



# **ANADARKO PETROLEUM CORP.**

**ANADARKO COLORADO NORTHERN ZONE NAD 83**

**WELD\_Reigle**

**REIGLE 25-4**

**REIGLE 25-4**

**Plan: REIGLE 25-4 (wp01)**

## **Standard Planning Report**

**30 September, 2010**





Project: ANADARKO COLORADO NORTHERN ZONE NAD 83  
 Site: WELD Reigle  
 Well: REIGLE 25-4  
 Wellbore: REIGLE 25-4  
 Section:  
 SHL:  
 Design: REIGLE 25-4 (wp01)  
 Latitude: 40° 10' 5.732 N  
 Longitude: 104° 40' 8.951 W  
 GL: 4858.0  
 KB: plat GL @ 4858.0ft



**Weatherford**



Azimuths to True North  
 Magnetic North: 8.85°

Magnetic Field  
 Strength: 53075.9nT  
 Dip Angle: 66.92°  
 Date: 9/30/2010  
 Model: BGGM2010

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4161.0	4179.0	PK
4513.0	4531.0	SX
6907.0	6925.0	NIO
7192.0	7210.0	CD
7279.0	7297.0	GH

#### CASING DETAILS

TVD	MD	Name	Size
700.0	700.0	9 5/8"	9-5/8

#### SECTION DETAILS

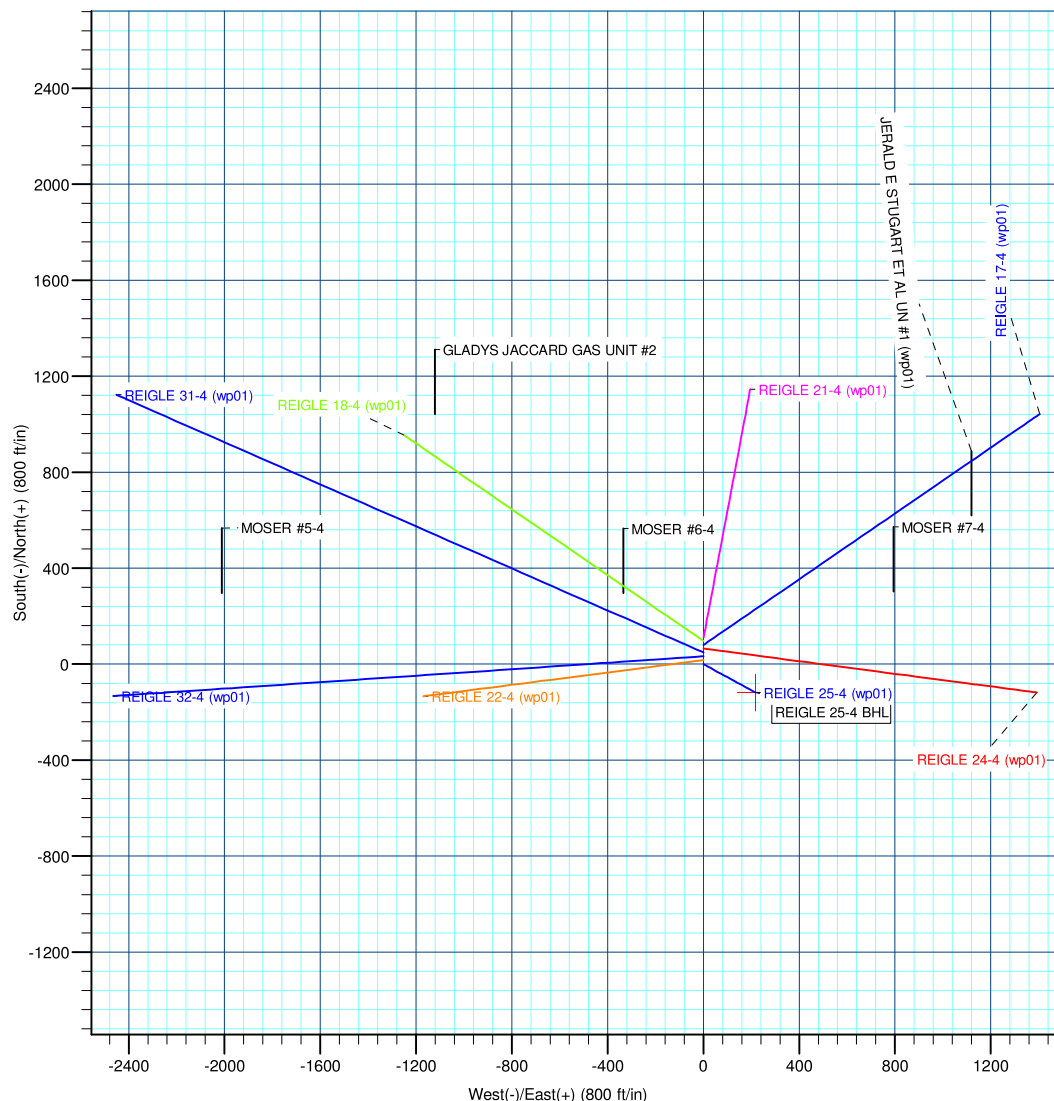
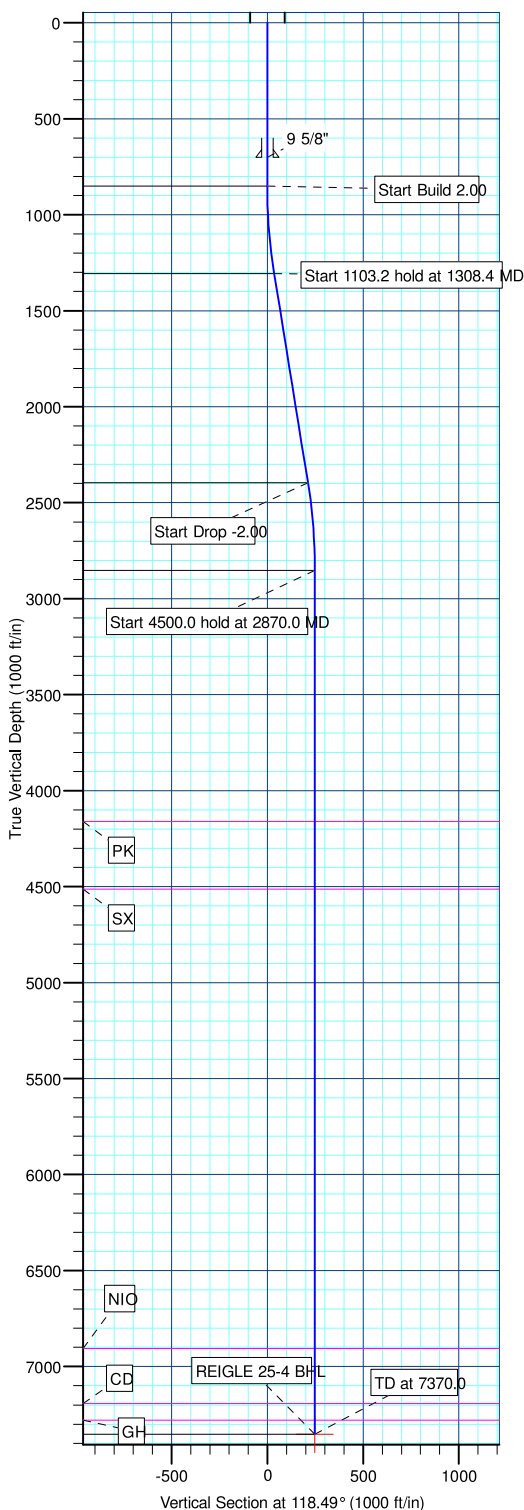
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1308.4	9.17	118.49	1306.4	-17.5	32.2	2.00	118.49	36.6	Start 1103.2 hold at 1308.4 MD
2411.6	9.17	118.49	2395.6	-101.3	186.7	0.00	0.00	212.4	Start Drop -2.00
2870.0	0.00	0.00	2852.0	-118.7	218.8	2.00	180.00	249.0	Start 4500.0 hold at 2870.0 MD
7370.0	0.00	0.00	7352.0	-118.7	218.8	0.00	0.00	249.0	TD at 7370.0

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
REIGLE 25-4 BHL	7352.0	-118.7	218.8	40° 10' 4.559 N	104° 40' 6.132 W	Point

#### WELL DETAILS: REIGLE 25-4

+N/-S	+E/-W	Northing	Ground Level: Easting	4858.0 Latitude	Longitude	Slot
0.0	0.0	1305227.53	3232187.08	40° 10' 5.732 N	104° 40' 8.951 W	



Plan: REIGLE 25-4 (wp01) (REIGLE 25-4/REIGLE 25-4)

Created By: Jason Daguitera Date: 17:39, September 30 2010

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REIGLE 25-4
<b>Company:</b>	ANADARKO PETROLEUM CORP.	<b>TVD Reference:</b>	plat GL @ 4858.0ft
<b>Project:</b>	ANADARKO COLORADO NORTHERN ZONE NAD 83	<b>MD Reference:</b>	plat GL @ 4858.0ft
<b>Site:</b>	WELD_Reigle	<b>North Reference:</b>	True
<b>Well:</b>	REIGLE 25-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	REIGLE 25-4		
<b>Design:</b>	REIGLE 25-4 (wp01)		

<b>Project</b>	ANADARKO COLORADO NORTHERN ZONE NAD 83, ROCKIES, ROCKIES		
<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_Reigle		
<b>Site Position:</b>		<b>Northing:</b>	1,305,307.68ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,232,187.17ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40° 10' 6.524 N
		<b>Longitude:</b>	104° 40' 8.940 W
		<b>Grid Convergence:</b>	0.54 °

<b>Well</b>	REIGLE 25-4		
<b>Well Position</b>	<b>+N/-S</b>	-80.2 ft	<b>Northing:</b>
	<b>+E/-W</b>	-0.8 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			40° 10' 5.732 N
			<b>Longitude:</b>
			104° 40' 8.951 W
			<b>Ground Level:</b>
			4,858.0ft

<b>Wellbore</b>	REIGLE 25-4				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2010	9/30/2010	8.85	66.92	53,076

<b>Design</b>	REIGLE 25-4 (wp01)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	118.49

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,308.4	9.17	118.49	1,306.4	-17.5	32.2	2.00	2.00	0.00	118.49	
2,411.6	9.17	118.49	2,395.6	-101.3	186.7	0.00	0.00	0.00	0.00	
2,870.0	0.00	0.00	2,852.0	-118.7	218.8	2.00	-2.00	0.00	180.00	
7,370.0	0.00	0.00	7,352.0	-118.7	218.8	0.00	0.00	0.00	0.00	REIGLE 25-4 BHL

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REIGLE 25-4
<b>Company:</b>	ANADARKO PETROLEUM CORP.	<b>TVD Reference:</b>	plat GL @ 4858.0ft
<b>Project:</b>	ANADARKO COLORADO NORTHERN ZONE NAD 83	<b>MD Reference:</b>	plat GL @ 4858.0ft
<b>Site:</b>	WELD_Reigle	<b>North Reference:</b>	True
<b>Well:</b>	REIGLE 25-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	REIGLE 25-4		
<b>Design:</b>	REIGLE 25-4 (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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>9 5/8"</b>									
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Start Build 2.00</b>									
850.0	0.00	0.00	850.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	1.00	118.49	900.0	-0.2	0.4	0.4	2.00	2.00	0.00
1,000.0	3.00	118.49	999.9	-1.9	3.5	3.9	2.00	2.00	0.00
1,100.0	5.00	118.49	1,099.7	-5.2	9.6	10.9	2.00	2.00	0.00
1,200.0	7.00	118.49	1,199.1	-10.2	18.8	21.4	2.00	2.00	0.00
1,300.0	9.00	118.49	1,298.2	-16.8	31.0	35.3	2.00	2.00	0.00
<b>Start 1103.2 hold at 1308.4 MD</b>									
1,308.4	9.17	118.49	1,306.4	-17.5	32.2	36.6	2.00	2.00	0.00
1,400.0	9.17	118.49	1,396.9	-24.4	45.0	51.2	0.00	0.00	0.00
1,500.0	9.17	118.49	1,495.6	-32.0	59.0	67.1	0.00	0.00	0.00
1,600.0	9.17	118.49	1,594.3	-39.6	73.0	83.1	0.00	0.00	0.00
1,700.0	9.17	118.49	1,693.0	-47.2	87.0	99.0	0.00	0.00	0.00
1,800.0	9.17	118.49	1,791.8	-54.8	101.0	114.9	0.00	0.00	0.00
1,900.0	9.17	118.49	1,890.5	-62.4	115.0	130.9	0.00	0.00	0.00
2,000.0	9.17	118.49	1,989.2	-70.0	129.0	146.8	0.00	0.00	0.00
2,100.0	9.17	118.49	2,087.9	-77.6	143.0	162.7	0.00	0.00	0.00
2,200.0	9.17	118.49	2,186.7	-85.2	157.0	178.7	0.00	0.00	0.00
2,300.0	9.17	118.49	2,285.4	-92.8	171.0	194.6	0.00	0.00	0.00
2,400.0	9.17	118.49	2,384.1	-100.4	185.0	210.5	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
2,411.6	9.17	118.49	2,395.6	-101.3	186.7	212.4	0.00	0.00	0.00
2,500.0	7.40	118.49	2,483.0	-107.4	197.8	225.1	2.00	-2.00	0.00
2,600.0	5.40	118.49	2,582.4	-112.7	207.6	236.3	2.00	-2.00	0.00
2,700.0	3.40	118.49	2,682.1	-116.3	214.4	243.9	2.00	-2.00	0.00
2,800.0	1.40	118.49	2,782.0	-118.3	218.1	248.1	2.00	-2.00	0.00
<b>Start 4500.0 hold at 2870.0 MD</b>									
2,870.0	0.00	0.00	2,852.0	-118.7	218.8	249.0	2.00	-2.00	0.00
2,900.0	0.00	0.00	2,882.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,000.0	0.00	0.00	2,982.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,082.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,182.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,282.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,382.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,482.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,582.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,682.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,782.0	-118.7	218.8	249.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,882.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,000.0	0.00	0.00	3,982.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,082.0	-118.7	218.8	249.0	0.00	0.00	0.00
<b>PK</b>									

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REIGLE 25-4
<b>Company:</b>	ANADARKO PETROLEUM CORP.	<b>TVD Reference:</b>	plat GL @ 4858.0ft
<b>Project:</b>	ANADARKO COLORADO NORTHERN ZONE NAD 83	<b>MD Reference:</b>	plat GL @ 4858.0ft
<b>Site:</b>	WELD_Reigle	<b>North Reference:</b>	True
<b>Well:</b>	REIGLE 25-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	REIGLE 25-4		
<b>Design:</b>	REIGLE 25-4 (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)
4,179.0	0.00	0.00	4,161.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,182.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,282.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,382.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,482.0	-118.7	218.8	249.0	0.00	0.00	0.00
<b>SX</b>									
4,531.0	0.00	0.00	4,513.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,582.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,682.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,782.0	-118.7	218.8	249.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,882.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,982.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,082.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,182.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,282.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,382.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,482.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,582.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,682.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,782.0	-118.7	218.8	249.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,882.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,982.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,082.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,182.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,282.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,382.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,482.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,582.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,682.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,782.0	-118.7	218.8	249.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,882.0	-118.7	218.8	249.0	0.00	0.00	0.00
<b>NIO</b>									
6,925.0	0.00	0.00	6,907.0	-118.7	218.8	249.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,982.0	-118.7	218.8	249.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,082.0	-118.7	218.8	249.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,182.0	-118.7	218.8	249.0	0.00	0.00	0.00
<b>CD</b>									
7,210.0	0.00	0.00	7,192.0	-118.7	218.8	249.0	0.00	0.00	0.00
<b>GH</b>									
7,297.0	0.00	0.00	7,279.0	-118.7	218.8	249.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,282.0	-118.7	218.8	249.0	0.00	0.00	0.00
<b>TD at 7370.0</b>									
7,370.0	0.00	0.00	7,352.0	-118.7	218.8	249.0	0.00	0.00	0.00

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REIGLE 25-4
<b>Company:</b>	ANADARKO PETROLEUM CORP.	<b>TVD Reference:</b>	plat GL @ 4858.0ft
<b>Project:</b>	ANADARKO COLORADO NORTHERN ZONE NAD 83	<b>MD Reference:</b>	plat GL @ 4858.0ft
<b>Site:</b>	WELD_Reigle	<b>North Reference:</b>	True
<b>Well:</b>	REIGLE 25-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	REIGLE 25-4		
<b>Design:</b>	REIGLE 25-4 (wp01)		

#### Design Targets

##### Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- Shape									
REIGLE 25-4 BHL	0.00	0.00	7,352.0	-118.7	218.8	1,305,110.83	3,232,407.01	40° 10' 4.559 N	104° 40' 6.132 W
- plan hits target center									
- Point									

#### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
700.0	700.0	9 5/8"	9-5/8	12-1/4

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,531.0	4,513.0	SX			
4,179.0	4,161.0	PK			
6,925.0	6,907.0	NIO			
7,210.0	7,192.0	CD			
7,297.0	7,279.0	GH			

#### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
850.0	850.0	0.0	0.0	Start Build 2.00
1,308.4	1,306.4	-17.5	32.2	Start 1103.2 hold at 1308.4 MD
2,411.6	2,395.6	-101.3	186.7	Start Drop -2.00
2,870.0	2,852.0	-118.7	218.8	Start 4500.0 hold at 2870.0 MD
7,370.0	7,352.0	-118.7	218.8	TD at 7370.0