

ConocoPhillips RBU Gold Data

Niobrara North Zone

Big Sandy

Big Sandy 3-65 36-31 1DH

Big Sandy 3-65 36-31 1DH

Plan: Big Sandy 3-65 36-31 1DH

Standard Planning Report

25 July, 2017

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Big Sandy 3-65 36-31 1DH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	27' RKB @ 5550.90ft (27' RKB)
Project:	Niobrara North Zone	MD Reference:	27' RKB @ 5550.90ft (27' RKB)
Site:	Big Sandy	North Reference:	True
Well:	Big Sandy 3-65 36-31 1DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Big Sandy 3-65 36-31 1DH		
Design:	Big Sandy 3-65 36-31 1DH		

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	Big Sandy				
Site Position:		Northing:	1,154,567.170 usft	Latitude:	39° 45' 15.469 N
From:	Lat/Long	Easting:	3,246,918.586 usft	Longitude:	104° 37' 18.412 W
Position Uncertainty:	0.00 ft	Slot Radius:	26 "	Grid Convergence:	0.57 °

Well	Big Sandy 3-65 36-31 1DH					
Well Position	+N/-S	-2,811.90 ft	Northing:	1,151,750.666 usft	Latitude:	39° 44' 47.680 N
	+E/-W	-481.03 ft	Easting:	3,246,465.428 usft	Longitude:	104° 37' 24.570 W
Position Uncertainty		2.00 ft	Wellhead Elevation:		Ground Level:	5,523.90 ft

Wellbore	Big Sandy 3-65 36-31 1DH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2017	7/25/2017	8.26	66.39	52,081.35783224

Design	Big Sandy 3-65 36-31 1DH			
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	86.04

Plan Survey Tool Program	Date	7/25/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	2,024.00	Big Sandy 3-65 36-31 1DH (Big S	Gyro-BM-MS Gyro - bat/mem drop m/s
2	2,024.00	7,271.63	Big Sandy 3-65 36-31 1DH (Big S	MWD+IFR_No SAG MWD + IFR (No SAG) correctic
3	7,271.63	15,367.02	Big Sandy 3-65 36-31 1DH (Big S	MWD+IFR_No SAG MWD + IFR (No SAG) correctic

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Design:	Big Sandy 3-65 36-31 1DH		

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	
4,420.00	0.00	0.00	4,420.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,486.42	16.00	33.45	5,472.62	123.40	81.53	1.50	1.50	0.00	33.45	
7,271.63	16.00	33.45	7,188.70	533.86	352.73	0.00	0.00	0.00	0.00	
8,093.93	90.85	90.60	7,662.00	643.58	928.71	10.00	9.10	6.95	57.97	Big Sandy 3-65 36-31
15,367.03	90.85	90.60	7,554.00	566.99	8,200.60	0.00	0.00	0.00	0.00	Big Sandy 3-65 36-31

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Well:	Big Sandy 3-65 36-31 1DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Big Sandy 3-65 36-31 1DH		
Design:	Big Sandy 3-65 36-31 1DH		

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
2,024.00	0.00	0.00	2,024.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface									
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
2,300.00	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
4,420.00	0.00	0.00	4,420.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	1.20	33.45	4,499.99	0.70	0.46	0.51	1.50	1.50	0.00
4,600.00	2.70	33.45	4,599.93	3.54	2.34	2.58	1.50	1.50	0.00
4,700.00	4.20	33.45	4,699.75	8.56	5.65	6.23	1.50	1.50	0.00
4,800.00	5.70	33.45	4,799.37	15.76	10.41	11.47	1.50	1.50	0.00
4,900.00	7.20	33.45	4,898.74	25.13	16.60	18.30	1.50	1.50	0.00
5,000.00	8.70	33.45	4,997.77	36.67	24.23	26.70	1.50	1.50	0.00

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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)
5,100.00	10.20	33.45	5,096.41	50.37	33.28	36.67	1.50	1.50	0.00
5,200.00	11.70	33.45	5,194.59	66.22	43.75	48.21	1.50	1.50	0.00
5,300.00	13.20	33.45	5,292.24	84.20	55.63	61.31	1.50	1.50	0.00
5,400.00	14.70	33.45	5,389.28	104.32	68.92	75.95	1.50	1.50	0.00
5,486.42	16.00	33.45	5,472.62	123.40	81.53	89.85	1.50	1.50	0.00
5,500.00	16.00	33.45	5,485.67	126.52	83.59	92.12	0.00	0.00	0.00
5,600.00	16.00	33.45	5,581.80	149.51	98.79	108.86	0.00	0.00	0.00
5,700.00	16.00	33.45	5,677.93	172.51	113.98	125.60	0.00	0.00	0.00
5,800.00	16.00	33.45	5,774.06	195.50	129.17	142.35	0.00	0.00	0.00
5,900.00	16.00	33.45	5,870.19	218.49	144.36	159.09	0.00	0.00	0.00
6,000.00	16.00	33.45	5,966.31	241.48	159.55	175.83	0.00	0.00	0.00
6,100.00	16.00	33.45	6,062.44	264.48	174.74	192.57	0.00	0.00	0.00
6,200.00	16.00	33.45	6,158.57	287.47	189.93	209.31	0.00	0.00	0.00
6,300.00	16.00	33.45	6,254.70	310.46	205.13	226.05	0.00	0.00	0.00
6,400.00	16.00	33.45	6,350.83	333.45	220.32	242.79	0.00	0.00	0.00
6,500.00	16.00	33.45	6,446.95	356.44	235.51	259.53	0.00	0.00	0.00
6,600.00	16.00	33.45	6,543.08	379.44	250.70	276.27	0.00	0.00	0.00
6,700.00	16.00	33.45	6,639.21	402.43	265.89	293.02	0.00	0.00	0.00
6,800.00	16.00	33.45	6,735.34	425.42	281.08	309.76	0.00	0.00	0.00
6,900.00	16.00	33.45	6,831.47	448.41	296.27	326.50	0.00	0.00	0.00
7,000.00	16.00	33.45	6,927.59	471.41	311.47	343.24	0.00	0.00	0.00
7,100.00	16.00	33.45	7,023.72	494.40	326.66	359.98	0.00	0.00	0.00
7,200.00	16.00	33.45	7,119.85	517.39	341.85	376.72	0.00	0.00	0.00
7,271.63	16.00	33.45	7,188.70	533.86	352.73	388.71	0.00	0.00	0.00
7,300.00	17.66	41.40	7,215.86	540.35	357.73	394.15	10.00	5.87	28.02
7,350.00	21.19	52.10	7,263.02	551.60	369.89	407.05	10.00	7.06	21.40
7,400.00	25.21	59.70	7,308.98	562.53	386.22	424.10	10.00	8.03	15.20
7,450.00	29.51	65.27	7,353.39	573.06	406.61	445.17	10.00	8.60	11.14
7,500.00	33.98	69.52	7,395.90	583.10	430.90	470.10	10.00	8.95	8.48
7,550.00	38.58	72.87	7,436.20	592.59	458.91	498.69	10.00	9.18	6.70
7,600.00	43.25	75.60	7,473.98	601.45	490.41	530.73	10.00	9.34	5.46
7,650.00	47.97	77.89	7,508.95	609.61	525.18	565.98	10.00	9.45	4.59
7,700.00	52.73	79.86	7,540.85	617.01	562.95	604.17	10.00	9.53	3.95
7,750.00	57.53	81.60	7,569.43	623.60	603.42	645.00	10.00	9.59	3.48
7,800.00	62.34	83.16	7,594.47	629.32	646.30	688.17	10.00	9.63	3.12
7,850.00	67.17	84.59	7,615.79	634.13	691.26	733.35	10.00	9.66	2.86
7,900.00	72.01	85.92	7,633.22	637.99	737.94	780.19	10.00	9.68	2.66
7,950.00	76.86	87.18	7,646.63	640.88	786.01	828.34	10.00	9.70	2.52
8,000.00	81.72	88.39	7,655.92	642.77	835.08	877.43	10.00	9.71	2.42
8,050.00	86.58	89.58	7,661.02	643.64	884.80	927.09	10.00	9.72	2.36
8,093.93	90.85	90.60	7,662.00	643.58	928.71	970.88	10.00	9.72	2.34
8,100.00	90.85	90.60	7,661.91	643.51	934.78	976.94	0.00	0.00	0.00
8,200.00	90.85	90.60	7,660.43	642.46	1,034.76	1,076.61	0.00	0.00	0.00
8,300.00	90.85	90.60	7,658.94	641.41	1,134.74	1,176.28	0.00	0.00	0.00
8,400.00	90.85	90.60	7,657.46	640.35	1,234.73	1,275.96	0.00	0.00	0.00
8,500.00	90.85	90.60	7,655.97	639.30	1,334.71	1,375.63	0.00	0.00	0.00
8,600.00	90.85	90.60	7,654.49	638.25	1,434.69	1,475.30	0.00	0.00	0.00
8,700.00	90.85	90.60	7,653.00	637.19	1,534.68	1,574.97	0.00	0.00	0.00
8,800.00	90.85	90.60	7,651.52	636.14	1,634.66	1,674.65	0.00	0.00	0.00
8,900.00	90.85	90.60	7,650.03	635.09	1,734.64	1,774.32	0.00	0.00	0.00
9,000.00	90.85	90.60	7,648.55	634.03	1,834.63	1,873.99	0.00	0.00	0.00
9,100.00	90.85	90.60	7,647.06	632.98	1,934.61	1,973.66	0.00	0.00	0.00
9,200.00	90.85	90.60	7,645.58	631.93	2,034.59	2,073.34	0.00	0.00	0.00
9,300.00	90.85	90.60	7,644.09	630.88	2,134.58	2,173.01	0.00	0.00	0.00

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Planned Survey										
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9,400.00	90.85	90.60	7,642.61	629.82	2,234.56	2,272.68	0.00	0.00	0.00	
9,500.00	90.85	90.60	7,641.12	628.77	2,334.55	2,372.36	0.00	0.00	0.00	
9,600.00	90.85	90.60	7,639.64	627.72	2,434.53	2,472.03	0.00	0.00	0.00	
9,700.00	90.85	90.60	7,638.15	626.66	2,534.51	2,571.70	0.00	0.00	0.00	
9,800.00	90.85	90.60	7,636.67	625.61	2,634.50	2,671.37	0.00	0.00	0.00	
9,900.00	90.85	90.60	7,635.18	624.56	2,734.48	2,771.05	0.00	0.00	0.00	
10,000.00	90.85	90.60	7,633.70	623.51	2,834.46	2,870.72	0.00	0.00	0.00	
10,100.00	90.85	90.60	7,632.21	622.45	2,934.45	2,970.39	0.00	0.00	0.00	
10,200.00	90.85	90.60	7,630.73	621.40	3,034.43	3,070.06	0.00	0.00	0.00	
10,300.00	90.85	90.60	7,629.24	620.35	3,134.41	3,169.74	0.00	0.00	0.00	
10,400.00	90.85	90.60	7,627.76	619.29	3,234.40	3,269.41	0.00	0.00	0.00	
10,500.00	90.85	90.60	7,626.27	618.24	3,334.38	3,369.08	0.00	0.00	0.00	
10,600.00	90.85	90.60	7,624.79	617.19	3,434.36	3,468.75	0.00	0.00	0.00	
10,700.00	90.85	90.60	7,623.30	616.13	3,534.35	3,568.43	0.00	0.00	0.00	
10,800.00	90.85	90.60	7,621.82	615.08	3,634.33	3,668.10	0.00	0.00	0.00	
10,900.00	90.85	90.60	7,620.33	614.03	3,734.31	3,767.77	0.00	0.00	0.00	
11,000.00	90.85	90.60	7,618.85	612.98	3,834.30	3,867.45	0.00	0.00	0.00	
11,100.00	90.85	90.60	7,617.36	611.92	3,934.28	3,967.12	0.00	0.00	0.00	
11,200.00	90.85	90.60	7,615.88	610.87	4,034.26	4,066.79	0.00	0.00	0.00	
11,300.00	90.85	90.60	7,614.39	609.82	4,134.25	4,166.46	0.00	0.00	0.00	
11,400.00	90.85	90.60	7,612.91	608.76	4,234.23	4,266.14	0.00	0.00	0.00	
11,500.00	90.85	90.60	7,611.42	607.71	4,334.21	4,365.81	0.00	0.00	0.00	
11,600.00	90.85	90.60	7,609.94	606.66	4,434.20	4,465.48	0.00	0.00	0.00	
11,700.00	90.85	90.60	7,608.45	605.61	4,534.18	4,565.15	0.00	0.00	0.00	
11,800.00	90.85	90.60	7,606.97	604.55	4,634.16	4,664.83	0.00	0.00	0.00	
11,900.00	90.85	90.60	7,605.48	603.50	4,734.15	4,764.50	0.00	0.00	0.00	
12,000.00	90.85	90.60	7,604.00	602.45	4,834.13	4,864.17	0.00	0.00	0.00	
12,100.00	90.85	90.60	7,602.51	601.39	4,934.11	4,963.84	0.00	0.00	0.00	
12,200.00	90.85	90.60	7,601.03	600.34	5,034.10	5,063.52	0.00	0.00	0.00	
12,300.00	90.85	90.60	7,599.54	599.29	5,134.08	5,163.19	0.00	0.00	0.00	
12,400.00	90.85	90.60	7,598.06	598.23	5,234.06	5,262.86	0.00	0.00	0.00	
12,500.00	90.85	90.60	7,596.57	597.18	5,334.05	5,362.54	0.00	0.00	0.00	
12,600.00	90.85	90.60	7,595.09	596.13	5,434.03	5,462.21	0.00	0.00	0.00	
12,700.00	90.85	90.60	7,593.60	595.08	5,534.02	5,561.88	0.00	0.00	0.00	
12,800.00	90.85	90.60	7,592.12	594.02	5,634.00	5,661.55	0.00	0.00	0.00	
12,900.00	90.85	90.60	7,590.63	592.97	5,733.98	5,761.23	0.00	0.00	0.00	
13,000.00	90.85	90.60	7,589.15	591.92	5,833.97	5,860.90	0.00	0.00	0.00	
13,100.00	90.85	90.60	7,587.66	590.86	5,933.95	5,960.57	0.00	0.00	0.00	
13,200.00	90.85	90.60	7,586.18	589.81	6,033.93	6,060.24	0.00	0.00	0.00	
13,300.00	90.85	90.60	7,584.69	588.76	6,133.92	6,159.92	0.00	0.00	0.00	
13,400.00	90.85	90.60	7,583.21	587.71	6,233.90	6,259.59	0.00	0.00	0.00	
13,500.00	90.85	90.60	7,581.72	586.65	6,333.88	6,359.26	0.00	0.00	0.00	
13,600.00	90.85	90.60	7,580.24	585.60	6,433.87	6,458.93	0.00	0.00	0.00	
13,700.00	90.85	90.60	7,578.75	584.55	6,533.85	6,558.61	0.00	0.00	0.00	
13,800.00	90.85	90.60	7,577.27	583.49	6,633.83	6,658.28	0.00	0.00	0.00	
13,900.00	90.85	90.60	7,575.78	582.44	6,733.82	6,757.95	0.00	0.00	0.00	
14,000.00	90.85	90.60	7,574.30	581.39	6,833.80	6,857.63	0.00	0.00	0.00	
14,100.00	90.85	90.60	7,572.81	580.33	6,933.78	6,957.30	0.00	0.00	0.00	
14,200.00	90.85	90.60	7,571.33	579.28	7,033.77	7,056.97	0.00	0.00	0.00	
14,300.00	90.85	90.60	7,569.84	578.23	7,133.75	7,156.64	0.00	0.00	0.00	
14,400.00	90.85	90.60	7,568.36	577.18	7,233.73	7,256.32	0.00	0.00	0.00	
14,500.00	90.85	90.60	7,566.87	576.12	7,333.72	7,355.99	0.00	0.00	0.00	
14,600.00	90.85	90.60	7,565.39	575.07	7,433.70	7,455.66	0.00	0.00	0.00	
14,700.00	90.85	90.60	7,563.90	574.02	7,533.68	7,555.33	0.00	0.00	0.00	

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Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Big Sandy 3-65 36-31 1DH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	27' RKB @ 5550.90ft (27' RKB)
Project:	Niobrara North Zone	MD Reference:	27' RKB @ 5550.90ft (27' RKB)
Site:	Big Sandy	North Reference:	True
Well:	Big Sandy 3-65 36-31 1DH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Big Sandy 3-65 36-31 1DH		
Design:	Big Sandy 3-65 36-31 1DH		

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)
14,800.00	90.85	90.60	7,562.42	572.96	7,633.67	7,655.01	0.00	0.00	0.00
14,900.00	90.85	90.60	7,560.94	571.91	7,733.65	7,754.68	0.00	0.00	0.00
15,000.00	90.85	90.60	7,559.45	570.86	7,833.63	7,854.35	0.00	0.00	0.00
15,100.00	90.85	90.60	7,557.97	569.80	7,933.62	7,954.02	0.00	0.00	0.00
15,200.00	90.85	90.60	7,556.48	568.75	8,033.60	8,053.70	0.00	0.00	0.00
15,300.00	90.85	90.60	7,555.00	567.70	8,133.58	8,153.37	0.00	0.00	0.00
15,367.02	90.85	90.60	7,554.00	566.99	8,200.59	8,220.17	0.00	0.00	0.00
Production									

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									
Big Sandy 3-65 36-31 1I	0.00	0.00	7,554.00	566.99	8,200.60	1,152,398.685	3,254,659.966	39° 44' 53.270 N	104° 35' 39.580 W
- plan hits target center									
- Point									
Big Sandy 3-65 36-31 1I	0.00	0.00	7,662.00	643.58	928.71	1,152,403.386	3,247,387.720	39° 44' 54.040 N	104° 37' 12.680 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,024.00	2,024.00	Surface	9-5/8	12-1/4	
15,367.02	7,554.00	Production	5-1/2	8-1/2	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
2,000.00	2,000.00	0.00	0.00	SL 2465' FSL 465' FEL
4,420.00	4,420.00	0.00	0.00	Start Build 1.50
5,486.42	5,472.62	123.40	81.53	Start 1785.20 hold at 5486.42 MD
7,271.63	7,188.70	533.86	352.73	Start DLS 10.00 TFO 57.97
8,093.00	7,662.01	643.59	927.78	BPI 2167' FNL 460' FWL
8,093.93	7,662.00	643.58	928.71	Start 7273.10 hold at 8093.93 MD
15,229.00	7,556.05	568.45	8,062.60	EPI 2191' FNL 2313' FWL
15,367.00	7,554.00	566.99	8,200.57	BHL 2192' FNL 2451' FWL
15,367.02	7,554.00	566.99	8,200.59	TD at 15367.02



ConocoPhillips

Adams County, Colorado

Big Sandy 3-65 36-31 1DH

Ground Level: 5523.90
Surface Location Latitude: 39° 44' 47.680 N
Surface Location Longitude: 104° 37' 24.570 W
North Reference: True
27' RKB @ 5550.90ft (27' RKB)

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
4420.00	0.00	0.00	4420.00	0.00	0.00	0.00	0.00
5486.42	16.00	33.45	5472.62	123.40	81.53	1.50	89.85
7271.63	16.00	33.45	7188.70	533.86	352.73	0.00	388.71
8093.93	90.85	90.60	7662.00	643.58	928.71	10.00	970.88
15367.02	90.85	90.60	7554.00	566.99	8200.60	0.00	8220.18

