

US ROCKIES REGION PLANNING

COLORADO NORTHERN CWP - 83

Phase 1 Pad 3

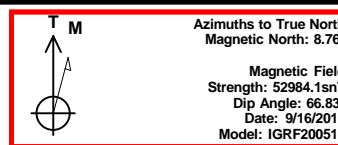
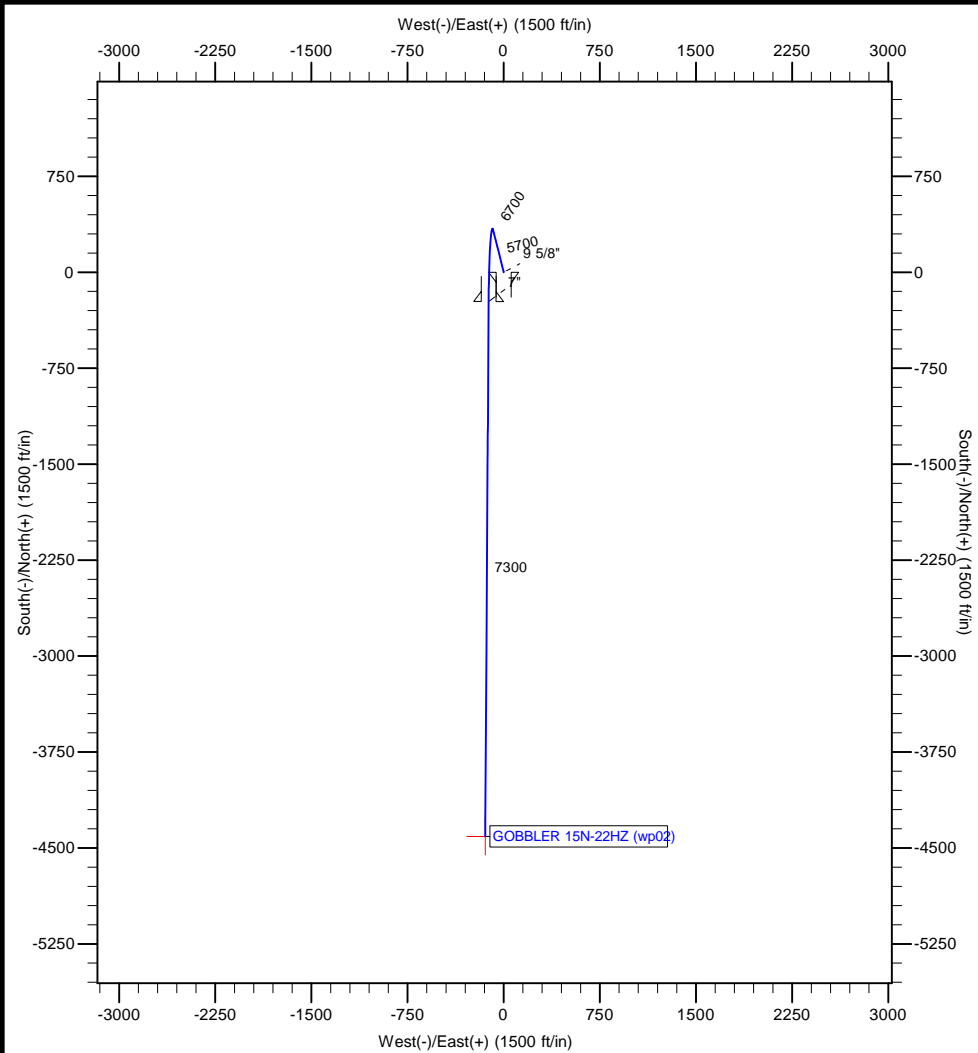
GOBBLER 15N-22HZ

GOBBLER 15N-22HZ

Plan: GOBBLER 15N-22HZ (wp02)

Standard Planning Report

25 October, 2011



Project: COLORADO NORTHERN CWP - 83
Site: Phase 1 Pad 3
Well: GOBBLER 15N-22HZ
Wellbore: GOBBLER 15N-22HZ
Section:
SHL:
Design: GOBBLER 15N-22HZ (wp02)
Latitude: 40.129807
Longitude: -104.761192
GL: 5053.01
KB: 5053' GL + 17' RKB @ 5070.01ft

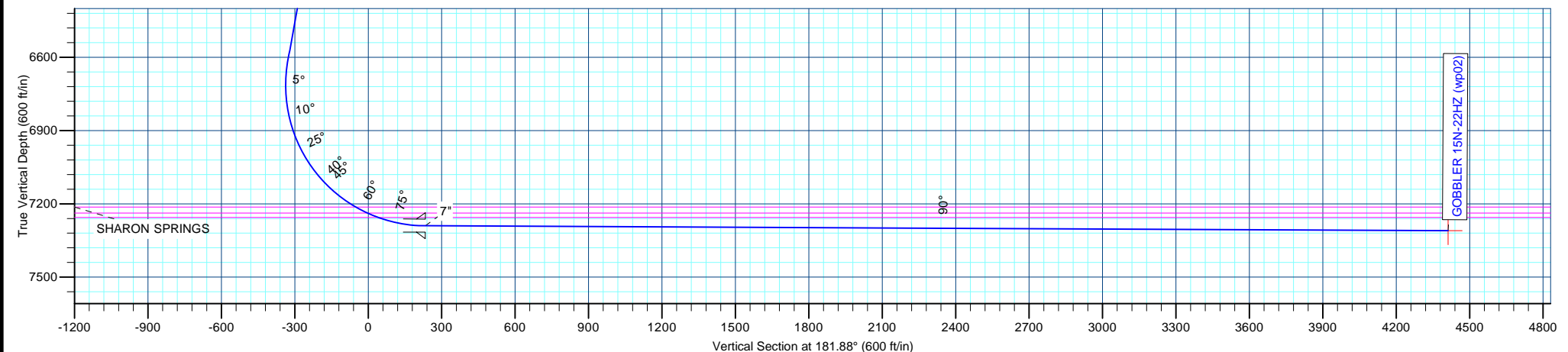
WELL DETAILS: GOBBLER 15N-22HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	5053.01 Latitude	Longitude	Slot
0.00	0.00	1290993.06	3206583.36	40.129807	-104.761192	

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4500.01	0.00	0.00	4500.01	0.00	0.00	0.00	0.00	0.00
5021.60	10.43	345.83	5018.72	45.91	-11.59	2.00	345.83	-45.50
6647.09	10.43	345.83	6617.34	331.27	-83.66	0.00	0.00	-328.34
7645.42	89.74	180.35	7290.01	-230.00	-118.00	10.00	-165.26	233.75
7647.60	89.73	180.37	7290.02	-232.18	-118.01	1.00	122.75	235.93
11825.15	89.73	180.37	7310.01	-4409.60	-144.87	0.00	0.00	4411.98

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)							
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape	
GOBBLER 15N-22HZ BHL	7310.01	-4409.60	-144.87	40.117702	-104.761710	Point	

FORMATION TOP DETAILS		
TVDPPath	MDPath	Formation
4210.01	4210.01	PARKMAN
4741.01	4741.29	SUSSEX
7213.01	7347.39	SHARON SPRINGS
7238.01	7401.91	NIOBRARA A
7256.01	7449.54	NIOBRARA B

CASING DETAILS			
TVD	MD	Name	Size
900.00	900.00	9 5/8"	9-5/8
7290.01	7645.42	7"	7



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well GOBBLER 15N-22HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	5053' GL + 17' RKB @ 5070.01ft
Project:	COLORADO NORTHERN CWP - 83	MD Reference:	5053' GL + 17' RKB @ 5070.01ft
Site:	Phase 1 Pad 3	North Reference:	True
Well:	GOBBLER 15N-22HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 15N-22HZ		
Design:	GOBBLER 15N-22HZ (wp02)		

Project	COLORADO NORTHERN CWP - 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Phase 1 Pad 3			
Site Position:		Northing:	1,290,993.56 usft	Latitude: 40.129807
From:	Lat/Long	Easting:	3,206,643.20 usft	Longitude: -104.760978
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence: 0.48 °

Well	GOBBLER 15N-22HZ, Phase 1 Pad 3			
Well Position	+N/-S	-0.01 ft	Northing:	1,290,993.05 usft
	+E/-W	-59.84 ft	Easting:	3,206,583.36 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:		Ground Level: 5,053.01 ft

Wellbore	GOBBLER 15N-22HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	9/16/2011	8.76	66.83	52,984

Design	GOBBLER 15N-22HZ (wp02)			
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	181.88

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,500.01	0.00	0.00	4,500.01	0.00	0.00	0.00	0.00	0.00	0.00	
5,021.60	10.43	345.83	5,018.72	45.91	-11.59	2.00	2.00	0.00	345.83	
6,647.09	10.43	345.83	6,617.34	331.27	-83.66	0.00	0.00	0.00	0.00	
7,645.42	89.74	180.35	7,290.01	-230.00	-118.00	10.00	7.94	-16.58	-165.26	
7,647.60	89.73	180.37	7,290.02	-232.18	-118.01	1.00	-0.54	0.84	122.75	
11,825.15	89.73	180.37	7,310.01	-4,409.60	-144.87	0.00	0.00	0.00	0.00	GOBBLER 15N-22HZ

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well GOBBLER 15N-22HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	5053' GL + 17' RKB @ 5070.01ft
Project:	COLORADO NORTHERN CWP - 83	MD Reference:	5053' GL + 17' RKB @ 5070.01ft
Site:	Phase 1 Pad 3	North Reference:	True
Well:	GOBBLER 15N-22HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 15N-22HZ		
Design:	GOBBLER 15N-22HZ (wp02)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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
9 5/8"									
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
2,300.00	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
4,210.01	0.00	0.00	4,210.01	0.00	0.00	0.00	0.00	0.00	0.00
PARKMAN									
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
4,500.01	0.00	0.00	4,500.01	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
4,600.00	2.00	345.83	4,599.98	1.69	-0.43	-1.68	2.00	2.00	0.00
4,700.00	4.00	345.83	4,699.84	6.77	-1.71	-6.71	2.00	2.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well GOBBLER 15N-22HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	5053' GL + 17' RKB @ 5070.01ft
Project:	COLORADO NORTHERN CWP - 83	MD Reference:	5053' GL + 17' RKB @ 5070.01ft
Site:	Phase 1 Pad 3	North Reference:	True
Well:	GOBBLER 15N-22HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 15N-22HZ		
Design:	GOBBLER 15N-22HZ (wp02)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,741.29	4.83	345.83	4,741.01	9.85	-2.49	-9.76	2.00	2.00	0.00
SUSSEX									
4,800.00	6.00	345.83	4,799.45	15.21	-3.84	-15.08	2.00	2.00	0.00
4,900.00	8.00	345.83	4,898.70	27.03	-6.83	-26.79	2.00	2.00	0.00
5,000.00	10.00	345.83	4,997.47	42.20	-10.66	-41.82	2.00	2.00	0.00
5,021.60	10.43	345.83	5,018.72	45.91	-11.59	-45.50	2.00	2.00	0.00
Start 1625.49 hold at 5021.60 MD									
5,100.00	10.43	345.83	5,095.83	59.67	-15.07	-59.15	0.00	0.00	0.00
5,200.00	10.43	345.83	5,194.17	77.23	-19.50	-76.55	0.00	0.00	0.00
5,300.00	10.43	345.83	5,292.52	94.78	-23.94	-93.95	0.00	0.00	0.00
5,400.00	10.43	345.83	5,390.87	112.34	-28.37	-111.35	0.00	0.00	0.00
5,500.00	10.43	345.83	5,489.22	129.89	-32.80	-128.75	0.00	0.00	0.00
5,600.00	10.43	345.83	5,587.56	147.45	-37.24	-146.15	0.00	0.00	0.00
5,700.00	10.43	345.83	5,685.91	165.00	-41.67	-163.55	0.00	0.00	0.00
5,800.00	10.43	345.83	5,784.26	182.56	-46.10	-180.95	0.00	0.00	0.00
5,900.00	10.43	345.83	5,882.60	200.12	-50.54	-198.35	0.00	0.00	0.00
6,000.00	10.43	345.83	5,980.95	217.67	-54.97	-215.75	0.00	0.00	0.00
6,100.00	10.43	345.83	6,079.30	235.23	-59.40	-233.15	0.00	0.00	0.00
6,200.00	10.43	345.83	6,177.65	252.78	-63.84	-250.55	0.00	0.00	0.00
6,300.00	10.43	345.83	6,275.99	270.34	-68.27	-267.95	0.00	0.00	0.00
6,400.00	10.43	345.83	6,374.34	287.89	-72.70	-285.35	0.00	0.00	0.00
6,500.00	10.43	345.83	6,472.69	305.45	-77.14	-302.75	0.00	0.00	0.00
6,600.00	10.43	345.83	6,571.03	323.00	-81.57	-320.15	0.00	0.00	0.00
6,647.09	10.43	345.83	6,617.34	331.27	-83.66	-328.34	0.00	0.00	0.00
Start DLS 10.00 TFO -165.26									
6,700.00	5.48	331.60	6,669.74	338.14	-86.04	-335.13	10.00	-9.36	-26.88
6,800.00	5.83	207.21	6,769.50	337.83	-90.64	-334.67	10.00	0.35	-124.39
6,900.00	15.42	189.97	6,867.69	320.17	-95.27	-316.87	10.00	9.59	-17.25
7,000.00	25.32	185.93	6,961.33	285.72	-99.80	-282.29	10.00	9.91	-4.03
7,100.00	35.28	184.08	7,047.56	235.51	-104.07	-231.97	10.00	9.96	-1.86
7,200.00	45.26	182.96	7,123.76	171.08	-107.97	-167.44	10.00	9.97	-1.12
7,300.00	55.24	182.17	7,187.63	94.37	-111.36	-90.66	10.00	9.98	-0.79
7,347.39	59.97	181.87	7,213.01	54.39	-112.77	-50.66	10.00	9.99	-0.65
SHARON SPRINGS									
7,400.00	65.22	181.56	7,237.22	7.72	-114.16	-3.97	10.00	9.99	-0.59
7,401.91	65.41	181.55	7,238.01	5.99	-114.21	-2.24	10.00	9.99	-0.56
NIOBRARA A									
7,449.54	70.17	181.29	7,256.01	-38.09	-115.30	41.85	10.00	9.99	-0.54
NIOBRARA B									
7,480.64	73.28	181.13	7,265.76	-67.60	-115.92	71.37	10.00	9.99	-0.51
GOBBLER 15N-22HZ heel									
7,500.00	75.21	181.04	7,271.02	-86.23	-116.28	90.00	10.00	9.99	-0.50
7,600.00	85.20	180.56	7,288.01	-184.64	-117.64	188.40	10.00	9.99	-0.48
7,645.42	89.74	180.35	7,290.01	-230.00	-118.00	233.75	10.00	9.99	-0.46
Start DLS 1.00 TFO 122.75 - 7"									
7,647.60	89.73	180.37	7,290.02	-232.18	-118.01	235.93	0.99	-0.53	0.84
Start 4177.55 hold at 7647.60 MD									
7,700.00	89.73	180.37	7,290.28	-284.58	-118.35	288.31	0.00	0.00	0.00
7,800.00	89.73	180.37	7,290.75	-384.58	-118.99	388.28	0.00	0.00	0.00
7,900.00	89.73	180.37	7,291.23	-484.57	-119.64	488.24	0.00	0.00	0.00
8,000.00	89.73	180.37	7,291.71	-584.57	-120.28	588.21	0.00	0.00	0.00
8,100.00	89.73	180.37	7,292.19	-684.57	-120.92	688.17	0.00	0.00	0.00
8,200.00	89.73	180.37	7,292.67	-784.56	-121.57	788.13	0.00	0.00	0.00

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	5053' GL + 17' RKB @ 5070.01ft
Project:	COLORADO NORTHERN CWP - 83	MD Reference:	5053' GL + 17' RKB @ 5070.01ft
Site:	Phase 1 Pad 3	North Reference:	True
Well:	GOBBLER 15N-22HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 15N-22HZ		
Design:	GOBBLER 15N-22HZ (wp02)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,300.00	89.73	180.37	7,293.15	-884.56	-122.21	888.10	0.00	0.00	0.00
8,400.00	89.73	180.37	7,293.63	-984.56	-122.85	988.06	0.00	0.00	0.00
8,500.00	89.73	180.37	7,294.10	-1,084.56	-123.49	1,088.03	0.00	0.00	0.00
8,600.00	89.73	180.37	7,294.58	-1,184.55	-124.14	1,187.99	0.00	0.00	0.00
8,700.00	89.73	180.37	7,295.06	-1,284.55	-124.78	1,287.95	0.00	0.00	0.00
8,800.00	89.73	180.37	7,295.54	-1,384.55	-125.42	1,387.92	0.00	0.00	0.00
8,900.00	89.73	180.37	7,296.02	-1,484.54	-126.06	1,487.88	0.00	0.00	0.00
9,000.00	89.73	180.37	7,296.50	-1,584.54	-126.71	1,587.85	0.00	0.00	0.00
9,100.00	89.73	180.37	7,296.97	-1,684.54	-127.35	1,687.81	0.00	0.00	0.00
9,200.00	89.73	180.37	7,297.45	-1,784.53	-127.99	1,787.77	0.00	0.00	0.00
9,300.00	89.73	180.37	7,297.93	-1,884.53	-128.64	1,887.74	0.00	0.00	0.00
9,400.00	89.73	180.37	7,298.41	-1,984.53	-129.28	1,987.70	0.00	0.00	0.00
9,500.00	89.73	180.37	7,298.89	-2,084.52	-129.92	2,087.66	0.00	0.00	0.00
9,600.00	89.73	180.37	7,299.37	-2,184.52	-130.56	2,187.63	0.00	0.00	0.00
9,700.00	89.73	180.37	7,299.85	-2,284.52	-131.21	2,287.59	0.00	0.00	0.00
9,800.00	89.73	180.37	7,300.32	-2,384.51	-131.85	2,387.56	0.00	0.00	0.00
9,900.00	89.73	180.37	7,300.80	-2,484.51	-132.49	2,487.52	0.00	0.00	0.00
10,000.00	89.73	180.37	7,301.28	-2,584.51	-133.14	2,587.48	0.00	0.00	0.00
10,100.00	89.73	180.37	7,301.76	-2,684.50	-133.78	2,687.45	0.00	0.00	0.00
10,200.00	89.73	180.37	7,302.24	-2,784.50	-134.42	2,787.41	0.00	0.00	0.00
10,300.00	89.73	180.37	7,302.72	-2,884.50	-135.06	2,887.38	0.00	0.00	0.00
10,400.00	89.73	180.37	7,303.20	-2,984.49	-135.71	2,987.34	0.00	0.00	0.00
10,500.00	89.73	180.37	7,303.67	-3,084.49	-136.35	3,087.30	0.00	0.00	0.00
10,600.00	89.73	180.37	7,304.15	-3,184.49	-136.99	3,187.27	0.00	0.00	0.00
10,700.00	89.73	180.37	7,304.63	-3,284.48	-137.64	3,287.23	0.00	0.00	0.00
10,800.00	89.73	180.37	7,305.11	-3,384.48	-138.28	3,387.20	0.00	0.00	0.00
10,900.00	89.73	180.37	7,305.59	-3,484.48	-138.92	3,487.16	0.00	0.00	0.00
11,000.00	89.73	180.37	7,306.07	-3,584.47	-139.56	3,587.12	0.00	0.00	0.00
11,100.00	89.73	180.37	7,306.54	-3,684.47	-140.21	3,687.09	0.00	0.00	0.00
11,200.00	89.73	180.37	7,307.02	-3,784.47	-140.85	3,787.05	0.00	0.00	0.00
11,300.00	89.73	180.37	7,307.50	-3,884.47	-141.49	3,887.02	0.00	0.00	0.00
11,400.00	89.73	180.37	7,307.98	-3,984.46	-142.14	3,986.98	0.00	0.00	0.00
11,500.00	89.73	180.37	7,308.46	-4,084.46	-142.78	4,086.94	0.00	0.00	0.00
11,600.00	89.73	180.37	7,308.94	-4,184.46	-143.42	4,186.91	0.00	0.00	0.00
11,700.00	89.73	180.37	7,309.42	-4,284.45	-144.06	4,286.87	0.00	0.00	0.00
11,800.00	89.73	180.37	7,309.89	-4,384.45	-144.71	4,386.84	0.00	0.00	0.00
11,825.15	89.73	180.37	7,310.01	-4,409.60	-144.87	4,411.98	0.00	0.00	0.00
TD at 11825.15 - GOBBLER 15N-22HZ BHL									

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
GOBBLER 15N-22HZ BI - plan hits target center - Point	0.00	0.00	7,310.01	-4,409.60	-144.87	1,286,582.41	3,206,475.23	40.117702	-104.761710

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well GOBBLER 15N-22HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	5053' GL + 17' RKB @ 5070.01ft
Project:	COLORADO NORTHERN CWP - 83	MD Reference:	5053' GL + 17' RKB @ 5070.01ft
Site:	Phase 1 Pad 3	North Reference:	True
Well:	GOBBLER 15N-22HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 15N-22HZ		
Design:	GOBBLER 15N-22HZ (wp02)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
900.00	900.00	9 5/8"	9-5/8	12-1/4	
7,645.42	7,290.01	7"	7	8-3/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,210.01	4,210.01	PARKMAN		0.00	
4,741.29	4,741.01	SUSSEX		0.00	
7,347.39	7,213.01	SHARON SPRINGS		0.00	
7,401.91	7,238.01	NIOBRARA A		0.00	
7,449.54	7,256.01	NIOBRARA B		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
4,500.01	4,500.01	0.00	0.00	Start Build 2.00	
5,021.60	5,018.72	45.91	-11.59	Start 1625.49 hold at 5021.60 MD	
6,647.09	6,617.34	331.27	-83.66	Start DLS 10.00 TFO -165.26	
7,645.42	7,290.01	-230.00	-118.00	Start DLS 1.00 TFO 122.75	
7,647.60	7,290.02	-232.18	-118.01	Start 4177.55 hold at 7647.60 MD	
11,825.15	7,310.01	-4,409.60	-144.87	TD at 11825.15	