



## **END OF WELL REPORT**

**Prepared For:**

**Kerr-McGee Oil & Gas Onshore LP  
PARAGON 16-6HZ PAD  
PARAGON 9N-31HZ  
WELD COUNTY, COLORADO**

***Prepared By  
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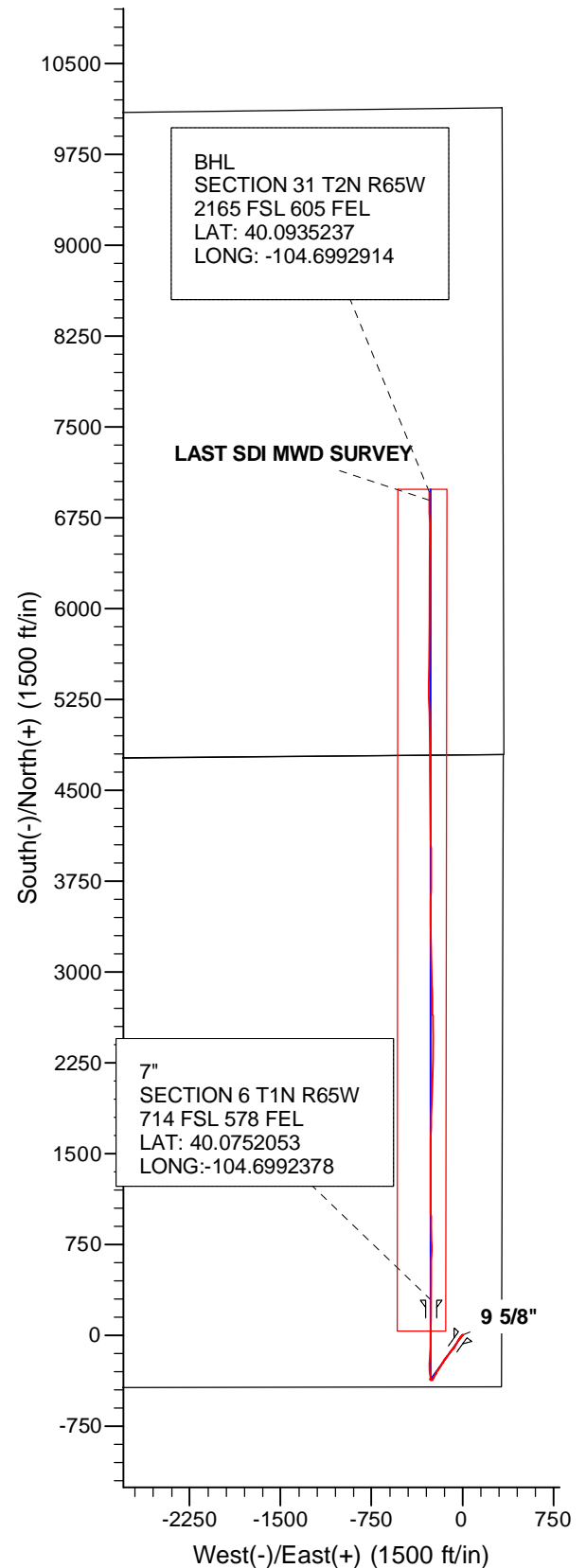
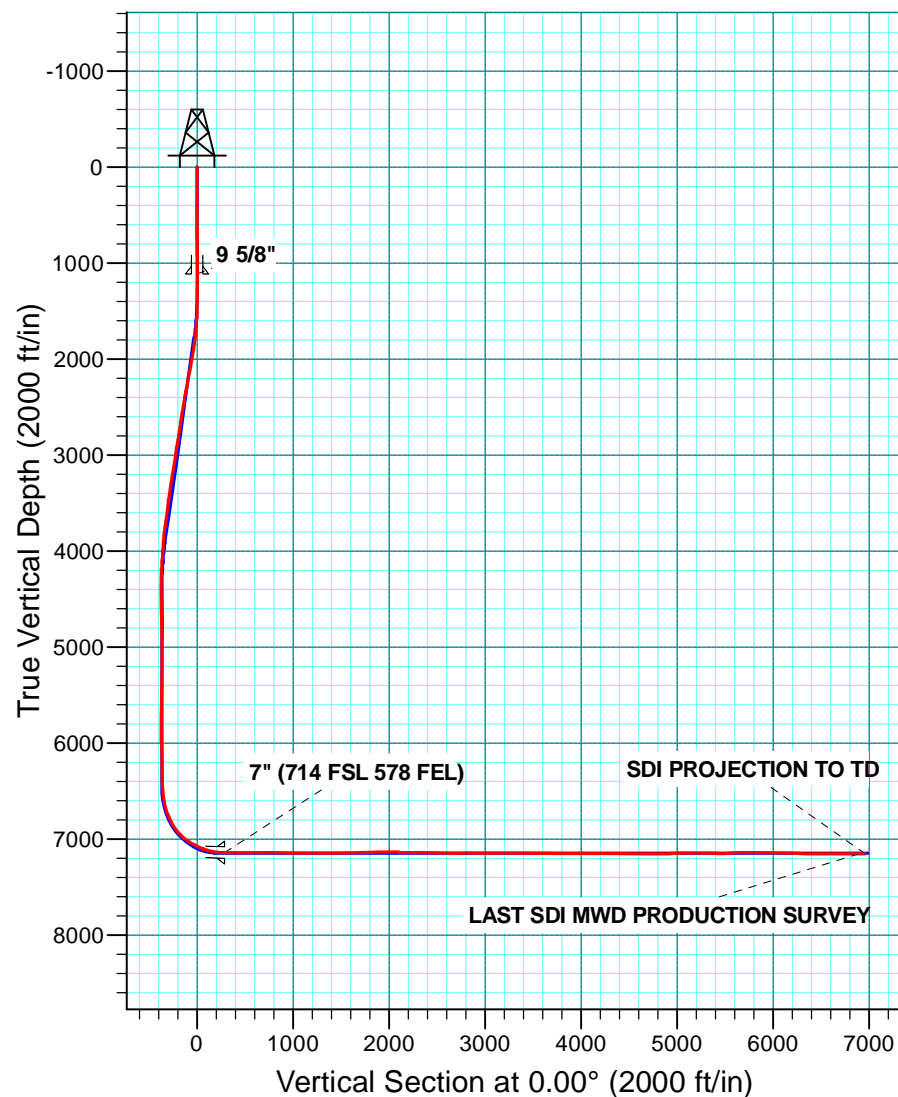
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WELL DETAILS: PARAGON 9N-31HZ					
GL 4975 & KB 25 @ 5000.00ft (HP 311)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1270968.13	3224345.41	40.0744140	-104.6983200



# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**PARAGON 16-6HZ PAD**

**PARAGON 9N-31HZ**

**OH**

**Design: OH**

## **Standard Survey Report**

**27 January, 2014**

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well PARAGON 9N-31HZ
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Site:</b>	PARAGON 16-6HZ PAD	<b>MD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Well:</b>	PARAGON 9N-31HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Denver Sales Office

<b>Project</b>	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
<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 Northern Zone		

<b>Site</b>	PARAGON 16-6HZ PAD, SESE SECTION 6 T1N R65W		
<b>Site Position:</b>		<b>Northing:</b>	1,270,968.13 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,224,345.41 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	40.0744140
		<b>Longitude:</b>	-104.6983200
		<b>Grid Convergence:</b>	0.52 °

<b>Well</b>	PARAGON 9N-31HZ, 422 FSL 330 FEL		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b> 1,270,968.13 usft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 3,224,345.41 usft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	0.00 ft
		<b>Latitude:</b>	40.0744140
		<b>Longitude:</b>	-104.6983200
		<b>Ground Level:</b>	4,975.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2013	12/20/2013	8.50	66.70	52,623

<b>Design</b>	OH				
<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		0.00

<b>Survey Program</b>	<b>Date</b>	1/22/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
25.00	1,037.00	Survey #1 MS GYRO SURFACE (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
1,269.00	14,227.00	Survey #2 SDI MWD PRODUCTION (OH)	SDI_MWD+CRUST_1.0	SDI MWD + Crustal anomaly, Version 1.0	

<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 (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	
125.00	0.10	244.78	125.00	-0.04	-0.08	-0.04	0.10	0.10	0.00	
<b>FIRST SURFACE GYRO SURVEY</b>										
225.00	0.02	88.11	225.00	-0.07	-0.14	-0.07	0.12	-0.08	-156.67	
325.00	0.20	86.55	325.00	-0.06	0.05	-0.06	0.18	0.18	-1.56	
425.00	0.39	87.89	425.00	-0.04	0.57	-0.04	0.19	0.19	1.34	
525.00	0.38	69.66	525.00	0.09	1.22	0.09	0.12	-0.01	-18.23	
625.00	0.48	87.79	624.99	0.22	1.95	0.22	0.17	0.10	18.13	
725.00	0.55	59.70	724.99	0.48	2.78	0.48	0.26	0.07	-28.09	

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well PARAGON 9N-31HZ
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Site:</b>	PARAGON 16-6HZ PAD	<b>MD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Well:</b>	PARAGON 9N-31HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Denver Sales Office

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
825.00	0.65	41.69	824.98	1.14	3.57	1.14	0.21	0.10	-18.01
925.00	0.59	8.92	924.98	2.08	4.03	2.08	0.35	-0.06	-32.77
1,025.00	0.31	351.79	1,024.98	2.85	4.07	2.85	0.31	-0.28	-17.13
1,037.00	0.25	343.95	1,036.98	2.91	4.06	2.91	0.59	-0.50	-65.33
<b>LAST SURFACE GYRO SURVEY</b>									
1,111.00	0.51	35.75	1,110.97	3.33	4.21	3.33	0.55	0.36	70.00
<b>9 5/8"</b>									
1,269.00	1.35	53.85	1,268.95	5.01	6.12	5.01	0.55	0.53	11.46
<b>FIRST SDI MWD PRODUCTION SURVEY</b>									
1,360.00	1.06	175.59	1,359.94	4.80	7.05	4.80	2.32	-0.32	133.78
1,452.00	2.42	224.58	1,451.90	2.57	5.76	2.57	2.07	1.48	53.25
1,565.00	3.89	229.72	1,564.73	-1.61	1.16	-1.61	1.32	1.30	4.55
1,657.00	6.69	231.60	1,656.33	-6.96	-5.42	-6.96	3.05	3.04	2.04
1,749.00	8.25	215.17	1,747.55	-15.68	-13.43	-15.68	2.86	1.70	-17.86
1,841.00	10.78	218.67	1,838.28	-27.80	-22.61	-27.80	2.82	2.75	3.80
1,932.00	11.46	210.06	1,927.58	-42.27	-32.45	-42.27	1.97	0.75	-9.46
2,023.00	11.65	210.70	2,016.73	-57.99	-41.67	-57.99	0.25	0.21	0.70
2,115.00	11.87	208.34	2,106.80	-74.31	-50.91	-74.31	0.57	0.24	-2.56
2,206.00	12.71	211.18	2,195.72	-91.11	-60.53	-91.11	1.14	0.92	3.12
2,298.00	12.92	219.32	2,285.43	-107.73	-72.29	-107.73	1.97	0.23	8.85
2,389.00	12.78	221.99	2,374.15	-123.08	-85.47	-123.08	0.67	-0.15	2.93
2,481.00	11.57	219.40	2,464.08	-137.77	-98.14	-137.77	1.44	-1.32	-2.82
2,573.00	11.87	216.21	2,554.17	-152.53	-109.58	-152.53	0.78	0.33	-3.47
2,665.00	11.54	217.01	2,644.25	-167.52	-120.71	-167.52	0.40	-0.36	0.87
2,756.00	10.40	216.84	2,733.59	-181.36	-131.11	-181.36	1.25	-1.25	-0.19
2,848.00	10.75	218.57	2,824.03	-194.71	-141.44	-194.71	0.51	0.38	1.88
2,939.00	10.40	210.04	2,913.49	-208.46	-150.85	-208.46	1.76	-0.38	-9.37
3,031.00	10.74	209.38	3,003.93	-223.12	-159.21	-223.12	0.39	0.37	-0.72
3,122.00	12.02	211.86	3,093.14	-238.55	-168.37	-238.55	1.51	1.41	2.73
3,214.00	11.52	212.18	3,183.20	-254.47	-178.32	-254.47	0.55	-0.54	0.35
3,306.00	10.31	215.48	3,273.54	-268.95	-187.99	-268.95	1.48	-1.32	3.59
3,397.00	10.32	215.36	3,363.07	-282.23	-197.44	-282.23	0.03	0.01	-0.13
3,489.00	8.99	212.24	3,453.76	-295.03	-206.04	-295.03	1.55	-1.45	-3.39
3,580.00	8.28	206.16	3,543.73	-306.92	-212.72	-306.92	1.27	-0.78	-6.68
3,672.00	8.21	212.54	3,634.78	-318.41	-219.18	-318.41	1.00	-0.08	6.93
3,764.00	8.25	210.97	3,725.83	-329.60	-226.11	-329.60	0.25	0.04	-1.71
3,856.00	7.29	211.33	3,816.99	-340.25	-232.54	-340.25	1.04	-1.04	0.39
3,947.00	5.96	208.29	3,907.38	-349.34	-237.78	-349.34	1.51	-1.46	-3.34
4,039.00	4.06	201.27	3,999.02	-356.58	-241.22	-356.58	2.17	-2.07	-7.63
4,130.00	3.75	196.64	4,089.81	-362.44	-243.24	-362.44	0.49	-0.34	-5.09
4,222.00	3.36	189.21	4,181.64	-367.98	-244.54	-367.98	0.66	-0.42	-8.08
4,316.00	1.31	212.70	4,275.55	-371.60	-245.56	-371.60	2.36	-2.18	24.99
4,411.00	0.81	267.60	4,370.54	-372.55	-246.82	-372.55	1.13	-0.53	57.79
4,505.00	0.81	297.26	4,464.53	-372.27	-248.07	-372.27	0.44	0.00	31.55

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<b>Well:</b>	PARAGON 9N-31HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Denver Sales Office

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,599.00	0.24	350.75	4,558.53	-371.77	-248.69	-371.77	0.74	-0.61	56.90
4,694.00	1.72	292.57	4,653.51	-371.03	-250.04	-371.03	1.69	1.56	-61.24
4,788.00	2.00	307.23	4,747.46	-369.49	-252.65	-369.49	0.58	0.30	15.60
4,883.00	1.25	299.34	4,842.42	-367.98	-254.87	-367.98	0.82	-0.79	-8.31
4,977.00	0.54	263.20	4,936.41	-367.53	-256.21	-367.53	0.93	-0.76	-38.45
5,071.00	0.14	299.74	5,030.41	-367.53	-256.75	-367.53	0.46	-0.43	38.87
5,165.00	0.26	58.32	5,124.41	-367.36	-256.67	-367.36	0.37	0.13	126.15
5,260.00	0.47	114.42	5,219.41	-367.41	-256.13	-367.41	0.41	0.22	59.05
5,354.00	0.47	67.84	5,313.41	-367.42	-255.42	-367.42	0.40	0.00	-49.55
5,448.00	0.68	221.06	5,407.40	-367.70	-255.43	-367.70	1.19	0.22	163.00
5,543.00	0.95	237.92	5,502.39	-368.54	-256.47	-368.54	0.38	0.28	17.75
5,637.00	1.25	248.09	5,596.38	-369.34	-258.08	-369.34	0.38	0.32	10.82
5,731.00	1.04	269.34	5,690.36	-369.73	-259.88	-369.73	0.50	-0.22	22.61
5,826.00	1.25	259.11	5,785.34	-369.93	-261.76	-369.93	0.31	0.22	-10.77
5,920.00	1.29	282.55	5,879.32	-369.90	-263.80	-369.90	0.55	0.04	24.94
6,014.00	1.06	314.80	5,973.30	-369.06	-265.45	-369.06	0.73	-0.24	34.31
6,108.00	1.45	335.09	6,067.28	-367.36	-266.57	-367.36	0.62	0.41	21.59
6,203.00	1.36	44.87	6,162.25	-365.47	-266.28	-365.47	1.69	-0.09	73.45
6,297.00	2.13	9.21	6,256.21	-362.96	-265.21	-362.96	1.38	0.82	-37.94
6,392.00	1.21	54.79	6,351.17	-360.64	-264.11	-360.64	1.63	-0.97	47.98
6,439.00	0.98	60.43	6,398.17	-360.15	-263.36	-360.15	0.54	-0.49	12.00
6,486.00	0.92	39.74	6,445.16	-359.67	-262.77	-359.67	0.74	-0.13	-44.02
6,533.00	4.21	357.46	6,492.11	-357.65	-262.60	-357.65	7.62	7.00	-89.96
6,580.00	7.35	352.94	6,538.86	-352.94	-263.05	-352.94	6.75	6.68	-9.62
6,627.00	9.57	356.18	6,585.35	-346.06	-263.68	-346.06	4.83	4.72	6.89
6,675.00	11.05	355.71	6,632.57	-337.49	-264.29	-337.49	3.09	3.08	-0.98
6,722.00	15.01	354.46	6,678.35	-326.94	-265.21	-326.94	8.45	8.43	-2.66
6,769.00	19.46	357.14	6,723.23	-313.05	-266.19	-313.05	9.62	9.47	5.70
6,816.00	24.15	355.60	6,766.86	-295.64	-267.32	-295.64	10.05	9.98	-3.28
6,863.00	28.28	353.33	6,809.02	-274.98	-269.35	-274.98	9.04	8.79	-4.83
6,910.00	30.35	355.80	6,850.00	-252.08	-271.51	-252.08	5.10	4.40	5.26
6,958.00	35.01	2.45	6,890.40	-226.21	-271.81	-226.21	12.24	9.71	13.85
7,005.00	40.15	5.08	6,927.64	-197.62	-269.89	-197.62	11.45	10.94	5.60
7,052.00	45.22	5.67	6,962.18	-165.91	-266.90	-165.91	10.82	10.79	1.26
7,099.00	50.79	3.70	6,993.61	-131.11	-264.08	-131.11	12.25	11.85	-4.19
7,146.00	56.74	2.73	7,021.38	-93.28	-261.96	-93.28	12.77	12.66	-2.06
7,193.00	61.07	1.38	7,045.65	-53.07	-260.53	-53.07	9.54	9.21	-2.87
7,241.00	62.42	1.02	7,068.37	-10.80	-259.65	-10.80	2.89	2.81	-0.75
7,288.00	66.35	359.83	7,088.69	31.57	-259.34	31.57	8.67	8.36	-2.53
7,335.00	70.54	359.92	7,105.95	75.28	-259.44	75.28	8.92	8.91	0.19
7,382.00	75.08	0.65	7,119.84	120.16	-259.21	120.16	9.77	9.66	1.55
7,429.00	79.44	0.98	7,130.20	165.99	-258.56	165.99	9.30	9.28	0.70
7,476.00	83.14	0.68	7,137.32	212.44	-257.88	212.44	7.90	7.87	-0.64

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<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Denver Sales Office

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,498.00	85.81	0.98	7,139.44	234.33	-257.57	234.33	12.21	12.14	1.36
7,552.00	88.54	0.52	7,142.10	288.26	-256.86	288.26	5.12	5.05	-0.86
<b>7" (714 FSL 578 FEL)</b>									
7,603.00	91.11	0.08	7,142.26	339.25	-256.60	339.25	5.12	5.05	-0.86
7,695.00	90.57	0.14	7,140.91	431.24	-256.42	431.24	0.59	-0.59	0.07
7,787.00	90.40	0.38	7,140.13	523.23	-256.00	523.23	0.32	-0.18	0.26
7,878.00	90.23	0.91	7,139.63	614.23	-254.98	614.23	0.61	-0.19	0.58
7,970.00	89.23	0.02	7,140.06	706.22	-254.23	706.22	1.46	-1.09	-0.97
8,061.00	88.72	359.32	7,141.69	797.20	-254.76	797.20	0.95	-0.56	-0.77
8,153.00	89.46	358.53	7,143.15	889.18	-256.48	889.18	1.18	0.80	-0.86
8,245.00	90.10	358.74	7,143.50	981.15	-258.67	981.15	0.73	0.70	0.23
8,336.00	89.70	358.95	7,143.66	1,072.13	-260.51	1,072.13	0.50	-0.44	0.23
8,428.00	90.17	0.62	7,143.77	1,164.12	-260.85	1,164.12	1.89	0.51	1.82
8,519.00	90.44	0.96	7,143.28	1,255.11	-259.60	1,255.11	0.48	0.30	0.37
8,611.00	89.60	359.02	7,143.25	1,347.11	-259.61	1,347.11	2.30	-0.91	-2.11
8,702.00	89.16	358.90	7,144.24	1,438.09	-261.27	1,438.09	0.50	-0.48	-0.13
8,794.00	90.60	0.62	7,144.43	1,530.08	-261.65	1,530.08	2.44	1.57	1.87
8,886.00	92.05	1.61	7,142.30	1,622.04	-259.86	1,622.04	1.91	1.58	1.08
8,978.00	91.78	1.52	7,139.23	1,713.95	-257.35	1,713.95	0.31	-0.29	-0.10
9,069.00	91.34	1.40	7,136.75	1,804.89	-255.03	1,804.89	0.50	-0.48	-0.13
9,161.00	90.37	1.27	7,135.38	1,896.85	-252.89	1,896.85	1.06	-1.05	-0.14
9,252.00	89.73	0.79	7,135.30	1,987.84	-251.25	1,987.84	0.88	-0.70	-0.53
9,344.00	88.89	1.99	7,136.41	2,079.80	-249.02	2,079.80	1.59	-0.91	1.30
9,439.00	89.83	2.77	7,137.47	2,174.71	-245.08	2,174.71	1.29	0.99	0.82
9,533.00	90.40	1.01	7,137.28	2,268.65	-241.98	2,268.65	1.97	0.61	-1.87
9,627.00	88.56	359.82	7,138.13	2,362.64	-241.30	2,362.64	2.33	-1.96	-1.27
9,722.00	87.61	359.41	7,141.31	2,457.59	-241.93	2,457.59	1.09	-1.00	-0.43
9,816.00	87.68	359.22	7,145.17	2,551.50	-243.06	2,551.50	0.22	0.07	-0.20
9,911.00	89.63	359.58	7,147.40	2,646.46	-244.05	2,646.46	2.09	2.05	0.38
10,005.00	90.67	358.99	7,147.15	2,740.45	-245.22	2,740.45	1.27	1.11	-0.63
10,099.00	89.76	357.49	7,146.80	2,834.41	-248.11	2,834.41	1.87	-0.97	-1.60
10,194.00	89.93	358.56	7,147.06	2,929.35	-251.38	2,929.35	1.14	0.18	1.13
10,288.00	90.54	358.20	7,146.67	3,023.31	-254.04	3,023.31	0.75	0.65	-0.38
10,383.00	90.13	359.41	7,146.11	3,118.28	-256.02	3,118.28	1.34	-0.43	1.27
10,477.00	89.80	358.62	7,146.17	3,212.27	-257.64	3,212.27	0.91	-0.35	-0.84
10,571.00	89.63	358.29	7,146.64	3,306.23	-260.17	3,306.23	0.39	-0.18	-0.35
10,665.00	89.73	359.95	7,147.16	3,400.22	-261.62	3,400.22	1.77	0.11	1.77
10,760.00	89.16	1.20	7,148.09	3,495.21	-260.66	3,495.21	1.45	-0.60	1.32
10,854.00	88.86	0.34	7,149.71	3,589.18	-259.40	3,589.18	0.97	-0.32	-0.91
10,948.00	90.24	0.52	7,150.45	3,683.17	-258.70	3,683.17	1.48	1.47	0.19
11,043.00	89.90	0.23	7,150.33	3,778.17	-258.07	3,778.17	0.47	-0.36	-0.31
11,137.00	89.93	0.10	7,150.47	3,872.17	-257.80	3,872.17	0.14	0.03	-0.14
11,231.00	91.41	359.59	7,149.37	3,966.16	-258.06	3,966.16	1.67	1.57	-0.54



<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well PARAGON 9N-31HZ
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Site:</b>	PARAGON 16-6HZ PAD	<b>MD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Well:</b>	PARAGON 9N-31HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Denver Sales Office

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,325.00	90.87	358.14	7,147.50	4,060.12	-259.92	4,060.12	1.65	-0.57	-1.54
11,420.00	89.33	359.87	7,147.34	4,155.10	-261.57	4,155.10	2.44	-1.62	1.82
11,514.00	89.53	359.22	7,148.27	4,249.09	-262.31	4,249.09	0.72	0.21	-0.69
11,608.00	88.79	358.35	7,149.65	4,343.06	-264.31	4,343.06	1.21	-0.79	-0.93
11,702.00	88.76	359.15	7,151.66	4,437.02	-266.36	4,437.02	0.85	-0.03	0.85
11,797.00	88.52	359.55	7,153.91	4,531.98	-267.44	4,531.98	0.49	-0.25	0.42
11,891.00	91.38	359.59	7,154.00	4,625.97	-268.14	4,625.97	3.04	3.04	0.04
11,986.00	89.66	359.71	7,153.13	4,720.96	-268.72	4,720.96	1.81	-1.81	0.13
12,080.00	90.40	0.07	7,153.08	4,814.96	-268.90	4,814.96	0.88	0.79	0.38
12,174.00	93.26	359.96	7,150.08	4,908.90	-268.88	4,908.90	3.04	3.04	-0.12
12,269.00	91.78	359.76	7,145.91	5,003.81	-269.11	5,003.81	1.57	-1.56	-0.21
12,363.00	90.60	358.51	7,143.95	5,097.77	-270.53	5,097.77	1.83	-1.26	-1.33
12,458.00	89.16	358.59	7,144.15	5,192.74	-272.93	5,192.74	1.52	-1.52	0.08
12,552.00	89.43	359.20	7,145.31	5,286.71	-274.74	5,286.71	0.71	0.29	0.65
12,647.00	89.09	1.12	7,146.54	5,381.70	-274.48	5,381.70	2.05	-0.36	2.02
12,741.00	90.10	0.65	7,147.20	5,475.69	-273.03	5,475.69	1.19	1.07	-0.50
12,835.00	92.45	359.89	7,145.11	5,569.66	-272.58	5,569.66	2.63	2.50	-0.81
12,930.00	91.55	359.98	7,141.79	5,664.60	-272.69	5,664.60	0.95	-0.95	0.09
13,024.00	88.92	0.57	7,141.41	5,758.59	-272.24	5,758.59	2.87	-2.80	0.63
13,119.00	90.07	0.55	7,142.25	5,853.58	-271.31	5,853.58	1.21	1.21	-0.02
13,213.00	89.63	1.70	7,142.49	5,947.56	-269.47	5,947.56	1.31	-0.47	1.22
13,307.00	88.55	0.44	7,143.98	6,041.52	-267.71	6,041.52	1.77	-1.15	-1.34
13,401.00	88.99	359.56	7,146.00	6,135.50	-267.71	6,135.50	1.05	0.47	-0.94
13,496.00	88.39	358.75	7,148.17	6,230.46	-269.11	6,230.46	1.06	-0.63	-0.85
13,590.00	87.95	359.94	7,151.18	6,324.41	-270.19	6,324.41	1.35	-0.47	1.27
13,622.00	88.15	359.85	7,152.26	6,356.39	-270.24	6,356.39	0.69	0.63	-0.28
13,653.00	88.19	359.98	7,153.25	6,387.37	-270.29	6,387.37	0.44	0.13	0.42
13,685.00	88.86	1.25	7,154.08	6,419.36	-269.95	6,419.36	4.49	2.09	3.97
13,716.00	89.19	1.29	7,154.61	6,450.35	-269.26	6,450.35	1.07	1.06	0.13
13,747.00	88.69	0.35	7,155.18	6,481.34	-268.82	6,481.34	3.43	-1.61	-3.03
13,779.00	89.50	0.40	7,155.68	6,513.34	-268.61	6,513.34	2.54	2.53	0.16
13,873.00	91.14	0.22	7,155.16	6,607.33	-268.10	6,607.33	1.76	1.74	-0.19
13,967.00	91.61	359.29	7,152.90	6,701.30	-268.50	6,701.30	1.11	0.50	-0.99
14,062.00	90.44	359.26	7,151.20	6,796.28	-269.70	6,796.28	1.23	-1.23	-0.03
14,158.00	90.50	359.29	7,150.42	6,892.26	-270.92	6,892.26	0.07	0.06	0.03
LAST SDI MWD PRODUCTION SURVEY									
14,227.00	90.50	359.29	7,149.82	6,961.26	-271.77	6,961.26	0.00	0.00	0.00
SDI PROJECTION TO TD									

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well PARAGON 9N-31HZ
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>TVD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Site:</b>	PARAGON 16-6HZ PAD	<b>MD Reference:</b>	GL 4975 & KB 25 @ 5000.00ft (HP 311)
<b>Well:</b>	PARAGON 9N-31HZ	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	OH	<b>Database:</b>	Denver Sales Office

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,111.00	1,110.97	9 5/8"		9.625	12.250
7,552.00	7,142.10	7" (714 FSL 578 FEL)		7.000	7.500

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
125.00	125.00	-0.04	-0.08	FIRST SURFACE GYRO SURVEY	
1,037.00	1,036.98	2.91	4.06	LAST SURFACE GYRO SURVEY	
1,269.00	1,268.95	5.01	6.12	FIRST SDI MWD PRODUCTION SURVEY	
14,158.00	7,150.42	6,892.26	-270.92	LAST SDI MWD PRODUCTION SURVEY	
14,227.00	7,149.82	6,961.26	-271.77	SDI PROJECTION TO TD	

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