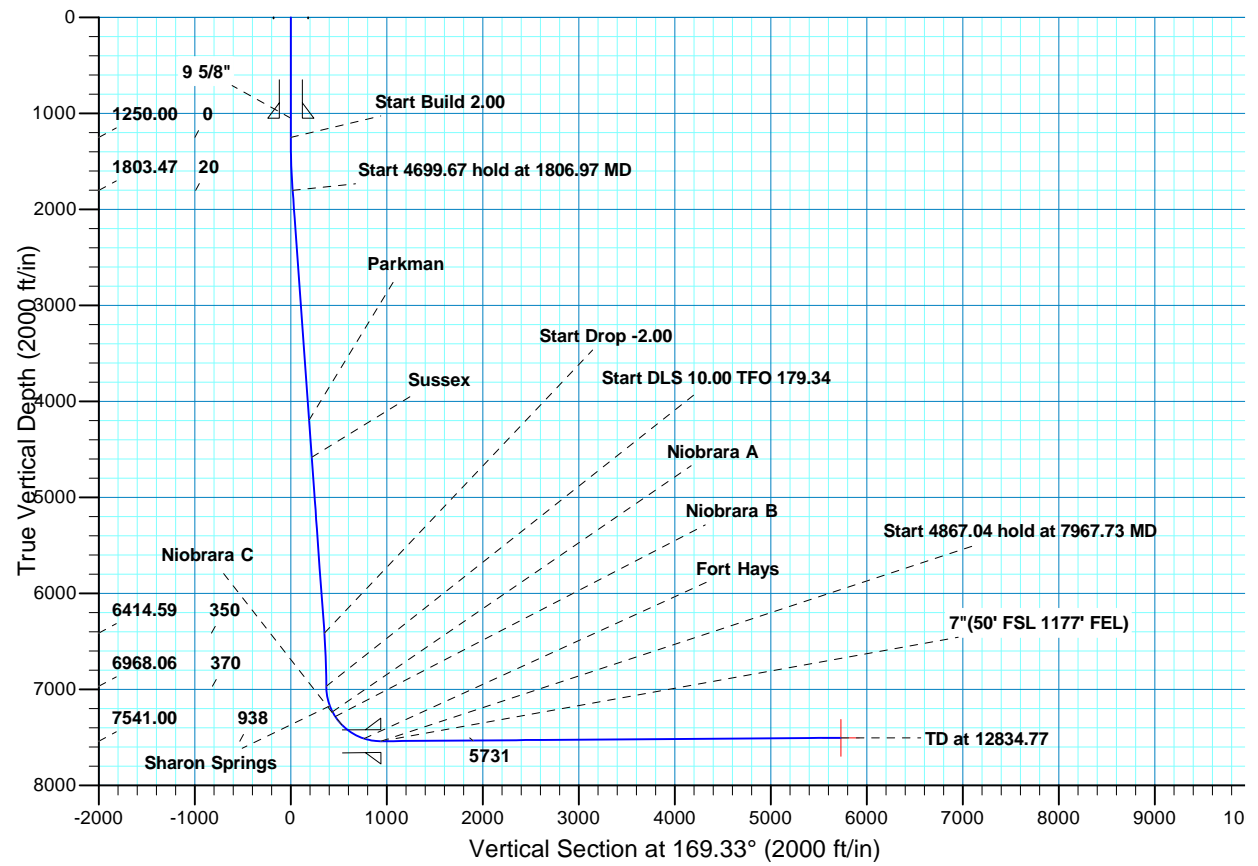
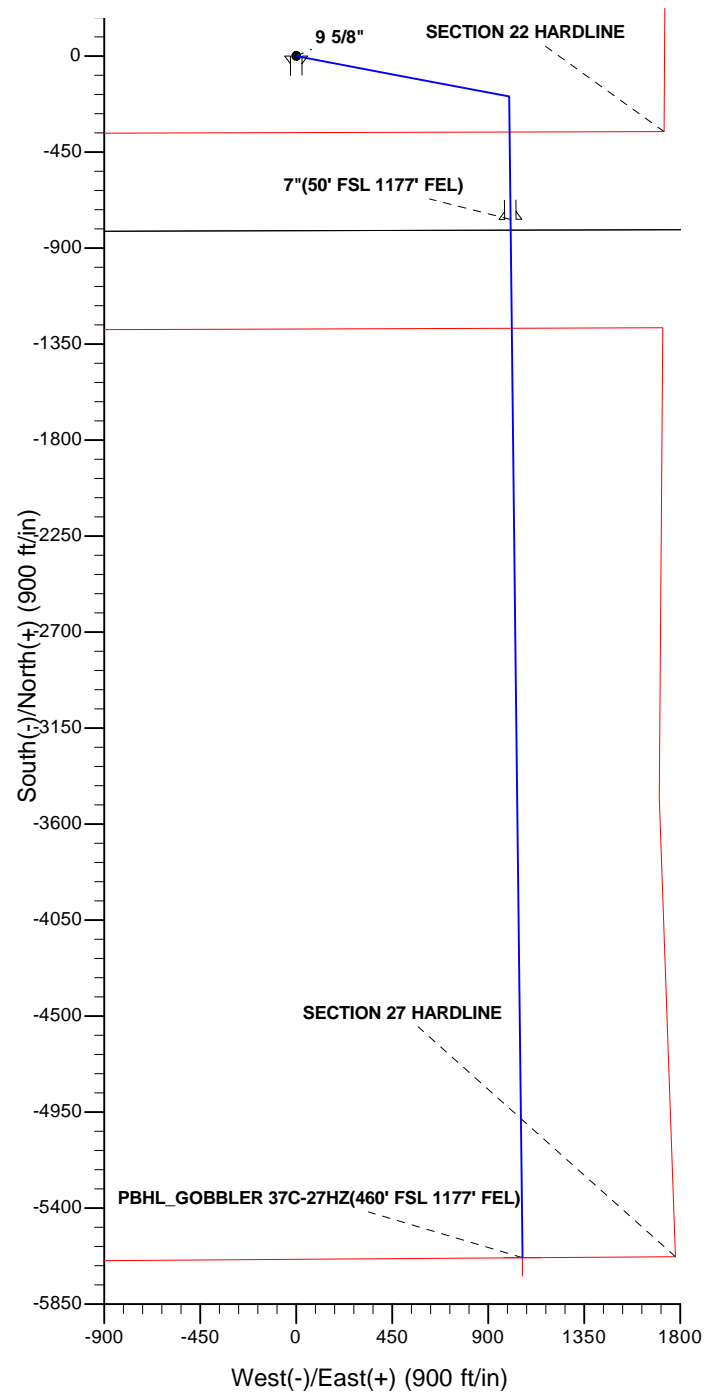




Project: COLORADO NORTHERN ZONE - 83  
 Site: GOBBLER 12-22HZ PAD  
 Well: GOBBLER 37C-27HZ  
 Wellbore: OH  
 Design: PLAN #1 PRELIMINARY



WELL DETAILS: GOBBLER 37C-27HZ									
GL 5054 & KB 17 @ 5071.00ft (ASSUMED)									
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude				
0.00	0.00	1286940.62	3206445.68	40.1186860	-104.7618050				
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	
1250.00	0.00	0.00	1250.00	0.00	0.00	0.00	0.00	0.00	
1806.97	11.14	100.69	1803.47	-10.01	53.04	2.00	100.69	19.66	
6506.64	11.14	100.69	6414.59	-178.44	945.23	0.00	0.00	350.35	
7063.61	0.00	0.00	6968.06	-188.45	998.27	2.00	180.00	370.00	
7967.73	90.41	179.34	7541.00	-765.49	1004.92	10.00	179.34	938.30	
12834.77	90.41	179.34	7506.00	-5632.09	1061.02	0.00	0.005731.16		PBHL_GOBBLER 37C-27HZ(460' FSL 1177' FEL)
FORMATION TOP DETAILS				CASING DETAILS					
TVDPath	MDPath	Formation	Inc	TVD	MD	Name	Size		
4196.00	4245.44	Parkman	11.14	1050.00	1050.00	9 5/8"	9.625		
4582.00	4638.85	Sussex	11.14	7541.00	7967.73	7"	7.000		
7173.00	7273.19	Sharon Springs	20.96						
7234.00	7340.16	Niobrara A	27.66						
7284.00	7398.25	Niobrara B	33.46						
7371.00	7510.50	Niobrara C	44.69						
7514.00	7786.95	Fort Hays	72.33						





# Scientific Drilling

## **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**GOBBLER 12-22HZ PAD**

**GOBBLER 37C-27HZ**

**OH**

**Plan: PLAN #1 PRELIMINARY**

## **Standard Planning Report**

**15 May, 2013**

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 37C-27HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Site:</b>	GOBBLER 12-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 37C-27HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1 PRELIMINARY		

<b>Project</b>	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	GOBBLER 12-22HZ PAD, SECTION SWSE 22-T2N R66W				
<b>Site Position:</b>	<b>Northing:</b>	1,286,949.10 usft	<b>Latitude:</b>	40.1187120	
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,206,325.91 usft	<b>Longitude:</b>	-104.7622330
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.48 °

<b>Well</b>	GOBBLER 37C-27HZ, 818' FSL 2187' FEL					
<b>Well Position</b>	<b>+N/-S</b>	-9.48 ft	<b>Northing:</b>	1,286,940.61 usft	<b>Latitude:</b>	40.1186860
	<b>+E/-W</b>	119.70 ft	<b>Easting:</b>	3,206,445.68 usft	<b>Longitude:</b>	-104.7618050
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	5,054.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2012	2013/05/15	8.64	66.73	52,681

<b>Design</b>	PLAN #1 PRELIMINARY			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	169.33

<b>Plan Sections</b>										
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	
1,250.00	0.00	0.00	1,250.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,806.97	11.14	100.69	1,803.47	-10.01	53.04	2.00	2.00	0.00	100.69	
6,506.64	11.14	100.69	6,414.59	-178.44	945.23	0.00	0.00	0.00	0.00	
7,063.61	0.00	0.00	6,968.06	-188.45	998.27	2.00	-2.00	0.00	180.00	
7,967.73	90.41	179.34	7,541.00	-765.49	1,004.92	10.00	10.00	19.84	179.34	
12,834.77	90.41	179.34	7,506.00	-5,632.09	1,061.02	0.00	0.00	0.00	0.00	PBHL_GOBBLER 37C

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 37C-27HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Site:</b>	GOBBLER 12-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 37C-27HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1 PRELIMINARY		

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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	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	0.00
900.00	0.00	0.00	900.00	0.00	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	0.00
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9 5/8"</b>										
1,100.00	0.00	0.00	1,100.00	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	0.00
1,250.00	0.00	0.00	1,250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>										
1,300.00	1.00	100.69	1,300.00	-0.08	0.43	0.16	2.00	2.00	2.00	0.00
1,400.00	3.00	100.69	1,399.93	-0.73	3.86	1.43	2.00	2.00	2.00	0.00
1,500.00	5.00	100.69	1,499.68	-2.02	10.71	3.97	2.00	2.00	2.00	0.00
1,600.00	7.00	100.69	1,599.13	-3.96	20.98	7.78	2.00	2.00	2.00	0.00
1,700.00	9.00	100.69	1,698.15	-6.54	34.66	12.85	2.00	2.00	2.00	0.00
1,800.00	11.00	100.69	1,796.63	-9.76	51.72	19.17	2.00	2.00	2.00	0.00
1,806.97	11.14	100.69	1,803.47	-10.01	53.04	19.66	2.00	2.00	2.00	0.00
<b>Start 4699.67 hold at 1806.97 MD</b>										
1,900.00	11.14	100.69	1,894.75	-13.35	70.70	26.20	0.00	0.00	0.00	0.00
2,000.00	11.14	100.69	1,992.86	-16.93	89.68	33.24	0.00	0.00	0.00	0.00
2,100.00	11.14	100.69	2,090.98	-20.51	108.67	40.28	0.00	0.00	0.00	0.00
2,200.00	11.14	100.69	2,189.09	-24.10	127.65	47.31	0.00	0.00	0.00	0.00
2,300.00	11.14	100.69	2,287.21	-27.68	146.63	54.35	0.00	0.00	0.00	0.00
2,400.00	11.14	100.69	2,385.33	-31.26	165.62	61.39	0.00	0.00	0.00	0.00
2,500.00	11.14	100.69	2,483.44	-34.85	184.60	68.42	0.00	0.00	0.00	0.00
2,600.00	11.14	100.69	2,581.56	-38.43	203.59	75.46	0.00	0.00	0.00	0.00
2,700.00	11.14	100.69	2,679.67	-42.02	222.57	82.49	0.00	0.00	0.00	0.00
2,800.00	11.14	100.69	2,777.79	-45.60	241.56	89.53	0.00	0.00	0.00	0.00
2,900.00	11.14	100.69	2,875.91	-49.18	260.54	96.57	0.00	0.00	0.00	0.00
3,000.00	11.14	100.69	2,974.02	-52.77	279.52	103.60	0.00	0.00	0.00	0.00
3,100.00	11.14	100.69	3,072.14	-56.35	298.51	110.64	0.00	0.00	0.00	0.00
3,200.00	11.14	100.69	3,170.25	-59.94	317.49	117.68	0.00	0.00	0.00	0.00
3,300.00	11.14	100.69	3,268.37	-63.52	336.48	124.71	0.00	0.00	0.00	0.00
3,400.00	11.14	100.69	3,366.49	-67.10	355.46	131.75	0.00	0.00	0.00	0.00
3,500.00	11.14	100.69	3,464.60	-70.69	374.45	138.79	0.00	0.00	0.00	0.00
3,600.00	11.14	100.69	3,562.72	-74.27	393.43	145.82	0.00	0.00	0.00	0.00
3,700.00	11.14	100.69	3,660.83	-77.85	412.41	152.86	0.00	0.00	0.00	0.00
3,800.00	11.14	100.69	3,758.95	-81.44	431.40	159.90	0.00	0.00	0.00	0.00
3,900.00	11.14	100.69	3,857.07	-85.02	450.38	166.93	0.00	0.00	0.00	0.00
4,000.00	11.14	100.69	3,955.18	-88.61	469.37	173.97	0.00	0.00	0.00	0.00
4,100.00	11.14	100.69	4,053.30	-92.19	488.35	181.00	0.00	0.00	0.00	0.00
4,200.00	11.14	100.69	4,151.41	-95.77	507.34	188.04	0.00	0.00	0.00	0.00
4,245.44	11.14	100.69	4,196.00	-97.40	515.96	191.24	0.00	0.00	0.00	0.00
<b>Sussex</b>										
4,300.00	11.14	100.69	4,249.53	-99.36	526.32	195.08	0.00	0.00	0.00	0.00
4,400.00	11.14	100.69	4,347.65	-102.94	545.30	202.11	0.00	0.00	0.00	0.00
4,500.00	11.14	100.69	4,445.76	-106.52	564.29	209.15	0.00	0.00	0.00	0.00

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 37C-27HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Site:</b>	GOBBLER 12-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 37C-27HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1 PRELIMINARY		

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)
4,600.00	11.14	100.69	4,543.88	-110.11	583.27	216.19	0.00	0.00	0.00
4,638.85	11.14	100.69	4,582.00	-111.50	590.65	218.92	0.00	0.00	0.00
<b>Sharon Springs</b>									
4,700.00	11.14	100.69	4,641.99	-113.69	602.26	223.22	0.00	0.00	0.00
4,800.00	11.14	100.69	4,740.11	-117.28	621.24	230.26	0.00	0.00	0.00
4,900.00	11.14	100.69	4,838.23	-120.86	640.23	237.30	0.00	0.00	0.00
5,000.00	11.14	100.69	4,936.34	-124.44	659.21	244.33	0.00	0.00	0.00
5,100.00	11.14	100.69	5,034.46	-128.03	678.19	251.37	0.00	0.00	0.00
5,200.00	11.14	100.69	5,132.57	-131.61	697.18	258.41	0.00	0.00	0.00
5,300.00	11.14	100.69	5,230.69	-135.19	716.16	265.44	0.00	0.00	0.00
5,400.00	11.14	100.69	5,328.81	-138.78	735.15	272.48	0.00	0.00	0.00
5,500.00	11.14	100.69	5,426.92	-142.36	754.13	279.51	0.00	0.00	0.00
5,600.00	11.14	100.69	5,525.04	-145.95	773.12	286.55	0.00	0.00	0.00
5,700.00	11.14	100.69	5,623.15	-149.53	792.10	293.59	0.00	0.00	0.00
5,800.00	11.14	100.69	5,721.27	-153.11	811.08	300.62	0.00	0.00	0.00
5,900.00	11.14	100.69	5,819.39	-156.70	830.07	307.66	0.00	0.00	0.00
6,000.00	11.14	100.69	5,917.50	-160.28	849.05	314.70	0.00	0.00	0.00
6,100.00	11.14	100.69	6,015.62	-163.87	868.04	321.73	0.00	0.00	0.00
6,200.00	11.14	100.69	6,113.73	-167.45	887.02	328.77	0.00	0.00	0.00
6,300.00	11.14	100.69	6,211.85	-171.03	906.01	335.81	0.00	0.00	0.00
6,400.00	11.14	100.69	6,309.97	-174.62	924.99	342.84	0.00	0.00	0.00
6,500.00	11.14	100.69	6,408.08	-178.20	943.97	349.88	0.00	0.00	0.00
6,506.64	11.14	100.69	6,414.59	-178.44	945.23	350.35	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
6,600.00	9.27	100.69	6,506.48	-181.51	961.49	356.37	2.00	-2.00	0.00
6,700.00	7.27	100.69	6,605.43	-184.18	975.63	361.61	2.00	-2.00	0.00
6,800.00	5.27	100.69	6,704.83	-186.20	986.36	365.59	2.00	-2.00	0.00
6,900.00	3.27	100.69	6,804.54	-187.58	993.68	368.30	2.00	-2.00	0.00
7,000.00	1.27	100.69	6,904.46	-188.32	997.58	369.75	2.00	-2.00	0.00
7,063.61	0.00	0.00	6,968.06	-188.45	998.27	370.00	2.00	-2.00	0.00
<b>Start DLS 10.00 TFO 179.34</b>									
7,100.00	3.64	179.34	7,004.43	-189.61	998.28	371.14	10.00	10.00	0.00
7,200.00	13.64	179.34	7,103.17	-204.61	998.46	385.92	10.00	10.00	0.00
7,273.19	20.96	179.34	7,173.00	-226.35	998.71	407.33	10.00	10.00	0.00
<b>Niobrara A</b>									
7,300.00	23.64	179.34	7,197.80	-236.53	998.82	417.35	10.00	10.00	0.00
7,340.16	27.66	179.34	7,234.00	-253.90	999.02	434.46	10.00	10.00	0.00
<b>Niobrara B</b>									
7,398.25	33.46	179.34	7,284.00	-283.42	999.36	463.54	10.00	10.00	0.00
<b>Niobrara C</b>									
7,400.00	33.64	179.34	7,285.46	-284.39	999.38	464.49	10.00	10.00	0.00
7,500.00	43.64	179.34	7,363.47	-346.75	1,000.09	525.90	10.00	10.00	0.00
7,510.50	44.69	179.34	7,371.00	-354.06	1,000.18	533.11	10.00	10.00	0.00
<b>Fort Hays</b>									
7,600.00	53.64	179.34	7,429.46	-421.71	1,000.96	599.73	10.00	10.00	0.00
7,700.00	63.64	179.34	7,481.44	-506.98	1,001.94	683.71	10.00	10.00	0.00
7,786.95	72.33	179.34	7,514.00	-587.51	1,002.87	763.02	10.00	10.00	0.00
<b>Formation 8</b>									
7,800.00	73.64	179.34	7,517.82	-599.99	1,003.01	775.31	10.00	10.00	0.00
7,900.00	83.64	179.34	7,537.49	-697.90	1,004.14	871.73	10.00	10.00	0.00
7,967.73	90.41	179.34	7,541.00	-765.49	1,004.92	938.30	10.00	10.00	0.00
<b>Start 4867.04 hold at 7967.73 MD - 7"(50' FSL 1177' FEL)</b>									
8,000.00	90.41	179.34	7,540.77	-797.76	1,005.29	970.08	0.00	0.00	0.00

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 37C-27HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Site:</b>	GOBBLER 12-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 37C-27HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1 PRELIMINARY		

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)
8,100.00	90.41	179.34	7,540.05	-897.75	1,006.45	1,068.56	0.00	0.00	0.00
8,200.00	90.41	179.34	7,539.33	-997.74	1,007.60	1,167.03	0.00	0.00	0.00
8,300.00	90.41	179.34	7,538.61	-1,097.73	1,008.75	1,265.51	0.00	0.00	0.00
8,400.00	90.41	179.34	7,537.89	-1,197.72	1,009.90	1,363.98	0.00	0.00	0.00
8,500.00	90.41	179.34	7,537.18	-1,297.72	1,011.06	1,462.46	0.00	0.00	0.00
8,600.00	90.41	179.34	7,536.46	-1,397.71	1,012.21	1,560.94	0.00	0.00	0.00
8,700.00	90.41	179.34	7,535.74	-1,497.70	1,013.36	1,659.41	0.00	0.00	0.00
8,800.00	90.41	179.34	7,535.02	-1,597.69	1,014.51	1,757.89	0.00	0.00	0.00
8,900.00	90.41	179.34	7,534.30	-1,697.68	1,015.67	1,856.36	0.00	0.00	0.00
9,000.00	90.41	179.34	7,533.58	-1,797.67	1,016.82	1,954.84	0.00	0.00	0.00
9,100.00	90.41	179.34	7,532.86	-1,897.66	1,017.97	2,053.31	0.00	0.00	0.00
9,200.00	90.41	179.34	7,532.14	-1,997.65	1,019.12	2,151.79	0.00	0.00	0.00
9,300.00	90.41	179.34	7,531.42	-2,097.64	1,020.28	2,250.27	0.00	0.00	0.00
9,400.00	90.41	179.34	7,530.70	-2,197.63	1,021.43	2,348.74	0.00	0.00	0.00
9,500.00	90.41	179.34	7,529.98	-2,297.62	1,022.58	2,447.22	0.00	0.00	0.00
9,600.00	90.41	179.34	7,529.26	-2,397.61	1,023.73	2,545.69	0.00	0.00	0.00
9,700.00	90.41	179.34	7,528.54	-2,497.60	1,024.89	2,644.17	0.00	0.00	0.00
9,800.00	90.41	179.34	7,527.83	-2,597.60	1,026.04	2,742.64	0.00	0.00	0.00
9,900.00	90.41	179.34	7,527.11	-2,697.59	1,027.19	2,841.12	0.00	0.00	0.00
10,000.00	90.41	179.34	7,526.39	-2,797.58	1,028.34	2,939.60	0.00	0.00	0.00
10,100.00	90.41	179.34	7,525.67	-2,897.57	1,029.50	3,038.07	0.00	0.00	0.00
10,200.00	90.41	179.34	7,524.95	-2,997.56	1,030.65	3,136.55	0.00	0.00	0.00
10,300.00	90.41	179.34	7,524.23	-3,097.55	1,031.80	3,235.02	0.00	0.00	0.00
10,400.00	90.41	179.34	7,523.51	-3,197.54	1,032.95	3,333.50	0.00	0.00	0.00
10,500.00	90.41	179.34	7,522.79	-3,297.53	1,034.11	3,431.97	0.00	0.00	0.00
10,600.00	90.41	179.34	7,522.07	-3,397.52	1,035.26	3,530.45	0.00	0.00	0.00
10,700.00	90.41	179.34	7,521.35	-3,497.51	1,036.41	3,628.93	0.00	0.00	0.00
10,800.00	90.41	179.34	7,520.63	-3,597.50	1,037.56	3,727.40	0.00	0.00	0.00
10,900.00	90.41	179.34	7,519.91	-3,697.49	1,038.72	3,825.88	0.00	0.00	0.00
11,000.00	90.41	179.34	7,519.20	-3,797.48	1,039.87	3,924.35	0.00	0.00	0.00
11,100.00	90.41	179.34	7,518.48	-3,897.48	1,041.02	4,022.83	0.00	0.00	0.00
11,200.00	90.41	179.34	7,517.76	-3,997.47	1,042.17	4,121.30	0.00	0.00	0.00
11,300.00	90.41	179.34	7,517.04	-4,097.46	1,043.33	4,219.78	0.00	0.00	0.00
11,400.00	90.41	179.34	7,516.32	-4,197.45	1,044.48	4,318.26	0.00	0.00	0.00
11,500.00	90.41	179.34	7,515.60	-4,297.44	1,045.63	4,416.73	0.00	0.00	0.00
11,600.00	90.41	179.34	7,514.88	-4,397.43	1,046.78	4,515.21	0.00	0.00	0.00
11,700.00	90.41	179.34	7,514.16	-4,497.42	1,047.94	4,613.68	0.00	0.00	0.00
11,800.00	90.41	179.34	7,513.44	-4,597.41	1,049.09	4,712.16	0.00	0.00	0.00
11,900.00	90.41	179.34	7,512.72	-4,697.40	1,050.24	4,810.63	0.00	0.00	0.00
12,000.00	90.41	179.34	7,512.00	-4,797.39	1,051.40	4,909.11	0.00	0.00	0.00
12,100.00	90.41	179.34	7,511.28	-4,897.38	1,052.55	5,007.59	0.00	0.00	0.00
12,200.00	90.41	179.34	7,510.57	-4,997.37	1,053.70	5,106.06	0.00	0.00	0.00
12,300.00	90.41	179.34	7,509.85	-5,097.36	1,054.85	5,204.54	0.00	0.00	0.00
12,400.00	90.41	179.34	7,509.13	-5,197.36	1,056.01	5,303.01	0.00	0.00	0.00
12,500.00	90.41	179.34	7,508.41	-5,297.35	1,057.16	5,401.49	0.00	0.00	0.00
12,600.00	90.41	179.34	7,507.69	-5,397.34	1,058.31	5,499.96	0.00	0.00	0.00
12,700.00	90.41	179.34	7,506.97	-5,497.33	1,059.46	5,598.44	0.00	0.00	0.00
12,800.00	90.41	179.34	7,506.25	-5,597.32	1,060.62	5,696.92	0.00	0.00	0.00
12,834.77	90.41	179.34	7,506.00	-5,632.09	1,061.02	5,731.16	0.00	0.00	0.00

TD at 12834.77 - PBHL\_GOBBLER 37C-27HZ(460' FSL 1177' FEL)

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 37C-27HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	GL 5054 & KB 17 @ 5071.00ft (ASSUMED)
<b>Site:</b>	GOBBLER 12-22HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 37C-27HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1 PRELIMINARY		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_GOBBLER 37C-2 - hit/miss target - Shape - plan hits target center - Point	0.00	0.00	7,506.00	-5,632.09	1,061.02	1,281,317.57	3,207,553.54	40.1032250	-104.7580120

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,050.00	1,050.00	9 5/8"	9.625	12.250	
7,967.73	7,541.00	7"(50' FSL 1177' FEL)	7.000	7.000	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,245.44	4,190.00	Sussex				
4,638.85	4,576.00	Sharon Springs				
7,273.19	7,167.00	Niobrara A				
7,340.16	7,228.00	Niobrara B				
7,398.25	7,278.00	Niobrara C				
7,510.50	7,365.00	Fort Hays				
7,786.95	7,508.00	Formation 8				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,250.00	1,250.00	0.00	0.00	Start Build 2.00	
1,806.97	1,803.47	-10.01	53.04	Start 4699.67 hold at 1806.97 MD	
6,506.64	6,414.59	-178.44	945.23	Start Drop -2.00	
7,063.61	6,968.06	-188.45	998.27	Start DLS 10.00 TFO 179.34	
7,967.73	7,541.00	-765.49	1,004.92	Start 4867.04 hold at 7967.73 MD	
12,834.77	7,506.00	-5,632.09	1,061.02	TD at 12834.77	