



ConocoPhillips

Arapahoe County, Colorado

Chico 4-65 26-25 2BH

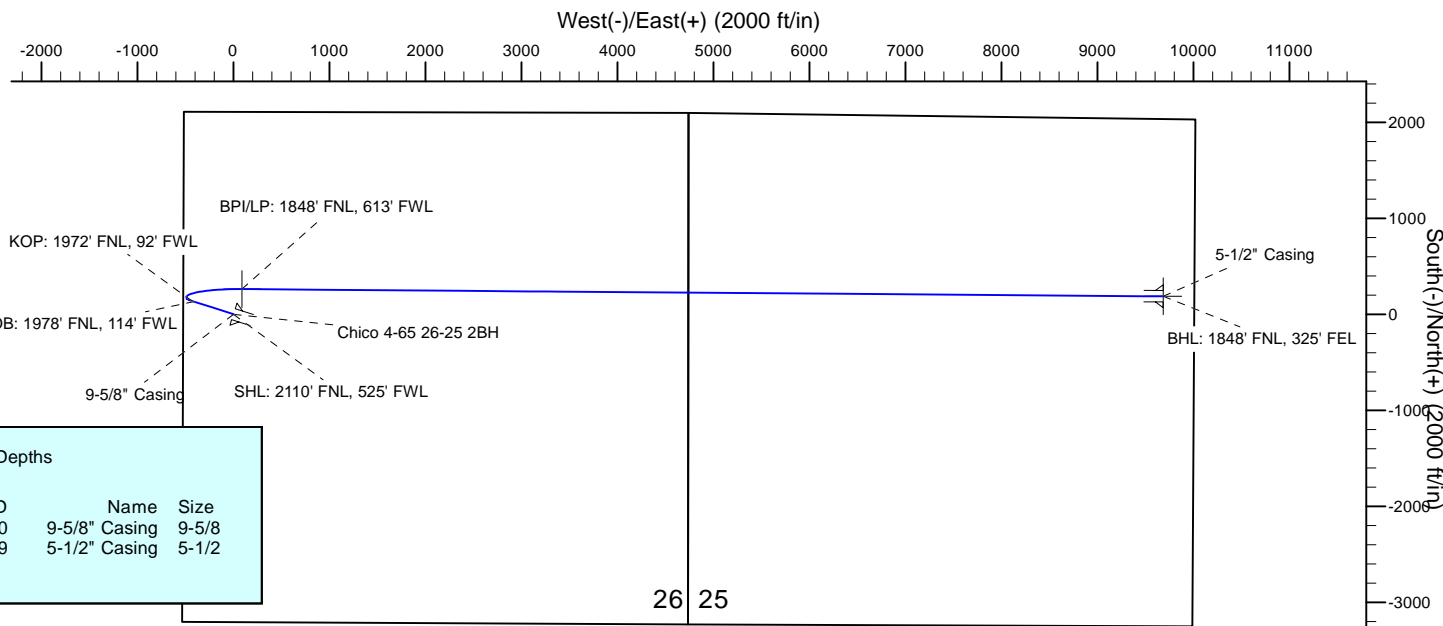
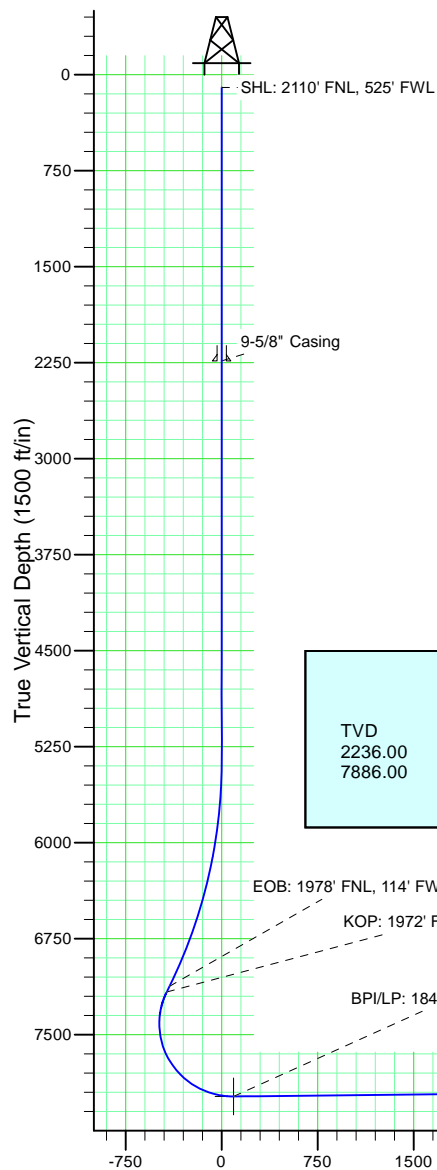
Design B

Ground Level: 5791.30
Surface Location Latitude: 39° 40' 34.240 N
Surface Location Longitude: 104° 38' 20.560 W
North Reference: True
25' RKB @ 5816.30ft (25' RKB)

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
5360.15	0.00	0.00	5360.15	0.00	0.00	0.00	0.00
7193.63	27.50	287.75	7124.03	131.58	-411.11	1.50	-408.50
7242.52	27.50	287.75	7167.40	138.46	-432.61	0.00	-429.86
8409.85	90.58	90.45	7983.00	262.10	88.35	10.00	93.40
18005.99	90.58	90.45	7886.00	187.04	9683.71	0.00	9685.52



Casing Depths

TVD	MD	Name	Size
2236.00	2236.00	9-5/8\" Casing	9-5/8
7886.00	18005.99	5-1/2\" Casing	5-1/2

Wellbore Targets

Name	TVD	Latitude	Longitude
Chico 4-65 26-25 2BH BHL	7886.00	39° 40' 36.070 N	104° 36' 16.710 W
Chico 4-65 26-25 2BH BPI	7983.00	39° 40' 36.830 N	104° 38' 19.430 W

ConocoPhillips RBU Gold Data

Niobrara Central Zone

Chico

Chico 4-65 26-25 2BH

Chico 4-65 26-25 2BH

Plan: Design B

Standard Planning Report

26 April, 2018



ConocoPhillips

Arapahoe County, Colorado

Chico 4-65 26-25 2BH

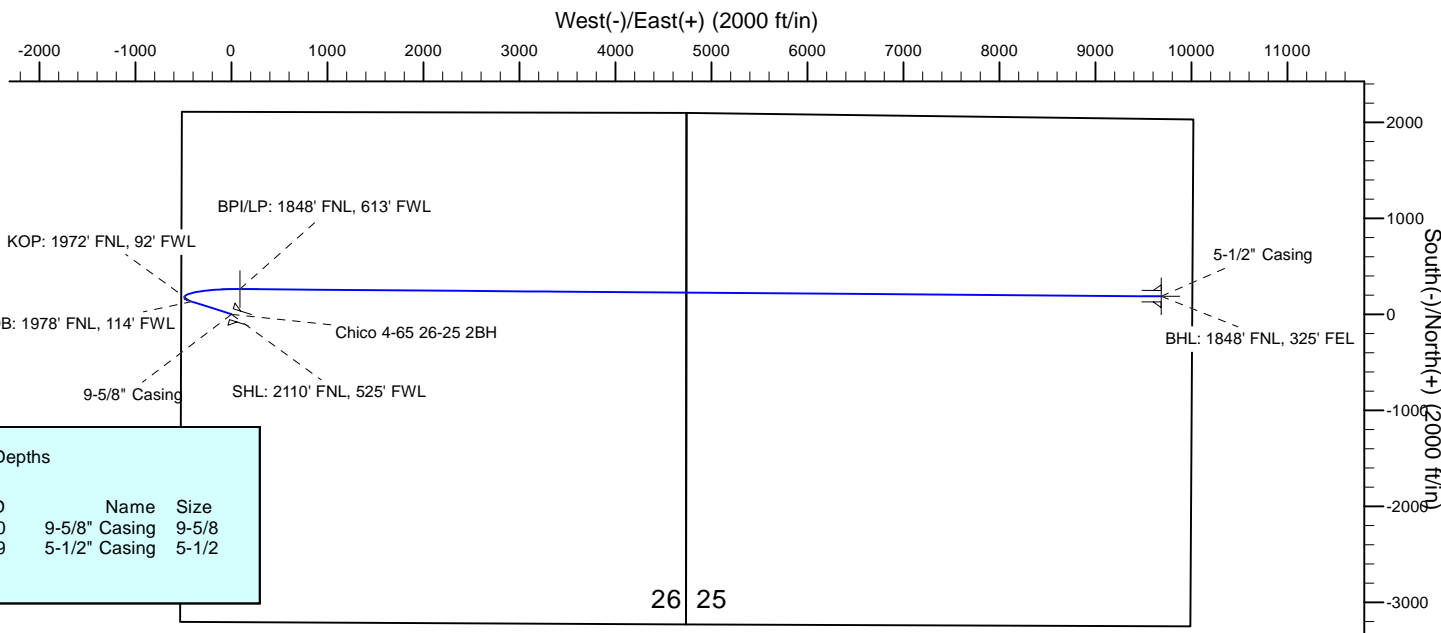
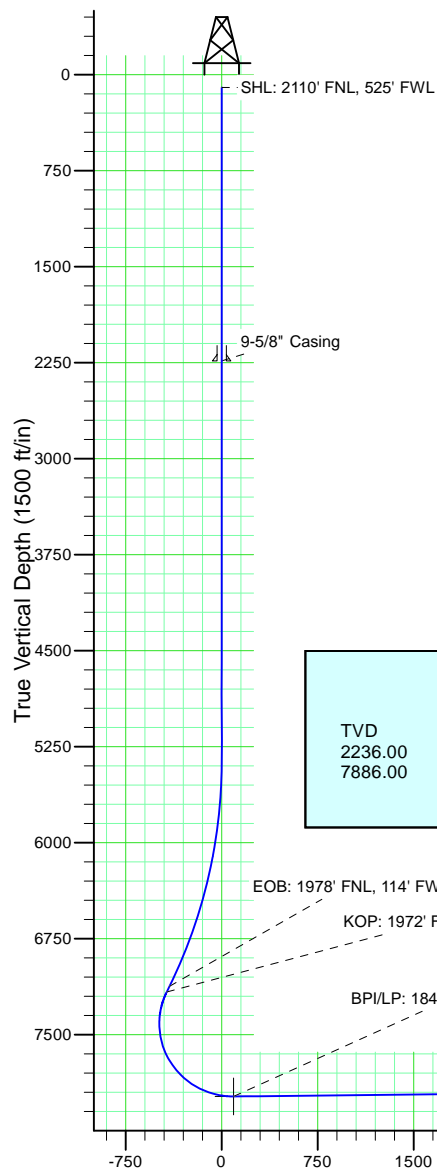
Design B

Ground Level: 5791.30
Surface Location Latitude: 39° 40' 34.240 N
Surface Location Longitude: 104° 38' 20.560 W
North Reference: True
25' RKB @ 5816.30ft (25' RKB)

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
5360.15	0.00	0.00	5360.15	0.00	0.00	0.00	0.00
7193.63	27.50	287.75	7124.03	131.58	-411.11	1.50	-408.50
7242.52	27.50	287.75	7167.40	138.46	-432.61	0.00	-429.86
8409.85	90.58	90.45	7983.00	262.10	88.35	10.00	93.40
18005.99	90.58	90.45	7886.00	187.04	9683.71	0.00	9685.52



Casing Depths

TVD	MD	Name	Size
2236.00	2236.00	9-5/8\" Casing	9-5/8
7886.00	18005.99	5-1/2\" Casing	5-1/2

Wellbore Targets

Name	TVD	Latitude	Longitude
Chico 4-65 26-25 2BH BHL	7886.00	39° 40' 36.070 N	104° 36' 16.710 W
Chico 4-65 26-25 2BH BPI	7983.00	39° 40' 36.830 N	104° 38' 19.430 W

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design B		

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		Chico				
Site Position:		Northing:	1,674,430.510 usft	Latitude:	39° 40' 55.099 N	
From:	Lat/Long	Easting:	3,241,798.168 usft	Longitude:	104° 38' 27.190 W	
Position Uncertainty:		0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.54 °

Well		Chico 4-65 26-25 2BH				
Well Position	+N-S	-2,110.67 ft	Northing:	1,672,324.862 usft	Latitude:	39° 40' 34.240 N
	+E-W	518.37 ft	Easting:	3,242,336.461 usft	Longitude:	104° 38' 20.560 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	5,791.30 ft	Ground Level:	5,791.30 ft

Wellbore	Chico 4-65 26-25 2BH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2017	12/1/2018	8.14	66.28	51,840.64858552

Design	Design B				
Audit Notes:					
Version:	0	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	88.89	

Plan Survey Tool Program	Date	4/26/2018			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	2,236.00	Design B (Chico 4-65 26-25 2BH)'Gyro-BM-MS	Gyro - bat/mem drop m/s	
2	2,236.00	5,360.15	Design B (Chico 4-65 26-25 2BH)'MWD+IFR_No SAG	MWD + IFR (No SAG) corre	
3	5,360.15	7,193.63	Design B (Chico 4-65 26-25 2BH)'MWD+IFR_No SAG	MWD + IFR (No SAG) corre	
4	7,193.63	7,242.52	Design B (Chico 4-65 26-25 2BH)'MWD+IFR_No SAG	MWD + IFR (No SAG) corre	
5	7,242.52	8,409.85	Design B (Chico 4-65 26-25 2BH)'MWD+IFR_No SAG	MWD + IFR (No SAG) corre	
6	8,409.85	18,005.99	Design B (Chico 4-65 26-25 2BH)'MWD+IFR_No SAG	MWD + IFR (No SAG) corre	

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design 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	
5,360.15	0.00	0.00	5,360.15	0.00	0.00	0.00	0.00	0.00	0.00	
7,193.63	27.50	287.75	7,124.03	131.58	-411.11	1.50	1.50	0.00	287.75	
7,242.52	27.50	287.75	7,167.40	138.46	-432.61	0.00	0.00	0.00	0.00	
8,409.85	90.58	90.45	7,983.00	262.10	88.35	10.00	5.40	13.94	160.55	Chico 4-65 26-25 2BH
18,005.99	90.58	90.45	7,886.00	187.04	9,683.71	0.00	0.00	0.00	0.00	Chico 4-65 26-25 2BH

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design 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
SHL: 2110' FNL, 525' FWL									
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
1,841.00	0.00	0.00	1,841.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills Top									
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
2,036.00	0.00	0.00	2,036.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre Top - Fox Hills Base									
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
2,236.00	0.00	0.00	2,236.00	0.00	0.00	0.00	0.00	0.00	0.00
Surface Casing - 9-5/8" Casing									
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

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design 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)
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
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,360.15	0.00	0.00	5,360.15	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.60	287.75	5,400.00	0.06	-0.20	-0.20	1.50	1.50	0.00
5,500.00	2.10	287.75	5,499.97	0.78	-2.44	-2.42	1.50	1.50	0.00
5,600.00	3.60	287.75	5,599.84	2.29	-7.17	-7.12	1.50	1.50	0.00
5,700.00	5.10	287.75	5,699.55	4.61	-14.39	-14.30	1.50	1.50	0.00
5,800.00	6.60	287.75	5,799.03	7.71	-24.09	-23.94	1.50	1.50	0.00
5,900.00	8.10	287.75	5,898.20	11.61	-36.27	-36.04	1.50	1.50	0.00
6,000.00	9.60	287.75	5,997.01	16.30	-50.92	-50.60	1.50	1.50	0.00
6,100.00	11.10	287.75	6,095.38	21.77	-68.03	-67.60	1.50	1.50	0.00
6,200.00	12.60	287.75	6,193.25	28.03	-87.58	-87.02	1.50	1.50	0.00
6,300.00	14.10	287.75	6,290.55	35.07	-109.57	-108.87	1.50	1.50	0.00
6,400.00	15.60	287.75	6,387.20	42.88	-133.97	-133.12	1.50	1.50	0.00
6,500.00	17.10	287.75	6,483.16	51.46	-160.78	-159.76	1.50	1.50	0.00
6,600.00	18.60	287.75	6,578.34	60.80	-189.97	-188.76	1.50	1.50	0.00
6,700.00	20.10	287.75	6,672.69	70.90	-221.52	-220.11	1.50	1.50	0.00
6,800.00	21.60	287.75	6,766.14	81.75	-255.42	-253.79	1.50	1.50	0.00
6,900.00	23.10	287.75	6,858.63	93.34	-291.63	-289.77	1.50	1.50	0.00
7,000.00	24.60	287.75	6,950.09	105.66	-330.13	-328.03	1.50	1.50	0.00
7,100.00	26.10	287.75	7,040.46	118.71	-370.91	-368.55	1.50	1.50	0.00
7,193.63	27.50	287.75	7,124.03	131.58	-411.11	-408.49	1.50	1.50	0.00
EOB: 1978' FNL, 114' FWL									
7,200.00	27.50	287.75	7,129.68	132.47	-413.91	-411.28	0.00	0.00	0.00
7,242.52	27.50	287.75	7,167.40	138.46	-432.61	-429.86	0.00	0.00	0.00
KOP: 1972' FNL, 92' FWL									
7,250.00	26.80	288.30	7,174.05	139.51	-435.86	-433.09	10.00	-9.41	7.38
7,300.00	22.16	292.82	7,219.55	146.71	-455.27	-452.35	10.00	-9.28	9.04
7,350.00	17.70	299.53	7,266.55	154.12	-470.58	-467.52	10.00	-8.91	13.42
7,400.00	13.62	310.31	7,314.69	161.68	-481.69	-478.48	10.00	-8.17	21.57
7,450.00	10.35	328.78	7,363.61	169.34	-488.51	-485.15	10.00	-6.54	36.93
7,500.00	8.85	357.76	7,412.94	177.03	-490.99	-487.48	10.00	-3.00	57.97
7,550.00	9.96	27.99	7,462.30	184.70	-489.11	-485.46	10.00	2.22	60.45
7,600.00	13.03	48.09	7,511.31	192.28	-482.89	-479.09	10.00	6.13	40.21
7,650.00	17.02	59.81	7,559.60	199.73	-472.36	-468.42	10.00	7.99	23.44
7,700.00	21.43	67.01	7,606.81	206.98	-457.62	-453.54	10.00	8.82	14.39
7,750.00	26.05	71.80	7,652.57	213.99	-438.77	-434.56	10.00	9.23	9.58
7,800.00	30.78	75.22	7,696.53	220.68	-415.96	-411.62	10.00	9.46	6.84
7,850.00	35.58	77.79	7,738.37	227.03	-389.35	-384.90	10.00	9.60	5.16
7,900.00	40.42	79.83	7,777.76	232.97	-359.17	-354.60	10.00	9.68	4.07
7,917.61	42.13	80.45	7,791.00	234.96	-347.72	-343.12	10.00	9.72	3.53
Niobrara Top									
7,950.00	45.29	81.50	7,814.41	238.46	-325.62	-320.95	10.00	9.75	3.22
8,000.00	50.18	82.90	7,848.03	243.46	-288.97	-284.22	10.00	9.78	2.81
8,050.00	55.08	84.12	7,878.37	247.94	-249.50	-244.67	10.00	9.81	2.44
8,100.00	60.00	85.20	7,905.20	251.85	-207.51	-202.60	10.00	9.83	2.16
8,150.00	64.92	86.18	7,928.31	255.17	-163.31	-158.35	10.00	9.85	1.96
8,200.00	69.85	87.09	7,947.52	257.87	-117.25	-112.25	10.00	9.86	1.81

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design 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)	
8,250.00	74.79	87.93	7,962.70	259.93	-69.67	-64.64	10.00	9.87	1.69	
8,295.98	79.33	88.68	7,973.00	261.26	-24.89	-19.84	10.00	9.87	1.62	
D Chalk Top										
8,300.00	79.73	88.74	7,973.73	261.35	-20.94	-15.89	10.00	9.88	1.59	
8,350.00	84.67	89.53	7,980.52	262.09	28.58	33.63	10.00	9.88	1.57	
8,400.00	89.61	90.30	7,983.02	262.17	78.50	83.55	10.00	9.88	1.54	
8,409.85	90.58	90.45	7,983.00	262.10	88.35	93.39	10.00	9.88	1.54	
BPI/LP: 1848' FNL, 613' FWL										
8,500.00	90.58	90.45	7,982.09	261.40	178.49	183.51	0.00	0.00	0.00	
8,600.00	90.58	90.45	7,981.08	260.62	278.48	283.47	0.00	0.00	0.00	
8,700.00	90.58	90.45	7,980.07	259.83	378.48	383.42	0.00	0.00	0.00	
8,800.00	90.58	90.45	7,979.06	259.05	478.47	483.38	0.00	0.00	0.00	
8,900.00	90.58	90.45	7,978.05	258.27	578.46	583.34	0.00	0.00	0.00	
9,000.00	90.58	90.45	7,977.03	257.49	678.45	683.30	0.00	0.00	0.00	
9,100.00	90.58	90.45	7,976.02	256.71	778.44	783.26	0.00	0.00	0.00	
9,200.00	90.58	90.45	7,975.01	255.92	878.44	883.21	0.00	0.00	0.00	
9,300.00	90.58	90.45	7,974.00	255.14	978.43	983.17	0.00	0.00	0.00	
9,400.00	90.58	90.45	7,972.99	254.36	1,078.42	1,083.13	0.00	0.00	0.00	
9,500.00	90.58	90.45	7,971.98	253.58	1,178.41	1,183.09	0.00	0.00	0.00	
9,600.00	90.58	90.45	7,970.97	252.79	1,278.40	1,283.05	0.00	0.00	0.00	
9,700.00	90.58	90.45	7,969.96	252.01	1,378.39	1,383.00	0.00	0.00	0.00	
9,800.00	90.58	90.45	7,968.95	251.23	1,478.39	1,482.96	0.00	0.00	0.00	
9,900.00	90.58	90.45	7,967.94	250.45	1,578.38	1,582.92	0.00	0.00	0.00	
10,000.00	90.58	90.45	7,966.93	249.67	1,678.37	1,682.88	0.00	0.00	0.00	
10,100.00	90.58	90.45	7,965.92	248.88	1,778.36	1,782.84	0.00	0.00	0.00	
10,200.00	90.58	90.45	7,964.90	248.10	1,878.35	1,882.79	0.00	0.00	0.00	
10,300.00	90.58	90.45	7,963.89	247.32	1,978.35	1,982.75	0.00	0.00	0.00	
10,400.00	90.58	90.45	7,962.88	246.54	2,078.34	2,082.71	0.00	0.00	0.00	
10,500.00	90.58	90.45	7,961.87	245.75	2,178.33	2,182.67	0.00	0.00	0.00	
10,600.00	90.58	90.45	7,960.86	244.97	2,278.32	2,282.63	0.00	0.00	0.00	
10,700.00	90.58	90.45	7,959.85	244.19	2,378.31	2,382.58	0.00	0.00	0.00	
10,800.00	90.58	90.45	7,958.84	243.41	2,478.30	2,482.54	0.00	0.00	0.00	
10,900.00	90.58	90.45	7,957.83	242.63	2,578.30	2,582.50	0.00	0.00	0.00	
11,000.00	90.58	90.45	7,956.82	241.84	2,678.29	2,682.46	0.00	0.00	0.00	
11,100.00	90.58	90.45	7,955.81	241.06	2,778.28	2,782.42	0.00	0.00	0.00	
11,200.00	90.58	90.45	7,954.80	240.28	2,878.27	2,882.38	0.00	0.00	0.00	
11,300.00	90.58	90.45	7,953.79	239.50	2,978.26	2,982.33	0.00	0.00	0.00	
11,400.00	90.58	90.45	7,952.78	238.71	3,078.26	3,082.29	0.00	0.00	0.00	
11,500.00	90.58	90.45	7,951.76	237.93	3,178.25	3,182.25	0.00	0.00	0.00	
11,600.00	90.58	90.45	7,950.75	237.15	3,278.24	3,282.21	0.00	0.00	0.00	
11,700.00	90.58	90.45	7,949.74	236.37	3,378.23	3,382.17	0.00	0.00	0.00	
11,800.00	90.58	90.45	7,948.73	235.59	3,478.22	3,482.12	0.00	0.00	0.00	
11,900.00	90.58	90.45	7,947.72	234.80	3,578.21	3,582.08	0.00	0.00	0.00	
12,000.00	90.58	90.45	7,946.71	234.02	3,678.21	3,682.04	0.00	0.00	0.00	
12,100.00	90.58	90.45	7,945.70	233.24	3,778.20	3,782.00	0.00	0.00	0.00	
12,200.00	90.58	90.45	7,944.69	232.46	3,878.19	3,881.96	0.00	0.00	0.00	
12,300.00	90.58	90.45	7,943.68	231.67	3,978.18	3,981.91	0.00	0.00	0.00	
12,400.00	90.58	90.45	7,942.67	230.89	4,078.17	4,081.87	0.00	0.00	0.00	
12,500.00	90.58	90.45	7,941.66	230.11	4,178.17	4,181.83	0.00	0.00	0.00	
12,600.00	90.58	90.45	7,940.65	229.33	4,278.16	4,281.79	0.00	0.00	0.00	
12,700.00	90.58	90.45	7,939.63	228.55	4,378.15	4,381.75	0.00	0.00	0.00	
12,800.00	90.58	90.45	7,938.62	227.76	4,478.14	4,481.70	0.00	0.00	0.00	
12,900.00	90.58	90.45	7,937.61	226.98	4,578.13	4,581.66	0.00	0.00	0.00	
13,000.00	90.58	90.45	7,936.60	226.20	4,678.12	4,681.62	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design 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)	
13,100.00	90.58	90.45	7,935.59	225.42	4,778.12	4,781.58	0.00	0.00	0.00	
13,200.00	90.58	90.45	7,934.58	224.63	4,878.11	4,881.54	0.00	0.00	0.00	
13,300.00	90.58	90.45	7,933.57	223.85	4,978.10	4,981.49	0.00	0.00	0.00	
13,400.00	90.58	90.45	7,932.56	223.07	5,078.09	5,081.45	0.00	0.00	0.00	
13,500.00	90.58	90.45	7,931.55	222.29	5,178.08	5,181.41	0.00	0.00	0.00	
13,600.00	90.58	90.45	7,930.54	221.51	5,278.08	5,281.37	0.00	0.00	0.00	
13,700.00	90.58	90.45	7,929.53	220.72	5,378.07	5,381.33	0.00	0.00	0.00	
13,800.00	90.58	90.45	7,928.52	219.94	5,478.06	5,481.29	0.00	0.00	0.00	
13,900.00	90.58	90.45	7,927.50	219.16	5,578.05	5,581.24	0.00	0.00	0.00	
14,000.00	90.58	90.45	7,926.49	218.38	5,678.04	5,681.20	0.00	0.00	0.00	
14,100.00	90.58	90.45	7,925.48	217.59	5,778.03	5,781.16	0.00	0.00	0.00	
14,200.00	90.58	90.45	7,924.47	216.81	5,878.03	5,881.12	0.00	0.00	0.00	
14,300.00	90.58	90.45	7,923.46	216.03	5,978.02	5,981.08	0.00	0.00	0.00	
14,400.00	90.58	90.45	7,922.45	215.25	6,078.01	6,081.03	0.00	0.00	0.00	
14,500.00	90.58	90.45	7,921.44	214.47	6,178.00	6,180.99	0.00	0.00	0.00	
14,600.00	90.58	90.45	7,920.43	213.68	6,277.99	6,280.95	0.00	0.00	0.00	
14,700.00	90.58	90.45	7,919.42	212.90	6,377.99	6,380.91	0.00	0.00	0.00	
14,800.00	90.58	90.45	7,918.41	212.12	6,477.98	6,480.87	0.00	0.00	0.00	
14,900.00	90.58	90.45	7,917.40	211.34	6,577.97	6,580.82	0.00	0.00	0.00	
15,000.00	90.58	90.45	7,916.39	210.55	6,677.96	6,680.78	0.00	0.00	0.00	
15,100.00	90.58	90.45	7,915.37	209.77	6,777.95	6,780.74	0.00	0.00	0.00	
15,200.00	90.58	90.45	7,914.36	208.99	6,877.95	6,880.70	0.00	0.00	0.00	
15,300.00	90.58	90.45	7,913.35	208.21	6,977.94	6,980.66	0.00	0.00	0.00	
15,400.00	90.58	90.45	7,912.34	207.43	7,077.93	7,080.61	0.00	0.00	0.00	
15,500.00	90.58	90.45	7,911.33	206.64	7,177.92	7,180.57	0.00	0.00	0.00	
15,600.00	90.58	90.45	7,910.32	205.86	7,277.91	7,280.53	0.00	0.00	0.00	
15,700.00	90.58	90.45	7,909.31	205.08	7,377.90	7,380.49	0.00	0.00	0.00	
15,800.00	90.58	90.45	7,908.30	204.30	7,477.90	7,480.45	0.00	0.00	0.00	
15,900.00	90.58	90.45	7,907.29	203.51	7,577.89	7,580.40	0.00	0.00	0.00	
16,000.00	90.58	90.45	7,906.28	202.73	7,677.88	7,680.36	0.00	0.00	0.00	
16,100.00	90.58	90.45	7,905.27	201.95	7,777.87	7,780.32	0.00	0.00	0.00	
16,200.00	90.58	90.45	7,904.26	201.17	7,877.86	7,880.28	0.00	0.00	0.00	
16,300.00	90.58	90.45	7,903.24	200.39	7,977.86	7,980.24	0.00	0.00	0.00	
16,400.00	90.58	90.45	7,902.23	199.60	8,077.85	8,080.20	0.00	0.00	0.00	
16,500.00	90.58	90.45	7,901.22	198.82	8,177.84	8,180.15	0.00	0.00	0.00	
16,600.00	90.58	90.45	7,900.21	198.04	8,277.83	8,280.11	0.00	0.00	0.00	
16,700.00	90.58	90.45	7,899.20	197.26	8,377.82	8,380.07	0.00	0.00	0.00	
16,800.00	90.58	90.45	7,898.19	196.47	8,477.81	8,480.03	0.00	0.00	0.00	
16,900.00	90.58	90.45	7,897.18	195.69	8,577.81	8,579.99	0.00	0.00	0.00	
17,000.00	90.58	90.45	7,896.17	194.91	8,677.80	8,679.94	0.00	0.00	0.00	
17,100.00	90.58	90.45	7,895.16	194.13	8,777.79	8,779.90	0.00	0.00	0.00	
17,200.00	90.58	90.45	7,894.15	193.35	8,877.78	8,879.86	0.00	0.00	0.00	
17,300.00	90.58	90.45	7,893.14	192.56	8,977.77	8,979.82	0.00	0.00	0.00	
17,400.00	90.58	90.45	7,892.13	191.78	9,077.77	9,079.78	0.00	0.00	0.00	
17,500.00	90.58	90.45	7,891.11	191.00	9,177.76	9,179.73	0.00	0.00	0.00	
17,600.00	90.58	90.45	7,890.10	190.22	9,277.75	9,279.69	0.00	0.00	0.00	
17,700.00	90.58	90.45	7,889.09	189.43	9,377.74	9,379.65	0.00	0.00	0.00	
17,800.00	90.58	90.45	7,888.08	188.65	9,477.73	9,479.61	0.00	0.00	0.00	
17,900.00	90.58	90.45	7,887.07	187.87	9,577.72	9,579.57	0.00	0.00	0.00	
18,005.99	90.58	90.45	7,886.00	187.04	9,683.71	9,685.51	0.00	0.00	0.00	
BHL: 1848' FNL, 325' FEL - 5-1/2" Casing										

ConocoPhillips

Planning Report

Database:	EDT 14 Central Planning	Local Co-ordinate Reference:	Well Chico 4-65 26-25 2BH
Company:	ConocoPhillips RBU Gold Data	TVD Reference:	25' RKB @ 5816.30ft (25' RKB)
Project:	Niobrara Central Zone	MD Reference:	25' RKB @ 5816.30ft (25' RKB)
Site:	Chico	North Reference:	True
Well:	Chico 4-65 26-25 2BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	Chico 4-65 26-25 2BH		
Design:	Design B		

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Chico 4-65 26-25 2BH - plan hits target center - Point	0.00	0.00	7,886.00	187.04	9,683.71	1,672,603.662	3,252,017.810	39° 40' 36.070 N	104° 36' 16.710 W
Chico 4-65 26-25 2BH - plan hits target center - Point	0.00	0.00	7,983.00	262.10	88.35	1,672,587.787	3,242,422.325	39° 40' 36.830 N	104° 38' 19.430 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
2,236.00	2,236.00	9-5/8" Casing	9-5/8	12-1/4
18,005.99	7,886.00	5-1/2" Casing	5-1/2	8-1/2

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,841.00	1,841.00	Fox Hills Top		0.00	
2,036.00	2,036.00	Pierre Top - Fox Hills Base		0.00	
2,236.00	2,236.00	Surface Casing		0.00	
7,917.61	7,791.00	Niobrara Top		0.00	
8,295.98	7,973.00	D Chalk Top		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
100.00	100.00	0.00	0.00	SHL: 2110' FNL, 525' FWL
7,193.63	7,124.03	131.58	-411.11	EOB: 1978' FNL, 114' FWL
7,242.52	7,167.40	138.46	-432.61	KOP: 1972' FNL, 92' FWL
8,409.85	7,983.00	262.10	88.35	BPI/LP: 1848' FNL, 613' FWL
18,005.99	7,886.00	187.04	9,683.71	BHL: 1848' FNL, 325' FEL