5.27	60.17	6,184.85	310.89	394.15	501.76	1.40	0.44	15.15
6,301.00	4.84	59.54	6,279.48	315.10	401.39	510.00	0.46	-0.45	-0.66
6,395.00	4.92	60.06	6,373.14	319.12	408.30	517.88	0.10	0.09	0.55
6,490.00	4.73	61.97	6,467.80	322.99	415.29	525.72	0.26	-0.20	2.01
6,585.00	4.29	61.57	6,562.51	326.52	421.87	533.03	0.46	-0.46	-0.42
6,681.00	4.21	63.71	6,658.25	329.79	428.19	539.97	0.19	-0.08	2.23
6,775.00	3.58	56.90	6,752.03	332.93	433.74	546.23	0.83	-0.67	-7.24
6,871.00	3.33	53.92	6,847.85	336.20	438.51	551.99	0.32	-0.26	-3.10
6,966.00	2.64	41.52	6,942.73	339.47	442.19	556.91	0.99	-0.73	-13.05
7,062.00	2.88	41.41	7,038.61	342.93	445.25	561.48	0.25	0.25	-0.11
7,157.00	2.11	50.46	7,133.52	345.83	448.18	565.59	0.91	-0.81	9.53
7,252.00	1.23	38.71	7,228.48	347.74	450.16	568.34	0.99	-0.93	-12.37
7,348.00	0.88	33.01	7,324.47	349.17	451.21	570.05	0.38	-0.36	-5.94
7,443.00	0.62	35.62	7,419.46	350.20	451.91	571.25	0.28	-0.27	2.75
7,539.00	0.26	52.07	7,515.46	350.75	452.38	571.97	0.39	-0.38	17.14
7,634.00	0.21	143.42	7,610.45	350.74	452.65	572.17	0.36	-0.05	96.16
7,729.00	0.31	206.62	7,705.45	350.37	452.64	571.93	0.30	0.11	66.53
7,825.00	1.16	307.19	7,801.45	350.73	451.75	571.47	1.31	0.89	104.76
7,921.00	1.03	310.57	7,897.43	351.88	450.32	571.12	0.15	-0.14	3.52
8,017.00	1.27	306.71	7,993.41	353.08	448.81	570.74	0.26	0.25	-4.02
8,112.00	1.43	307.25	8,088.38	354.42	447.03	570.24	0.17	0.17	0.57

<b>Company:</b>	WPX Energy Rocky Mountain, LLC	<b>Local Co-ordinate Reference:</b>	Well RU 543-7 - Slot B02
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<b>Site:</b>	RU 44-7 Pad	<b>MD Reference:</b>	KELLY BUSHING @ 7943.02ft (Nabors 576 (26' RKB) kjs)
<b>Well:</b>	RU 543-7	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)	
8,207.00	1.31	310.96	8,183.36	355.85	445.26	569.81	0.16	-0.13	3.91	
8,302.00	1.47	305.45	8,278.33	357.27	443.45	569.33	0.22	0.17	-5.80	
8,398.00	1.16	299.99	8,374.30	358.47	441.60	568.70	0.35	-0.32	-5.69	
8,493.00	1.10	281.27	8,469.29	359.13	439.88	567.80	0.39	-0.06	-19.71	
8,588.00	1.25	264.51	8,564.27	359.21	437.95	566.38	0.39	0.16	-17.64	
8,684.00	1.14	263.53	8,660.24	359.00	435.96	564.72	0.12	-0.11	-1.02	
8,779.00	0.97	271.62	8,755.23	358.92	434.22	563.33	0.24	-0.18	8.52	
8,874.00	0.74	269.83	8,850.22	358.94	432.80	562.26	0.24	-0.24	-1.88	
8,969.00	0.44	303.93	8,945.21	359.14	431.88	561.69	0.47	-0.32	35.89	
9,064.00	0.42	357.52	9,040.21	359.69	431.57	561.80	0.41	-0.02	56.41	
9,160.00	0.41	312.05	9,136.21	360.27	431.30	561.97	0.33	-0.01	-47.36	
9,255.00	0.44	283.39	9,231.21	360.58	430.69	561.71	0.22	0.03	-30.17	
9,350.00	0.12	299.62	9,326.20	360.72	430.25	561.45	0.34	-0.34	17.08	
9,446.00	0.39	346.01	9,422.20	361.09	430.08	561.56	0.33	0.28	48.32	
9,541.00	0.48	30.39	9,517.20	361.74	430.20	562.08	0.36	0.09	46.72	
9,636.00	0.26	70.08	9,612.20	362.16	430.61	562.66	0.34	-0.23	41.78	
9,732.00	0.35	61.03	9,708.20	362.38	431.07	563.15	0.11	0.09	-9.43	
9,932.00	0.18	351.42	9,908.20	362.98	431.56	563.91	0.17	-0.09	-34.81	
Last SDI Production MWD Survey										
9,990.00	0.18	351.42	9,966.20	363.16	431.53	564.01	0.00	0.00	0.00	
Projection to TD										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
87.00	87.00	0.46	0.27	First SDI Gyro MWD Survey	
541.00	540.30	13.83	20.49	Last SDI Gyro MWD Survey	
611.00	610.13	17.19	23.97	First SDI Surface MWD Survey	
1,256.00	1,252.24	54.01	71.94	Last SDI Surface MWD Survey	
1,351.00	1,346.70	59.16	80.66	First SDI Production MWD Survey	
9,932.00	9,908.20	362.98	431.56	Last SDI Production MWD Survey	
9,990.00	9,966.20	363.16	431.53	Projection to TD	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_