

ConocoPhillips RBU Gold Data_Niobrara

Niobrara - CO Northern Zone

Bear

Bear 3-65 22-23 5H_D

Bear 3-65 22-23 5H_D

Plan: Bear 3-65 22-23 5H_D

Standard Planning Report

25 October, 2016

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Bear 3-65 22-23 5H_D
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5593.90ft
Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5593.90ft
Site:	Bear	North Reference:	True
Well:	Bear 3-65 22-23 5H_D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Bear 3-65 22-23 5H_D		
Design:	Bear 3-65 22-23 5H_D		

Project	Niobrara - CO Northern Zone, Adams County, CO, Definitive (Gold) Database		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Bear			
Site Position:		Northing:	1,165,129.402 usft	Latitude: 39° 47' 0.870 N
From:	Lat/Long	Easting:	3,236,258.060 usft	Longitude: 104° 39' 33.620 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence: 0.54 °

Well	Bear 3-65 22-23 5H_D			
Well Position	+N/-S	-3,826.89 ft	Northing:	1,161,308.353 usft
	+E/-W	593.44 ft	Easting:	3,236,887.747 usft
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft
			Ground Level:	5,569.90 ft

Wellbore	Bear 3-65 22-23 5H_D				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	10/25/2016	8.34	66.45	52,147

Design	Bear 3-65 22-23 5H_D			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	92.06

Plan Sections										
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	
2,269.00	0.00	0.00	2,269.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,447.67	2.68	192.20	2,447.61	-4.08	-0.88	1.50	1.50	0.00	192.20	
7,269.64	2.68	192.20	7,264.30	-224.47	-48.52	0.00	0.00	0.00	0.00	
8,181.88	90.68	90.57	7,842.00	-257.00	530.95	10.00	9.65	-11.14	-101.59	Bear 3-65 22-23 5H_I
17,315.36	90.68	90.57	7,733.00	-347.21	9,663.34	0.00	0.00	0.00	0.00	Bear 3-65 22-23 5H_I

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Planning Report

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Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5593.90ft
Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5593.90ft
Site:	Bear	North Reference:	True
Well:	Bear 3-65 22-23 5H_D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Bear 3-65 22-23 5H_D		
Design:	Bear 3-65 22-23 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
2,269.00	0.00	0.00	2,269.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.47	192.20	2,300.00	-0.12	-0.03	-0.02	1.50	1.50	0.00
2,400.00	1.97	192.20	2,399.97	-2.20	-0.47	-0.40	1.50	1.50	0.00
2,447.67	2.68	192.20	2,447.61	-4.08	-0.88	-0.74	1.50	1.50	0.00
2,500.00	2.68	192.20	2,499.88	-6.48	-1.40	-1.17	0.00	0.00	0.00
2,600.00	2.68	192.20	2,599.77	-11.05	-2.39	-1.99	0.00	0.00	0.00
2,700.00	2.68	192.20	2,699.66	-15.62	-3.38	-2.81	0.00	0.00	0.00
2,800.00	2.68	192.20	2,799.55	-20.19	-4.36	-3.64	0.00	0.00	0.00
2,900.00	2.68	192.20	2,899.44	-24.76	-5.35	-4.46	0.00	0.00	0.00
3,000.00	2.68	192.20	2,999.33	-29.33	-6.34	-5.28	0.00	0.00	0.00
3,100.00	2.68	192.20	3,099.22	-33.90	-7.33	-6.11	0.00	0.00	0.00
3,200.00	2.68	192.20	3,199.11	-38.47	-8.31	-6.93	0.00	0.00	0.00
3,300.00	2.68	192.20	3,299.00	-43.04	-9.30	-7.75	0.00	0.00	0.00
3,400.00	2.68	192.20	3,398.89	-47.61	-10.29	-8.57	0.00	0.00	0.00
3,500.00	2.68	192.20	3,498.78	-52.18	-11.28	-9.40	0.00	0.00	0.00
3,600.00	2.68	192.20	3,598.67	-56.75	-12.27	-10.22	0.00	0.00	0.00
3,700.00	2.68	192.20	3,698.57	-61.32	-13.25	-11.04	0.00	0.00	0.00
3,800.00	2.68	192.20	3,798.46	-65.89	-14.24	-11.87	0.00	0.00	0.00
3,900.00	2.68	192.20	3,898.35	-70.46	-15.23	-12.69	0.00	0.00	0.00
4,000.00	2.68	192.20	3,998.24	-75.03	-16.22	-13.51	0.00	0.00	0.00
4,100.00	2.68	192.20	4,098.13	-79.60	-17.21	-14.34	0.00	0.00	0.00
4,200.00	2.68	192.20	4,198.02	-84.17	-18.19	-15.16	0.00	0.00	0.00
4,300.00	2.68	192.20	4,297.91	-88.74	-19.18	-15.98	0.00	0.00	0.00
4,400.00	2.68	192.20	4,397.80	-93.31	-20.17	-16.81	0.00	0.00	0.00
4,500.00	2.68	192.20	4,497.69	-97.88	-21.16	-17.63	0.00	0.00	0.00
4,600.00	2.68	192.20	4,597.58	-102.45	-22.15	-18.45	0.00	0.00	0.00
4,700.00	2.68	192.20	4,697.47	-107.02	-23.13	-19.28	0.00	0.00	0.00
4,800.00	2.68	192.20	4,797.36	-111.59	-24.12	-20.10	0.00	0.00	0.00
4,900.00	2.68	192.20	4,897.25	-116.17	-25.11	-20.92	0.00	0.00	0.00
5,000.00	2.68	192.20	4,997.14	-120.74	-26.10	-21.74	0.00	0.00	0.00
5,100.00	2.68	192.20	5,097.03	-125.31	-27.08	-22.57	0.00	0.00	0.00

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Wellbore:	Bear 3-65 22-23 5H_D		
Design:	Bear 3-65 22-23 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	2.68	192.20	5,196.92	-129.88	-28.07	-23.39	0.00	0.00	0.00
5,300.00	2.68	192.20	5,296.82	-134.45	-29.06	-24.21	0.00	0.00	0.00
5,400.00	2.68	192.20	5,396.71	-139.02	-30.05	-25.04	0.00	0.00	0.00
5,500.00	2.68	192.20	5,496.60	-143.59	-31.04	-25.86	0.00	0.00	0.00
5,600.00	2.68	192.20	5,596.49	-148.16	-32.02	-26.68	0.00	0.00	0.00
5,700.00	2.68	192.20	5,696.38	-152.73	-33.01	-27.51	0.00	0.00	0.00
5,800.00	2.68	192.20	5,796.27	-157.30	-34.00	-28.33	0.00	0.00	0.00
5,900.00	2.68	192.20	5,896.16	-161.87	-34.99	-29.15	0.00	0.00	0.00
6,000.00	2.68	192.20	5,996.05	-166.44	-35.98	-29.98	0.00	0.00	0.00
6,100.00	2.68	192.20	6,095.94	-171.01	-36.96	-30.80	0.00	0.00	0.00
6,200.00	2.68	192.20	6,195.83	-175.58	-37.95	-31.62	0.00	0.00	0.00
6,300.00	2.68	192.20	6,295.72	-180.15	-38.94	-32.45	0.00	0.00	0.00
6,400.00	2.68	192.20	6,395.61	-184.72	-39.93	-33.27	0.00	0.00	0.00
6,500.00	2.68	192.20	6,495.50	-189.29	-40.92	-34.09	0.00	0.00	0.00
6,600.00	2.68	192.20	6,595.39	-193.86	-41.90	-34.92	0.00	0.00	0.00
6,700.00	2.68	192.20	6,695.28	-198.43	-42.89	-35.74	0.00	0.00	0.00
6,800.00	2.68	192.20	6,795.17	-203.00	-43.88	-36.56	0.00	0.00	0.00
6,900.00	2.68	192.20	6,895.06	-207.57	-44.87	-37.38	0.00	0.00	0.00
7,000.00	2.68	192.20	6,994.96	-212.14	-45.85	-38.21	0.00	0.00	0.00
7,100.00	2.68	192.20	7,094.85	-216.71	-46.84	-39.03	0.00	0.00	0.00
7,200.00	2.68	192.20	7,194.74	-221.28	-47.83	-39.85	0.00	0.00	0.00
7,269.64	2.68	192.20	7,264.30	-224.47	-48.52	-40.43	0.00	0.00	0.00
7,300.00	3.62	137.01	7,294.62	-225.86	-48.01	-39.87	10.00	3.10	-181.81
7,350.00	7.94	109.79	7,344.36	-228.19	-43.68	-35.46	10.00	8.64	-54.43
7,400.00	12.77	102.27	7,393.54	-230.53	-35.03	-26.73	10.00	9.65	-15.03
7,450.00	17.69	98.86	7,441.77	-232.88	-22.12	-13.74	10.00	9.84	-6.82
7,500.00	22.64	96.91	7,488.69	-235.21	-5.05	3.40	10.00	9.91	-3.91
7,550.00	27.61	95.63	7,533.94	-237.51	16.05	24.57	10.00	9.94	-2.56
7,600.00	32.59	94.71	7,577.19	-239.75	41.02	49.60	10.00	9.96	-1.83
7,650.00	37.58	94.01	7,618.09	-241.92	69.66	78.30	10.00	9.97	-1.39
7,700.00	42.56	93.46	7,656.34	-244.01	101.77	110.47	10.00	9.97	-1.11
7,750.00	47.55	93.00	7,691.65	-246.00	137.09	145.84	10.00	9.98	-0.92
7,800.00	52.54	92.61	7,723.75	-247.87	175.36	184.15	10.00	9.98	-0.78
7,850.00	57.54	92.27	7,752.39	-249.61	216.29	225.11	10.00	9.98	-0.68
7,900.00	62.53	91.96	7,777.36	-251.21	259.56	268.42	10.00	9.99	-0.61
7,950.00	67.52	91.68	7,798.46	-252.65	304.85	313.73	10.00	9.99	-0.56
8,000.00	72.52	91.42	7,815.54	-253.92	351.81	360.70	10.00	9.99	-0.52
8,050.00	77.51	91.18	7,828.47	-255.02	400.08	408.98	10.00	9.99	-0.49
8,100.00	82.50	90.94	7,837.14	-255.93	449.30	458.20	10.00	9.99	-0.47
8,150.00	87.50	90.71	7,841.49	-256.64	499.09	507.98	10.00	9.99	-0.46
8,181.88	90.68	90.57	7,842.00	-257.00	530.95	539.84	10.00	9.99	-0.46
8,200.00	90.68	90.57	7,841.78	-257.18	549.07	557.95	0.00	0.00	0.00
8,300.00	90.68	90.57	7,840.59	-258.17	649.06	657.91	0.00	0.00	0.00
8,400.00	90.68	90.57	7,839.40	-259.15	749.05	757.87	0.00	0.00	0.00
8,500.00	90.68	90.57	7,838.20	-260.14	849.04	857.83	0.00	0.00	0.00
8,600.00	90.68	90.57	7,837.01	-261.13	949.03	957.79	0.00	0.00	0.00
8,700.00	90.68	90.57	7,835.82	-262.12	1,049.01	1,057.75	0.00	0.00	0.00
8,800.00	90.68	90.57	7,834.62	-263.11	1,149.00	1,157.71	0.00	0.00	0.00
8,900.00	90.68	90.57	7,833.43	-264.09	1,248.99	1,257.67	0.00	0.00	0.00
9,000.00	90.68	90.57	7,832.24	-265.08	1,348.98	1,357.63	0.00	0.00	0.00
9,100.00	90.68	90.57	7,831.04	-266.07	1,448.97	1,457.59	0.00	0.00	0.00
9,200.00	90.68	90.57	7,829.85	-267.06	1,548.95	1,557.54	0.00	0.00	0.00
9,300.00	90.68	90.57	7,828.66	-268.04	1,648.94	1,657.50	0.00	0.00	0.00
9,400.00	90.68	90.57	7,827.46	-269.03	1,748.93	1,757.46	0.00	0.00	0.00

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Wellbore:	Bear 3-65 22-23 5H_D		
Design:	Bear 3-65 22-23 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	90.68	90.57	7,826.27	-270.02	1,848.92	1,857.42	0.00	0.00	0.00
9,600.00	90.68	90.57	7,825.08	-271.01	1,948.91	1,957.38	0.00	0.00	0.00
9,700.00	90.68	90.57	7,823.88	-271.99	2,048.89	2,057.34	0.00	0.00	0.00
9,800.00	90.68	90.57	7,822.69	-272.98	2,148.88	2,157.30	0.00	0.00	0.00
9,900.00	90.68	90.57	7,821.50	-273.97	2,248.87	2,257.26	0.00	0.00	0.00
10,000.00	90.68	90.57	7,820.30	-274.96	2,348.86	2,357.22	0.00	0.00	0.00
10,100.00	90.68	90.57	7,819.11	-275.95	2,448.85	2,457.18	0.00	0.00	0.00
10,200.00	90.68	90.57	7,817.92	-276.93	2,548.83	2,557.13	0.00	0.00	0.00
10,300.00	90.68	90.57	7,816.72	-277.92	2,648.82	2,657.09	0.00	0.00	0.00
10,400.00	90.68	90.57	7,815.53	-278.91	2,748.81	2,757.05	0.00	0.00	0.00
10,500.00	90.68	90.57	7,814.34	-279.90	2,848.80	2,857.01	0.00	0.00	0.00
10,600.00	90.68	90.57	7,813.14	-280.88	2,948.79	2,956.97	0.00	0.00	0.00
10,700.00	90.68	90.57	7,811.95	-281.87	3,048.77	3,056.93	0.00	0.00	0.00
10,800.00	90.68	90.57	7,810.76	-282.86	3,148.76	3,156.89	0.00	0.00	0.00
10,900.00	90.68	90.57	7,809.56	-283.85	3,248.75	3,256.85	0.00	0.00	0.00
11,000.00	90.68	90.57	7,808.37	-284.84	3,348.74	3,356.81	0.00	0.00	0.00
11,100.00	90.68	90.57	7,807.17	-285.82	3,448.73	3,456.77	0.00	0.00	0.00
11,200.00	90.68	90.57	7,805.98	-286.81	3,548.71	3,556.72	0.00	0.00	0.00
11,300.00	90.68	90.57	7,804.79	-287.80	3,648.70	3,656.68	0.00	0.00	0.00
11,400.00	90.68	90.57	7,803.59	-288.79	3,748.69	3,756.64	0.00	0.00	0.00
11,500.00	90.68	90.57	7,802.40	-289.77	3,848.68	3,856.60	0.00	0.00	0.00
11,600.00	90.68	90.57	7,801.21	-290.76	3,948.67	3,956.56	0.00	0.00	0.00
11,700.00	90.68	90.57	7,800.01	-291.75	4,048.65	4,056.52	0.00	0.00	0.00
11,800.00	90.68	90.57	7,798.82	-292.74	4,148.64	4,156.48	0.00	0.00	0.00
11,900.00	90.68	90.57	7,797.63	-293.72	4,248.63	4,256.44	0.00	0.00	0.00
12,000.00	90.68	90.57	7,796.43	-294.71	4,348.62	4,356.40	0.00	0.00	0.00
12,100.00	90.68	90.57	7,795.24	-295.70	4,448.61	4,456.36	0.00	0.00	0.00
12,200.00	90.68	90.57	7,794.05	-296.69	4,548.59	4,556.31	0.00	0.00	0.00
12,300.00	90.68	90.57	7,792.85	-297.68	4,648.58	4,656.27	0.00	0.00	0.00
12,400.00	90.68	90.57	7,791.66	-298.66	4,748.57	4,756.23	0.00	0.00	0.00
12,500.00	90.68	90.57	7,790.47	-299.65	4,848.56	4,856.19	0.00	0.00	0.00
12,600.00	90.68	90.57	7,789.27	-300.64	4,948.55	4,956.15	0.00	0.00	0.00
12,700.00	90.68	90.57	7,788.08	-301.63	5,048.53	5,056.11	0.00	0.00	0.00
12,800.00	90.68	90.57	7,786.89	-302.61	5,148.52	5,156.07	0.00	0.00	0.00
12,900.00	90.68	90.57	7,785.69	-303.60	5,248.51	5,256.03	0.00	0.00	0.00
13,000.00	90.68	90.57	7,784.50	-304.59	5,348.50	5,355.99	0.00	0.00	0.00
13,100.00	90.68	90.57	7,783.31	-305.58	5,448.49	5,455.94	0.00	0.00	0.00
13,200.00	90.68	90.57	7,782.11	-306.56	5,548.47	5,555.90	0.00	0.00	0.00
13,300.00	90.68	90.57	7,780.92	-307.55	5,648.46	5,655.86	0.00	0.00	0.00
13,400.00	90.68	90.57	7,779.73	-308.54	5,748.45	5,755.82	0.00	0.00	0.00
13,500.00	90.68	90.57	7,778.53	-309.53	5,848.44	5,855.78	0.00	0.00	0.00
13,600.00	90.68	90.57	7,777.34	-310.52	5,948.43	5,955.74	0.00	0.00	0.00
13,700.00	90.68	90.57	7,776.15	-311.50	6,048.41	6,055.70	0.00	0.00	0.00
13,800.00	90.68	90.57	7,774.95	-312.49	6,148.40	6,155.66	0.00	0.00	0.00
13,900.00	90.68	90.57	7,773.76	-313.48	6,248.39	6,255.62	0.00	0.00	0.00
14,000.00	90.68	90.57	7,772.57	-314.47	6,348.38	6,355.58	0.00	0.00	0.00
14,100.00	90.68	90.57	7,771.37	-315.45	6,448.37	6,455.53	0.00	0.00	0.00
14,200.00	90.68	90.57	7,770.18	-316.44	6,548.35	6,555.49	0.00	0.00	0.00
14,300.00	90.68	90.57	7,768.99	-317.43	6,648.34	6,655.45	0.00	0.00	0.00
14,400.00	90.68	90.57	7,767.79	-318.42	6,748.33	6,755.41	0.00	0.00	0.00
14,500.00	90.68	90.57	7,766.60	-319.41	6,848.32	6,855.37	0.00	0.00	0.00
14,600.00	90.68	90.57	7,765.41	-320.39	6,948.31	6,955.33	0.00	0.00	0.00
14,700.00	90.68	90.57	7,764.21	-321.38	7,048.29	7,055.29	0.00	0.00	0.00
14,800.00	90.68	90.57	7,763.02	-322.37	7,148.28	7,155.25	0.00	0.00	0.00

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Bear 3-65 22-23 5H_D
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5593.90ft
Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5593.90ft
Site:	Bear	North Reference:	True
Well:	Bear 3-65 22-23 5H_D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Bear 3-65 22-23 5H_D		
Design:	Bear 3-65 22-23 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	90.68	90.57	7,761.83	-323.36	7,248.27	7,255.21	0.00	0.00	0.00	
15,000.00	90.68	90.57	7,760.63	-324.34	7,348.26	7,355.17	0.00	0.00	0.00	
15,100.00	90.68	90.57	7,759.44	-325.33	7,448.25	7,455.12	0.00	0.00	0.00	
15,200.00	90.68	90.57	7,758.25	-326.32	7,548.23	7,555.08	0.00	0.00	0.00	
15,300.00	90.68	90.57	7,757.05	-327.31	7,648.22	7,655.04	0.00	0.00	0.00	
15,400.00	90.68	90.57	7,755.86	-328.29	7,748.21	7,755.00	0.00	0.00	0.00	
15,500.00	90.68	90.57	7,754.66	-329.28	7,848.20	7,854.96	0.00	0.00	0.00	
15,600.00	90.68	90.57	7,753.47	-330.27	7,948.19	7,954.92	0.00	0.00	0.00	
15,700.00	90.68	90.57	7,752.28	-331.26	8,048.17	8,054.88	0.00	0.00	0.00	
15,800.00	90.68	90.57	7,751.08	-332.25	8,148.16	8,154.84	0.00	0.00	0.00	
15,900.00	90.68	90.57	7,749.89	-333.23	8,248.15	8,254.80	0.00	0.00	0.00	
16,000.00	90.68	90.57	7,748.70	-334.22	8,348.14	8,354.76	0.00	0.00	0.00	
16,100.00	90.68	90.57	7,747.50	-335.21	8,448.13	8,454.71	0.00	0.00	0.00	
16,200.00	90.68	90.57	7,746.31	-336.20	8,548.11	8,554.67	0.00	0.00	0.00	
16,300.00	90.68	90.57	7,745.12	-337.18	8,648.10	8,654.63	0.00	0.00	0.00	
16,400.00	90.68	90.57	7,743.92	-338.17	8,748.09	8,754.59	0.00	0.00	0.00	
16,500.00	90.68	90.57	7,742.73	-339.16	8,848.08	8,854.55	0.00	0.00	0.00	
16,600.00	90.68	90.57	7,741.54	-340.15	8,948.07	8,954.51	0.00	0.00	0.00	
16,700.00	90.68	90.57	7,740.34	-341.13	9,048.05	9,054.47	0.00	0.00	0.00	
16,800.00	90.68	90.57	7,739.15	-342.12	9,148.04	9,154.43	0.00	0.00	0.00	
16,900.00	90.68	90.57	7,737.96	-343.11	9,248.03	9,254.39	0.00	0.00	0.00	
17,000.00	90.68	90.57	7,736.76	-344.10	9,348.02	9,354.35	0.00	0.00	0.00	
17,100.00	90.68	90.57	7,735.57	-345.09	9,448.01	9,454.30	0.00	0.00	0.00	
17,200.00	90.68	90.57	7,734.38	-346.07	9,547.99	9,554.26	0.00	0.00	0.00	
17,300.00	90.68	90.57	7,733.18	-347.06	9,647.98	9,654.22	0.00	0.00	0.00	
17,315.36	90.68	90.57	7,733.00	-347.21	9,663.34	9,669.58	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	
Bear 3-65 22-23 5H_D E - hit/miss target - Shape - Point	0.00	0.00	7,733.00	-347.21	9,663.34	1,161,052.998	3,246,553.850	39° 46' 19.600 N	104° 37' 22.260 W	
Bear 3-65 22-23 5H_D E - plan hits target center - Point	0.00	0.00	7,842.00	-257.00	530.95	1,161,056.413	3,237,421.111	39° 46' 20.510 N	104° 39' 19.220 W	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,169.00	2,169.00	Surface	9-5/8	13-1/2	
17,315.00	7,733.00	Production	5-1/2	8-3/4	



ConocoPhillips

Adams County, Colorado

Bear 3-65 22-23 5H_D

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
2269.00	0.00	0.00	2269.00	0.00	0.00	0.00	0.00
2447.67	2.68	192.20	2447.61	-4.08	-0.88	1.50	-0.74
7269.64	2.68	192.20	7264.30	-224.47	-48.52	0.00	-40.43
8181.87	90.68	90.57	7842.00	-257.00	530.95	10.00	539.84
17315.36	90.68	90.57	7733.00	-347.21	9663.34	0.00	9669.58

Casing Depths

TVD	MD	Name	Size
2169.00	2169.00	Surface	9-5/8
7733.00	17315.00	Production	5-1/2

