



# **Weatherford®**

## **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_GOBBLER 15-23HZ PAD**

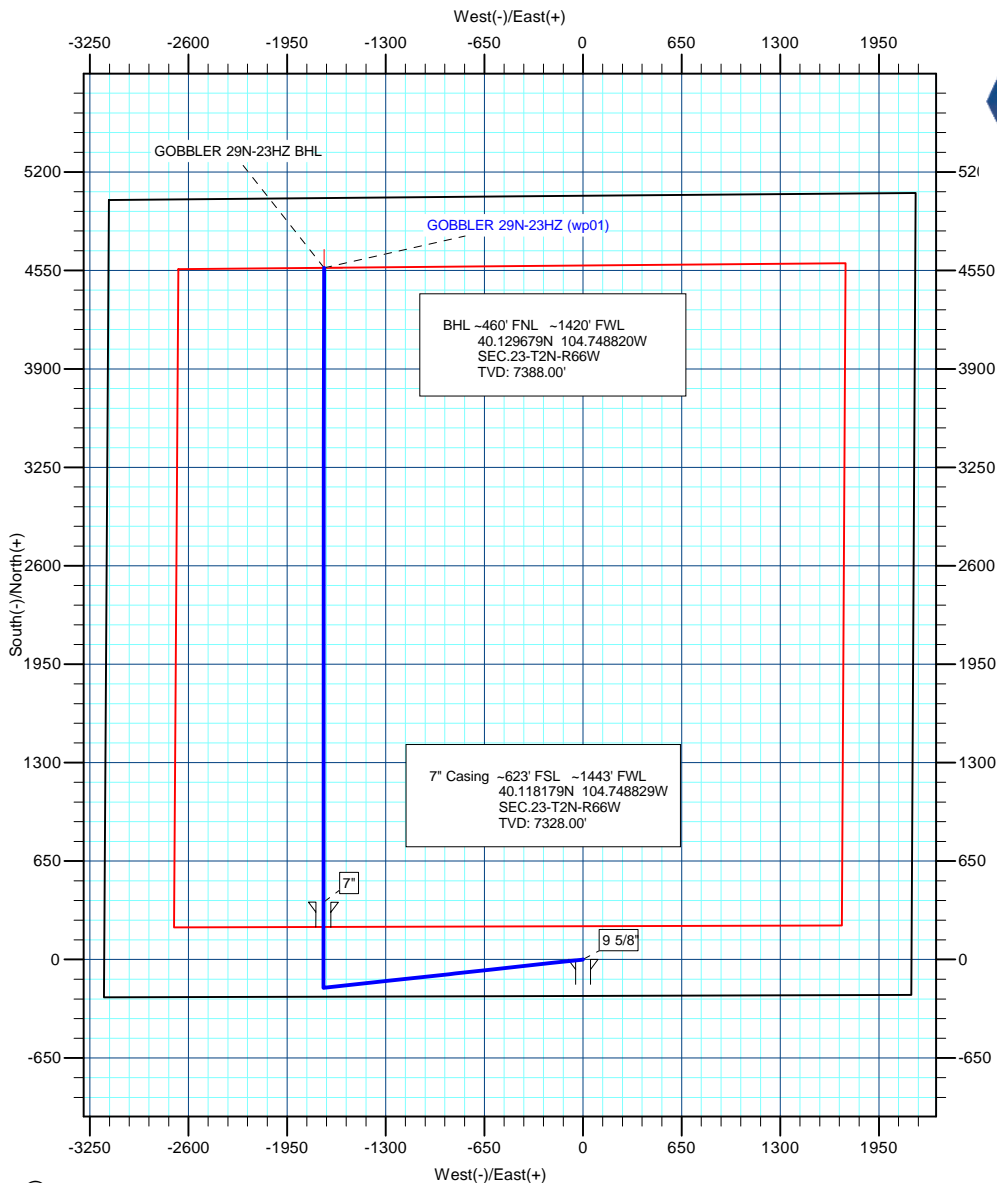
**GOBBLER 29N-23HZ**

**Wellbore #1**

**Plan: GOBBLER 29N-23HZ (wp01)**

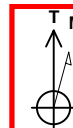
## **Standard Planning Report**

**26 February, 2013**



**Weatherford®**

Project: COLORADO NORTHERN ZONE - 83  
 Site: WELD GOBBLER 15-23HZ PAD  
 Well: GOBBLER 29N-23HZ  
 Wellbore: Wellbore #1  
 Section: Sec.23-T2N-R66W  
 SHL: 240' FSL 2165' FEL  
 Design: GOBBLER 29N-23HZ (wp01)  
 Latitude: 40.117142  
 Longitude: -104.742716  
 GL: 5101.00  
 KB: 17' RKB + GL @ 5118.00ft



Azimuths to True North  
 Magnetic North: 8.72°

Magnetic Field  
 Strength: 52902.2snT  
 Dip Angle: 66.80°  
 Date: 3/20/2012  
 Model: IGRF2010

#### WELL DETAILS: GOBBLER 29N-23HZ

+N/-S	+E/-W	Northing	Ground Level: Easting	5101.00 Latitude	Longitude	Slot
0.00	0.00	1286423.21	3211788.84	40.117142	-104.742716	

#### ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation
1167.00	1167.00	0.00	0.00	0.00	0.00	0.00	0.00	Start DLS 2.00 TFO 263.76
2290.21	2321.18	23.08	263.76	-24.92	-228.01	56.47	229.37	Start 3217.39 hold at 2321.18 MD
5250.00	5538.58	23.08	263.76	-162.00	-1482.00	367.03	1490.83	Start Drop -2.00
6373.21	6692.76	0.00	0.00	-186.92	-1710.01	423.50	1720.20	Start 381.89 hold at 6692.76 MD
6755.10	7074.65	0.00	0.00	-186.92	-1710.01	423.50	1720.20	Start Build 10.00
7328.00	7966.44	89.18	0.04	377.83	-1709.63	952.39	2284.95	Start 4189.65 hold at 7966.44 MD
7388.00	12156.09	89.18	0.04	4567.05	-1706.81	4875.56	6474.17	TD at 12156.09

#### WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

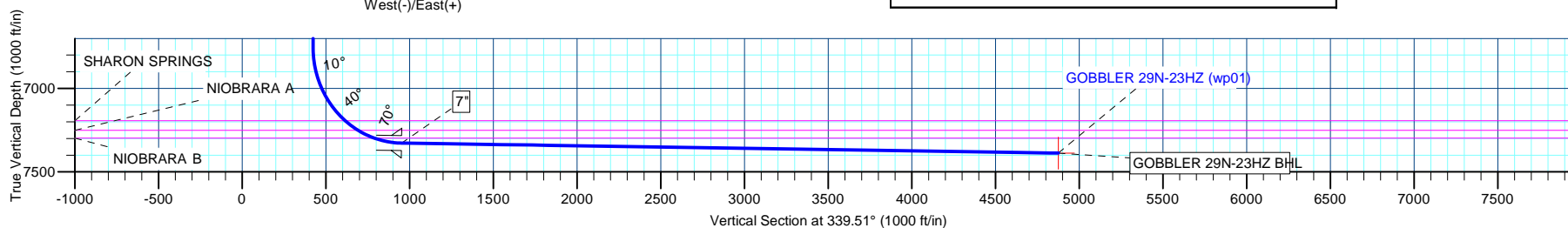
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
GOBBLER 29N-23HZ BHL	7388.00	4567.05	-1706.81	40.129679	-104.748820	Point

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4203.00	4400.45	PARKMAN
4606.00	4838.53	SUSSEX
7194.00	7574.63	SHARON SPRINGS
7251.00	7674.05	NIOBRARA A
7298.00	7788.23	NIOBRARA B

#### CASING DETAILS

TVD	MD	Name	Size
1017.00	1017.00	9 5/8"	9-5/8
7328.00	7966.44	7"	7



<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 29N-23HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Site:</b>	WELD_GOBBLER 15-23HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 29N-23HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	GOBBLER 29N-23HZ (wp01)		

<b>Project</b>	COLORADO NORTHERN ZONE - 83		
<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>	WELD_GOBBLER 15-23HZ PAD, Sec.23-T2N-R66W			
<b>Site Position:</b>		<b>Northing:</b>	1,286,424.35 usft	<b>Latitude:</b> 40.117143
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,211,878.89 usft	<b>Longitude:</b> -104.742394
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.49 °

<b>Well</b>	GOBBLER 29N-23HZ			
<b>Well Position</b>	<b>+N/-S</b>	-0.38 ft	<b>Northing:</b>	1,286,423.20 usft
	<b>+E/-W</b>	-90.05 ft	<b>Easting:</b>	3,211,788.84 usft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 5,101.00 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/20/2012	8.72	66.80	52,902

<b>Design</b>	GOBBLER 29N-23HZ (wp01)			
<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	339.51

<b>Plan Sections</b>										
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	
1,167.00	0.00	0.00	1,167.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,321.18	23.08	263.76	2,290.21	-24.92	-228.01	2.00	2.00	-8.34	263.76	
5,538.58	23.08	263.76	5,250.00	-162.00	-1,482.00	0.00	0.00	0.00	0.00	
6,692.76	0.00	0.00	6,373.21	-186.92	-1,710.01	2.00	-2.00	0.00	180.00	
7,074.65	0.00	0.00	6,755.10	-186.92	-1,710.01	0.00	0.00	0.00	0.00	
7,966.44	89.18	0.04	7,328.00	377.83	-1,709.63	10.00	10.00	0.00	0.04	
12,156.09	89.18	0.04	7,388.00	4,567.05	-1,706.81	0.00	0.00	0.00	0.00	GOBBLER 29N-23HZ



**Weatherford®**

**Anadarko Petroleum Corp**

Planning Report



<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 29N-23HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Site:</b>	WELD_GOBBLER 15-23HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 29N-23HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	GOBBLER 29N-23HZ (wp01)		

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
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,017.00	0.00	0.00	1,017.00	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
1,167.00	0.00	0.00	1,167.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start DLS 2.00 TFO 263.76</b>									
1,200.00	0.66	263.76	1,200.00	-0.02	-0.19	0.05	2.00	2.00	0.00
1,300.00	2.66	263.76	1,299.95	-0.34	-3.07	0.76	2.00	2.00	0.00
1,400.00	4.66	263.76	1,399.74	-1.03	-9.41	2.33	2.00	2.00	0.00
1,500.00	6.66	263.76	1,499.25	-2.10	-19.22	4.76	2.00	2.00	0.00
1,600.00	8.66	263.76	1,598.35	-3.55	-32.47	8.04	2.00	2.00	0.00
1,700.00	10.66	263.76	1,696.93	-5.37	-49.15	12.17	2.00	2.00	0.00
1,800.00	12.66	263.76	1,794.86	-7.57	-69.24	17.15	2.00	2.00	0.00
1,900.00	14.66	263.76	1,892.03	-10.13	-92.71	22.96	2.00	2.00	0.00
2,000.00	16.66	263.76	1,988.31	-13.07	-119.54	29.61	2.00	2.00	0.00
2,100.00	18.66	263.76	2,083.59	-16.36	-149.70	37.07	2.00	2.00	0.00
2,200.00	20.66	263.76	2,177.76	-20.02	-183.14	45.36	2.00	2.00	0.00
2,300.00	22.66	263.76	2,270.69	-24.03	-219.83	54.44	2.00	2.00	0.00
2,321.18	23.08	263.76	2,290.21	-24.92	-228.01	56.47	2.00	2.00	0.00
<b>Start 3217.39 hold at 2321.18 MD</b>									
2,400.00	23.08	263.76	2,362.72	-28.28	-258.73	64.08	0.00	0.00	0.00
2,500.00	23.08	263.76	2,454.71	-32.54	-297.71	73.73	0.00	0.00	0.00
2,600.00	23.08	263.76	2,546.70	-36.80	-336.68	83.38	0.00	0.00	0.00
2,700.00	23.08	263.76	2,638.70	-41.06	-375.66	93.03	0.00	0.00	0.00
2,800.00	23.08	263.76	2,730.69	-45.32	-414.64	102.69	0.00	0.00	0.00
2,900.00	23.08	263.76	2,822.69	-49.58	-453.61	112.34	0.00	0.00	0.00
3,000.00	23.08	263.76	2,914.68	-53.85	-492.59	121.99	0.00	0.00	0.00
3,100.00	23.08	263.76	3,006.67	-58.11	-531.56	131.64	0.00	0.00	0.00
3,200.00	23.08	263.76	3,098.67	-62.37	-570.54	141.30	0.00	0.00	0.00
3,300.00	23.08	263.76	3,190.66	-66.63	-609.51	150.95	0.00	0.00	0.00
3,400.00	23.08	263.76	3,282.65	-70.89	-648.49	160.60	0.00	0.00	0.00
3,500.00	23.08	263.76	3,374.65	-75.15	-687.46	170.25	0.00	0.00	0.00
3,600.00	23.08	263.76	3,466.64	-79.41	-726.44	179.91	0.00	0.00	0.00
3,700.00	23.08	263.76	3,558.63	-83.67	-765.41	189.56	0.00	0.00	0.00
3,800.00	23.08	263.76	3,650.63	-87.93	-804.39	199.21	0.00	0.00	0.00
3,900.00	23.08	263.76	3,742.62	-92.19	-843.36	208.86	0.00	0.00	0.00
4,000.00	23.08	263.76	3,834.61	-96.45	-882.34	218.52	0.00	0.00	0.00
4,100.00	23.08	263.76	3,926.61	-100.71	-921.31	228.17	0.00	0.00	0.00
4,200.00	23.08	263.76	4,018.60	-104.97	-960.29	237.82	0.00	0.00	0.00
4,300.00	23.08	263.76	4,110.59	-109.23	-999.26	247.47	0.00	0.00	0.00
4,400.00	23.08	263.76	4,202.59	-113.49	-1,038.24	257.13	0.00	0.00	0.00
4,400.45	23.08	263.76	4,203.00	-113.51	-1,038.41	257.17	0.00	0.00	0.00
<b>PARKMAN</b>									
4,500.00	23.08	263.76	4,294.58	-117.75	-1,077.21	266.78	0.00	0.00	0.00

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 29N-23HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Site:</b>	WELD_GOBBLER 15-23HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 29N-23HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	GOBBLER 29N-23HZ (wp01)		

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)
4,600.00	23.08	263.76	4,386.57	-122.01	-1,116.19	276.43	0.00	0.00	0.00
4,700.00	23.08	263.76	4,478.57	-126.27	-1,155.16	286.08	0.00	0.00	0.00
4,800.00	23.08	263.76	4,570.56	-130.53	-1,194.14	295.74	0.00	0.00	0.00
4,838.53	23.08	263.76	4,606.00	-132.17	-1,209.15	299.46	0.00	0.00	0.00
<b>SUSSEX</b>									
4,900.00	23.08	263.76	4,662.55	-134.79	-1,233.11	305.39	0.00	0.00	0.00
5,000.00	23.08	263.76	4,754.55	-139.05	-1,272.09	315.04	0.00	0.00	0.00
5,100.00	23.08	263.76	4,846.54	-143.31	-1,311.06	324.69	0.00	0.00	0.00
5,200.00	23.08	263.76	4,938.53	-147.58	-1,350.04	334.35	0.00	0.00	0.00
5,300.00	23.08	263.76	5,030.53	-151.84	-1,389.01	344.00	0.00	0.00	0.00
5,400.00	23.08	263.76	5,122.52	-156.10	-1,427.99	353.65	0.00	0.00	0.00
5,500.00	23.08	263.76	5,214.51	-160.36	-1,466.97	363.30	0.00	0.00	0.00
5,538.58	23.08	263.76	5,250.00	-162.00	-1,482.00	367.03	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,600.00	21.86	263.76	5,306.76	-164.55	-1,505.34	372.81	2.00	-2.00	0.00
5,700.00	19.86	263.76	5,400.20	-168.42	-1,540.72	381.57	2.00	-2.00	0.00
5,800.00	17.86	263.76	5,494.83	-171.93	-1,572.85	389.53	2.00	-2.00	0.00
5,900.00	15.86	263.76	5,590.53	-175.08	-1,601.67	396.67	2.00	-2.00	0.00
6,000.00	13.86	263.76	5,687.19	-177.87	-1,627.16	402.98	2.00	-2.00	0.00
6,100.00	11.86	263.76	5,784.67	-180.28	-1,649.27	408.45	2.00	-2.00	0.00
6,200.00	9.86	263.76	5,882.88	-182.33	-1,667.99	413.09	2.00	-2.00	0.00
6,300.00	7.86	263.76	5,981.68	-184.00	-1,683.29	416.88	2.00	-2.00	0.00
6,400.00	5.86	263.76	6,080.96	-185.30	-1,695.16	419.82	2.00	-2.00	0.00
6,500.00	3.86	263.76	6,180.60	-186.22	-1,703.57	421.90	2.00	-2.00	0.00
6,600.00	1.86	263.76	6,280.47	-186.76	-1,708.52	423.13	2.00	-2.00	0.00
6,692.76	0.00	0.00	6,373.21	-186.92	-1,710.01	423.50	2.00	-2.00	0.00
<b>Start 381.89 hold at 6692.76 MD</b>									
6,700.00	0.00	0.00	6,380.45	-186.92	-1,710.01	423.50	0.00	0.00	0.00
6,800.00	0.00	0.00	6,480.45	-186.92	-1,710.01	423.50	0.00	0.00	0.00
6,900.00	0.00	0.00	6,580.45	-186.92	-1,710.01	423.50	0.00	0.00	0.00
7,000.00	0.00	0.00	6,680.45	-186.92	-1,710.01	423.50	0.00	0.00	0.00
7,074.65	0.00	0.00	6,755.10	-186.92	-1,710.01	423.50	0.00	0.00	0.00
<b>Start Build 10.00</b>									
7,100.00	2.54	0.04	6,780.45	-186.36	-1,710.01	424.02	10.00	10.00	0.00
7,150.00	7.54	0.04	6,830.24	-181.98	-1,710.01	428.13	10.00	10.00	0.00
7,200.00	12.54	0.04	6,879.46	-173.27	-1,710.01	436.29	10.00	10.00	0.00
7,250.00	17.54	0.04	6,927.73	-160.30	-1,710.00	448.43	10.00	10.00	0.00
7,300.00	22.54	0.04	6,974.69	-143.18	-1,709.99	464.47	10.00	10.00	0.00
7,350.00	27.54	0.04	7,019.98	-122.02	-1,709.97	484.28	10.00	10.00	0.00
7,400.00	32.54	0.04	7,063.25	-97.00	-1,709.95	507.71	10.00	10.00	0.00
7,450.00	37.54	0.04	7,104.18	-68.31	-1,709.93	534.58	10.00	10.00	0.00
7,500.00	42.54	0.04	7,142.45	-36.16	-1,709.91	564.69	10.00	10.00	0.00
7,550.00	47.54	0.04	7,177.77	-0.79	-1,709.89	597.81	10.00	10.00	0.00
7,574.63	50.00	0.04	7,194.00	17.73	-1,709.88	615.15	10.00	10.00	0.00
<b>SHARON SPRINGS</b>									
7,600.00	52.54	0.04	7,209.87	37.52	-1,709.86	633.69	10.00	10.00	0.00
7,650.00	57.54	0.04	7,238.52	78.48	-1,709.84	672.05	10.00	10.00	0.00
7,674.05	59.94	0.04	7,251.00	99.04	-1,709.82	691.30	10.00	10.00	0.00
<b>NIORARA A</b>									
7,700.00	62.54	0.04	7,263.48	121.78	-1,709.81	712.60	10.00	10.00	0.00
7,750.00	67.54	0.04	7,284.58	167.10	-1,709.78	755.04	10.00	10.00	0.00
7,788.23	71.36	0.04	7,298.00	202.89	-1,709.75	788.56	10.00	10.00	0.00
<b>NIORARA B</b>									

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 29N-23HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Site:</b>	WELD_GOBBLER 15-23HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 29N-23HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	GOBBLER 29N-23HZ (wp01)		

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)	
7,800.00	72.54	0.04	7,301.65	214.08	-1,709.74	799.03	10.00	10.00	0.00	
7,850.00	77.54	0.04	7,314.55	262.37	-1,709.71	844.26	10.00	10.00	0.00	
7,900.00	82.54	0.04	7,323.20	311.60	-1,709.68	890.36	10.00	10.00	0.00	
7,950.00	87.54	0.04	7,327.53	361.39	-1,709.65	936.99	10.00	10.00	0.00	
7,966.44	89.18	0.04	7,328.00	377.83	-1,709.63	952.38	10.00	10.00	0.00	
Start 4189.65 hold at 7966.44 MD - 7"										
8,000.00	89.18	0.04	7,328.48	411.38	-1,709.61	983.81	0.00	0.00	0.00	
8,100.00	89.18	0.04	7,329.91	511.37	-1,709.54	1,077.45	0.00	0.00	0.00	
8,200.00	89.18	0.04	7,331.35	611.36	-1,709.48	1,171.09	0.00	0.00	0.00	
8,300.00	89.18	0.04	7,332.78	711.35	-1,709.41	1,264.73	0.00	0.00	0.00	
8,400.00	89.18	0.04	7,334.21	811.34	-1,709.34	1,358.37	0.00	0.00	0.00	
8,500.00	89.18	0.04	7,335.64	911.33	-1,709.27	1,452.01	0.00	0.00	0.00	
8,600.00	89.18	0.04	7,337.07	1,011.32	-1,709.21	1,545.65	0.00	0.00	0.00	
8,700.00	89.18	0.04	7,338.51	1,111.31	-1,709.14	1,639.29	0.00	0.00	0.00	
8,800.00	89.18	0.04	7,339.94	1,211.30	-1,709.07	1,732.93	0.00	0.00	0.00	
8,900.00	89.18	0.04	7,341.37	1,311.29	-1,709.00	1,826.57	0.00	0.00	0.00	
9,000.00	89.18	0.04	7,342.80	1,411.28	-1,708.94	1,920.21	0.00	0.00	0.00	
9,100.00	89.18	0.04	7,344.23	1,511.27	-1,708.87	2,013.85	0.00	0.00	0.00	
9,200.00	89.18	0.04	7,345.67	1,611.26	-1,708.80	2,107.49	0.00	0.00	0.00	
9,300.00	89.18	0.04	7,347.10	1,711.25	-1,708.73	2,201.13	0.00	0.00	0.00	
9,400.00	89.18	0.04	7,348.53	1,811.24	-1,708.67	2,294.77	0.00	0.00	0.00	
9,500.00	89.18	0.04	7,349.96	1,911.23	-1,708.60	2,388.41	0.00	0.00	0.00	
9,600.00	89.18	0.04	7,351.39	2,011.22	-1,708.53	2,482.04	0.00	0.00	0.00	
9,700.00	89.18	0.04	7,352.83	2,111.21	-1,708.47	2,575.68	0.00	0.00	0.00	
9,800.00	89.18	0.04	7,354.26	2,211.20	-1,708.40	2,669.32	0.00	0.00	0.00	
9,900.00	89.18	0.04	7,355.69	2,311.19	-1,708.33	2,762.96	0.00	0.00	0.00	
10,000.00	89.18	0.04	7,357.12	2,411.18	-1,708.26	2,856.60	0.00	0.00	0.00	
10,100.00	89.18	0.04	7,358.55	2,511.17	-1,708.20	2,950.24	0.00	0.00	0.00	
10,200.00	89.18	0.04	7,359.99	2,611.16	-1,708.13	3,043.88	0.00	0.00	0.00	
10,300.00	89.18	0.04	7,361.42	2,711.15	-1,708.06	3,137.52	0.00	0.00	0.00	
10,400.00	89.18	0.04	7,362.85	2,811.14	-1,707.99	3,231.16	0.00	0.00	0.00	
10,500.00	89.18	0.04	7,364.28	2,911.13	-1,707.93	3,324.80	0.00	0.00	0.00	
10,600.00	89.18	0.04	7,365.72	3,011.12	-1,707.86	3,418.44	0.00	0.00	0.00	
10,700.00	89.18	0.04	7,367.15	3,111.10	-1,707.79	3,512.08	0.00	0.00	0.00	
10,800.00	89.18	0.04	7,368.58	3,211.09	-1,707.72	3,605.72	0.00	0.00	0.00	
10,900.00	89.18	0.04	7,370.01	3,311.08	-1,707.66	3,699.36	0.00	0.00	0.00	
11,000.00	89.18	0.04	7,371.44	3,411.07	-1,707.59	3,793.00	0.00	0.00	0.00	
11,100.00	89.18	0.04	7,372.88	3,511.06	-1,707.52	3,886.64	0.00	0.00	0.00	
11,200.00	89.18	0.04	7,374.31	3,611.05	-1,707.45	3,980.28	0.00	0.00	0.00	
11,300.00	89.18	0.04	7,375.74	3,711.04	-1,707.39	4,073.92	0.00	0.00	0.00	
11,400.00	89.18	0.04	7,377.17	3,811.03	-1,707.32	4,167.56	0.00	0.00	0.00	
11,500.00	89.18	0.04	7,378.60	3,911.02	-1,707.25	4,261.20	0.00	0.00	0.00	
11,600.00	89.18	0.04	7,380.04	4,011.01	-1,707.18	4,354.84	0.00	0.00	0.00	
11,700.00	89.18	0.04	7,381.47	4,111.00	-1,707.12	4,448.48	0.00	0.00	0.00	
11,800.00	89.18	0.04	7,382.90	4,210.99	-1,707.05	4,542.12	0.00	0.00	0.00	
11,900.00	89.18	0.04	7,384.33	4,310.98	-1,706.98	4,635.76	0.00	0.00	0.00	
12,000.00	89.18	0.04	7,385.76	4,410.97	-1,706.91	4,729.40	0.00	0.00	0.00	
12,100.00	89.18	0.04	7,387.20	4,510.96	-1,706.85	4,823.04	0.00	0.00	0.00	
12,156.09	89.18	0.04	7,388.00	4,567.05	-1,706.81	4,875.56	0.00	0.00	0.00	
TD at 12156.09 - GOBBLER 29N-23HZ BHL										

<b>Database:</b>	edmp	<b>Local Co-ordinate Reference:</b>	Well GOBBLER 29N-23HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + GL @ 5118.00ft
<b>Site:</b>	WELD_GOBBLER 15-23HZ PAD	<b>North Reference:</b>	True
<b>Well:</b>	GOBBLER 29N-23HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	GOBBLER 29N-23HZ (wp01)		

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									
GOBBLER 29N-23HZ B	0.00	0.00	7,388.00	4,567.05	-1,706.81	1,290,975.50	3,210,043.09	40.129679	-104.748820
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,017.00	1,017.00	9 5/8"	9-5/8	12-1/4	
7,966.44	7,328.00	7"	7	8-3/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,400.45	4,203.00	PARKMAN		0.00	
4,838.53	4,606.00	SUSSEX		0.00	
7,574.63	7,194.00	SHARON SPRINGS		0.00	
7,674.05	7,251.00	NIOBRARA A		0.00	
7,788.23	7,298.00	NIOBRARA B		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,167.00	1,167.00	0.00	0.00	Start DLS 2.00 TFO 263.76
2,321.18	2,290.21	-24.92	-228.01	Start 3217.39 hold at 2321.18 MD
5,538.58	5,250.00	-162.00	-1,482.00	Start Drop -2.00
6,692.76	6,373.21	-186.92	-1,710.01	Start 381.89 hold at 6692.76 MD
7,074.65	6,755.10	-186.92	-1,710.01	Start Build 10.00
7,966.44	7,328.00	377.83	-1,709.63	Start 4189.65 hold at 7966.44 MD
12,156.09	7,388.00	4,567.05	-1,706.81	TD at 12156.09