

ConocoPhillips RBU Gold Data

Niobrara Central Zone

Bear

Bear 3-65 22-23 3AH

Wellbore #1

Plan: Bear 3-65 22-23 3AH Rev.A

Standard Planning Report

16 October, 2017

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Bear 3-65 22-23 3AH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	B Rig 5594.9 @ 5596.90ft (Original Well Elev)
Project:	Niobrara Central Zone	MD Reference:	B Rig 5594.9 @ 5596.90ft (Original Well Elev)
Site:	Bear	North Reference:	True
Well:	Bear 3-65 22-23 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Bear 3-65 22-23 3AH Rev.A		

Project	Niobrara Central Zone, Colorado Central Zone, FIPS Zone: 0502		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site		Bear			
Site Position:		Northing:	1,707,569.460 usft	Latitude:	39° 46' 23.050 N
From:	Lat/Long	Easting:	3,236,851.239 usft	Longitude:	104° 39' 26.530 W
Position Uncertainty:	2.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.53 °

Well	Bear 3-65 22-23 3AH					
Well Position	+N/-S	-0.01 ft	Northing:	1,707,569.451 usft	Latitude:	39° 46' 23.050 N
	+E/-W	0.00 ft	Easting:	3,236,851.239 usft	Longitude:	104° 39' 26.530 W
Position Uncertainty		2.00 ft	Wellhead Elevation:		Ground Level:	5,569.90 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2017	10/16/2017	8.26	66.39	52,018.52679838

Design	Bear 3-65 22-23 3AH Rev.A			
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	84.60

Plan Survey Tool Program	Date	10/16/2017		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	2,172.00	Bear 3-65 22-23 3AH Rev.A (Wel	SDI ADK 105 AdK w/ Gyrocompass HS refer
2	2,172.00	18,161.19	Bear 3-65 22-23 3AH Rev.A (Wel	MWD+IFR_No SAG MWD + IFR (No SAG) correctic

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Wellbore:	Wellbore #1		
Design:	Bear 3-65 22-23 3AH Rev.A		

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	
2,172.00	0.00	0.00	2,172.00	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	
4,259.55	17.39	321.47	4,241.82	136.64	-108.79	1.50	1.50	0.00	321.47	
7,327.44	17.39	321.47	7,169.43	854.08	-680.01	0.00	0.00	0.00	0.00	
8,336.29	90.03	90.53	7,831.00	1,009.85	-115.55	10.00	7.20	12.79	127.75	Bear 3AH BPI
18,161.19	90.03	90.53	7,826.00	918.61	9,708.93	0.00	0.00	0.00	0.00	Bear 3AH BHL

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Site:	Bear	North Reference:	True
Well:	Bear 3-65 22-23 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Bear 3-65 22-23 3AH Rev.A		

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
2,172.00	0.00	0.00	2,172.00	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	1.50	321.47	3,199.99	1.02	-0.82	-0.72	1.50	1.50	0.00
3,300.00	3.00	321.47	3,299.91	4.10	-3.26	-2.86	1.50	1.50	0.00
3,400.00	4.50	321.47	3,399.69	9.21	-7.33	-6.43	1.50	1.50	0.00
3,500.00	6.00	321.47	3,499.27	16.37	-13.03	-11.43	1.50	1.50	0.00
3,600.00	7.50	321.47	3,598.57	25.56	-20.35	-17.86	1.50	1.50	0.00
3,700.00	9.00	321.47	3,697.54	36.79	-29.29	-25.70	1.50	1.50	0.00
3,800.00	10.50	321.47	3,796.09	50.04	-39.84	-34.95	1.50	1.50	0.00
3,900.00	12.00	321.47	3,894.16	65.30	-51.99	-45.61	1.50	1.50	0.00
4,000.00	13.50	321.47	3,991.70	82.57	-65.74	-57.67	1.50	1.50	0.00
4,100.00	15.00	321.47	4,088.62	101.82	-81.07	-71.12	1.50	1.50	0.00
4,200.00	16.50	321.47	4,184.86	123.06	-97.98	-85.95	1.50	1.50	0.00
4,259.55	17.39	321.47	4,241.82	136.64	-108.79	-95.43	1.50	1.50	0.00
4,300.00	17.39	321.47	4,280.42	146.10	-116.32	-102.04	0.00	0.00	0.00
4,400.00	17.39	321.47	4,375.85	169.48	-134.94	-118.37	0.00	0.00	0.00
4,500.00	17.39	321.47	4,471.28	192.87	-153.56	-134.71	0.00	0.00	0.00
4,600.00	17.39	321.47	4,566.71	216.25	-172.18	-151.04	0.00	0.00	0.00
4,700.00	17.39	321.47	4,662.13	239.64	-190.80	-167.38	0.00	0.00	0.00
4,800.00	17.39	321.47	4,757.56	263.02	-209.42	-183.71	0.00	0.00	0.00
4,900.00	17.39	321.47	4,852.99	286.41	-228.04	-200.04	0.00	0.00	0.00
5,000.00	17.39	321.47	4,948.42	309.80	-246.66	-216.38	0.00	0.00	0.00

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Planned Survey										
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5,100.00	17.39	321.47	5,043.84	333.18	-265.27	-232.71	0.00	0.00	0.00	
5,200.00	17.39	321.47	5,139.27	356.57	-283.89	-249.05	0.00	0.00	0.00	
5,300.00	17.39	321.47	5,234.70	379.95	-302.51	-265.38	0.00	0.00	0.00	
5,400.00	17.39	321.47	5,330.13	403.34	-321.13	-281.71	0.00	0.00	0.00	
5,500.00	17.39	321.47	5,425.55	426.72	-339.75	-298.05	0.00	0.00	0.00	
5,600.00	17.39	321.47	5,520.98	450.11	-358.37	-314.38	0.00	0.00	0.00	
5,700.00	17.39	321.47	5,616.41	473.50	-376.99	-330.71	0.00	0.00	0.00	
5,800.00	17.39	321.47	5,711.84	496.88	-395.61	-347.05	0.00	0.00	0.00	
5,900.00	17.39	321.47	5,807.26	520.27	-414.23	-363.38	0.00	0.00	0.00	
6,000.00	17.39	321.47	5,902.69	543.65	-432.85	-379.72	0.00	0.00	0.00	
6,100.00	17.39	321.47	5,998.12	567.04	-451.47	-396.05	0.00	0.00	0.00	
6,200.00	17.39	321.47	6,093.55	590.42	-470.09	-412.38	0.00	0.00	0.00	
6,300.00	17.39	321.47	6,188.97	613.81	-488.71	-428.72	0.00	0.00	0.00	
6,400.00	17.39	321.47	6,284.40	637.20	-507.33	-445.05	0.00	0.00	0.00	
6,500.00	17.39	321.47	6,379.83	660.58	-525.95	-461.39	0.00	0.00	0.00	
6,600.00	17.39	321.47	6,475.26	683.97	-544.57	-477.72	0.00	0.00	0.00	
6,700.00	17.39	321.47	6,570.68	707.35	-563.19	-494.05	0.00	0.00	0.00	
6,800.00	17.39	321.47	6,666.11	730.74	-581.81	-510.39	0.00	0.00	0.00	
6,900.00	17.39	321.47	6,761.54	754.12	-600.42	-526.72	0.00	0.00	0.00	
7,000.00	17.39	321.47	6,856.97	777.51	-619.04	-543.05	0.00	0.00	0.00	
7,100.00	17.39	321.47	6,952.40	800.90	-637.66	-559.39	0.00	0.00	0.00	
7,200.00	17.39	321.47	7,047.82	824.28	-656.28	-575.72	0.00	0.00	0.00	
7,300.00	17.39	321.47	7,143.25	847.67	-674.90	-592.06	0.00	0.00	0.00	
7,327.44	17.39	321.47	7,169.43	854.08	-680.01	-596.54	0.00	0.00	0.00	
7,400.00	14.13	345.62	7,239.33	871.17	-688.98	-603.85	10.00	-4.50	33.28	
7,500.00	15.07	25.92	7,336.35	894.75	-686.32	-598.99	10.00	0.94	40.29	
7,600.00	21.23	51.76	7,431.47	917.71	-666.36	-576.96	10.00	6.16	25.84	
7,700.00	29.50	65.06	7,521.83	939.35	-629.72	-538.44	10.00	8.27	13.31	
7,800.00	38.55	72.75	7,604.66	959.02	-577.50	-484.60	10.00	9.05	7.69	
7,900.00	47.93	77.84	7,677.45	976.13	-511.29	-417.08	10.00	9.38	5.09	
8,000.00	57.47	81.60	7,737.99	990.14	-433.11	-337.92	10.00	9.55	3.76	
8,100.00	67.11	84.63	7,784.44	1,000.63	-345.32	-249.53	10.00	9.64	3.03	
8,200.00	76.79	87.25	7,815.39	1,007.29	-250.60	-154.60	10.00	9.69	2.62	
8,300.00	86.50	89.67	7,829.90	1,009.92	-151.82	-56.02	10.00	9.71	2.42	
8,336.29	90.03	90.53	7,831.00	1,009.85	-115.55	-19.92	10.00	9.72	2.37	
8,400.00	90.03	90.53	7,830.97	1,009.26	-51.85	43.45	0.00	0.00	0.00	
8,500.00	90.03	90.53	7,830.92	1,008.33	48.15	142.92	0.00	0.00	0.00	
8,600.00	90.03	90.53	7,830.87	1,007.40	148.15	242.38	0.00	0.00	0.00	
8,700.00	90.03	90.53	7,830.82	1,006.48	248.14	341.84	0.00	0.00	0.00	
8,800.00	90.03	90.53	7,830.76	1,005.55	348.14	441.31	0.00	0.00	0.00	
8,900.00	90.03	90.53	7,830.71	1,004.62	448.13	540.77	0.00	0.00	0.00	
9,000.00	90.03	90.53	7,830.66	1,003.69	548.13	640.23	0.00	0.00	0.00	
9,100.00	90.03	90.53	7,830.61	1,002.76	648.12	739.70	0.00	0.00	0.00	
9,200.00	90.03	90.53	7,830.56	1,001.83	748.12	839.16	0.00	0.00	0.00	
9,300.00	90.03	90.53	7,830.51	1,000.90	848.12	938.62	0.00	0.00	0.00	
9,400.00	90.03	90.53	7,830.46	999.97	948.11	1,038.09	0.00	0.00	0.00	
9,500.00	90.03	90.53	7,830.41	999.05	1,048.11	1,137.55	0.00	0.00	0.00	
9,600.00	90.03	90.53	7,830.36	998.12	1,148.10	1,237.01	0.00	0.00	0.00	
9,700.00	90.03	90.53	7,830.31	997.19	1,248.10	1,336.48	0.00	0.00	0.00	
9,800.00	90.03	90.53	7,830.26	996.26	1,348.09	1,435.94	0.00	0.00	0.00	
9,900.00	90.03	90.53	7,830.20	995.33	1,448.09	1,535.41	0.00	0.00	0.00	
10,000.00	90.03	90.53	7,830.15	994.40	1,548.09	1,634.87	0.00	0.00	0.00	
10,100.00	90.03	90.53	7,830.10	993.47	1,648.08	1,734.33	0.00	0.00	0.00	
10,200.00	90.03	90.53	7,830.05	992.55	1,748.08	1,833.80	0.00	0.00	0.00	

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Wellbore:	Wellbore #1		
Design:	Bear 3-65 22-23 3AH Rev.A		

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)	
10,300.00	90.03	90.53	7,830.00	991.62	1,848.07	1,933.26	0.00	0.00	0.00	
10,400.00	90.03	90.53	7,829.95	990.69	1,948.07	2,032.72	0.00	0.00	0.00	
10,500.00	90.03	90.53	7,829.90	989.76	2,048.06	2,132.19	0.00	0.00	0.00	
10,600.00	90.03	90.53	7,829.85	988.83	2,148.06	2,231.65	0.00	0.00	0.00	
10,700.00	90.03	90.53	7,829.80	987.90	2,248.06	2,331.11	0.00	0.00	0.00	
10,800.00	90.03	90.53	7,829.75	986.97	2,348.05	2,430.58	0.00	0.00	0.00	
10,900.00	90.03	90.53	7,829.70	986.04	2,448.05	2,530.04	0.00	0.00	0.00	
11,000.00	90.03	90.53	7,829.64	985.12	2,548.04	2,629.51	0.00	0.00	0.00	
11,100.00	90.03	90.53	7,829.59	984.19	2,648.04	2,728.97	0.00	0.00	0.00	
11,200.00	90.03	90.53	7,829.54	983.26	2,748.03	2,828.43	0.00	0.00	0.00	
11,300.00	90.03	90.53	7,829.49	982.33	2,848.03	2,927.90	0.00	0.00	0.00	
11,400.00	90.03	90.53	7,829.44	981.40	2,948.02	3,027.36	0.00	0.00	0.00	
11,500.00	90.03	90.53	7,829.39	980.47	3,048.02	3,126.82	0.00	0.00	0.00	
11,600.00	90.03	90.53	7,829.34	979.54	3,148.02	3,226.29	0.00	0.00	0.00	
11,700.00	90.03	90.53	7,829.29	978.61	3,248.01	3,325.75	0.00	0.00	0.00	
11,800.00	90.03	90.53	7,829.24	977.69	3,348.01	3,425.21	0.00	0.00	0.00	
11,900.00	90.03	90.53	7,829.19	976.76	3,448.00	3,524.68	0.00	0.00	0.00	
12,000.00	90.03	90.53	7,829.14	975.83	3,548.00	3,624.14	0.00	0.00	0.00	
12,100.00	90.03	90.53	7,829.08	974.90	3,647.99	3,723.60	0.00	0.00	0.00	
12,200.00	90.03	90.53	7,829.03	973.97	3,747.99	3,823.07	0.00	0.00	0.00	
12,300.00	90.03	90.53	7,828.98	973.04	3,847.99	3,922.53	0.00	0.00	0.00	
12,400.00	90.03	90.53	7,828.93	972.11	3,947.98	4,022.00	0.00	0.00	0.00	
12,500.00	90.03	90.53	7,828.88	971.18	4,047.98	4,121.46	0.00	0.00	0.00	
12,600.00	90.03	90.53	7,828.83	970.26	4,147.97	4,220.92	0.00	0.00	0.00	
12,700.00	90.03	90.53	7,828.78	969.33	4,247.97	4,320.39	0.00	0.00	0.00	
12,800.00	90.03	90.53	7,828.73	968.40	4,347.96	4,419.85	0.00	0.00	0.00	
12,900.00	90.03	90.53	7,828.68	967.47	4,447.96	4,519.31	0.00	0.00	0.00	
13,000.00	90.03	90.53	7,828.63	966.54	4,547.96	4,618.78	0.00	0.00	0.00	
13,100.00	90.03	90.53	7,828.58	965.61	4,647.95	4,718.24	0.00	0.00	0.00	
13,200.00	90.03	90.53	7,828.52	964.68	4,747.95	4,817.70	0.00	0.00	0.00	
13,300.00	90.03	90.53	7,828.47	963.75	4,847.94	4,917.17	0.00	0.00	0.00	
13,400.00	90.03	90.53	7,828.42	962.83	4,947.94	5,016.63	0.00	0.00	0.00	
13,500.00	90.03	90.53	7,828.37	961.90	5,047.93	5,116.10	0.00	0.00	0.00	
13,600.00	90.03	90.53	7,828.32	960.97	5,147.93	5,215.56	0.00	0.00	0.00	
13,700.00	90.03	90.53	7,828.27	960.04	5,247.93	5,315.02	0.00	0.00	0.00	
13,800.00	90.03	90.53	7,828.22	959.11	5,347.92	5,414.49	0.00	0.00	0.00	
13,900.00	90.03	90.53	7,828.17	958.18	5,447.92	5,513.95	0.00	0.00	0.00	
14,000.00	90.03	90.53	7,828.12	957.25	5,547.91	5,613.41	0.00	0.00	0.00	
14,100.00	90.03	90.53	7,828.07	956.32	5,647.91	5,712.88	0.00	0.00	0.00	
14,200.00	90.03	90.53	7,828.02	955.40	5,747.90	5,812.34	0.00	0.00	0.00	
14,300.00	90.03	90.53	7,827.97	954.47	5,847.90	5,911.80	0.00	0.00	0.00	
14,400.00	90.03	90.53	7,827.91	953.54	5,947.90	6,011.27	0.00	0.00	0.00	
14,500.00	90.03	90.53	7,827.86	952.61	6,047.89	6,110.73	0.00	0.00	0.00	
14,600.00	90.03	90.53	7,827.81	951.68	6,147.89	6,210.19	0.00	0.00	0.00	
14,700.00	90.03	90.53	7,827.76	950.75	6,247.88	6,309.66	0.00	0.00	0.00	
14,800.00	90.03	90.53	7,827.71	949.82	6,347.88	6,409.12	0.00	0.00	0.00	
14,900.00	90.03	90.53	7,827.66	948.89	6,447.87	6,508.59	0.00	0.00	0.00	
15,000.00	90.03	90.53	7,827.61	947.97	6,547.87	6,608.05	0.00	0.00	0.00	
15,100.00	90.03	90.53	7,827.56	947.04	6,647.86	6,707.51	0.00	0.00	0.00	
15,200.00	90.03	90.53	7,827.51	946.11	6,747.86	6,806.98	0.00	0.00	0.00	
15,300.00	90.03	90.53	7,827.46	945.18	6,847.86	6,906.44	0.00	0.00	0.00	
15,400.00	90.03	90.53	7,827.41	944.25	6,947.85	7,005.90	0.00	0.00	0.00	
15,500.00	90.03	90.53	7,827.35	943.32	7,047.85	7,105.37	0.00	0.00	0.00	
15,600.00	90.03	90.53	7,827.30	942.39	7,147.84	7,204.83	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Bear 3-65 22-23 3AH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	B Rig 5594.9 @ 5596.90ft (Original Well Elev)
Project:	Niobrara Central Zone	MD Reference:	B Rig 5594.9 @ 5596.90ft (Original Well Elev)
Site:	Bear	North Reference:	True
Well:	Bear 3-65 22-23 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Bear 3-65 22-23 3AH Rev.A		

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)
15,700.00	90.03	90.53	7,827.25	941.47	7,247.84	7,304.29	0.00	0.00	0.00
15,800.00	90.03	90.53	7,827.20	940.54	7,347.83	7,403.76	0.00	0.00	0.00
15,900.00	90.03	90.53	7,827.15	939.61	7,447.83	7,503.22	0.00	0.00	0.00
16,000.00	90.03	90.53	7,827.10	938.68	7,547.83	7,602.69	0.00	0.00	0.00
16,100.00	90.03	90.53	7,827.05	937.75	7,647.82	7,702.15	0.00	0.00	0.00
16,200.00	90.03	90.53	7,827.00	936.82	7,747.82	7,801.61	0.00	0.00	0.00
16,300.00	90.03	90.53	7,826.95	935.89	7,847.81	7,901.08	0.00	0.00	0.00
16,400.00	90.03	90.53	7,826.90	934.96	7,947.81	8,000.54	0.00	0.00	0.00
16,500.00	90.03	90.53	7,826.85	934.04	8,047.80	8,100.00	0.00	0.00	0.00
16,600.00	90.03	90.53	7,826.79	933.11	8,147.80	8,199.47	0.00	0.00	0.00
16,700.00	90.03	90.53	7,826.74	932.18	8,247.80	8,298.93	0.00	0.00	0.00
16,800.00	90.03	90.53	7,826.69	931.25	8,347.79	8,398.39	0.00	0.00	0.00
16,900.00	90.03	90.53	7,826.64	930.32	8,447.79	8,497.86	0.00	0.00	0.00
17,000.00	90.03	90.53	7,826.59	929.39	8,547.78	8,597.32	0.00	0.00	0.00
17,100.00	90.03	90.53	7,826.54	928.46	8,647.78	8,696.78	0.00	0.00	0.00
17,200.00	90.03	90.53	7,826.49	927.53	8,747.77	8,796.25	0.00	0.00	0.00
17,300.00	90.03	90.53	7,826.44	926.61	8,847.77	8,895.71	0.00	0.00	0.00
17,400.00	90.03	90.53	7,826.39	925.68	8,947.77	8,995.18	0.00	0.00	0.00
17,500.00	90.03	90.53	7,826.34	924.75	9,047.76	9,094.64	0.00	0.00	0.00
17,600.00	90.03	90.53	7,826.29	923.82	9,147.76	9,194.10	0.00	0.00	0.00
17,700.00	90.03	90.53	7,826.23	922.89	9,247.75	9,293.57	0.00	0.00	0.00
17,800.00	90.03	90.53	7,826.18	921.96	9,347.75	9,393.03	0.00	0.00	0.00
17,900.00	90.03	90.53	7,826.13	921.03	9,447.74	9,492.49	0.00	0.00	0.00
18,000.00	90.03	90.53	7,826.08	920.10	9,547.74	9,591.96	0.00	0.00	0.00
18,100.00	90.03	90.53	7,826.03	919.18	9,647.74	9,691.42	0.00	0.00	0.00
18,161.00	90.03	90.53	7,826.00	918.61	9,708.73	9,752.09	0.00	0.00	0.00
5 1/2" x 8 1/2"									
18,161.19	90.03	90.53	7,826.00	918.61	9,708.93	9,752.29	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									
Bear 3AH BHL	0.00	0.00	7,826.00	918.61	9,708.93	1,708,578.074	3,246,551.253	39° 46' 32.110 N	104° 37' 22.180 W
- plan hits target center									
- Point									
Bear 3AH BPI	0.00	0.00	7,831.00	1,009.85	-115.55	1,708,578.192	3,236,726.323	39° 46' 33.030 N	104° 39' 28.010 W
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,172.00	2,172.00	9 5/8"	9-5/8	12-1/4	
18,161.00	7,826.00	5 1/2" x 8 1/2"	5-1/2	8-1/2	



ConocoPhillips

Bear 3-65 22-23 3AH Rev.A

Ground Level: 5569.90
Surface Location Latitude: 39° 46' 23.050 N
Surface Location Longitude: 104° 39' 26.530 W
North Reference: True
B Rig 5594.9 @ 5596.90ft (Original Well Elev)

North American Datum 1983
GRS 1980
US State Plane 1983
Colorado Central 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
2172.00	0.00	0.00	2172.00	0.00	0.00	0.00	0.00
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00
4259.55	17.39	321.47	4241.82	136.64	-108.79	1.50	-95.43
7327.44	17.39	321.47	7169.43	854.08	-680.01	0.00	-596.54
8336.29	90.03	90.53	7831.00	1009.85	-115.55	10.00	-19.92
18161.19	90.03	90.53	7826.00	918.61	9708.93	0.00	9752.29

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

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

Casing Depths

TVD	MD	Name	Size
2172.00	2172.00	9 5/8"	9-5/8
7826.00	18161.005	1/2" x 8 1/2"	5-1/2

22

23

SL 1472' FSL 583' FWL

BPI 2483' FSL 460' FWL

EPI 2483' FSL 460' FEL

BHL 2483' FSL 325' FEL

TD at 18161.19

KOP 2326' FSL 97' FEL

Bear 3-65 22-23 3AH

Section Lines

Wellbore Targets

Name	TVD	Latitude	Longitude
Bear 3AH BHL	7826.00	39° 46' 32.110 N	104° 37' 22.180 W
Bear 3AH BPI	7831.00	39° 46' 33.030 N	104° 39' 28.010 W

