

ConocoPhillips RBU Gold Data_Niobrara

Niobrara - CO Central Zone

Rush 0465 2930

Rush 4-65 29-30 3AH

Rush 4-65 29-30 3AH

Plan: Rush 4-65 29-30 3AH

Standard Planning Report

30 January, 2017

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Rush 4-65 29-30 3AH
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5720.00ft
Project:	Niobrara - CO Central Zone	MD Reference:	24' RKB @ 5720.00ft
Site:	Rush 0465 2930	North Reference:	True
Well:	Rush 4-65 29-30 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Rush 4-65 29-30 3AH		
Design:	Rush 4-65 29-30 3AH		

Project	Niobrara - CO Central Zone, Arapahoe, Douglas, Elbert County - Colorado, 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 Central Zone		Using geodetic scale factor

Site		Rush 0465 2930			
Site Position:		Northing:	1,674,265.179 usft	Latitude:	39° 40' 55.358 N
From:	Lat/Long	Easting:	3,220,614.549 usft	Longitude:	104° 42' 58.151 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.49 °

Well	Rush 4-65 29-30 3AH					
Well Position	+N/-S	-3,756.51 ft	Northing:	1,670,603.695 usft	Latitude:	39° 40' 18.210 N
	+E/-W	10,991.08 ft	Easting:	3,231,637.463 usft	Longitude:	104° 40' 37.590 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,696.00 ft

Wellbore	Rush 4-65 29-30 3AH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	1/30/2017	8.32	66.36	52,067

Design	Rush 4-65 29-30 3AH			
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	276.66

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	
2,955.00	0.00	0.00	2,955.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,755.20	12.00	339.35	3,749.36	78.15	-29.45	1.50	1.50	0.00	339.35	
7,511.66	12.00	339.35	7,423.69	809.16	-304.96	0.00	0.00	0.00	0.00	
8,364.29	89.52	270.32	7,944.00	914.74	-871.06	10.00	9.09	-8.10	-69.54	Rush 4-65 29-30 3AH
15,677.14	89.52	270.32	8,005.00	955.49	-8,183.54	0.00	0.00	0.00	0.00	Rush 4-65 29-30 3AH

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Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Rush 4-65 29-30 3AH
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5720.00ft
Project:	Niobrara - CO Central Zone	MD Reference:	24' RKB @ 5720.00ft
Site:	Rush 0465 2930	North Reference:	True
Well:	Rush 4-65 29-30 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Rush 4-65 29-30 3AH		
Design:	Rush 4-65 29-30 3AH		

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
2,219.00	0.00	0.00	2,219.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface									
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
2,955.00	0.00	0.00	2,955.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.68	339.35	3,000.00	0.25	-0.09	0.12	1.50	1.50	0.00
3,100.00	2.18	339.35	3,099.97	2.58	-0.97	1.26	1.50	1.50	0.00
3,200.00	3.68	339.35	3,199.83	7.35	-2.77	3.60	1.50	1.50	0.00
3,300.00	5.18	339.35	3,299.53	14.57	-5.49	7.14	1.50	1.50	0.00
3,400.00	6.68	339.35	3,398.99	24.23	-9.13	11.88	1.50	1.50	0.00
3,500.00	8.18	339.35	3,498.15	36.32	-13.69	17.81	1.50	1.50	0.00
3,600.00	9.68	339.35	3,596.94	50.84	-19.16	24.93	1.50	1.50	0.00
3,700.00	11.18	339.35	3,695.29	67.77	-25.54	33.23	1.50	1.50	0.00
3,755.20	12.00	339.35	3,749.36	78.15	-29.45	38.32	1.50	1.50	0.00
3,800.00	12.00	339.35	3,793.18	86.86	-32.74	42.59	0.00	0.00	0.00
3,900.00	12.00	339.35	3,890.99	106.32	-40.07	52.13	0.00	0.00	0.00
4,000.00	12.00	339.35	3,988.81	125.78	-47.41	61.67	0.00	0.00	0.00
4,100.00	12.00	339.35	4,086.62	145.24	-54.74	71.21	0.00	0.00	0.00
4,200.00	12.00	339.35	4,184.44	164.70	-62.07	80.76	0.00	0.00	0.00
4,300.00	12.00	339.35	4,282.25	184.16	-69.41	90.30	0.00	0.00	0.00
4,400.00	12.00	339.35	4,380.06	203.62	-76.74	99.84	0.00	0.00	0.00
4,500.00	12.00	339.35	4,477.88	223.08	-84.08	109.38	0.00	0.00	0.00
4,600.00	12.00	339.35	4,575.69	242.54	-91.41	118.92	0.00	0.00	0.00
4,700.00	12.00	339.35	4,673.50	262.00	-98.74	128.46	0.00	0.00	0.00
4,800.00	12.00	339.35	4,771.32	281.47	-106.08	138.00	0.00	0.00	0.00
4,900.00	12.00	339.35	4,869.13	300.93	-113.41	147.55	0.00	0.00	0.00

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Planning Report

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Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5720.00ft
Project:	Niobrara - CO Central Zone	MD Reference:	24' RKB @ 5720.00ft
Site:	Rush 0465 2930	North Reference:	True
Well:	Rush 4-65 29-30 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Rush 4-65 29-30 3AH		
Design:	Rush 4-65 29-30 3AH		

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)
5,000.00	12.00	339.35	4,966.94	320.39	-120.75	157.09	0.00	0.00	0.00
5,100.00	12.00	339.35	5,064.76	339.85	-128.08	166.63	0.00	0.00	0.00
5,200.00	12.00	339.35	5,162.57	359.31	-135.42	176.17	0.00	0.00	0.00
5,300.00	12.00	339.35	5,260.39	378.77	-142.75	185.71	0.00	0.00	0.00
5,400.00	12.00	339.35	5,358.20	398.23	-150.08	195.25	0.00	0.00	0.00
5,500.00	12.00	339.35	5,456.01	417.69	-157.42	204.79	0.00	0.00	0.00
5,600.00	12.00	339.35	5,553.83	437.15	-164.75	214.34	0.00	0.00	0.00
5,700.00	12.00	339.35	5,651.64	456.61	-172.09	223.88	0.00	0.00	0.00
5,800.00	12.00	339.35	5,749.45	476.07	-179.42	233.42	0.00	0.00	0.00
5,900.00	12.00	339.35	5,847.27	495.53	-186.75	242.96	0.00	0.00	0.00
6,000.00	12.00	339.35	5,945.08	514.99	-194.09	252.50	0.00	0.00	0.00
6,100.00	12.00	339.35	6,042.89	534.45	-201.42	262.04	0.00	0.00	0.00
6,200.00	12.00	339.35	6,140.71	553.91	-208.76	271.59	0.00	0.00	0.00
6,300.00	12.00	339.35	6,238.52	573.37	-216.09	281.13	0.00	0.00	0.00
6,400.00	12.00	339.35	6,336.34	592.83	-223.43	290.67	0.00	0.00	0.00
6,500.00	12.00	339.35	6,434.15	612.29	-230.76	300.21	0.00	0.00	0.00
6,600.00	12.00	339.35	6,531.96	631.75	-238.09	309.75	0.00	0.00	0.00
6,700.00	12.00	339.35	6,629.78	651.21	-245.43	319.29	0.00	0.00	0.00
6,800.00	12.00	339.35	6,727.59	670.67	-252.76	328.83	0.00	0.00	0.00
6,900.00	12.00	339.35	6,825.40	690.13	-260.10	338.38	0.00	0.00	0.00
7,000.00	12.00	339.35	6,923.22	709.59	-267.43	347.92	0.00	0.00	0.00
7,100.00	12.00	339.35	7,021.03	729.05	-274.76	357.46	0.00	0.00	0.00
7,200.00	12.00	339.35	7,118.85	748.51	-282.10	367.00	0.00	0.00	0.00
7,300.00	12.00	339.35	7,216.66	767.97	-289.43	376.54	0.00	0.00	0.00
7,400.00	12.00	339.35	7,314.47	787.43	-296.77	386.08	0.00	0.00	0.00
7,500.00	12.00	339.35	7,412.29	806.89	-304.10	395.62	0.00	0.00	0.00
7,511.66	12.00	339.35	7,423.69	809.16	-304.96	396.74	0.00	0.00	0.00
7,550.00	13.81	324.13	7,461.07	816.60	-309.05	401.66	10.00	4.72	-39.68
7,600.00	17.18	310.20	7,509.26	826.21	-318.19	411.86	10.00	6.74	-27.87
7,650.00	21.19	301.05	7,556.49	835.64	-331.58	426.25	10.00	8.02	-18.30
7,700.00	25.54	294.79	7,602.38	844.83	-349.12	444.74	10.00	8.69	-12.51
7,750.00	30.08	290.28	7,646.60	853.70	-370.67	467.17	10.00	9.08	-9.02
7,800.00	34.73	286.88	7,688.81	862.18	-396.07	493.38	10.00	9.31	-6.82
7,850.00	39.46	284.19	7,728.68	870.22	-425.12	523.17	10.00	9.46	-5.38
7,900.00	44.25	281.99	7,765.91	877.74	-457.61	556.31	10.00	9.56	-4.39
7,950.00	49.06	280.15	7,800.22	884.70	-493.29	592.56	10.00	9.63	-3.69
8,000.00	53.90	278.55	7,831.35	891.03	-531.88	631.62	10.00	9.68	-3.19
8,050.00	58.77	277.14	7,859.06	896.70	-573.09	673.21	10.00	9.72	-2.82
8,100.00	63.64	275.87	7,883.14	901.65	-616.61	717.01	10.00	9.75	-2.54
8,150.00	68.53	274.71	7,903.41	905.85	-662.11	762.69	10.00	9.77	-2.33
8,200.00	73.42	273.62	7,919.71	909.28	-709.24	809.90	10.00	9.79	-2.18
8,250.00	78.32	272.58	7,931.91	911.89	-757.64	858.28	10.00	9.80	-2.07
8,300.00	83.22	271.58	7,939.93	913.68	-806.94	907.46	10.00	9.80	-2.00
8,350.00	88.12	270.60	7,943.71	914.62	-856.77	957.06	10.00	9.81	-1.96
8,364.29	89.52	270.32	7,944.00	914.74	-871.06	971.26	10.00	9.81	-1.95
8,400.00	89.52	270.32	7,944.30	914.94	-906.77	1,006.75	0.00	0.00	0.00
8,500.00	89.52	270.32	7,945.13	915.49	-1,006.76	1,106.14	0.00	0.00	0.00
8,600.00	89.52	270.32	7,945.97	916.05	-1,106.76	1,205.52	0.00	0.00	0.00
8,700.00	89.52	270.32	7,946.80	916.61	-1,206.75	1,304.91	0.00	0.00	0.00
8,800.00	89.52	270.32	7,947.63	917.17	-1,306.75	1,404.29	0.00	0.00	0.00
8,900.00	89.52	270.32	7,948.47	917.72	-1,406.74	1,503.68	0.00	0.00	0.00
9,000.00	89.52	270.32	7,949.30	918.28	-1,506.74	1,603.06	0.00	0.00	0.00
9,100.00	89.52	270.32	7,950.14	918.84	-1,606.73	1,702.45	0.00	0.00	0.00
9,200.00	89.52	270.32	7,950.97	919.39	-1,706.73	1,801.83	0.00	0.00	0.00

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Wellbore:	Rush 4-65 29-30 3AH		
Design:	Rush 4-65 29-30 3AH		

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)	
9,300.00	89.52	270.32	7,951.81	919.95	-1,806.72	1,901.22	0.00	0.00	0.00	
9,400.00	89.52	270.32	7,952.64	920.51	-1,906.72	2,000.60	0.00	0.00	0.00	
9,500.00	89.52	270.32	7,953.47	921.07	-2,006.71	2,099.99	0.00	0.00	0.00	
9,600.00	89.52	270.32	7,954.31	921.62	-2,106.71	2,199.37	0.00	0.00	0.00	
9,700.00	89.52	270.32	7,955.14	922.18	-2,206.70	2,298.76	0.00	0.00	0.00	
9,800.00	89.52	270.32	7,955.98	922.74	-2,306.70	2,398.14	0.00	0.00	0.00	
9,900.00	89.52	270.32	7,956.81	923.30	-2,406.69	2,497.53	0.00	0.00	0.00	
10,000.00	89.52	270.32	7,957.64	923.85	-2,506.69	2,596.91	0.00	0.00	0.00	
10,100.00	89.52	270.32	7,958.48	924.41	-2,606.68	2,696.30	0.00	0.00	0.00	
10,200.00	89.52	270.32	7,959.31	924.97	-2,706.68	2,795.68	0.00	0.00	0.00	
10,300.00	89.52	270.32	7,960.15	925.53	-2,806.67	2,895.07	0.00	0.00	0.00	
10,400.00	89.52	270.32	7,960.98	926.08	-2,906.67	2,994.45	0.00	0.00	0.00	
10,500.00	89.52	270.32	7,961.82	926.64	-3,006.66	3,093.84	0.00	0.00	0.00	
10,600.00	89.52	270.32	7,962.65	927.20	-3,106.66	3,193.22	0.00	0.00	0.00	
10,700.00	89.52	270.32	7,963.48	927.75	-3,206.65	3,292.61	0.00	0.00	0.00	
10,800.00	89.52	270.32	7,964.32	928.31	-3,306.65	3,391.99	0.00	0.00	0.00	
10,900.00	89.52	270.32	7,965.15	928.87	-3,406.64	3,491.38	0.00	0.00	0.00	
11,000.00	89.52	270.32	7,965.99	929.43	-3,506.64	3,590.76	0.00	0.00	0.00	
11,100.00	89.52	270.32	7,966.82	929.98	-3,606.63	3,690.15	0.00	0.00	0.00	
11,200.00	89.52	270.32	7,967.65	930.54	-3,706.63	3,789.53	0.00	0.00	0.00	
11,300.00	89.52	270.32	7,968.49	931.10	-3,806.62	3,888.92	0.00	0.00	0.00	
11,400.00	89.52	270.32	7,969.32	931.66	-3,906.62	3,988.30	0.00	0.00	0.00	
11,500.00	89.52	270.32	7,970.16	932.21	-4,006.61	4,087.69	0.00	0.00	0.00	
11,600.00	89.52	270.32	7,970.99	932.77	-4,106.61	4,187.07	0.00	0.00	0.00	
11,700.00	89.52	270.32	7,971.82	933.33	-4,206.60	4,286.46	0.00	0.00	0.00	
11,800.00	89.52	270.32	7,972.66	933.89	-4,306.60	4,385.84	0.00	0.00	0.00	
11,900.00	89.52	270.32	7,973.49	934.44	-4,406.59	4,485.23	0.00	0.00	0.00	
12,000.00	89.52	270.32	7,974.33	935.00	-4,506.59	4,584.61	0.00	0.00	0.00	
12,100.00	89.52	270.32	7,975.16	935.56	-4,606.58	4,684.00	0.00	0.00	0.00	
12,200.00	89.52	270.32	7,976.00	936.11	-4,706.58	4,783.38	0.00	0.00	0.00	
12,300.00	89.52	270.32	7,976.83	936.67	-4,806.57	4,882.77	0.00	0.00	0.00	
12,400.00	89.52	270.32	7,977.66	937.23	-4,906.57	4,982.15	0.00	0.00	0.00	
12,500.00	89.52	270.32	7,978.50	937.79	-5,006.56	5,081.54	0.00	0.00	0.00	
12,600.00	89.52	270.32	7,979.33	938.34	-5,106.56	5,180.92	0.00	0.00	0.00	
12,700.00	89.52	270.32	7,980.17	938.90	-5,206.55	5,280.31	0.00	0.00	0.00	
12,800.00	89.52	270.32	7,981.00	939.46	-5,306.55	5,379.69	0.00	0.00	0.00	
12,900.00	89.52	270.32	7,981.83	940.02	-5,406.54	5,479.08	0.00	0.00	0.00	
13,000.00	89.52	270.32	7,982.67	940.57	-5,506.54	5,578.46	0.00	0.00	0.00	
13,100.00	89.52	270.32	7,983.50	941.13	-5,606.53	5,677.85	0.00	0.00	0.00	
13,200.00	89.52	270.32	7,984.34	941.69	-5,706.53	5,777.23	0.00	0.00	0.00	
13,300.00	89.52	270.32	7,985.17	942.25	-5,806.52	5,876.62	0.00	0.00	0.00	
13,400.00	89.52	270.32	7,986.01	942.80	-5,906.52	5,976.00	0.00	0.00	0.00	
13,500.00	89.52	270.32	7,986.84	943.36	-6,006.51	6,075.39	0.00	0.00	0.00	
13,600.00	89.52	270.32	7,987.67	943.92	-6,106.51	6,174.77	0.00	0.00	0.00	
13,700.00	89.52	270.32	7,988.51	944.47	-6,206.50	6,274.15	0.00	0.00	0.00	
13,800.00	89.52	270.32	7,989.34	945.03	-6,306.50	6,373.54	0.00	0.00	0.00	
13,900.00	89.52	270.32	7,990.18	945.59	-6,406.49	6,472.92	0.00	0.00	0.00	
14,000.00	89.52	270.32	7,991.01	946.15	-6,506.49	6,572.31	0.00	0.00	0.00	
14,100.00	89.52	270.32	7,991.84	946.70	-6,606.48	6,671.69	0.00	0.00	0.00	
14,200.00	89.52	270.32	7,992.68	947.26	-6,706.48	6,771.08	0.00	0.00	0.00	
14,300.00	89.52	270.32	7,993.51	947.82	-6,806.47	6,870.46	0.00	0.00	0.00	
14,400.00	89.52	270.32	7,994.35	948.38	-6,906.47	6,969.85	0.00	0.00	0.00	
14,500.00	89.52	270.32	7,995.18	948.93	-7,006.46	7,069.23	0.00	0.00	0.00	
14,600.00	89.52	270.32	7,996.02	949.49	-7,106.46	7,168.62	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well Rush 4-65 29-30 3AH
Company:	ConocoPhillips RBU Gold Data_Niobrara	TVD Reference:	24' RKB @ 5720.00ft
Project:	Niobrara - CO Central Zone	MD Reference:	24' RKB @ 5720.00ft
Site:	Rush 0465 2930	North Reference:	True
Well:	Rush 4-65 29-30 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Rush 4-65 29-30 3AH		
Design:	Rush 4-65 29-30 3AH		

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)
14,700.00	89.52	270.32	7,996.85	950.05	-7,206.45	7,268.00	0.00	0.00	0.00
14,800.00	89.52	270.32	7,997.68	950.60	-7,306.45	7,367.39	0.00	0.00	0.00
14,900.00	89.52	270.32	7,998.52	951.16	-7,406.44	7,466.77	0.00	0.00	0.00
15,000.00	89.52	270.32	7,999.35	951.72	-7,506.44	7,566.16	0.00	0.00	0.00
15,100.00	89.52	270.32	8,000.19	952.28	-7,606.43	7,665.54	0.00	0.00	0.00
15,200.00	89.52	270.32	8,001.02	952.83	-7,706.43	7,764.93	0.00	0.00	0.00
15,300.00	89.52	270.32	8,001.85	953.39	-7,806.42	7,864.31	0.00	0.00	0.00
15,400.00	89.52	270.32	8,002.69	953.95	-7,906.42	7,963.70	0.00	0.00	0.00
15,500.00	89.52	270.32	8,003.52	954.51	-8,006.41	8,063.08	0.00	0.00	0.00
15,600.00	89.52	270.32	8,004.36	955.06	-8,106.41	8,162.47	0.00	0.00	0.00
15,677.14	89.52	270.32	8,005.00	955.49	-8,183.54	8,239.13	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
Rush 4-65 29-30 3AH BI - hit/miss target - Shape - Point	0.00	0.00	7,944.00	914.74	-871.06	1,671,510.489	3,230,758.171	39° 40' 27.250 N	104° 40' 48.730 W
Rush 4-65 29-30 3AH BI - plan hits target center - Point	0.00	0.00	8,005.00	955.49	-8,183.54	1,671,485.009	3,223,445.739	39° 40' 27.640 N	104° 42' 22.250 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,219.00	2,219.00	Surface	9-5/8	12-1/4	
15,677.14	8,005.00	Production	5-1/2	8-3/4	



ConocoPhillips

Arapahoe County, Colorado

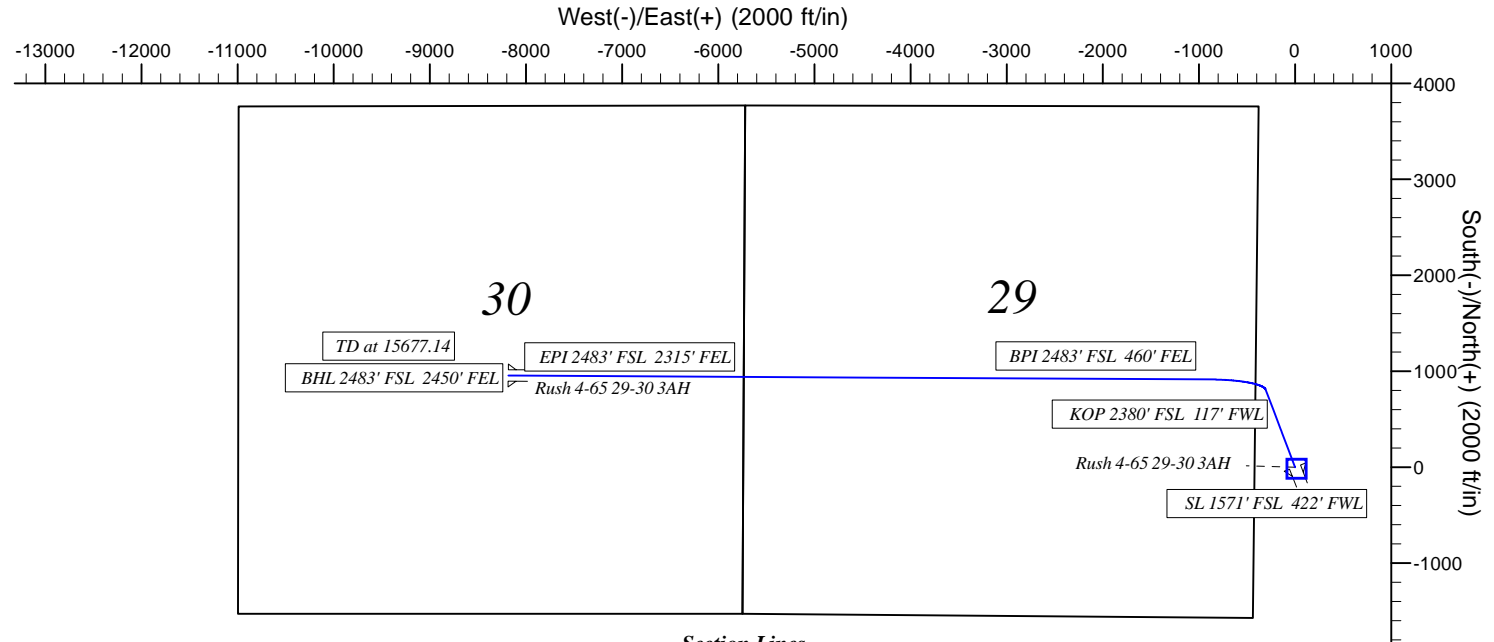
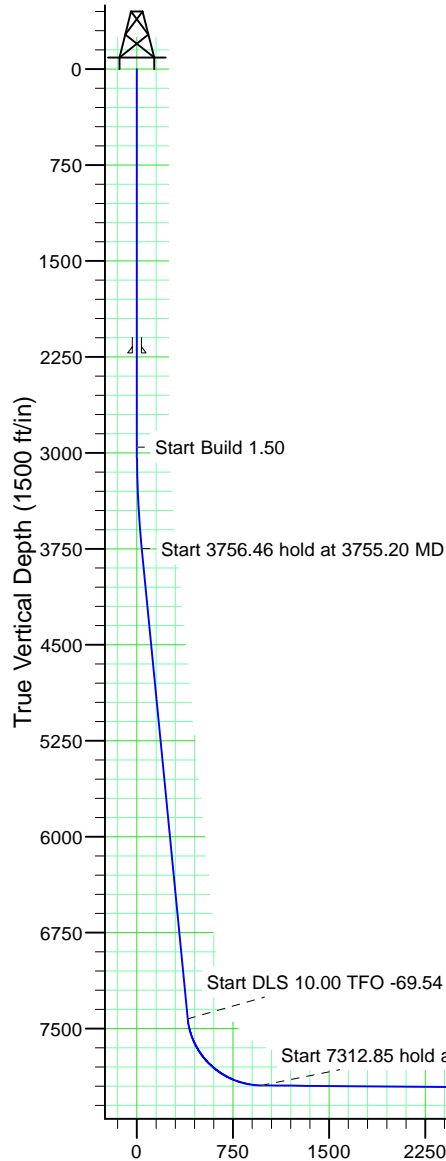
Rush 4-65 29-30 3AH

Casing Depths

TVD	MD	Name	Size
2219.00	2219.00	Surface	9-5/8
8005.00	15677.14	Production	5-1/2

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
2955.00	0.00	0.00	2955.00	0.00	0.00	0.00	0.00
3755.20	12.00	339.35	3749.36	78.15	-29.45	1.50	38.32
7511.66	12.00	339.35	7423.69	809.16	-304.96	0.00	396.74
8364.29	89.52	270.32	7944.00	914.74	-871.06	10.00	971.26
15677.14	89.52	270.32	8005.00	955.49	-8183.54	0.00	8239.13



Section Lines

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

Wellbore Targets

Name	TVD	Latitude	Longitude
Rush 4-65 29-30 3AH BPI	7944.00	39° 40' 27.250 N	104° 40' 48.730 W
Rush 4-65 29-30 3AH BHL	8005.00	39° 40' 27.640 N	104° 42' 22.250 W

Ground Level: 5696.00
Surface Location Latitude: 39° 40' 18.210 N
Surface Location Longitude: 104° 40' 37.590 W
North Reference: True
24' RKB @ 5720.00ft