



ANADARKO PETROLEUM CORP.

ANADARKO COLORADO NORTHERN ZONE NAD 83

WELD_Reigle

REIGLE 24-4

REIGLE 24-4

Plan: REIGLE 24-4 (wp01)

Standard Planning Report

30 September, 2010





Project: ANADARKO COLORADO NORTHERN ZONE NAD 83
 Site: WELD_Reigle
 Well: REIGLE 24-4
 Wellbore: REIGLE 24-4
 Section:
 SHL:
 Design: REIGLE 24-4 (wp01)
 Latitude: 40° 10' 6.366 N
 Longitude: 104° 40' 8.944 W
 GL: 4859.0
 KB: plat GL @ 4859.0ft



Weatherford



Azimuths to True North
 Magnetic North: 8.85°

Magnetic Field
 Strength: 53076.0snT
 Dip Angle: 66.92°
 Date: 9/30/2010
 Model: BGGM2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4161.0	4409.5	PK
4513.0	4777.0	SX
6907.0	7176.4	NIO
7192.0	7461.4	CD
7279.0	7548.4	GH

CASING DETAILS

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

SECTION DETAILS

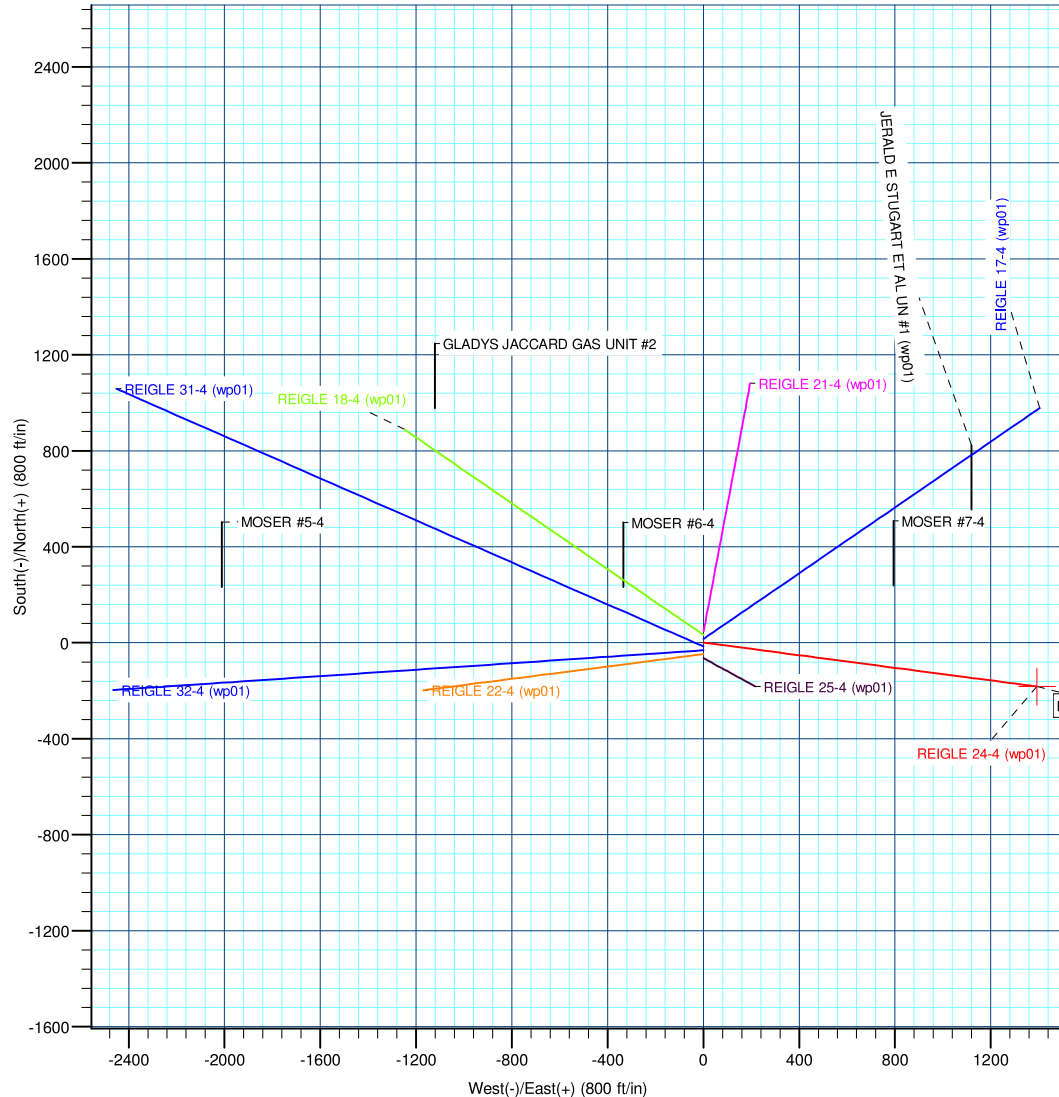
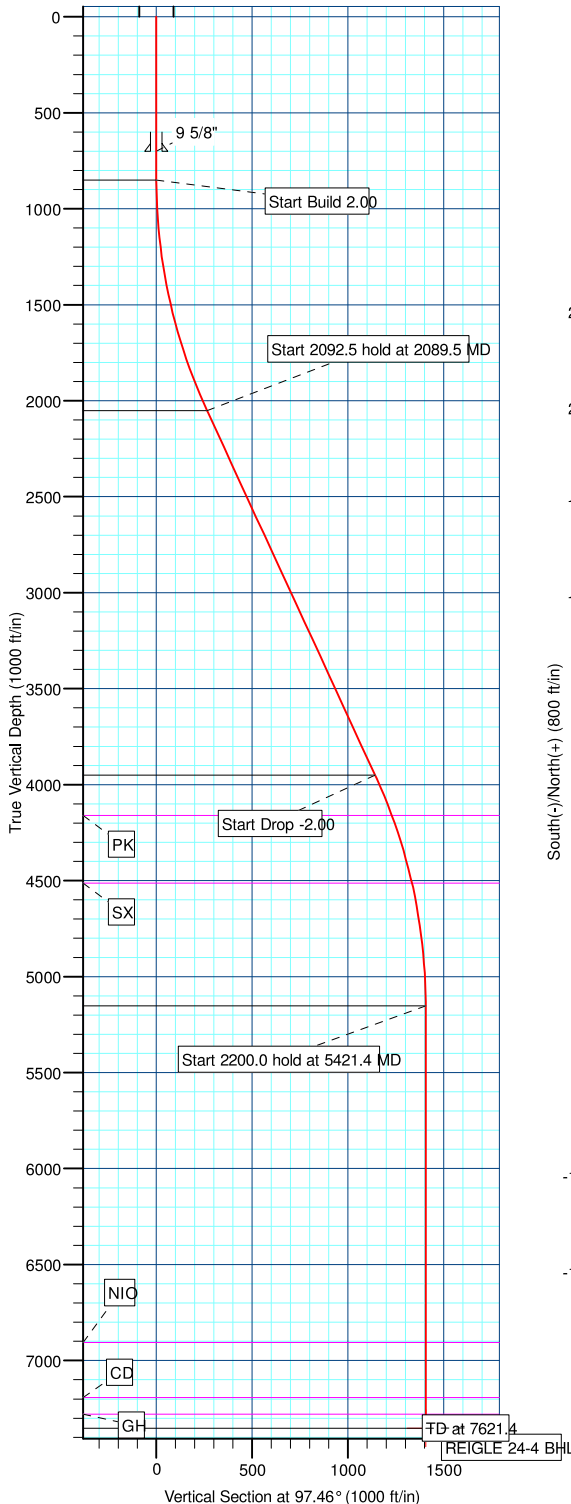
MD	Inc	Azi	TVD	+N-S	+E-W	DLeg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
2089.5	24.79	97.46	2051.2	-34.3	261.7	2.00	97.46	264.0	Start 2092.5 hold at 2089.5 MD
4182.0	24.79	97.46	3950.8	-148.2	1131.7	0.00	0.00	1141.3	Start Drop -2.00
5421.4	0.00	0.00	5152.0	-182.5	1393.4	2.00	180.00	1405.3	Start 2200.0 hold at 5421.4 MD
7621.4	0.00	0.00	7352.0	-182.5	1393.4	0.00	0.00	1405.3	TD at 7621.4

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

Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape
REIGLE 24-4 BHL	7352.0	-182.5	1393.4	40° 10' 4.562 N	104° 39' 50.994 W	Point

WELL DETAILS: REIGLE 24-4

+N-S	+E-W	Northing	Ground Level: Easting	4859.0 Latitude	Longitude	Slot
0.0	0.0	1305291.64	3232187.04	40° 10' 6.366 N	104° 40' 8.944 W	



Plan: REIGLE 24-4 (wp01) (REIGLE 24-4/REIGLE 24-4)

Created By: Jason Daguitera Date: 17:34, September 30 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REIGLE 24-4
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	plat GL @ 4859.0ft
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4859.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 24-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 24-4		
Design:	REIGLE 24-4 (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 24-4					
Well Position	+N/-S	-16.0 ft	Northing:	1,305,291.64 ft	Latitude:	40° 10' 6.366 N
	+E/-W	-0.3 ft	Easting:	3,232,187.04 ft	Longitude:	104° 40' 8.944 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,859.0 ft

Wellbore	REIGLE 24-4				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	9/30/2010	8.85	66.92	53,076

Design	REIGLE 24-4 (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	97.46

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	
850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,089.5	24.79	97.46	2,051.2	-34.3	261.7	2.00	2.00	0.00	97.46	
4,182.0	24.79	97.46	3,950.8	-148.2	1,131.7	0.00	0.00	0.00	0.00	
5,421.4	0.00	0.00	5,152.0	-182.5	1,393.4	2.00	-2.00	0.00	180.00	
7,621.4	0.00	0.00	7,352.0	-182.5	1,393.4	0.00	0.00	0.00	0.00	REIGLE 24-4 BHL

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REIGLE 24-4
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	plat GL @ 4859.0ft
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4859.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 24-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 24-4		
Design:	REIGLE 24-4 (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
9 5/8"									
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
Start Build 2.00									
850.0	0.00	0.00	850.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	1.00	97.46	900.0	-0.1	0.4	0.4	2.00	2.00	0.00
1,000.0	3.00	97.46	999.9	-0.5	3.9	3.9	2.00	2.00	0.00
1,100.0	5.00	97.46	1,099.7	-1.4	10.8	10.9	2.00	2.00	0.00
1,200.0	7.00	97.46	1,199.1	-2.8	21.2	21.4	2.00	2.00	0.00
1,300.0	9.00	97.46	1,298.2	-4.6	35.0	35.3	2.00	2.00	0.00
1,400.0	11.00	97.46	1,396.6	-6.8	52.2	52.6	2.00	2.00	0.00
1,500.0	13.00	97.46	1,494.4	-9.5	72.8	73.4	2.00	2.00	0.00
1,600.0	15.00	97.46	1,591.5	-12.7	96.8	97.6	2.00	2.00	0.00
1,700.0	17.00	97.46	1,687.6	-16.3	124.1	125.2	2.00	2.00	0.00
1,800.0	19.00	97.46	1,782.7	-20.3	154.8	156.1	2.00	2.00	0.00
1,900.0	21.00	97.46	1,876.6	-24.7	188.7	190.3	2.00	2.00	0.00
2,000.0	23.00	97.46	1,969.4	-29.6	225.8	227.7	2.00	2.00	0.00
Start 2092.5 hold at 2089.5 MD									
2,089.5	24.79	97.46	2,051.2	-34.3	261.7	264.0	2.00	2.00	0.00
2,100.0	24.79	97.46	2,060.7	-34.8	266.1	268.4	0.00	0.00	0.00
2,200.0	24.79	97.46	2,151.5	-40.3	307.7	310.3	0.00	0.00	0.00
2,300.0	24.79	97.46	2,242.3	-45.7	349.3	352.2	0.00	0.00	0.00
2,400.0	24.79	97.46	2,333.1	-51.2	390.8	394.2	0.00	0.00	0.00
2,500.0	24.79	97.46	2,423.9	-56.6	432.4	436.1	0.00	0.00	0.00
2,600.0	24.79	97.46	2,514.6	-62.1	474.0	478.0	0.00	0.00	0.00
2,700.0	24.79	97.46	2,605.4	-67.5	515.6	520.0	0.00	0.00	0.00
2,800.0	24.79	97.46	2,696.2	-73.0	557.1	561.9	0.00	0.00	0.00
2,900.0	24.79	97.46	2,787.0	-78.4	598.7	603.8	0.00	0.00	0.00
3,000.0	24.79	97.46	2,877.8	-83.8	640.3	645.7	0.00	0.00	0.00
3,100.0	24.79	97.46	2,968.6	-89.3	681.9	687.7	0.00	0.00	0.00
3,200.0	24.79	97.46	3,059.4	-94.7	723.4	729.6	0.00	0.00	0.00
3,300.0	24.79	97.46	3,150.1	-100.2	765.0	771.5	0.00	0.00	0.00
3,400.0	24.79	97.46	3,240.9	-105.6	806.6	813.5	0.00	0.00	0.00
3,500.0	24.79	97.46	3,331.7	-111.1	848.2	855.4	0.00	0.00	0.00
3,600.0	24.79	97.46	3,422.5	-116.5	889.7	897.3	0.00	0.00	0.00
3,700.0	24.79	97.46	3,513.3	-121.9	931.3	939.2	0.00	0.00	0.00
3,800.0	24.79	97.46	3,604.1	-127.4	972.9	981.2	0.00	0.00	0.00
3,900.0	24.79	97.46	3,694.9	-132.8	1,014.4	1,023.1	0.00	0.00	0.00
4,000.0	24.79	97.46	3,785.6	-138.3	1,056.0	1,065.0	0.00	0.00	0.00
4,100.0	24.79	97.46	3,876.4	-143.7	1,097.6	1,107.0	0.00	0.00	0.00
Start Drop -2.00									
4,182.0	24.79	97.46	3,950.8	-148.2	1,131.7	1,141.3	0.00	0.00	0.00
4,200.0	24.43	97.46	3,967.2	-149.2	1,139.1	1,148.8	2.00	-2.00	0.00
4,300.0	22.43	97.46	4,059.0	-154.3	1,178.5	1,188.6	2.00	-2.00	0.00
4,400.0	20.43	97.46	4,152.1	-159.1	1,214.8	1,225.1	2.00	-2.00	0.00
PK									

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Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4859.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 24-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 24-4		
Design:	REIGLE 24-4 (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)	
4,409.5	20.24	97.46	4,161.0	-159.5	1,218.0	1,228.4	2.00	-2.00	0.00	
4,500.0	18.43	97.46	4,246.4	-163.4	1,247.7	1,258.4	2.00	-2.00	0.00	
4,600.0	16.43	97.46	4,341.8	-167.3	1,277.4	1,288.3	2.00	-2.00	0.00	
4,700.0	14.43	97.46	4,438.2	-170.7	1,303.8	1,314.9	2.00	-2.00	0.00	
SX										
4,777.0	12.89	97.46	4,513.0	-173.1	1,321.8	1,333.1	2.00	-2.00	0.00	
4,800.0	12.43	97.46	4,535.4	-173.7	1,326.8	1,338.2	2.00	-2.00	0.00	
4,900.0	10.43	97.46	4,633.4	-176.3	1,346.5	1,358.0	2.00	-2.00	0.00	
5,000.0	8.43	97.46	4,732.1	-178.4	1,362.7	1,374.4	2.00	-2.00	0.00	
5,100.0	6.43	97.46	4,831.2	-180.1	1,375.5	1,387.3	2.00	-2.00	0.00	
5,200.0	4.43	97.46	4,930.8	-181.3	1,384.9	1,396.8	2.00	-2.00	0.00	
5,300.0	2.43	97.46	5,030.6	-182.1	1,390.9	1,402.7	2.00	-2.00	0.00	
5,400.0	0.43	97.46	5,130.6	-182.4	1,393.3	1,405.2	2.00	-2.00	0.00	
Start 2200.0 hold at 5421.4 MD										
5,421.4	0.00	0.00	5,152.0	-182.5	1,393.4	1,405.3	2.00	-2.00	0.00	
5,500.0	0.00	0.00	5,230.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,330.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,430.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,530.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,630.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,730.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,100.0	0.00	0.00	5,830.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,200.0	0.00	0.00	5,930.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,030.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,130.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,230.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,330.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,430.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,530.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,630.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,730.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,830.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
NIO										
7,176.4	0.00	0.00	6,907.0	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,930.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,030.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,130.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
CD										
7,461.4	0.00	0.00	7,192.0	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,230.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
GH										
7,548.4	0.00	0.00	7,279.0	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,330.6	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	
TD at 7621.4										
7,621.4	0.00	0.00	7,352.0	-182.5	1,393.4	1,405.3	0.00	0.00	0.00	

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well REIGLE 24-4
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	plat GL @ 4859.0ft
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	plat GL @ 4859.0ft
Site:	WELD_Reigle	North Reference:	True
Well:	REIGLE 24-4	Survey Calculation Method:	Minimum Curvature
Wellbore:	REIGLE 24-4		
Design:	REIGLE 24-4 (wp01)		

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
REIGLE 24-4 BHL - plan hits target center - Point	0.00	0.00	7,352.0	-182.5	1,393.4	1,305,122.25	3,233,582.10	40° 10' 4.562 N	104° 39' 50.994 W

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 (°)
4,777.0	4,513.0	SX			
7,461.4	7,192.0	CD			
4,409.5	4,161.0	PK			
7,176.4	6,907.0	NIO			
7,548.4	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
2,089.5	2,051.2	-34.3	261.7	Start 2092.5 hold at 2089.5 MD
4,182.0	3,950.8	-148.2	1,131.7	Start Drop -2.00
5,421.4	5,152.0	-182.5	1,393.4	Start 2200.0 hold at 5421.4 MD
7,621.4	7,352.0	-182.5	1,393.4	TD at 7621.4