

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_GOBBLER 1C-23HZ

GOBBLER 1C-23HZ

GOBBLER 1C-23HZ

Plan: GOBBLER 1C-23HZ (wp01)

Standard Planning Report

31 May, 2011



Weatherford®



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Azimuths to True North

Magnetic North: 8.83°

Magnetic Field

Strength: 52987.5nT

Dip Angle: 66.83°

Date: 5/31/2011

Model: IGRF2010

Project: COLORADO NORTHERN ZONE - 83

Site: WELD GOBBLER 1C-23HZ

Well: GOBBLER 1C-23HZ

Wellbore: GOBBLER 1C-23HZ

Section: SHL:

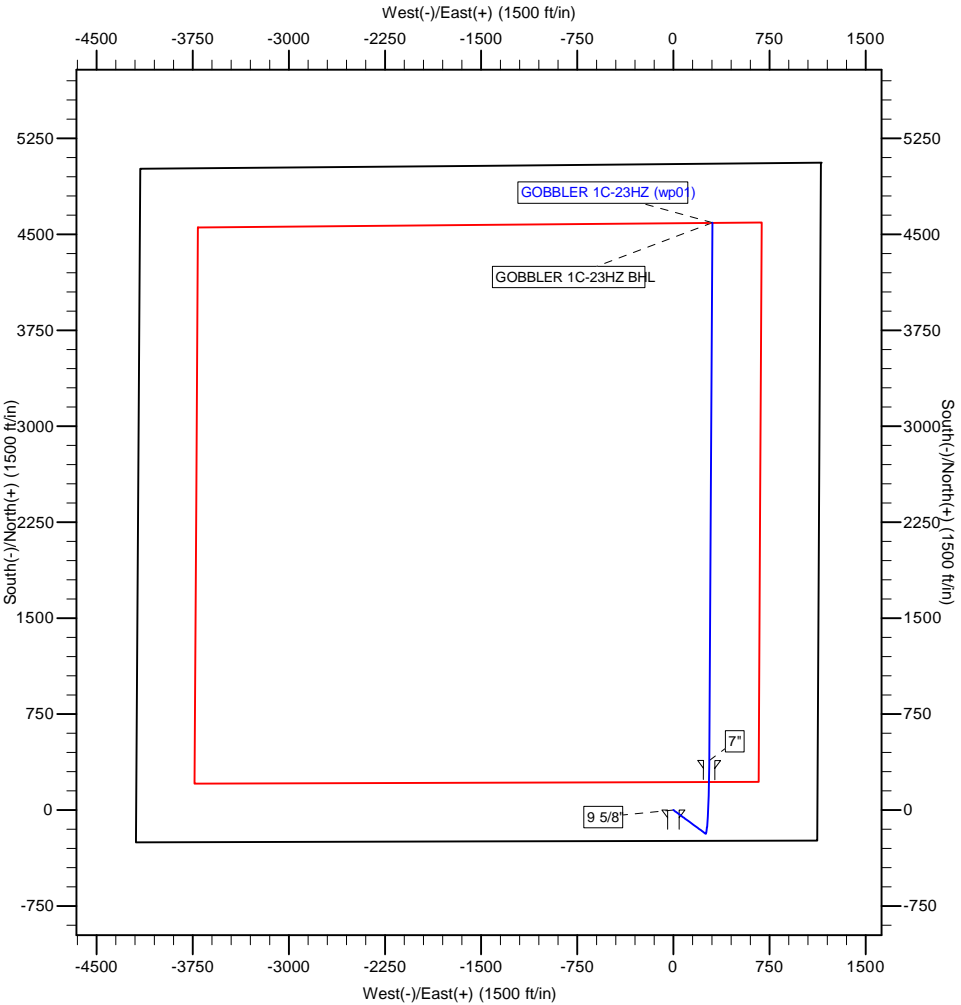
Design: GOBBLER 1C-23HZ (wp01)

Latitude: 40.117150

Longitude: -104.739014

GL: 5086.00

KB: 17' RKB + 5086' GL @ 5103.00ft



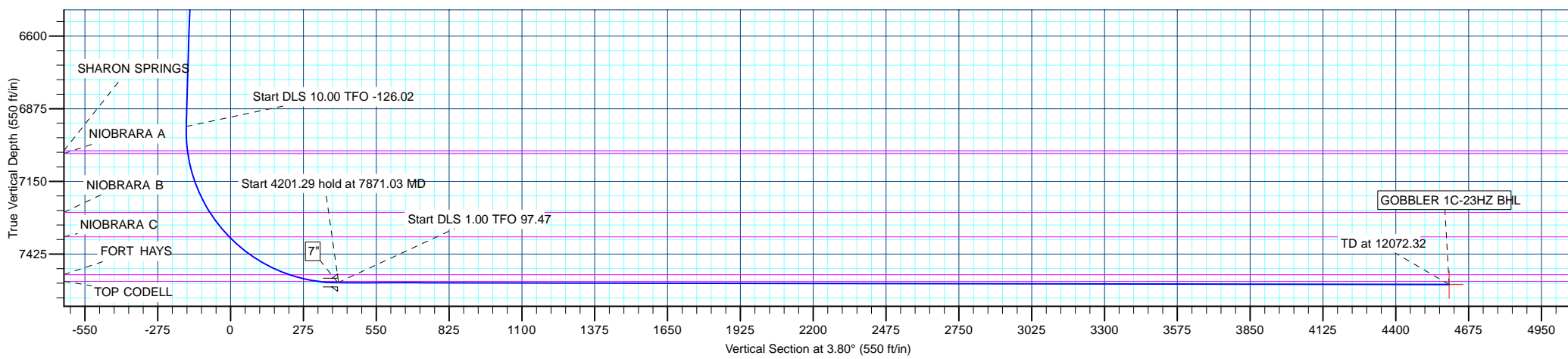
WELL DETAILS: GOBBLER 1C-23HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	5086.00 Latitude	Longitude	Slot
0.00	0.00	1286434.99	3212824.12	40.117150	-104.739014	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
GOBBLER 1C-23HZ BHL	7540.00	4591.02	304.79	40.129753	-104.737924	Point

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	
1357.32	3.15	126.37	1357.24	-2.56	3.48	2.00	126.37	-2.32	
6950.63	3.15	126.37	6942.11	-184.59	250.69	0.00	0.00	-167.58	
7868.22	89.91	0.31	7533.00	387.00	280.00	10.00	-126.02	404.70	
7871.03	89.90	0.34	7533.00	389.81	280.02	1.00	97.47	407.50	
12072.32	89.90	0.34	7540.00	4591.02	304.79	0.00	0.00	4601.12	GOBBLER 1C-23HZ BHL

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2973.00	2975.52	PARKMAN
5018.00	5023.61	SUSSEX
7034.00	7042.81	SHARON SPRINGS
7045.00	7053.92	NIOBRARA A
7267.00	7292.77	NIOBRARA B
7360.00	7411.61	NIOBRARA C
7503.00	7682.81	FORT HAYS
7528.00	7793.35	TOP CODELL

CASING DETAILS			
TVD	MD	Name	Size
1050.00	1050.00	9 5/8"	9-5/8
7533.00	7868.22	7"	7



Database:	edm5000p	Local Co-ordinate Reference:	Well GOBBLER 1C-23HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 5086' GL @ 5103.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 5086' GL @ 5103.00ft
Site:	WELD_GOBBLER 1C-23HZ	North Reference:	True
Well:	GOBBLER 1C-23HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 1C-23HZ		
Design:	GOBBLER 1C-23HZ (wp01)		

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

Site		WELD_GOBBLER 1C-23HZ			
Site Position:		Northing:	1,286,434.99 ft	Latitude:	40.117150
From:	Lat/Long	Easting:	3,212,824.12 ft	Longitude:	-104.739014
Position Uncertainty:	0.00 ft	Slot Radius:	0 "	Grid Convergence:	0.49

Well	GOBBLER 1C-23HZ					
Well Position	+N-S	0.00 ft	Northing:	1,286,434.99 ft	Latitude:	40.117150
	+E-W	0.00 ft	Easting:	3,212,824.12 ft	Longitude:	-104.739014
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,086.00 ft

Wellbore	GOBBLER 1C-23HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/31/2011	8.83	66.83	52,988

Design	GOBBLER 1C-23HZ (wp01)				
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	3.80	

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	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,357.32	3.15	126.37	1,357.24	-2.56	3.48	2.00	2.00	0.00	126.37	
6,950.63	3.15	126.37	6,942.12	-184.59	250.69	0.00	0.00	0.00	0.00	
7,868.22	89.91	0.31	7,533.00	387.00	280.00	10.00	9.46	-13.74	-126.02	
7,871.03	89.90	0.34	7,533.00	389.81	280.02	1.00	-0.13	0.99	97.47	
12,072.32	89.90	0.34	7,540.00	4,591.02	304.79	0.00	0.00	0.00	0.00	GOBBLER 1C-23H.

Database:	edm5000p	Local Co-ordinate Reference:	Well GOBBLER 1C-23HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 5086' GL @ 5103.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 5086' GL @ 5103.00ft
Site:	WELD_GOBBLER 1C-23HZ	North Reference:	True
Well:	GOBBLER 1C-23HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 1C-23HZ		
Design:	GOBBLER 1C-23HZ (wp01)		

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
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
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
Start Build 2.00									
1,300.00	2.00	126.37	1,299.98	-1.03	1.41	-0.94	2.00	2.00	0.00
1,357.32	3.15	126.37	1,357.24	-2.56	3.48	-2.32	2.00	2.00	0.00
Start 5593.31 hold at 1357.32 MD									
1,400.00	3.15	126.37	1,399.86	-3.95	5.36	-3.59	0.00	0.00	0.00
1,500.00	3.15	126.37	1,499.71	-7.20	9.78	-6.54	0.00	0.00	0.00
1,600.00	3.15	126.37	1,599.56	-10.46	14.20	-9.49	0.00	0.00	0.00
1,700.00	3.15	126.37	1,699.40	-13.71	18.62	-12.45	0.00	0.00	0.00
1,800.00	3.15	126.37	1,799.25	-16.97	23.04	-15.40	0.00	0.00	0.00
1,900.00	3.15	126.37	1,899.10	-20.22	27.46	-18.36	0.00	0.00	0.00
2,000.00	3.15	126.37	1,998.95	-23.48	31.88	-21.31	0.00	0.00	0.00
2,100.00	3.15	126.37	2,098.80	-26.73	36.30	-24.27	0.00	0.00	0.00
2,200.00	3.15	126.37	2,198.65	-29.99	40.72	-27.22	0.00	0.00	0.00
2,300.00	3.15	126.37	2,298.50	-33.24	45.14	-30.18	0.00	0.00	0.00
2,400.00	3.15	126.37	2,398.35	-36.49	49.56	-33.13	0.00	0.00	0.00
2,500.00	3.15	126.37	2,498.20	-39.75	53.98	-36.09	0.00	0.00	0.00
2,600.00	3.15	126.37	2,598.05	-43.00	58.40	-39.04	0.00	0.00	0.00
2,700.00	3.15	126.37	2,697.90	-46.26	62.82	-41.99	0.00	0.00	0.00
2,800.00	3.15	126.37	2,797.75	-49.51	67.24	-44.95	0.00	0.00	0.00
2,900.00	3.15	126.37	2,897.60	-52.77	71.66	-47.90	0.00	0.00	0.00
2,975.52	3.15	126.37	2,973.00	-55.22	75.00	-50.13	0.00	0.00	0.00
PARKMAN									
3,000.00	3.15	126.37	2,997.44	-56.02	76.08	-50.86	0.00	0.00	0.00
3,100.00	3.15	126.37	3,097.29	-59.28	80.50	-53.81	0.00	0.00	0.00
3,200.00	3.15	126.37	3,197.14	-62.53	84.92	-56.77	0.00	0.00	0.00
3,300.00	3.15	126.37	3,296.99	-65.78	89.34	-59.72	0.00	0.00	0.00
3,400.00	3.15	126.37	3,396.84	-69.04	93.76	-62.68	0.00	0.00	0.00
3,500.00	3.15	126.37	3,496.69	-72.29	98.18	-65.63	0.00	0.00	0.00
3,600.00	3.15	126.37	3,596.54	-75.55	102.60	-68.59	0.00	0.00	0.00
3,700.00	3.15	126.37	3,696.39	-78.80	107.02	-71.54	0.00	0.00	0.00
3,800.00	3.15	126.37	3,796.24	-82.06	111.44	-74.49	0.00	0.00	0.00
3,900.00	3.15	126.37	3,896.09	-85.31	115.86	-77.45	0.00	0.00	0.00
4,000.00	3.15	126.37	3,995.94	-88.57	120.28	-80.40	0.00	0.00	0.00
4,100.00	3.15	126.37	4,095.79	-91.82	124.70	-83.36	0.00	0.00	0.00
4,200.00	3.15	126.37	4,195.64	-95.07	129.12	-86.31	0.00	0.00	0.00
4,300.00	3.15	126.37	4,295.49	-98.33	133.54	-89.27	0.00	0.00	0.00
4,400.00	3.15	126.37	4,395.33	-101.58	137.96	-92.22	0.00	0.00	0.00
4,500.00	3.15	126.37	4,495.18	-104.84	142.38	-95.18	0.00	0.00	0.00
4,600.00	3.15	126.37	4,595.03	-108.09	146.80	-98.13	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 5086' GL @ 5103.00ft
Site:	WELD_GOBBLER 1C-23HZ	North Reference:	True
Well:	GOBBLER 1C-23HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 1C-23HZ		
Design:	GOBBLER 1C-23HZ (wp01)		

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	3.15	126.37	4,694.88	-111.35	151.22	-101.08	0.00	0.00	0.00
4,800.00	3.15	126.37	4,794.73	-114.60	155.64	-104.04	0.00	0.00	0.00
4,900.00	3.15	126.37	4,894.58	-117.86	160.06	-106.99	0.00	0.00	0.00
5,000.00	3.15	126.37	4,994.43	-121.11	164.48	-109.95	0.00	0.00	0.00
5,023.61	3.15	126.37	5,018.00	-121.88	165.52	-110.65	0.00	0.00	0.00
SUSSEX									
5,100.00	3.15	126.37	5,094.28	-124.36	168.90	-112.90	0.00	0.00	0.00
5,200.00	3.15	126.37	5,194.13	-127.62	173.32	-115.86	0.00	0.00	0.00
5,300.00	3.15	126.37	5,293.98	-130.87	177.74	-118.81	0.00	0.00	0.00
5,400.00	3.15	126.37	5,393.83	-134.13	182.16	-121.77	0.00	0.00	0.00
5,500.00	3.15	126.37	5,493.68	-137.38	186.58	-124.72	0.00	0.00	0.00
5,600.00	3.15	126.37	5,593.53	-140.64	191.00	-127.68	0.00	0.00	0.00
5,700.00	3.15	126.37	5,693.37	-143.89	195.41	-130.63	0.00	0.00	0.00
5,800.00	3.15	126.37	5,793.22	-147.15	199.83	-133.58	0.00	0.00	0.00
5,900.00	3.15	126.37	5,893.07	-150.40	204.25	-136.54	0.00	0.00	0.00
6,000.00	3.15	126.37	5,992.92	-153.65	208.67	-139.49	0.00	0.00	0.00
6,100.00	3.15	126.37	6,092.77	-156.91	213.09	-142.45	0.00	0.00	0.00
6,200.00	3.15	126.37	6,192.62	-160.16	217.51	-145.40	0.00	0.00	0.00
6,300.00	3.15	126.37	6,292.47	-163.42	221.93	-148.36	0.00	0.00	0.00
6,400.00	3.15	126.37	6,392.32	-166.67	226.35	-151.31	0.00	0.00	0.00
6,500.00	3.15	126.37	6,492.17	-169.93	230.77	-154.27	0.00	0.00	0.00
6,600.00	3.15	126.37	6,592.02	-173.18	235.19	-157.22	0.00	0.00	0.00
6,700.00	3.15	126.37	6,691.87	-176.44	239.61	-160.18	0.00	0.00	0.00
6,800.00	3.15	126.37	6,791.72	-179.69	244.03	-163.13	0.00	0.00	0.00
6,900.00	3.15	126.37	6,891.57	-182.94	248.45	-166.08	0.00	0.00	0.00
6,950.63	3.15	126.37	6,942.12	-184.59	250.69	-167.58	0.00	0.00	0.00
Start DLS 10.00 TFO -126.02									
7,000.00	4.00	39.78	6,991.42	-184.07	252.88	-166.92	10.00	1.73	-175.37
7,042.81	7.79	19.26	7,034.00	-180.18	254.80	-162.91	10.00	8.86	-47.93
SHARON SPRINGS									
7,053.92	8.85	16.89	7,045.00	-178.65	255.29	-161.35	10.00	9.52	-21.29
NIOBRARA A									
7,100.00	13.33	11.12	7,090.21	-170.05	257.35	-152.63	10.00	9.72	-12.53
7,200.00	23.22	6.25	7,185.05	-139.07	261.73	-121.42	10.00	9.89	-4.87
7,292.77	32.45	4.31	7,267.00	-95.97	265.60	-78.17	10.00	9.95	-2.09
NIOBRARA B									
7,300.00	33.17	4.20	7,273.08	-92.07	265.89	-74.25	10.00	9.97	-1.51
7,400.00	43.15	3.02	7,351.61	-30.48	269.71	-12.55	10.00	9.97	-1.18
7,411.61	44.31	2.92	7,360.00	-22.46	270.13	-4.52	10.00	9.98	-0.93
NIOBRARA C									
7,500.00	53.13	2.22	7,418.26	43.82	273.07	61.82	10.00	9.98	-0.79
7,600.00	63.11	1.60	7,471.00	128.59	275.87	146.58	10.00	9.99	-0.62
7,682.81	71.39	1.16	7,503.00	204.87	277.69	222.81	10.00	9.99	-0.52
FORT HAYS									
7,700.00	73.10	1.08	7,508.24	221.23	278.01	239.16	10.00	9.99	-0.49
7,793.35	82.43	0.64	7,528.00	312.35	279.38	330.17	10.00	9.99	-0.47
TOP CODELL									
7,800.00	83.09	0.61	7,528.84	318.95	279.45	336.76	10.00	9.99	-0.45
7,868.22	89.91	0.31	7,533.00	387.00	280.00	404.70	10.00	9.99	-0.45
Start DLS 1.00 TFO 97.47 - 7"									
7,871.03	89.90	0.34	7,533.00	389.81	280.02	407.50	1.00	-0.12	0.99
Start 4201.29 hold at 7871.03 MD									

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 5086' GL @ 5103.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 5086' GL @ 5103.00ft
Site:	WELD_GOBBLER 1C-23HZ	North Reference:	True
Well:	GOBBLER 1C-23HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 1C-23HZ		
Design:	GOBBLER 1C-23HZ (wp01)		

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)
7,900.00	89.90	0.34	7,533.05	418.78	280.19	436.42	0.00	0.00	0.00
8,000.00	89.90	0.34	7,533.22	518.78	280.78	536.24	0.00	0.00	0.00
8,100.00	89.90	0.34	7,533.39	618.77	281.37	636.05	0.00	0.00	0.00
8,200.00	89.90	0.34	7,533.55	718.77	281.96	735.87	0.00	0.00	0.00
8,300.00	89.90	0.34	7,533.72	818.77	282.55	835.69	0.00	0.00	0.00
8,400.00	89.90	0.34	7,533.89	918.77	283.13	935.51	0.00	0.00	0.00
8,500.00	89.90	0.34	7,534.05	1,018.77	283.72	1,035.32	0.00	0.00	0.00
8,600.00	89.90	0.34	7,534.22	1,118.76	284.31	1,135.14	0.00	0.00	0.00
8,700.00	89.90	0.34	7,534.39	1,218.76	284.90	1,234.96	0.00	0.00	0.00
8,800.00	89.90	0.34	7,534.55	1,318.76	285.49	1,334.78	0.00	0.00	0.00
8,900.00	89.90	0.34	7,534.72	1,418.76	286.08	1,434.59	0.00	0.00	0.00
9,000.00	89.90	0.34	7,534.88	1,518.76	286.67	1,534.41	0.00	0.00	0.00
9,100.00	89.90	0.34	7,535.05	1,618.76	287.26	1,634.23	0.00	0.00	0.00
9,200.00	89.90	0.34	7,535.22	1,718.75	287.85	1,734.05	0.00	0.00	0.00
9,300.00	89.90	0.34	7,535.38	1,818.75	288.44	1,833.86	0.00	0.00	0.00
9,400.00	89.90	0.34	7,535.55	1,918.75	289.03	1,933.68	0.00	0.00	0.00
9,500.00	89.90	0.34	7,535.72	2,018.75	289.62	2,033.50	0.00	0.00	0.00
9,600.00	89.90	0.34	7,535.88	2,118.75	290.21	2,133.32	0.00	0.00	0.00
9,700.00	89.90	0.34	7,536.05	2,218.74	290.80	2,233.13	0.00	0.00	0.00
9,800.00	89.90	0.34	7,536.22	2,318.74	291.39	2,332.95	0.00	0.00	0.00
9,900.00	89.90	0.34	7,536.38	2,418.74	291.98	2,432.77	0.00	0.00	0.00
10,000.00	89.90	0.34	7,536.55	2,518.74	292.57	2,532.59	0.00	0.00	0.00
10,100.00	89.90	0.34	7,536.72	2,618.74	293.16	2,632.40	0.00	0.00	0.00
10,200.00	89.90	0.34	7,536.88	2,718.73	293.75	2,732.22	0.00	0.00	0.00
10,300.00	89.90	0.34	7,537.05	2,818.73	294.34	2,832.04	0.00	0.00	0.00
10,400.00	89.90	0.34	7,537.22	2,918.73	294.93	2,931.86	0.00	0.00	0.00
10,500.00	89.90	0.34	7,537.38	3,018.73	295.52	3,031.67	0.00	0.00	0.00
10,600.00	89.90	0.34	7,537.55	3,118.73	296.11	3,131.49	0.00	0.00	0.00
10,700.00	89.90	0.34	7,537.72	3,218.73	296.70	3,231.31	0.00	0.00	0.00
10,800.00	89.90	0.34	7,537.88	3,318.72	297.28	3,331.13	0.00	0.00	0.00
10,900.00	89.90	0.34	7,538.05	3,418.72	297.87	3,430.94	0.00	0.00	0.00
11,000.00	89.90	0.34	7,538.21	3,518.72	298.46	3,530.76	0.00	0.00	0.00
11,100.00	89.90	0.34	7,538.38	3,618.72	299.05	3,630.58	0.00	0.00	0.00
11,200.00	89.90	0.34	7,538.55	3,718.72	299.64	3,730.40	0.00	0.00	0.00
11,300.00	89.90	0.34	7,538.71	3,818.71	300.23	3,830.21	0.00	0.00	0.00
11,400.00	89.90	0.34	7,538.88	3,918.71	300.82	3,930.03	0.00	0.00	0.00
11,500.00	89.90	0.34	7,539.05	4,018.71	301.41	4,029.85	0.00	0.00	0.00
11,600.00	89.90	0.34	7,539.21	4,118.71	302.00	4,129.67	0.00	0.00	0.00
11,700.00	89.90	0.34	7,539.38	4,218.71	302.59	4,229.48	0.00	0.00	0.00
11,800.00	89.90	0.34	7,539.55	4,318.70	303.18	4,329.30	0.00	0.00	0.00
11,900.00	89.90	0.34	7,539.71	4,418.70	303.77	4,429.12	0.00	0.00	0.00
12,000.00	89.90	0.34	7,539.88	4,518.70	304.36	4,528.94	0.00	0.00	0.00
12,072.32	89.90	0.34	7,540.00	4,591.02	304.79	4,601.12	0.00	0.00	0.00
TD at 12072.32 - GOBBLER 1C-23HZ BHL									

Database:	edm5000p	Local Co-ordinate Reference:	Well GOBBLER 1C-23HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 5086' GL @ 5103.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 5086' GL @ 5103.00ft
Site:	WELD_GOBBLER 1C-23HZ	North Reference:	True
Well:	GOBBLER 1C-23HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	GOBBLER 1C-23HZ		
Design:	GOBBLER 1C-23HZ (wp01)		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
GOBBLER 1C-23HZ I	0.00	0.00	7,540.00	4,591.02	304.79	1,291,028.45	3,213,089.50	40.129753	-104.737924
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(ft)	(ft)	Name		(")	(")
1,050.00	1,050.00	9 5/8"		9-5/8	12-1/4
7,868.22	7,533.00	7"		7	8-3/4

Formations						
Measured Depth	Vertical Depth				Dip	Dip Direction
(ft)	(ft)	Name	Lithology		(°)	(°)
2,975.52	2,973.00	PARKMAN			0.00	
5,023.61	5,018.00	SUSSEX			0.00	
7,042.81	7,034.00	SHARON SPRINGS			0.00	
7,053.92	7,045.00	NIOBRARA A			0.00	
7,292.77	7,267.00	NIOBRARA B			0.00	
7,411.61	7,360.00	NIOBRARA C			0.00	
7,682.81	7,503.00	FORT HAYS			0.00	
7,793.35	7,528.00	TOP CODELL			0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
1,200.00	1,200.00	0.00	0.00	Start Build 2.00	
1,357.32	1,357.24	-2.56	3.48	Start 5593.31 hold at 1357.32 MD	
6,950.63	6,942.12	-184.59	250.69	Start DLS 10.00 TFO -126.02	
7,868.22	7,533.00	387.00	280.00	Start DLS 1.00 TFO 97.47	
7,871.03	7,533.00	389.81	280.02	Start 4201.29 hold at 7871.03 MD	
12,072.32	7,540.00	4,591.02	304.79	TD at 12072.32	