

ConocoPhillips RBU Gold Data

Niobrara North Zone

Aspen

Aspen 3-65 15-14 2DH

Wellbore #1

Plan: Aspen 3-65 15-14 2DH Rev.B

Standard Planning Report

01 December, 2017

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Aspen 3-65 15-14 2DH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	WELL @ 5502.20ft (Original Well Elev)
Project:	Niobrara North Zone	MD Reference:	WELL @ 5502.20ft (Original Well Elev)
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Aspen 3-65 15-14 2DH Rev.B		

Project	Niobrara North Zone, Colorado North Zone, FIPS Zone: 0501		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Aspen				
Site Position:		Northing:	1,168,772.043 usft	Latitude:	39° 47' 36.830 N
From:	Lat/Long	Easting:	3,236,662.251 usft	Longitude:	104° 39' 28.000 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	-20.00 ft	Northing:	1,168,752.040 usft	Latitude:	39° 47' 36.632 N
	+E-W	0.00 ft	Easting:	3,236,662.441 usft	Longitude:	104° 39' 28.000 W
Position Uncertainty		2.00 ft	Wellhead Elevation:		Ground Level:	5,477.20 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2017	12/1/2017	8.25	66.40	52,014.54139011

Design	Aspen 3-65 15-14 2DH Rev.B			
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	96.31

Plan Survey Tool Program	Date	12/1/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	2,130.00	Aspen 3-65 15-14 2DH Rev.B (WSDI ADK 105	
			AdK w/ Gyrocompass HS re	
2	2,130.00	15,776.09	Aspen 3-65 15-14 2DH Rev.B (WMWD+IFR_No SAG	
			MWD + IFR (No SAG) corre	

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Wellbore:	Wellbore #1		
Design:	Aspen 3-65 15-14 2DH Rev.B		

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	
2,130.00	0.00	0.00	2,130.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,250.00	0.00	0.00	5,250.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,888.97	24.58	181.63	6,839.14	-346.12	-9.84	1.50	1.50	0.00	181.63	
7,389.03	24.58	181.63	7,293.87	-554.08	-15.76	0.00	0.00	0.00	0.00	
8,305.47	91.35	90.62	7,816.20	-805.68	566.71	10.00	7.28	-9.93	-90.36	Aspen 3-65 15-14 2
15,760.35	91.35	90.62	7,641.00	-886.35	8,019.09	0.00	0.00	0.00	0.00	Aspen 3-65 15-14 2

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Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Aspen 3-65 15-14 2DH Rev.B		

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
2,130.00	0.00	0.00	2,130.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00

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Wellbore:	Wellbore #1		
Design:	Aspen 3-65 15-14 2DH Rev.B		

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	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,250.00	0.00	0.00	5,250.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.75	181.63	5,300.00	-0.33	-0.01	0.03	1.50	1.50	0.00
5,400.00	2.25	181.63	5,399.96	-2.94	-0.08	0.24	1.50	1.50	0.00
5,500.00	3.75	181.63	5,499.82	-8.18	-0.23	0.67	1.50	1.50	0.00
5,600.00	5.25	181.63	5,599.51	-16.02	-0.46	1.31	1.50	1.50	0.00
5,700.00	6.75	181.63	5,698.96	-26.47	-0.75	2.16	1.50	1.50	0.00
5,800.00	8.25	181.63	5,798.10	-39.51	-1.12	3.22	1.50	1.50	0.00
5,900.00	9.75	181.63	5,896.87	-55.15	-1.57	4.50	1.50	1.50	0.00
6,000.00	11.25	181.63	5,995.19	-73.37	-2.09	5.99	1.50	1.50	0.00
6,100.00	12.75	181.63	6,093.00	-94.15	-2.68	7.68	1.50	1.50	0.00
6,200.00	14.25	181.63	6,190.24	-117.48	-3.34	9.59	1.50	1.50	0.00
6,300.00	15.75	181.63	6,286.83	-143.35	-4.08	11.70	1.50	1.50	0.00
6,400.00	17.25	181.63	6,382.71	-171.74	-4.88	14.01	1.50	1.50	0.00
6,500.00	18.75	181.63	6,477.81	-202.63	-5.76	16.53	1.50	1.50	0.00
6,600.00	20.25	181.63	6,572.07	-236.00	-6.71	19.26	1.50	1.50	0.00
6,700.00	21.75	181.63	6,665.43	-271.82	-7.73	22.18	1.50	1.50	0.00
6,800.00	23.25	181.63	6,757.81	-310.07	-8.82	25.30	1.50	1.50	0.00
6,888.97	24.58	181.63	6,839.14	-346.12	-9.84	28.24	1.50	1.50	0.00
6,900.00	24.58	181.63	6,849.17	-350.71	-9.97	28.62	0.00	0.00	0.00
7,000.00	24.58	181.63	6,940.10	-392.30	-11.16	32.01	0.00	0.00	0.00
7,100.00	24.58	181.63	7,031.04	-433.88	-12.34	35.40	0.00	0.00	0.00
7,200.00	24.58	181.63	7,121.97	-475.47	-13.52	38.80	0.00	0.00	0.00
7,300.00	24.58	181.63	7,212.91	-517.06	-14.70	42.19	0.00	0.00	0.00
7,389.03	24.58	181.63	7,293.87	-554.08	-15.76	45.21	0.00	0.00	0.00
7,400.00	24.60	178.99	7,303.84	-558.65	-15.78	45.69	10.00	0.15	-24.03
7,500.00	26.77	156.33	7,394.18	-600.19	-6.35	59.62	10.00	2.17	-22.66
7,600.00	31.86	138.64	7,481.51	-640.72	20.20	90.47	10.00	5.09	-17.69
7,700.00	38.74	126.01	7,563.18	-679.02	63.06	137.28	10.00	6.88	-12.63
7,800.00	46.61	116.86	7,636.72	-713.92	120.93	198.63	10.00	7.87	-9.14
7,900.00	55.03	109.90	7,699.88	-744.36	192.05	272.67	10.00	8.43	-6.97
8,000.00	63.78	104.26	7,750.76	-769.42	274.26	357.13	10.00	8.75	-5.64
8,100.00	72.72	99.42	7,787.79	-788.32	365.07	449.46	10.00	8.94	-4.84
8,200.00	81.76	95.03	7,809.86	-800.51	461.71	546.86	10.00	9.04	-4.38
8,300.00	90.85	90.85	7,816.31	-805.61	561.24	646.35	10.00	9.09	-4.19
8,305.47	91.35	90.62	7,816.20	-805.68	566.71	651.80	10.00	9.09	-4.16
8,400.00	91.35	90.62	7,813.98	-806.70	661.21	745.83	0.00	0.00	0.00
8,500.00	91.35	90.62	7,811.63	-807.78	761.17	845.31	0.00	0.00	0.00
8,600.00	91.35	90.62	7,809.28	-808.86	861.14	944.79	0.00	0.00	0.00
8,700.00	91.35	90.62	7,806.93	-809.95	961.11	1,044.27	0.00	0.00	0.00
8,800.00	91.35	90.62	7,804.58	-811.03	1,061.07	1,143.75	0.00	0.00	0.00
8,900.00	91.35	90.62	7,802.23	-812.11	1,161.04	1,243.23	0.00	0.00	0.00
9,000.00	91.35	90.62	7,799.88	-813.19	1,261.01	1,342.71	0.00	0.00	0.00
9,100.00	91.35	90.62	7,797.53	-814.28	1,360.97	1,442.19	0.00	0.00	0.00
9,200.00	91.35	90.62	7,795.18	-815.36	1,460.94	1,541.67	0.00	0.00	0.00
9,300.00	91.35	90.62	7,792.83	-816.44	1,560.91	1,641.15	0.00	0.00	0.00
9,400.00	91.35	90.62	7,790.48	-817.52	1,660.87	1,740.63	0.00	0.00	0.00
9,500.00	91.35	90.62	7,788.13	-818.60	1,760.84	1,840.11	0.00	0.00	0.00
9,600.00	91.35	90.62	7,785.78	-819.69	1,860.81	1,939.59	0.00	0.00	0.00
9,700.00	91.35	90.62	7,783.43	-820.77	1,960.77	2,039.07	0.00	0.00	0.00
9,800.00	91.35	90.62	7,781.08	-821.85	2,060.74	2,138.56	0.00	0.00	0.00
9,900.00	91.35	90.62	7,778.73	-822.93	2,160.71	2,238.04	0.00	0.00	0.00
10,000.00	91.35	90.62	7,776.38	-824.02	2,260.67	2,337.52	0.00	0.00	0.00
10,100.00	91.35	90.62	7,774.03	-825.10	2,360.64	2,437.00	0.00	0.00	0.00

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Project:	Niobrara North Zone	MD Reference:	WELL @ 5502.20ft (Original Well Elev)
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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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)
10,200.00	91.35	90.62	7,771.68	-826.18	2,460.61	2,536.48	0.00	0.00	0.00
10,300.00	91.35	90.62	7,769.33	-827.26	2,560.57	2,635.96	0.00	0.00	0.00
10,400.00	91.35	90.62	7,766.98	-828.34	2,660.54	2,735.44	0.00	0.00	0.00
10,500.00	91.35	90.62	7,764.63	-829.43	2,760.50	2,834.92	0.00	0.00	0.00
10,600.00	91.35	90.62	7,762.28	-830.51	2,860.47	2,934.40	0.00	0.00	0.00
10,700.00	91.35	90.62	7,759.93	-831.59	2,960.44	3,033.88	0.00	0.00	0.00
10,800.00	91.35	90.62	7,757.58	-832.67	3,060.40	3,133.36	0.00	0.00	0.00
10,900.00	91.35	90.62	7,755.23	-833.75	3,160.37	3,232.84	0.00	0.00	0.00
11,000.00	91.35	90.62	7,752.88	-834.84	3,260.34	3,332.32	0.00	0.00	0.00
11,100.00	91.35	90.62	7,750.52	-835.92	3,360.30	3,431.80	0.00	0.00	0.00
11,200.00	91.35	90.62	7,748.17	-837.00	3,460.27	3,531.28	0.00	0.00	0.00
11,300.00	91.35	90.62	7,745.82	-838.08	3,560.24	3,630.76	0.00	0.00	0.00
11,400.00	91.35	90.62	7,743.47	-839.17	3,660.20	3,730.24	0.00	0.00	0.00
11,500.00	91.35	90.62	7,741.12	-840.25	3,760.17	3,829.72	0.00	0.00	0.00
11,600.00	91.35	90.62	7,738.77	-841.33	3,860.14	3,929.20	0.00	0.00	0.00
11,700.00	91.35	90.62	7,736.42	-842.41	3,960.10	4,028.68	0.00	0.00	0.00
11,800.00	91.35	90.62	7,734.07	-843.49	4,060.07	4,128.16	0.00	0.00	0.00
11,900.00	91.35	90.62	7,731.72	-844.58	4,160.04	4,227.64	0.00	0.00	0.00
12,000.00	91.35	90.62	7,729.37	-845.66	4,260.00	4,327.12	0.00	0.00	0.00
12,100.00	91.35	90.62	7,727.02	-846.74	4,359.97	4,426.60	0.00	0.00	0.00
12,200.00	91.35	90.62	7,724.67	-847.82	4,459.94	4,526.08	0.00	0.00	0.00
12,300.00	91.35	90.62	7,722.32	-848.91	4,559.90	4,625.56	0.00	0.00	0.00
12,400.00	91.35	90.62	7,719.97	-849.99	4,659.87	4,725.04	0.00	0.00	0.00
12,500.00	91.35	90.62	7,717.62	-851.07	4,759.84	4,824.52	0.00	0.00	0.00
12,600.00	91.35	90.62	7,715.27	-852.15	4,859.80	4,924.00	0.00	0.00	0.00
12,700.00	91.35	90.62	7,712.92	-853.23	4,959.77	5,023.48	0.00	0.00	0.00
12,800.00	91.35	90.62	7,710.57	-854.32	5,059.74	5,122.96	0.00	0.00	0.00
12,900.00	91.35	90.62	7,708.22	-855.40	5,159.70	5,222.44	0.00	0.00	0.00
13,000.00	91.35	90.62	7,705.87	-856.48	5,259.67	5,321.93	0.00	0.00	0.00
13,100.00	91.35	90.62	7,703.52	-857.56	5,359.63	5,421.41	0.00	0.00	0.00
13,200.00	91.35	90.62	7,701.17	-858.65	5,459.60	5,520.89	0.00	0.00	0.00
13,300.00	91.35	90.62	7,698.82	-859.73	5,559.57	5,620.37	0.00	0.00	0.00
13,400.00	91.35	90.62	7,696.47	-860.81	5,659.53	5,719.85	0.00	0.00	0.00
13,500.00	91.35	90.62	7,694.12	-861.89	5,759.50	5,819.33	0.00	0.00	0.00
13,600.00	91.35	90.62	7,691.77	-862.97	5,859.47	5,918.81	0.00	0.00	0.00
13,700.00	91.35	90.62	7,689.42	-864.06	5,959.43	6,018.29	0.00	0.00	0.00
13,800.00	91.35	90.62	7,687.07	-865.14	6,059.40	6,117.77	0.00	0.00	0.00
13,900.00	91.35	90.62	7,684.72	-866.22	6,159.37	6,217.25	0.00	0.00	0.00
14,000.00	91.35	90.62	7,682.37	-867.30	6,259.33	6,316.73	0.00	0.00	0.00
14,100.00	91.35	90.62	7,680.02	-868.39	6,359.30	6,416.21	0.00	0.00	0.00
14,200.00	91.35	90.62	7,677.67	-869.47	6,459.27	6,515.69	0.00	0.00	0.00
14,300.00	91.35	90.62	7,675.32	-870.55	6,559.23	6,615.17	0.00	0.00	0.00
14,400.00	91.35	90.62	7,672.97	-871.63	6,659.20	6,714.65	0.00	0.00	0.00
14,500.00	91.35	90.62	7,670.62	-872.71	6,759.17	6,814.13	0.00	0.00	0.00
14,600.00	91.35	90.62	7,668.27	-873.80	6,859.13	6,913.61	0.00	0.00	0.00
14,700.00	91.35	90.62	7,665.92	-874.88	6,959.10	7,013.09	0.00	0.00	0.00
14,800.00	91.35	90.62	7,663.57	-875.96	7,059.07	7,112.57	0.00	0.00	0.00
14,900.00	91.35	90.62	7,661.22	-877.04	7,159.03	7,212.05	0.00	0.00	0.00
15,000.00	91.35	90.62	7,658.87	-878.13	7,259.00	7,311.53	0.00	0.00	0.00
15,100.00	91.35	90.62	7,656.52	-879.21	7,358.97	7,411.01	0.00	0.00	0.00
15,200.00	91.35	90.62	7,654.17	-880.29	7,458.93	7,510.49	0.00	0.00	0.00
15,300.00	91.35	90.62	7,651.82	-881.37	7,558.90	7,609.97	0.00	0.00	0.00
15,400.00	91.35	90.62	7,649.47	-882.45	7,658.86	7,709.45	0.00	0.00	0.00
15,500.00	91.35	90.62	7,647.12	-883.54	7,758.83	7,808.93	0.00	0.00	0.00

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Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Aspen 3-65 15-14 2DH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	WELL @ 5502.20ft (Original Well Elev)
Project:	Niobrara North Zone	MD Reference:	WELL @ 5502.20ft (Original Well Elev)
Site:	Aspen	North Reference:	True
Well:	Aspen 3-65 15-14 2DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Aspen 3-65 15-14 2DH Rev.B		

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)
15,600.00	91.35	90.62	7,644.77	-884.62	7,858.80	7,908.41	0.00	0.00	0.00
15,700.00	91.35	90.62	7,642.42	-885.70	7,958.76	8,007.89	0.00	0.00	0.00
15,760.00	91.35	90.62	7,641.01	-886.35	8,018.74	8,067.58	0.00	0.00	0.00
5 1/2" x 8 1/2"									
15,760.35	91.35	90.62	7,641.00	-886.35	8,019.09	8,067.93	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 2DI	0.00	0.00	7,641.00	-886.35	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 2DI	0.00	0.00	7,816.20	-805.68	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 (")	
2,130.00	2,130.00	9 5/8"	9-5/8	12-1/4	
15,760.00	7,641.01	5 1/2" x 8 1/2"	5-1/2	8-1/2	



ConocoPhillips

Aspen 3-65 15-14 2DH Rev.B

Ground Level: 5477.20
Surface Location Latitude: 39° 47' 36.632 N
Surface Location Longitude: 104° 39' 28.000 W
North Reference: True
WELL @ 5502.20ft (Original Well Elev)

North American Datum 1983
GRS 1980
US State Plane 1983
Colorado Northern Zone

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
2130.00	0.00	0.00	2130.00	0.00	0.00	0.00	0.00
5250.00	0.00	0.00	5250.00	0.00	0.00	0.00	0.00
6888.97	24.58	181.63	6839.14	-346.12	-9.84	1.50	28.24
7389.03	24.58	181.63	7293.87	-554.08	-15.76	0.00	45.21
8305.47	91.35	90.62	7816.20	-805.68	566.71	10.00	651.80
15760.35	91.35	90.62	7641.00	-886.35	8019.09	0.00	8067.93

West(-)/East(+) (2000 ft/in)

-2000 -1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000

