



ANADARKO PETROLEUM CORP.

ANADARKO COLORADO NORTHERN ZONE NAD 83

WELD_Reigle

REIGLE 32-4

REIGLE 32-4

Plan: REIGLE 32-4 (wp01)

Standard Planning Report

30 September, 2010

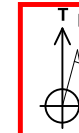




Project: ANADARKO COLORADO NORTHERN ZONE NAD 83
 Site: WELD_Reigle
 Well: REIGLE 32-4
 Wellbore: REIGLE 32-4
 Section:
 SHL:
 Design: REIGLE 32-4 (wp01)
 Latitude: 40° 10' 6.049 N
 Longitude: 104° 40' 8.947 W
 GL: 4860.0
 KB: plat GL @ 4860.0ft



Weatherford®



Azimuths to True North
 Magnetic North: 8.85°

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

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4161.0	4501.6	PK
4513.0	4891.2	SX
6907.0	7432.4	NIO
7192.0	7717.4	CD
7279.0	7804.4	GH

CASING DETAILS

TVD	MD	Name	Size
700.0	702.1	9 5/8"	9-5/8

SECTION DETAILS

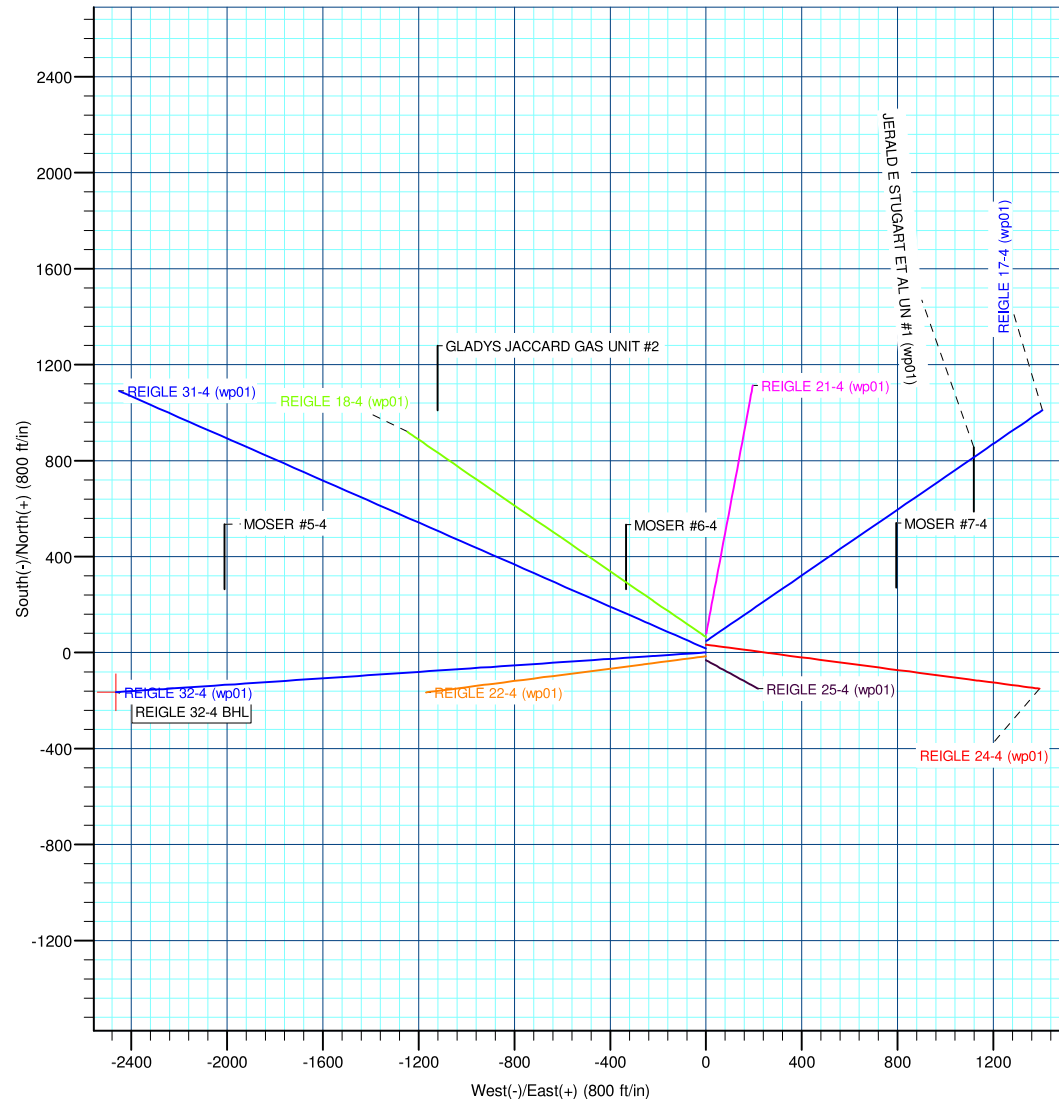
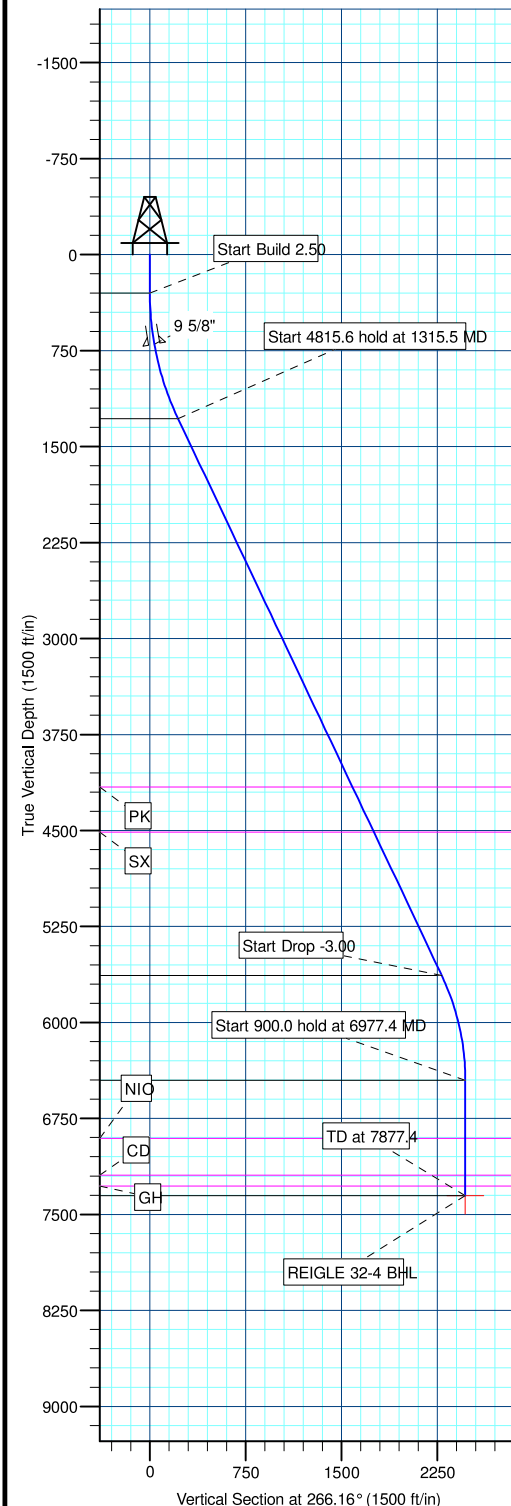
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.50
1315.5	25.39	266.16	1282.6	-14.8	-220.8	2.50	266.16	221.3	Start 4815.6 hold at 1315.5 MD
6131.1	25.39	266.16	5633.2	-152.9	-2280.9	0.00	0.00	2286.0	Start Drop -3.00
6977.4	0.00	0.00	6452.0	-165.3	-2464.9	3.00	180.00	2470.4	Start 900.0 hold at 6977.4 MD
7877.4	0.00	0.00	7352.0	-165.3	-2464.9	0.00	0.00	2470.4	TD at 7877.4

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
REIGLE 32-4 BHL	7352.0	-165.3	-2464.9	40° 10' 4.415 N	104° 40' 40.699 W	Point

WELL DETAILS: REIGLE 32-4

+N/-S	+E/-W	Northing	Ground Level: Easting	4860.0 Latitude	Longitude	Slot
0.0	0.0	1305259.58	3232187.06	40° 10' 6.049 N	104° 40' 8.947 W	



Plan: REIGLE 32-4 (wp01) (REIGLE 32-4/REIGLE 32-4)

Created By: Jason Daguitera Date: 17:48, September 30 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REIGLE 32-4
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	plat GL @ 4860.0ft
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4860.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 32-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 32-4		
Design:	REIGLE 32-4 (wp01)		

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

Site		WELD_Reigle			
Site Position:		Northing:	1,305,307.68ft	Latitude:	40° 10' 6.524 N
From:	Lat/Long	Easting:	3,232,187.17ft	Longitude:	104° 40' 8.940 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.54 °

Well	REIGLE 32-4					
Well Position	+N/-S	-48.1ft	Northing:	1,305,259.58 ft	Latitude:	40° 10' 6.049 N
	+E/-W	-0.6 ft	Easting:	3,232,187.06 ft	Longitude:	104° 40' 8.947 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,860.0ft

Wellbore	REIGLE 32-4				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	9/30/2010	8.85	66.92	53,076

Design	REIGLE 32-4 (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	266.16

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,315.5	25.39	266.16	1,282.6	-14.8	-220.8	2.50	2.50	0.00	266.16	
6,131.1	25.39	266.16	5,633.2	-152.9	-2,280.9	0.00	0.00	0.00	0.00	
6,977.4	0.00	0.00	6,452.0	-165.3	-2,464.9	3.00	-3.00	0.00	180.00	
7,877.4	0.00	0.00	7,352.0	-165.3	-2,464.9	0.00	0.00	0.00	0.00	REIGLE 32-4 BHL

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REIGLE 32-4
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	plat GL @ 4860.0ft
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4860.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 32-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 32-4		
Design:	REIGLE 32-4 (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
Start Build 2.50									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.50	266.16	400.0	-0.1	-2.2	2.2	2.50	2.50	0.00
500.0	5.00	266.16	499.7	-0.6	-8.7	8.7	2.50	2.50	0.00
600.0	7.50	266.16	599.1	-1.3	-19.6	19.6	2.50	2.50	0.00
700.0	10.00	266.16	698.0	-2.3	-34.7	34.8	2.50	2.50	0.00
9 5/8"									
702.1	10.05	266.16	700.0	-2.4	-35.1	35.2	2.50	2.50	0.00
800.0	12.50	266.16	796.0	-3.6	-54.2	54.3	2.50	2.50	0.00
900.0	15.00	266.16	893.2	-5.2	-77.9	78.1	2.50	2.50	0.00
1,000.0	17.50	266.16	989.2	-7.1	-105.8	106.1	2.50	2.50	0.00
1,100.0	20.00	266.16	1,083.9	-9.2	-137.9	138.2	2.50	2.50	0.00
1,200.0	22.50	266.16	1,177.0	-11.7	-174.1	174.5	2.50	2.50	0.00
1,300.0	25.00	266.16	1,268.6	-14.4	-214.2	214.7	2.50	2.50	0.00
Start 4815.6 hold at 1315.5 MD									
1,315.5	25.39	266.16	1,282.6	-14.8	-220.8	221.3	2.50	2.50	0.00
1,400.0	25.39	266.16	1,358.9	-17.2	-257.0	257.6	0.00	0.00	0.00
1,500.0	25.39	266.16	1,449.3	-20.1	-299.8	300.4	0.00	0.00	0.00
1,600.0	25.39	266.16	1,539.6	-23.0	-342.5	343.3	0.00	0.00	0.00
1,700.0	25.39	266.16	1,630.0	-25.8	-385.3	386.2	0.00	0.00	0.00
1,800.0	25.39	266.16	1,720.3	-28.7	-428.1	429.0	0.00	0.00	0.00
1,900.0	25.39	266.16	1,810.6	-31.6	-470.9	471.9	0.00	0.00	0.00
2,000.0	25.39	266.16	1,901.0	-34.4	-513.6	514.8	0.00	0.00	0.00
2,100.0	25.39	266.16	1,991.3	-37.3	-556.4	557.7	0.00	0.00	0.00
2,200.0	25.39	266.16	2,081.7	-40.2	-599.2	600.5	0.00	0.00	0.00
2,300.0	25.39	266.16	2,172.0	-43.0	-642.0	643.4	0.00	0.00	0.00
2,400.0	25.39	266.16	2,262.4	-45.9	-684.8	686.3	0.00	0.00	0.00
2,500.0	25.39	266.16	2,352.7	-48.8	-727.5	729.2	0.00	0.00	0.00
2,600.0	25.39	266.16	2,443.0	-51.6	-770.3	772.0	0.00	0.00	0.00
2,700.0	25.39	266.16	2,533.4	-54.5	-813.1	814.9	0.00	0.00	0.00
2,800.0	25.39	266.16	2,623.7	-57.4	-855.9	857.8	0.00	0.00	0.00
2,900.0	25.39	266.16	2,714.1	-60.2	-898.6	900.7	0.00	0.00	0.00
3,000.0	25.39	266.16	2,804.4	-63.1	-941.4	943.5	0.00	0.00	0.00
3,100.0	25.39	266.16	2,894.8	-66.0	-984.2	986.4	0.00	0.00	0.00
3,200.0	25.39	266.16	2,985.1	-68.9	-1,027.0	1,029.3	0.00	0.00	0.00
3,300.0	25.39	266.16	3,075.4	-71.7	-1,069.8	1,072.2	0.00	0.00	0.00
3,400.0	25.39	266.16	3,165.8	-74.6	-1,112.5	1,115.0	0.00	0.00	0.00
3,500.0	25.39	266.16	3,256.1	-77.5	-1,155.3	1,157.9	0.00	0.00	0.00
3,600.0	25.39	266.16	3,346.5	-80.3	-1,198.1	1,200.8	0.00	0.00	0.00
3,700.0	25.39	266.16	3,436.8	-83.2	-1,240.9	1,243.7	0.00	0.00	0.00
3,800.0	25.39	266.16	3,527.2	-86.1	-1,283.6	1,286.5	0.00	0.00	0.00
3,900.0	25.39	266.16	3,617.5	-88.9	-1,326.4	1,329.4	0.00	0.00	0.00
4,000.0	25.39	266.16	3,707.8	-91.8	-1,369.2	1,372.3	0.00	0.00	0.00
4,100.0	25.39	266.16	3,798.2	-94.7	-1,412.0	1,415.1	0.00	0.00	0.00
4,200.0	25.39	266.16	3,888.5	-97.5	-1,454.8	1,458.0	0.00	0.00	0.00
4,300.0	25.39	266.16	3,978.9	-100.4	-1,497.5	1,500.9	0.00	0.00	0.00
4,400.0	25.39	266.16	4,069.2	-103.3	-1,540.3	1,543.8	0.00	0.00	0.00
4,500.0	25.39	266.16	4,159.6	-106.1	-1,583.1	1,586.6	0.00	0.00	0.00
PK									
4,501.6	25.39	266.16	4,161.0	-106.2	-1,583.8	1,587.3	0.00	0.00	0.00

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Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4860.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 32-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 32-4		
Design:	REIGLE 32-4 (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)
4,600.0	25.39	266.16	4,249.9	-109.0	-1,625.9	1,629.5	0.00	0.00	0.00
4,700.0	25.39	266.16	4,340.2	-111.9	-1,668.6	1,672.4	0.00	0.00	0.00
4,800.0	25.39	266.16	4,430.6	-114.7	-1,711.4	1,715.3	0.00	0.00	0.00
SX									
4,891.2	25.39	266.16	4,513.0	-117.4	-1,750.4	1,754.4	0.00	0.00	0.00
4,900.0	25.39	266.16	4,520.9	-117.6	-1,754.2	1,758.1	0.00	0.00	0.00
5,000.0	25.39	266.16	4,611.3	-120.5	-1,797.0	1,801.0	0.00	0.00	0.00
5,100.0	25.39	266.16	4,701.6	-123.3	-1,839.8	1,843.9	0.00	0.00	0.00
5,200.0	25.39	266.16	4,792.0	-126.2	-1,882.5	1,886.8	0.00	0.00	0.00
5,300.0	25.39	266.16	4,882.3	-129.1	-1,925.3	1,929.6	0.00	0.00	0.00
5,400.0	25.39	266.16	4,972.6	-131.9	-1,968.1	1,972.5	0.00	0.00	0.00
5,500.0	25.39	266.16	5,063.0	-134.8	-2,010.9	2,015.4	0.00	0.00	0.00
5,600.0	25.39	266.16	5,153.3	-137.7	-2,053.6	2,058.3	0.00	0.00	0.00
5,700.0	25.39	266.16	5,243.7	-140.6	-2,096.4	2,101.1	0.00	0.00	0.00
5,800.0	25.39	266.16	5,334.0	-143.4	-2,139.2	2,144.0	0.00	0.00	0.00
5,900.0	25.39	266.16	5,424.4	-146.3	-2,182.0	2,186.9	0.00	0.00	0.00
6,000.0	25.39	266.16	5,514.7	-149.2	-2,224.8	2,229.8	0.00	0.00	0.00
6,100.0	25.39	266.16	5,605.0	-152.0	-2,267.5	2,272.6	0.00	0.00	0.00
Start Drop -3.00									
6,131.1	25.39	266.16	5,633.2	-152.9	-2,280.9	2,286.0	0.00	0.00	0.00
6,200.0	23.32	266.16	5,695.9	-154.8	-2,309.2	2,314.4	3.00	-3.00	0.00
6,300.0	20.32	266.16	5,788.7	-157.3	-2,346.3	2,351.5	3.00	-3.00	0.00
6,400.0	17.32	266.16	5,883.4	-159.5	-2,378.5	2,383.8	3.00	-3.00	0.00
6,500.0	14.32	266.16	5,979.6	-161.3	-2,405.7	2,411.1	3.00	-3.00	0.00
6,600.0	11.32	266.16	6,077.1	-162.8	-2,427.8	2,433.2	3.00	-3.00	0.00
6,700.0	8.32	266.16	6,175.6	-163.9	-2,444.8	2,450.3	3.00	-3.00	0.00
6,800.0	5.32	266.16	6,274.9	-164.7	-2,456.7	2,462.2	3.00	-3.00	0.00
6,900.0	2.32	266.16	6,374.6	-165.1	-2,463.3	2,468.8	3.00	-3.00	0.00
Start 900.0 hold at 6977.4 MD									
6,977.4	0.00	0.00	6,452.0	-165.3	-2,464.9	2,470.4	3.00	-3.00	0.00
7,000.0	0.00	0.00	6,474.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,100.0	0.00	0.00	6,574.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,200.0	0.00	0.00	6,674.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,300.0	0.00	0.00	6,774.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,400.0	0.00	0.00	6,874.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
NIO									
7,432.4	0.00	0.00	6,907.0	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,500.0	0.00	0.00	6,974.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,074.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,700.0	0.00	0.00	7,174.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
CD									
7,717.4	0.00	0.00	7,192.0	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,274.6	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
GH									
7,804.4	0.00	0.00	7,279.0	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00
TD at 7877.4									
7,877.4	0.00	0.00	7,352.0	-165.3	-2,464.9	2,470.4	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REIGLE 32-4
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	plat GL @ 4860.0ft
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4860.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 32-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 32-4		
Design:	REIGLE 32-4 (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 32-4 BHL	0.00	0.00	7,352.0	-165.3	-2,464.9	1,305,071.24	3,229,723.85	40° 10' 4.415 N	104° 40' 40.699 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
702.1	700.0	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,432.4	6,907.0	NIO			
4,501.6	4,161.0	PK			
7,717.4	7,192.0	CD			
4,891.2	4,513.0	SX			
7,804.4	7,279.0	GH			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	Start Build 2.50
1,315.5	1,282.6	-14.8	-220.8	Start 4815.6 hold at 1315.5 MD
6,131.1	5,633.2	-152.9	-2,280.9	Start Drop -3.00
6,977.4	6,452.0	-165.3	-2,464.9	Start 900.0 hold at 6977.4 MD
7,877.4	7,352.0	-165.3	-2,464.9	TD at 7877.4