

# **ConocoPhillips RBU Gold Data\_Niobrara**

**Niobrara - CO Central Zone**

**Parachute**

**Parachute 4-65 5-6 5H\_D**

**Parachute 4-65 5-6 5H\_D**

**Plan: Parachute 4-65 5-6 5H\_D**

## **Standard Planning Report**

**01 November, 2016**

# ConocoPhillips

## Planning Report

<b>Database:</b>	EDM Central Planning	<b>Local Co-ordinate Reference:</b>	Well Parachute 4-65 5-6 5H_D
<b>Company:</b>	ConocoPhillips RBU Gold Data_Niobrara	<b>TVD Reference:</b>	24' RKB @ 5598.70ft
<b>Project:</b>	Niobrara - CO Central Zone	<b>MD Reference:</b>	24' RKB @ 5598.70ft
<b>Site:</b>	Parachute	<b>North Reference:</b>	True
<b>Well:</b>	Parachute 4-65 5-6 5H_D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Parachute 4-65 5-6 5H_D		
<b>Design:</b>	Parachute 4-65 5-6 5H_D		

<b>Project</b>	Niobrara - CO Central Zone, Arapahoe, Douglas, Elbert County - Colorado, Definitive (Gold) Database		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Central Zone		Using geodetic scale factor

Site	Parachute				
Site Position:		Northing:	1,695,425.711 usft	Latitude:	39° 44' 24.490 N
From:	Lat/Long	Easting:	3,220,481.181 usft	Longitude:	104° 42' 57.521 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.49 °

Well	Parachute 4-65 5-6 5H_D					
Well Position	+N/-S	-3,232.41 ft	Northing:	1,692,290.475 usft	Latitude:	39° 43' 52.520 N
	+E/-W	11,244.93 ft	Easting:	3,231,753.540 usft	Longitude:	104° 40' 33.590 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,574.70 ft

<b>Wellbore</b>	Parachute 4-65 5-6 5H_D				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2016	10/28/2016	8.35	66.41	52,123

<b>Design</b>	Parachute 4-65 5-6 5H_D			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<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	265.66

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,229.00	0.00	0.00	2,229.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,979.38	11.26	215.62	2,974.56	-59.72	-42.79	1.50	1.50	0.00	215.62	
7,432.94	11.26	215.62	7,342.47	-766.34	-549.08	0.00	0.00	0.00	0.00	
8,262.69	89.48	270.10	7,844.00	-845.88	-1,113.35	10.00	9.43	6.57	55.08	Parachute 4-65 5-6 5H_D
18,082.49	89.48	270.10	7,933.00	-829.40	-10,932.73	0.00	0.00	0.00	0.00	Parachute 4-65 5-6 5H_D

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<b>Project:</b>	Niobrara - CO Central Zone	<b>MD Reference:</b>	24' RKB @ 5598.70ft
<b>Site:</b>	Parachute	<b>North Reference:</b>	True
<b>Well:</b>	Parachute 4-65 5-6 5H_D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Parachute 4-65 5-6 5H_D		
<b>Design:</b>	Parachute 4-65 5-6 5H_D		

Planned 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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,229.00	0.00	0.00	2,229.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	1.07	215.62	2,300.00	-0.54	-0.38	0.42	1.50	1.50	0.00
2,400.00	2.57	215.62	2,399.94	-3.11	-2.23	2.46	1.50	1.50	0.00
2,500.00	4.07	215.62	2,499.77	-7.81	-5.60	6.17	1.50	1.50	0.00
2,600.00	5.57	215.62	2,599.42	-14.63	-10.49	11.56	1.50	1.50	0.00
2,700.00	7.07	215.62	2,698.81	-23.58	-16.89	18.63	1.50	1.50	0.00
2,800.00	8.57	215.62	2,797.88	-34.63	-24.81	27.36	1.50	1.50	0.00
2,900.00	10.07	215.62	2,896.55	-47.79	-34.24	37.75	1.50	1.50	0.00
2,979.38	11.26	215.62	2,974.56	-59.72	-42.79	47.19	1.50	1.50	0.00
3,000.00	11.26	215.62	2,994.79	-62.99	-45.13	49.77	0.00	0.00	0.00
3,100.00	11.26	215.62	3,092.86	-78.86	-56.50	62.31	0.00	0.00	0.00
3,200.00	11.26	215.62	3,190.94	-94.73	-67.87	74.84	0.00	0.00	0.00
3,300.00	11.26	215.62	3,289.02	-110.59	-79.24	87.38	0.00	0.00	0.00
3,400.00	11.26	215.62	3,387.09	-126.46	-90.61	99.91	0.00	0.00	0.00
3,500.00	11.26	215.62	3,485.17	-142.32	-101.98	112.45	0.00	0.00	0.00
3,600.00	11.26	215.62	3,583.25	-158.19	-113.34	124.99	0.00	0.00	0.00
3,700.00	11.26	215.62	3,681.32	-174.06	-124.71	137.52	0.00	0.00	0.00
3,800.00	11.26	215.62	3,779.40	-189.92	-136.08	150.06	0.00	0.00	0.00
3,900.00	11.26	215.62	3,877.48	-205.79	-147.45	162.59	0.00	0.00	0.00
4,000.00	11.26	215.62	3,975.55	-221.66	-158.82	175.13	0.00	0.00	0.00
4,100.00	11.26	215.62	4,073.63	-237.52	-170.19	187.67	0.00	0.00	0.00
4,200.00	11.26	215.62	4,171.71	-253.39	-181.55	200.20	0.00	0.00	0.00
4,300.00	11.26	215.62	4,269.78	-269.26	-192.92	212.74	0.00	0.00	0.00
4,400.00	11.26	215.62	4,367.86	-285.12	-204.29	225.27	0.00	0.00	0.00
4,500.00	11.26	215.62	4,465.94	-300.99	-215.66	237.81	0.00	0.00	0.00
4,600.00	11.26	215.62	4,564.01	-316.85	-227.03	250.35	0.00	0.00	0.00
4,700.00	11.26	215.62	4,662.09	-332.72	-238.40	262.88	0.00	0.00	0.00
4,800.00	11.26	215.62	4,760.17	-348.59	-249.76	275.42	0.00	0.00	0.00
4,900.00	11.26	215.62	4,858.24	-364.45	-261.13	287.95	0.00	0.00	0.00
5,000.00	11.26	215.62	4,956.32	-380.32	-272.50	300.49	0.00	0.00	0.00
5,100.00	11.26	215.62	5,054.40	-396.19	-283.87	313.03	0.00	0.00	0.00

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<b>Well:</b>	Parachute 4-65 5-6 5H_D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Parachute 4-65 5-6 5H_D		
<b>Design:</b>	Parachute 4-65 5-6 5H_D		

Planned 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)
5,200.00	11.26	215.62	5,152.47	-412.05	-295.24	325.56	0.00	0.00	0.00
5,300.00	11.26	215.62	5,250.55	-427.92	-306.61	338.10	0.00	0.00	0.00
5,400.00	11.26	215.62	5,348.62	-443.79	-317.97	350.63	0.00	0.00	0.00
5,500.00	11.26	215.62	5,446.70	-459.65	-329.34	363.17	0.00	0.00	0.00
5,600.00	11.26	215.62	5,544.78	-475.52	-340.71	375.71	0.00	0.00	0.00
5,700.00	11.26	215.62	5,642.85	-491.38	-352.08	388.24	0.00	0.00	0.00
5,800.00	11.26	215.62	5,740.93	-507.25	-363.45	400.78	0.00	0.00	0.00
5,900.00	11.26	215.62	5,839.01	-523.12	-374.82	413.31	0.00	0.00	0.00
6,000.00	11.26	215.62	5,937.08	-538.98	-386.18	425.85	0.00	0.00	0.00
6,100.00	11.26	215.62	6,035.16	-554.85	-397.55	438.39	0.00	0.00	0.00
6,200.00	11.26	215.62	6,133.24	-570.72	-408.92	450.92	0.00	0.00	0.00
6,300.00	11.26	215.62	6,231.31	-586.58	-420.29	463.46	0.00	0.00	0.00
6,400.00	11.26	215.62	6,329.39	-602.45	-431.66	475.99	0.00	0.00	0.00
6,500.00	11.26	215.62	6,427.47	-618.32	-443.02	488.53	0.00	0.00	0.00
6,600.00	11.26	215.62	6,525.54	-634.18	-454.39	501.06	0.00	0.00	0.00
6,700.00	11.26	215.62	6,623.62	-650.05	-465.76	513.60	0.00	0.00	0.00
6,800.00	11.26	215.62	6,721.70	-665.91	-477.13	526.14	0.00	0.00	0.00
6,900.00	11.26	215.62	6,819.77	-681.78	-488.50	538.67	0.00	0.00	0.00
7,000.00	11.26	215.62	6,917.85	-697.65	-499.87	551.21	0.00	0.00	0.00
7,100.00	11.26	215.62	7,015.93	-713.51	-511.23	563.74	0.00	0.00	0.00
7,200.00	11.26	215.62	7,114.00	-729.38	-522.60	576.28	0.00	0.00	0.00
7,300.00	11.26	215.62	7,212.08	-745.25	-533.97	588.82	0.00	0.00	0.00
7,400.00	11.26	215.62	7,310.16	-761.11	-545.34	601.35	0.00	0.00	0.00
7,432.94	11.26	215.62	7,342.47	-766.34	-549.08	605.48	0.00	0.00	0.00
7,450.00	12.31	222.20	7,359.16	-769.04	-551.28	607.87	10.00	6.19	38.54
7,500.00	16.05	235.88	7,407.65	-776.87	-560.58	617.75	10.00	7.48	27.37
7,550.00	20.33	244.23	7,455.14	-784.53	-574.14	631.84	10.00	8.56	16.70
7,600.00	24.87	249.71	7,501.30	-791.96	-591.83	650.05	10.00	9.08	10.96
7,650.00	29.55	253.56	7,545.75	-799.10	-613.54	672.23	10.00	9.36	7.71
7,700.00	34.32	256.44	7,588.18	-805.90	-639.08	698.21	10.00	9.53	5.75
7,750.00	39.13	258.69	7,628.24	-812.30	-668.27	727.80	10.00	9.63	4.49
7,800.00	43.99	260.51	7,665.65	-818.26	-700.89	760.78	10.00	9.70	3.65
7,850.00	48.86	262.04	7,700.10	-823.74	-736.68	796.88	10.00	9.75	3.06
7,900.00	53.76	263.35	7,731.35	-828.68	-775.38	835.85	10.00	9.79	2.63
7,950.00	58.66	264.51	7,759.15	-833.06	-816.69	877.37	10.00	9.81	2.32
8,000.00	63.58	265.56	7,783.29	-836.84	-860.29	921.13	10.00	9.83	2.09
8,050.00	68.50	266.52	7,803.59	-839.98	-905.86	966.81	10.00	9.85	1.92
8,100.00	73.43	267.41	7,819.90	-842.48	-953.04	1,014.04	10.00	9.86	1.79
8,150.00	78.36	268.27	7,832.08	-844.30	-1,001.49	1,062.49	10.00	9.86	1.70
8,200.00	83.29	269.09	7,840.05	-845.44	-1,050.82	1,111.76	10.00	9.87	1.64
8,250.00	88.23	269.89	7,843.75	-845.88	-1,100.66	1,161.50	10.00	9.87	1.61
8,262.69	89.48	270.10	7,844.00	-845.88	-1,113.35	1,174.15	10.00	9.87	1.60
8,300.00	89.48	270.10	7,844.34	-845.82	-1,150.66	1,211.35	0.00	0.00	0.00
8,400.00	89.48	270.10	7,845.24	-845.65	-1,250.65	1,311.04	0.00	0.00	0.00
8,500.00	89.48	270.10	7,846.15	-845.48	-1,350.65	1,410.74	0.00	0.00	0.00
8,600.00	89.48	270.10	7,847.06	-845.32	-1,450.65	1,510.43	0.00	0.00	0.00
8,700.00	89.48	270.10	7,847.96	-845.15	-1,550.64	1,610.13	0.00	0.00	0.00
8,800.00	89.48	270.10	7,848.87	-844.98	-1,650.64	1,709.83	0.00	0.00	0.00
8,900.00	89.48	270.10	7,849.78	-844.81	-1,750.63	1,809.52	0.00	0.00	0.00
9,000.00	89.48	270.10	7,850.68	-844.65	-1,850.63	1,909.22	0.00	0.00	0.00
9,100.00	89.48	270.10	7,851.59	-844.48	-1,950.62	2,008.92	0.00	0.00	0.00
9,200.00	89.48	270.10	7,852.50	-844.31	-2,050.62	2,108.61	0.00	0.00	0.00
9,300.00	89.48	270.10	7,853.40	-844.14	-2,150.62	2,208.31	0.00	0.00	0.00
9,400.00	89.48	270.10	7,854.31	-843.97	-2,250.61	2,308.01	0.00	0.00	0.00

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<b>Site:</b>	Parachute	<b>North Reference:</b>	True
<b>Well:</b>	Parachute 4-65 5-6 5H_D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Parachute 4-65 5-6 5H_D		
<b>Design:</b>	Parachute 4-65 5-6 5H_D		

Planned 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)
9,500.00	89.48	270.10	7,855.21	-843.81	-2,350.61	2,407.70	0.00	0.00	0.00
9,600.00	89.48	270.10	7,856.12	-843.64	-2,450.60	2,507.40	0.00	0.00	0.00
9,700.00	89.48	270.10	7,857.03	-843.47	-2,550.60	2,607.10	0.00	0.00	0.00
9,800.00	89.48	270.10	7,857.93	-843.30	-2,650.59	2,706.79	0.00	0.00	0.00
9,900.00	89.48	270.10	7,858.84	-843.13	-2,750.59	2,806.49	0.00	0.00	0.00
10,000.00	89.48	270.10	7,859.75	-842.97	-2,850.59	2,906.19	0.00	0.00	0.00
10,100.00	89.48	270.10	7,860.65	-842.80	-2,950.58	3,005.88	0.00	0.00	0.00
10,200.00	89.48	270.10	7,861.56	-842.63	-3,050.58	3,105.58	0.00	0.00	0.00
10,300.00	89.48	270.10	7,862.46	-842.46	-3,150.57	3,205.28	0.00	0.00	0.00
10,400.00	89.48	270.10	7,863.37	-842.30	-3,250.57	3,304.97	0.00	0.00	0.00
10,500.00	89.48	270.10	7,864.28	-842.13	-3,350.57	3,404.67	0.00	0.00	0.00
10,600.00	89.48	270.10	7,865.18	-841.96	-3,450.56	3,504.37	0.00	0.00	0.00
10,700.00	89.48	270.10	7,866.09	-841.79	-3,550.56	3,604.06	0.00	0.00	0.00
10,800.00	89.48	270.10	7,867.00	-841.62	-3,650.55	3,703.76	0.00	0.00	0.00
10,900.00	89.48	270.10	7,867.90	-841.46	-3,750.55	3,803.46	0.00	0.00	0.00
11,000.00	89.48	270.10	7,868.81	-841.29	-3,850.54	3,903.15	0.00	0.00	0.00
11,100.00	89.48	270.10	7,869.72	-841.12	-3,950.54	4,002.85	0.00	0.00	0.00
11,200.00	89.48	270.10	7,870.62	-840.95	-4,050.54	4,102.54	0.00	0.00	0.00
11,300.00	89.48	270.10	7,871.53	-840.78	-4,150.53	4,202.24	0.00	0.00	0.00
11,400.00	89.48	270.10	7,872.43	-840.62	-4,250.53	4,301.94	0.00	0.00	0.00
11,500.00	89.48	270.10	7,873.34	-840.45	-4,350.52	4,401.63	0.00	0.00	0.00
11,600.00	89.48	270.10	7,874.25	-840.28	-4,450.52	4,501.33	0.00	0.00	0.00
11,700.00	89.48	270.10	7,875.15	-840.11	-4,550.51	4,601.03	0.00	0.00	0.00
11,800.00	89.48	270.10	7,876.06	-839.95	-4,650.51	4,700.72	0.00	0.00	0.00
11,900.00	89.48	270.10	7,876.97	-839.78	-4,750.51	4,800.42	0.00	0.00	0.00
12,000.00	89.48	270.10	7,877.87	-839.61	-4,850.50	4,900.12	0.00	0.00	0.00
12,100.00	89.48	270.10	7,878.78	-839.44	-4,950.50	4,999.81	0.00	0.00	0.00
12,200.00	89.48	270.10	7,879.69	-839.27	-5,050.49	5,099.51	0.00	0.00	0.00
12,300.00	89.48	270.10	7,880.59	-839.11	-5,150.49	5,199.21	0.00	0.00	0.00
12,400.00	89.48	270.10	7,881.50	-838.94	-5,250.48	5,298.90	0.00	0.00	0.00
12,500.00	89.48	270.10	7,882.40	-838.77	-5,350.48	5,398.60	0.00	0.00	0.00
12,600.00	89.48	270.10	7,883.31	-838.60	-5,450.48	5,498.30	0.00	0.00	0.00
12,700.00	89.48	270.10	7,884.22	-838.44	-5,550.47	5,597.99	0.00	0.00	0.00
12,800.00	89.48	270.10	7,885.12	-838.27	-5,650.47	5,697.69	0.00	0.00	0.00
12,900.00	89.48	270.10	7,886.03	-838.10	-5,750.46	5,797.39	0.00	0.00	0.00
13,000.00	89.48	270.10	7,886.94	-837.93	-5,850.46	5,897.08	0.00	0.00	0.00
13,100.00	89.48	270.10	7,887.84	-837.76	-5,950.45	5,996.78	0.00	0.00	0.00
13,200.00	89.48	270.10	7,888.75	-837.60	-6,050.45	6,096.48	0.00	0.00	0.00
13,300.00	89.48	270.10	7,889.65	-837.43	-6,150.45	6,196.17	0.00	0.00	0.00
13,400.00	89.48	270.10	7,890.56	-837.26	-6,250.44	6,295.87	0.00	0.00	0.00
13,500.00	89.48	270.10	7,891.47	-837.09	-6,350.44	6,395.57	0.00	0.00	0.00
13,600.00	89.48	270.10	7,892.37	-836.92	-6,450.43	6,495.26	0.00	0.00	0.00
13,700.00	89.48	270.10	7,893.28	-836.76	-6,550.43	6,594.96	0.00	0.00	0.00
13,800.00	89.48	270.10	7,894.19	-836.59	-6,650.43	6,694.65	0.00	0.00	0.00
13,900.00	89.48	270.10	7,895.09	-836.42	-6,750.42	6,794.35	0.00	0.00	0.00
14,000.00	89.48	270.10	7,896.00	-836.25	-6,850.42	6,894.05	0.00	0.00	0.00
14,100.00	89.48	270.10	7,896.91	-836.09	-6,950.41	6,993.74	0.00	0.00	0.00
14,200.00	89.48	270.10	7,897.81	-835.92	-7,050.41	7,093.44	0.00	0.00	0.00
14,300.00	89.48	270.10	7,898.72	-835.75	-7,150.40	7,193.14	0.00	0.00	0.00
14,400.00	89.48	270.10	7,899.62	-835.58	-7,250.40	7,292.83	0.00	0.00	0.00
14,500.00	89.48	270.10	7,900.53	-835.41	-7,350.40	7,392.53	0.00	0.00	0.00
14,600.00	89.48	270.10	7,901.44	-835.25	-7,450.39	7,492.23	0.00	0.00	0.00
14,700.00	89.48	270.10	7,902.34	-835.08	-7,550.39	7,591.92	0.00	0.00	0.00
14,800.00	89.48	270.10	7,903.25	-834.91	-7,650.38	7,691.62	0.00	0.00	0.00

# ConocoPhillips

## Planning Report

<b>Database:</b>	EDM Central Planning	<b>Local Co-ordinate Reference:</b>	Well Parachute 4-65 5-6 5H_D
<b>Company:</b>	ConocoPhillips RBU Gold Data_Niobrara	<b>TVD Reference:</b>	24' RKB @ 5598.70ft
<b>Project:</b>	Niobrara - CO Central Zone	<b>MD Reference:</b>	24' RKB @ 5598.70ft
<b>Site:</b>	Parachute	<b>North Reference:</b>	True
<b>Well:</b>	Parachute 4-65 5-6 5H_D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Parachute 4-65 5-6 5H_D		
<b>Design:</b>	Parachute 4-65 5-6 5H_D		

Planned 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)	
14,900.00	89.48	270.10	7,904.16	-834.74	-7,750.38	7,791.32	0.00	0.00	0.00	
15,000.00	89.48	270.10	7,905.06	-834.58	-7,850.37	7,891.01	0.00	0.00	0.00	
15,100.00	89.48	270.10	7,905.97	-834.41	-7,950.37	7,990.71	0.00	0.00	0.00	
15,200.00	89.48	270.10	7,906.88	-834.24	-8,050.37	8,090.41	0.00	0.00	0.00	
15,300.00	89.48	270.10	7,907.78	-834.07	-8,150.36	8,190.10	0.00	0.00	0.00	
15,400.00	89.48	270.10	7,908.69	-833.90	-8,250.36	8,289.80	0.00	0.00	0.00	
15,500.00	89.48	270.10	7,909.59	-833.74	-8,350.35	8,389.50	0.00	0.00	0.00	
15,600.00	89.48	270.10	7,910.50	-833.57	-8,450.35	8,489.19	0.00	0.00	0.00	
15,700.00	89.48	270.10	7,911.41	-833.40	-8,550.34	8,588.89	0.00	0.00	0.00	
15,800.00	89.48	270.10	7,912.31	-833.23	-8,650.34	8,688.59	0.00	0.00	0.00	
15,900.00	89.48	270.10	7,913.22	-833.06	-8,750.34	8,788.28	0.00	0.00	0.00	
16,000.00	89.48	270.10	7,914.13	-832.90	-8,850.33	8,887.98	0.00	0.00	0.00	
16,100.00	89.48	270.10	7,915.03	-832.73	-8,950.33	8,987.68	0.00	0.00	0.00	
16,200.00	89.48	270.10	7,915.94	-832.56	-9,050.32	9,087.37	0.00	0.00	0.00	
16,300.00	89.48	270.10	7,916.84	-832.39	-9,150.32	9,187.07	0.00	0.00	0.00	
16,400.00	89.48	270.10	7,917.75	-832.23	-9,250.31	9,286.76	0.00	0.00	0.00	
16,500.00	89.48	270.10	7,918.66	-832.06	-9,350.31	9,386.46	0.00	0.00	0.00	
16,600.00	89.48	270.10	7,919.56	-831.89	-9,450.31	9,486.16	0.00	0.00	0.00	
16,700.00	89.48	270.10	7,920.47	-831.72	-9,550.30	9,585.85	0.00	0.00	0.00	
16,800.00	89.48	270.10	7,921.38	-831.55	-9,650.30	9,685.55	0.00	0.00	0.00	
16,900.00	89.48	270.10	7,922.28	-831.39	-9,750.29	9,785.25	0.00	0.00	0.00	
17,000.00	89.48	270.10	7,923.19	-831.22	-9,850.29	9,884.94	0.00	0.00	0.00	
17,100.00	89.48	270.10	7,924.10	-831.05	-9,950.29	9,984.64	0.00	0.00	0.00	
17,200.00	89.48	270.10	7,925.00	-830.88	-10,050.28	10,084.34	0.00	0.00	0.00	
17,300.00	89.48	270.10	7,925.91	-830.72	-10,150.28	10,184.03	0.00	0.00	0.00	
17,400.00	89.48	270.10	7,926.81	-830.55	-10,250.27	10,283.73	0.00	0.00	0.00	
17,500.00	89.48	270.10	7,927.72	-830.38	-10,350.27	10,383.43	0.00	0.00	0.00	
17,600.00	89.48	270.10	7,928.63	-830.21	-10,450.26	10,483.12	0.00	0.00	0.00	
17,700.00	89.48	270.10	7,929.53	-830.04	-10,550.26	10,582.82	0.00	0.00	0.00	
17,800.00	89.48	270.10	7,930.44	-829.88	-10,650.26	10,682.52	0.00	0.00	0.00	
17,900.00	89.48	270.10	7,931.35	-829.71	-10,750.25	10,782.21	0.00	0.00	0.00	
18,000.00	89.48	270.10	7,932.25	-829.54	-10,850.25	10,881.91	0.00	0.00	0.00	
18,082.49	89.48	270.10	7,933.00	-829.40	-10,932.73	10,964.14	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Parachute 4-65 5-6 5H_I - hit/miss target - Shape - Point	0.00	0.00	7,844.00	-845.88	-1,113.35	1,691,434.534	3,230,647.910	39° 43' 44.160 N	104° 40' 47.840 W	
Parachute 4-65 5-6 5H_I - plan hits target center - Point	0.00	0.00	7,933.00	-829.40	-10,932.73	1,691,361.951	3,220,828.845	39° 43' 44.300 N	104° 42' 53.520 W	

ConocoPhillips  
Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Parachute 4-65 5-6 5H_D
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5598.70ft
Project:	Niobrara - CO Central Zone	MD Reference:	24' RKB @ 5598.70ft
Site:	Parachute	North Reference:	True
Well:	Parachute 4-65 5-6 5H_D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Parachute 4-65 5-6 5H_D		
Design:	Parachute 4-65 5-6 5H_D		

Casing Points					
	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
	2,129.00	2,129.00	Surface	9-5/8	13-1/2
	18,082.49	7,933.00	Production	5-1/2	8-3/4



ConocoPhillips

Arapahoe County, Colorado

Parachute 4-65 5-6 5H\_D

Wellbore Targets

Name	TVD	Latitude	Longitude
Parachute 4-65 5-6 5H_D BPI	7844.00	39° 43' 44.160 N	104° 40' 47.840 W
Parachute 4-65 5-6 5H_D BHL	7933.00	39° 43' 44.300 N	104° 42' 53.520 W

Well Profile Data

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2229.00	0.00	0.00	2229.00	0.00	0.00	0.00	0.00
2979.38	11.26	215.62	2974.56	-59.72	-42.79	1.50	47.19
7432.94	11.26	215.62	7342.47	-766.34	-549.08	0.00	605.48
8262.69	89.48	270.10	7844.00	-845.88	-1113.35	10.00	1174.15
18082.49	89.48	270.10	7933.00	-829.40	-10932.73	0.00	10964.14

Casing Depths

TVD	MD	Name	Size
2129.00	2129.00	Surface	9-5/8
7933.00	18082.49	Production	5-1/2

