

ConocoPhillips RBU Gold Data_Niobrara

Niobrara - CO Northern Zone

Aspen

Aspen 3-65 15-14 2DH

Aspen 3-65 15-14 2DH

Plan: Aspen 3-65 15-14 2DH

Standard Planning Report

26 October, 2016

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Aspen 3-65 15-14 2DH
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5501.20ft
Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5501.20ft
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Aspen 3-65 15-14 2DH		
Design:	Aspen 3-65 15-14 2DH		

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	Aspen				
Site Position:		Northing:	1,170,423.418 usft	Latitude:	39° 47' 53.189 N
From:	Lat/Long	Easting:	3,236,242.994 usft	Longitude:	104° 39' 33.170 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.54 °

Well	Aspen 3-65 15-14 2DH					
Well Position	+N/-S	-1,655.31 ft	Northing:	1,168,772.030 usft	Latitude:	39° 47' 36.830 N
	+E/-W	403.59 ft	Easting:	3,236,662.251 usft	Longitude:	104° 39' 28.000 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,477.20 ft

Wellbore	Aspen 3-65 15-14 2DH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	10/26/2016	8.34	66.46	52,158

Design	Aspen 3-65 15-14 2DH			
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	96.45

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	
2,229.00	0.00	0.00	2,229.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,814.31	8.78	181.45	2,812.02	-44.74	-1.14	1.50	1.50	0.00	181.45	
7,302.85	8.78	181.45	7,247.97	-729.63	-18.53	0.00	0.00	0.00	0.00	
8,217.42	91.35	90.62	7,815.00	-825.67	566.71	10.00	9.03	-9.93	-90.62	Aspen 3-65 15-14 2DI
15,672.29	91.35	90.62	7,640.00	-906.35	8,019.09	0.00	0.00	0.00	0.00	Aspen 3-65 15-14 2DI

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Aspen 3-65 15-14 2DH
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5501.20ft
Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5501.20ft
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Aspen 3-65 15-14 2DH		
Design:	Aspen 3-65 15-14 2DH		

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	181.45	2,300.00	-0.66	-0.02	0.06	1.50	1.50	0.00
2,400.00	2.57	181.45	2,399.94	-3.83	-0.10	0.33	1.50	1.50	0.00
2,500.00	4.07	181.45	2,499.77	-9.61	-0.24	0.84	1.50	1.50	0.00
2,600.00	5.57	181.45	2,599.42	-18.00	-0.46	1.57	1.50	1.50	0.00
2,700.00	7.07	181.45	2,698.81	-28.99	-0.74	2.52	1.50	1.50	0.00
2,800.00	8.57	181.45	2,797.88	-42.59	-1.08	3.71	1.50	1.50	0.00
2,814.31	8.78	181.45	2,812.02	-44.74	-1.14	3.90	1.50	1.50	0.00
2,900.00	8.78	181.45	2,896.71	-57.82	-1.47	5.03	0.00	0.00	0.00
3,000.00	8.78	181.45	2,995.54	-73.08	-1.86	6.36	0.00	0.00	0.00
3,100.00	8.78	181.45	3,094.36	-88.33	-2.24	7.69	0.00	0.00	0.00
3,200.00	8.78	181.45	3,193.19	-103.59	-2.63	9.02	0.00	0.00	0.00
3,300.00	8.78	181.45	3,292.02	-118.85	-3.02	10.35	0.00	0.00	0.00
3,400.00	8.78	181.45	3,390.85	-134.11	-3.41	11.68	0.00	0.00	0.00
3,500.00	8.78	181.45	3,489.68	-149.37	-3.79	13.01	0.00	0.00	0.00
3,600.00	8.78	181.45	3,588.51	-164.63	-4.18	14.34	0.00	0.00	0.00
3,700.00	8.78	181.45	3,687.33	-179.89	-4.57	15.66	0.00	0.00	0.00
3,800.00	8.78	181.45	3,786.16	-195.14	-4.96	16.99	0.00	0.00	0.00
3,900.00	8.78	181.45	3,884.99	-210.40	-5.34	18.32	0.00	0.00	0.00
4,000.00	8.78	181.45	3,983.82	-225.66	-5.73	19.65	0.00	0.00	0.00
4,100.00	8.78	181.45	4,082.65	-240.92	-6.12	20.98	0.00	0.00	0.00
4,200.00	8.78	181.45	4,181.48	-256.18	-6.50	22.31	0.00	0.00	0.00
4,300.00	8.78	181.45	4,280.30	-271.44	-6.89	23.64	0.00	0.00	0.00
4,400.00	8.78	181.45	4,379.13	-286.70	-7.28	24.96	0.00	0.00	0.00
4,500.00	8.78	181.45	4,477.96	-301.96	-7.67	26.29	0.00	0.00	0.00
4,600.00	8.78	181.45	4,576.79	-317.21	-8.05	27.62	0.00	0.00	0.00
4,700.00	8.78	181.45	4,675.62	-332.47	-8.44	28.95	0.00	0.00	0.00
4,800.00	8.78	181.45	4,774.45	-347.73	-8.83	30.28	0.00	0.00	0.00
4,900.00	8.78	181.45	4,873.27	-362.99	-9.22	31.61	0.00	0.00	0.00
5,000.00	8.78	181.45	4,972.10	-378.25	-9.60	32.94	0.00	0.00	0.00
5,100.00	8.78	181.45	5,070.93	-393.51	-9.99	34.27	0.00	0.00	0.00

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Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Aspen 3-65 15-14 2DH		
Design:	Aspen 3-65 15-14 2DH		

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	8.78	181.45	5,169.76	-408.77	-10.38	35.59	0.00	0.00	0.00
5,300.00	8.78	181.45	5,268.59	-424.02	-10.77	36.92	0.00	0.00	0.00
5,400.00	8.78	181.45	5,367.41	-439.28	-11.15	38.25	0.00	0.00	0.00
5,500.00	8.78	181.45	5,466.24	-454.54	-11.54	39.58	0.00	0.00	0.00
5,600.00	8.78	181.45	5,565.07	-469.80	-11.93	40.91	0.00	0.00	0.00
5,700.00	8.78	181.45	5,663.90	-485.06	-12.32	42.24	0.00	0.00	0.00
5,800.00	8.78	181.45	5,762.73	-500.32	-12.70	43.57	0.00	0.00	0.00
5,900.00	8.78	181.45	5,861.56	-515.58	-13.09	44.89	0.00	0.00	0.00
6,000.00	8.78	181.45	5,960.38	-530.83	-13.48	46.22	0.00	0.00	0.00
6,100.00	8.78	181.45	6,059.21	-546.09	-13.87	47.55	0.00	0.00	0.00
6,200.00	8.78	181.45	6,158.04	-561.35	-14.25	48.88	0.00	0.00	0.00
6,300.00	8.78	181.45	6,256.87	-576.61	-14.64	50.21	0.00	0.00	0.00
6,400.00	8.78	181.45	6,355.70	-591.87	-15.03	51.54	0.00	0.00	0.00
6,500.00	8.78	181.45	6,454.53	-607.13	-15.42	52.87	0.00	0.00	0.00
6,600.00	8.78	181.45	6,553.35	-622.39	-15.80	54.20	0.00	0.00	0.00
6,700.00	8.78	181.45	6,652.18	-637.64	-16.19	55.52	0.00	0.00	0.00
6,800.00	8.78	181.45	6,751.01	-652.90	-16.58	56.85	0.00	0.00	0.00
6,900.00	8.78	181.45	6,849.84	-668.16	-16.97	58.18	0.00	0.00	0.00
7,000.00	8.78	181.45	6,948.67	-683.42	-17.35	59.51	0.00	0.00	0.00
7,100.00	8.78	181.45	7,047.50	-698.68	-17.74	60.84	0.00	0.00	0.00
7,200.00	8.78	181.45	7,146.32	-713.94	-18.13	62.17	0.00	0.00	0.00
7,302.85	8.78	181.45	7,247.97	-729.63	-18.53	63.53	0.00	0.00	0.00
7,350.00	9.91	152.93	7,294.52	-736.85	-16.77	66.09	10.00	2.40	-60.49
7,400.00	13.00	132.83	7,343.53	-744.50	-10.69	73.00	10.00	6.17	-40.20
7,450.00	17.00	121.16	7,391.83	-752.11	-0.30	84.17	10.00	8.02	-23.34
7,500.00	21.42	114.01	7,439.04	-759.62	14.31	99.53	10.00	8.84	-14.31
7,550.00	26.05	109.25	7,484.80	-766.96	33.02	118.95	10.00	9.24	-9.52
7,600.00	30.78	105.86	7,528.77	-774.07	55.71	142.29	10.00	9.47	-6.79
7,650.00	35.58	103.29	7,570.61	-780.92	82.19	169.37	10.00	9.60	-5.12
7,700.00	40.42	101.27	7,610.00	-787.44	112.26	199.99	10.00	9.69	-4.04
7,750.00	45.30	99.62	7,646.64	-793.58	145.70	233.90	10.00	9.74	-3.31
7,800.00	50.19	98.22	7,680.26	-799.30	182.25	270.86	10.00	9.78	-2.79
7,850.00	55.09	97.01	7,710.59	-804.55	221.63	310.58	10.00	9.81	-2.42
7,900.00	60.01	95.94	7,737.41	-809.30	263.54	352.76	10.00	9.83	-2.15
7,950.00	64.94	94.97	7,760.51	-813.51	307.66	397.08	10.00	9.85	-1.94
8,000.00	69.87	94.07	7,779.71	-817.14	353.67	443.20	10.00	9.86	-1.79
8,050.00	74.80	93.23	7,794.88	-820.17	401.20	490.77	10.00	9.87	-1.68
8,100.00	79.74	92.43	7,805.89	-822.57	449.90	539.43	10.00	9.88	-1.61
8,150.00	84.68	91.65	7,812.66	-824.33	499.39	588.81	10.00	9.88	-1.56
8,200.00	89.62	90.89	7,815.15	-825.44	549.30	638.53	10.00	9.88	-1.53
8,217.42	91.35	90.62	7,815.00	-825.67	566.71	655.86	10.00	9.88	-1.53
8,300.00	91.35	90.62	7,813.06	-826.56	649.27	737.99	0.00	0.00	0.00
8,400.00	91.35	90.62	7,810.71	-827.64	749.23	837.44	0.00	0.00	0.00
8,500.00	91.35	90.62	7,808.37	-828.73	849.20	936.90	0.00	0.00	0.00
8,600.00	91.35	90.62	7,806.02	-829.81	949.17	1,036.36	0.00	0.00	0.00
8,700.00	91.35	90.62	7,803.67	-830.89	1,049.13	1,135.81	0.00	0.00	0.00
8,800.00	91.35	90.62	7,801.32	-831.97	1,149.10	1,235.27	0.00	0.00	0.00
8,900.00	91.35	90.62	7,798.98	-833.06	1,249.07	1,334.72	0.00	0.00	0.00
9,000.00	91.35	90.62	7,796.63	-834.14	1,349.03	1,434.18	0.00	0.00	0.00
9,100.00	91.35	90.62	7,794.28	-835.22	1,449.00	1,533.63	0.00	0.00	0.00
9,200.00	91.35	90.62	7,791.93	-836.30	1,548.97	1,633.09	0.00	0.00	0.00
9,300.00	91.35	90.62	7,789.59	-837.38	1,648.93	1,732.55	0.00	0.00	0.00
9,400.00	91.35	90.62	7,787.24	-838.47	1,748.90	1,832.00	0.00	0.00	0.00
9,500.00	91.35	90.62	7,784.89	-839.55	1,848.87	1,931.46	0.00	0.00	0.00

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Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5501.20ft
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Aspen 3-65 15-14 2DH		
Design:	Aspen 3-65 15-14 2DH		

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)
9,600.00	91.35	90.62	7,782.54	-840.63	1,948.83	2,030.91	0.00	0.00	0.00
9,700.00	91.35	90.62	7,780.20	-841.71	2,048.80	2,130.37	0.00	0.00	0.00
9,800.00	91.35	90.62	7,777.85	-842.79	2,148.77	2,229.82	0.00	0.00	0.00
9,900.00	91.35	90.62	7,775.50	-843.88	2,248.73	2,329.28	0.00	0.00	0.00
10,000.00	91.35	90.62	7,773.15	-844.96	2,348.70	2,428.74	0.00	0.00	0.00
10,100.00	91.35	90.62	7,770.81	-846.04	2,448.67	2,528.19	0.00	0.00	0.00
10,200.00	91.35	90.62	7,768.46	-847.12	2,548.63	2,627.65	0.00	0.00	0.00
10,300.00	91.35	90.62	7,766.11	-848.21	2,648.60	2,727.10	0.00	0.00	0.00
10,400.00	91.35	90.62	7,763.76	-849.29	2,748.57	2,826.56	0.00	0.00	0.00
10,500.00	91.35	90.62	7,761.42	-850.37	2,848.53	2,926.01	0.00	0.00	0.00
10,600.00	91.35	90.62	7,759.07	-851.45	2,948.50	3,025.47	0.00	0.00	0.00
10,700.00	91.35	90.62	7,756.72	-852.53	3,048.47	3,124.93	0.00	0.00	0.00
10,800.00	91.35	90.62	7,754.38	-853.62	3,148.43	3,224.38	0.00	0.00	0.00
10,900.00	91.35	90.62	7,752.03	-854.70	3,248.40	3,323.84	0.00	0.00	0.00
11,000.00	91.35	90.62	7,749.68	-855.78	3,348.36	3,423.29	0.00	0.00	0.00
11,100.00	91.35	90.62	7,747.33	-856.86	3,448.33	3,522.75	0.00	0.00	0.00
11,200.00	91.35	90.62	7,744.99	-857.95	3,548.30	3,622.20	0.00	0.00	0.00
11,300.00	91.35	90.62	7,742.64	-859.03	3,648.26	3,721.66	0.00	0.00	0.00
11,400.00	91.35	90.62	7,740.29	-860.11	3,748.23	3,821.12	0.00	0.00	0.00
11,500.00	91.35	90.62	7,737.94	-861.19	3,848.20	3,920.57	0.00	0.00	0.00
11,600.00	91.35	90.62	7,735.60	-862.27	3,948.16	4,020.03	0.00	0.00	0.00
11,700.00	91.35	90.62	7,733.25	-863.36	4,048.13	4,119.48	0.00	0.00	0.00
11,800.00	91.35	90.62	7,730.90	-864.44	4,148.10	4,218.94	0.00	0.00	0.00
11,900.00	91.35	90.62	7,728.55	-865.52	4,248.06	4,318.39	0.00	0.00	0.00
12,000.00	91.35	90.62	7,726.21	-866.60	4,348.03	4,417.85	0.00	0.00	0.00
12,100.00	91.35	90.62	7,723.86	-867.69	4,448.00	4,517.31	0.00	0.00	0.00
12,200.00	91.35	90.62	7,721.51	-868.77	4,547.96	4,616.76	0.00	0.00	0.00
12,300.00	91.35	90.62	7,719.16	-869.85	4,647.93	4,716.22	0.00	0.00	0.00
12,400.00	91.35	90.62	7,716.82	-870.93	4,747.90	4,815.67	0.00	0.00	0.00
12,500.00	91.35	90.62	7,714.47	-872.01	4,847.86	4,915.13	0.00	0.00	0.00
12,600.00	91.35	90.62	7,712.12	-873.10	4,947.83	5,014.58	0.00	0.00	0.00
12,700.00	91.35	90.62	7,709.77	-874.18	5,047.80	5,114.04	0.00	0.00	0.00
12,800.00	91.35	90.62	7,707.43	-875.26	5,147.76	5,213.49	0.00	0.00	0.00
12,900.00	91.35	90.62	7,705.08	-876.34	5,247.73	5,312.95	0.00	0.00	0.00
13,000.00	91.35	90.62	7,702.73	-877.43	5,347.70	5,412.41	0.00	0.00	0.00
13,100.00	91.35	90.62	7,700.38	-878.51	5,447.66	5,511.86	0.00	0.00	0.00
13,200.00	91.35	90.62	7,698.04	-879.59	5,547.63	5,611.32	0.00	0.00	0.00
13,300.00	91.35	90.62	7,695.69	-880.67	5,647.60	5,710.77	0.00	0.00	0.00
13,400.00	91.35	90.62	7,693.34	-881.75	5,747.56	5,810.23	0.00	0.00	0.00
13,500.00	91.35	90.62	7,690.99	-882.84	5,847.53	5,909.68	0.00	0.00	0.00
13,600.00	91.35	90.62	7,688.65	-883.92	5,947.50	6,009.14	0.00	0.00	0.00
13,700.00	91.35	90.62	7,686.30	-885.00	6,047.46	6,108.60	0.00	0.00	0.00
13,800.00	91.35	90.62	7,683.95	-886.08	6,147.43	6,208.05	0.00	0.00	0.00
13,900.00	91.35	90.62	7,681.60	-887.17	6,247.40	6,307.51	0.00	0.00	0.00
14,000.00	91.35	90.62	7,679.26	-888.25	6,347.36	6,406.96	0.00	0.00	0.00
14,100.00	91.35	90.62	7,676.91	-889.33	6,447.33	6,506.42	0.00	0.00	0.00
14,200.00	91.35	90.62	7,674.56	-890.41	6,547.30	6,605.87	0.00	0.00	0.00
14,300.00	91.35	90.62	7,672.21	-891.49	6,647.26	6,705.33	0.00	0.00	0.00
14,400.00	91.35	90.62	7,669.87	-892.58	6,747.23	6,804.79	0.00	0.00	0.00
14,500.00	91.35	90.62	7,667.52	-893.66	6,847.20	6,904.24	0.00	0.00	0.00
14,600.00	91.35	90.62	7,665.17	-894.74	6,947.16	7,003.70	0.00	0.00	0.00
14,700.00	91.35	90.62	7,662.82	-895.82	7,047.13	7,103.15	0.00	0.00	0.00
14,800.00	91.35	90.62	7,660.48	-896.91	7,147.10	7,202.61	0.00	0.00	0.00
14,900.00	91.35	90.62	7,658.13	-897.99	7,247.06	7,302.06	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Aspen 3-65 15-14 2DH
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5501.20ft
Project:	Niobrara - CO Northern Zone	MD Reference:	24' RKB @ 5501.20ft
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Aspen 3-65 15-14 2DH		
Design:	Aspen 3-65 15-14 2DH		

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)	
15,000.00	91.35	90.62	7,655.78	-899.07	7,347.03	7,401.52	0.00	0.00	0.00	
15,100.00	91.35	90.62	7,653.43	-900.15	7,446.99	7,500.98	0.00	0.00	0.00	
15,200.00	91.35	90.62	7,651.09	-901.23	7,546.96	7,600.43	0.00	0.00	0.00	
15,300.00	91.35	90.62	7,648.74	-902.32	7,646.93	7,699.89	0.00	0.00	0.00	
15,400.00	91.35	90.62	7,646.39	-903.40	7,746.89	7,799.34	0.00	0.00	0.00	
15,500.00	91.35	90.62	7,644.04	-904.48	7,846.86	7,898.80	0.00	0.00	0.00	
15,600.00	91.35	90.62	7,641.70	-905.56	7,946.83	7,998.25	0.00	0.00	0.00	
15,672.29	91.35	90.62	7,640.00	-906.35	8,019.09	8,070.15	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	
- hit/miss target										
- Shape										
Aspen 3-65 15-14 2DH E	0.00	0.00	7,640.00	-906.35	8,019.09	1,167,941.899	3,244,689.483	39° 47' 27.860 N	104° 37' 45.270 W	
- plan hits target center										
- Point										
Aspen 3-65 15-14 2DH E	0.00	0.00	7,815.00	-825.67	566.71	1,167,951.792	3,237,236.773	39° 47' 28.670 N	104° 39' 20.740 W	
- plan hits target center										
- Point										

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		
15,672.29	7,640.00	Production	5-1/2	8-3/4		



ConocoPhillips

Adams County, Colorado

Aspen 3-65 15-14 2DH

Wellbore Targets

Name	TVD	Latitude	Longitude
Aspen 3-65 15-14 2DH BHL	7640.00	39° 47' 27.860 N	104° 37' 45.270 W
Aspen 3-65 15-14 2DH BPI	7815.00	39° 47' 28.670 N	104° 39' 20.740 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
2814.31	8.78	181.45	2812.02	-44.74	-1.14	1.50	3.90
7302.85	8.78	181.45	7247.97	-729.63	-18.53	0.00	63.53
8217.42	91.35	90.62	7815.00	-825.67	566.71	10.00	655.86
15672.29	91.35	90.62	7640.00	-906.35	8019.09	0.00	8070.15

Casing Depths

TVD	MD	Name	Size
2129.00	2129.00	Surface	9-5/8
7640.00	15672.29	Production	5-1/2

