



ANADARKO PETROLEUM CORP.

ANADARKO COLORADO NORTHERN ZONE NAD 83

WELD_Denver

DENVER 25-18

DENVER 25-18

Plan: DENVER 25-18 (wp02)

Standard Planning Report

06 October, 2010





Project: ANADARKO COLORADO NORTHERN ZONE NAD 83
 Site: WELD Denver
 Well: DENVER 25-18
 Wellbore: DENVER 25-18
 Section:
 SHL:
 Design: DENVER 25-18 (wp02)
 Latitude: 40° 2' 49.826 N
 Longitude: 104° 48' 47.999 W
 GL: 4935.0
 KB: WELL @ 4935.0ft (Original Well Elev)



Weatherford®



Azimuths to True North
 Magnetic North: 8.92°
 Magnetic Field
 Strength: 52995.7nT
 Dip Angle: 66.79°
 Date: 9/29/2010
 Model: BGGM2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3975.0	4268.5	PK Depth
4661.0	5025.3	SX Depth
7125.0	7590.3	NIO Depth
7485.0	7950.3	CD Depth
7577.0	8042.3	GH Depth
7935.0	8400.3	J Depth

CASING DETAILS

TVD	MD	Name	Size
960.0	966.0	9 5/8"	9-5/8

SECTION DETAILS

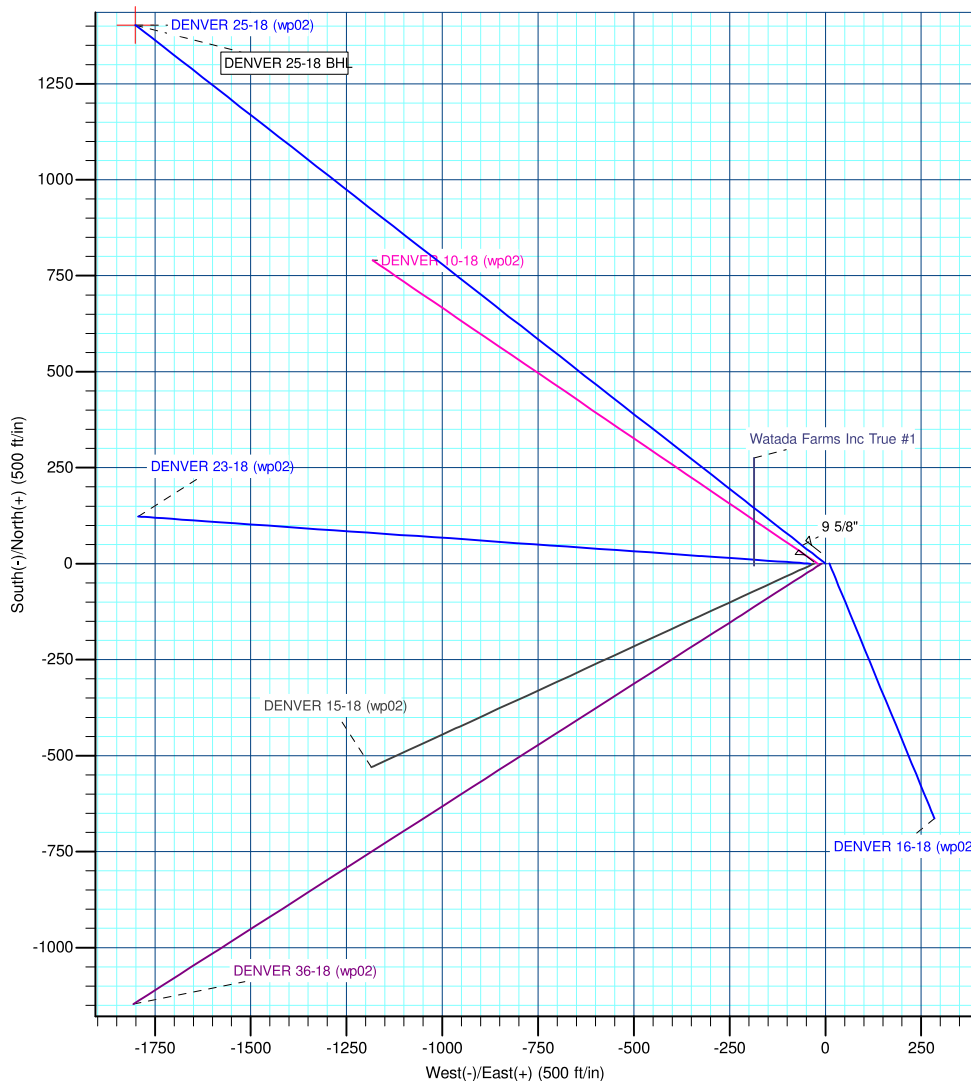
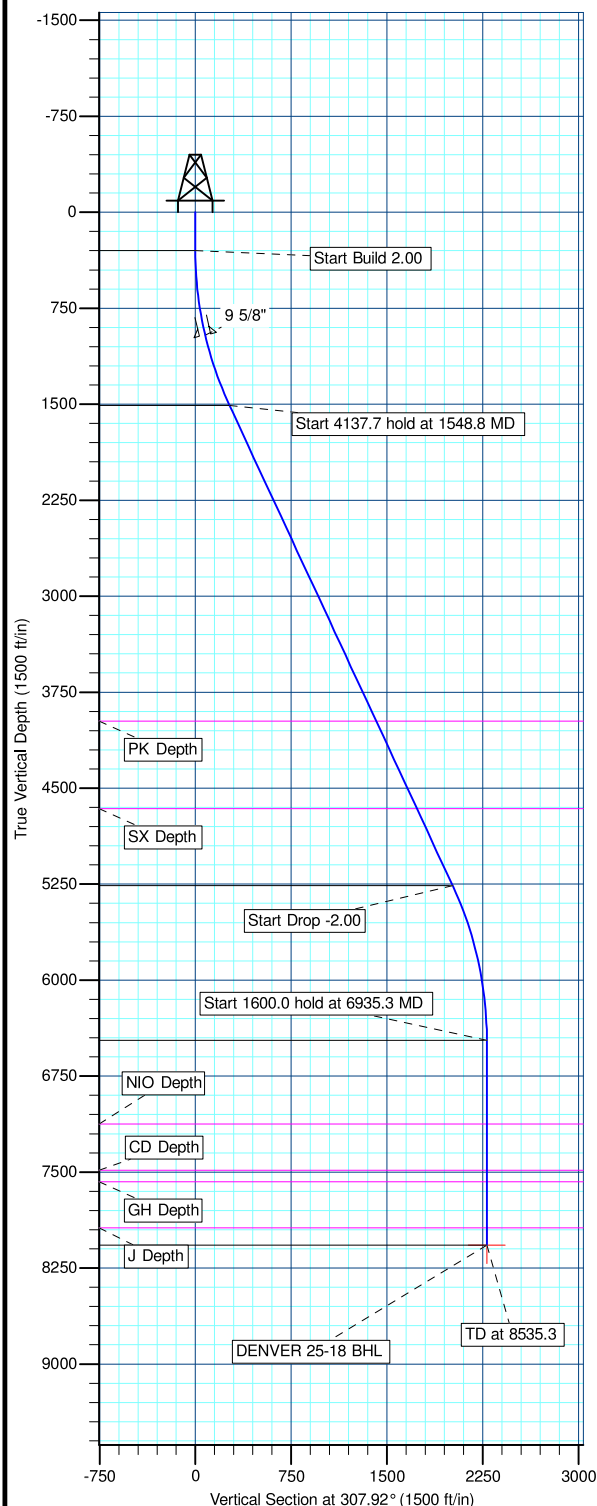
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1548.8	24.98	307.92	1509.6	164.6	-211.3	2.00	307.92	267.9	Start 4137.7 hold at 1548.8 MD
5686.5	24.98	307.92	5260.4	1238.3	-1589.6	0.00	0.00	2014.9	Start Drop -2.00
6935.3	0.00	0.00	6470.0	1402.9	-1800.9	2.00	180.00	2282.8	Start 1600.0 hold at 6935.3 MD
8535.3	0.00	0.00	8070.0	1402.9	-1800.9	0.00	0.00	2282.8	TD at 8535.3

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

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
DENVER 25-18 BHL	8070.0	1402.9	-1800.9	40° 3' 3.690 N	104° 49' 11.158 W	Point

WELL DETAILS: DENVER 25-18

+N/-S	+E/-W	Northing	Ground Level: Easting	4935.0 Latitude	104° 48' 47.999 W Longitude	Slot
0.0	0.0	1260775.43	3192237.24	40° 2' 49.826 N		



Plan: DENVER 25-18 (wp02) (DENVER 25-18/DENVER 25-18)

Created By: Jason Daguitera Date: 16:18, October 06 2010

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well DENVER 25-18
Company:	ANADARKO PETROLEUM CORP.	TVD Reference:	WELL @ 4935.0ft (Original Well Elev)
Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4935.0ft (Original Well Elev)
Site:	WELD_Denver	North Reference:	True
Well:	DENVER 25-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	DENVER 25-18		
Design:	DENVER 25-18 (wp02)		

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_Denver			
Site Position:		Northing:	1,260,775.65 ft	Latitude: 40° 2' 49.830 N
From:	Lat/Long	Easting:	3,192,216.80 ft	Longitude: 104° 48' 48.262 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence: 0.44 °

Well	DENVER 25-18			
Well Position	+N/-S	-0.4 ft	Northing:	1,260,775.43 ft
	+E/-W	20.4 ft	Easting:	3,192,237.24 ft
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft
				Ground Level: 4,935.0 ft

Wellbore	DENVER 25-18				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	9/29/2010	8.92	66.79	52,996

Design	DENVER 25-18 (wp02)			
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	307.92

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	
1,548.8	24.98	307.92	1,509.6	164.6	-211.3	2.00	2.00	0.00	307.92	
5,686.5	24.98	307.92	5,260.4	1,238.3	-1,589.6	0.00	0.00	0.00	0.00	
6,935.3	0.00	0.00	6,470.0	1,402.9	-1,800.9	2.00	-2.00	0.00	180.00	
8,535.3	0.00	0.00	8,070.0	1,402.9	-1,800.9	0.00	0.00	0.00	0.00	DENVER 25-18 BH

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Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4935.0ft (Original Well Elev)
Site:	WELD_Denver	North Reference:	True
Well:	DENVER 25-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	DENVER 25-18		
Design:	DENVER 25-18 (wp02)		

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 2.00									
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.00	307.92	400.0	1.1	-1.4	1.7	2.00	2.00	0.00
500.0	4.00	307.92	499.8	4.3	-5.5	7.0	2.00	2.00	0.00
600.0	6.00	307.92	599.5	9.6	-12.4	15.7	2.00	2.00	0.00
700.0	8.00	307.92	698.7	17.1	-22.0	27.9	2.00	2.00	0.00
800.0	10.00	307.92	797.5	26.7	-34.3	43.5	2.00	2.00	0.00
900.0	12.00	307.92	895.6	38.5	-49.4	62.6	2.00	2.00	0.00
9 5/8"									
966.0	13.32	307.92	960.0	47.4	-60.8	77.1	2.00	2.00	0.00
1,000.0	14.00	307.92	993.1	52.3	-67.1	85.1	2.00	2.00	0.00
1,100.0	16.00	307.92	1,089.6	68.2	-87.5	111.0	2.00	2.00	0.00
1,200.0	18.00	307.92	1,185.3	86.2	-110.6	140.2	2.00	2.00	0.00
1,300.0	20.00	307.92	1,279.8	106.2	-136.3	172.8	2.00	2.00	0.00
1,400.0	22.00	307.92	1,373.2	128.2	-164.6	208.6	2.00	2.00	0.00
1,500.0	24.00	307.92	1,465.2	152.2	-195.4	247.7	2.00	2.00	0.00
Start 4137.7 hold at 1548.8 MD									
1,548.8	24.98	307.92	1,509.6	164.6	-211.3	267.9	2.00	2.00	0.00
1,600.0	24.98	307.92	1,556.0	177.9	-228.4	289.5	0.00	0.00	0.00
1,700.0	24.98	307.92	1,646.7	203.9	-261.7	331.7	0.00	0.00	0.00
1,800.0	24.98	307.92	1,737.3	229.8	-295.0	374.0	0.00	0.00	0.00
1,900.0	24.98	307.92	1,828.0	255.8	-328.3	416.2	0.00	0.00	0.00
2,000.0	24.98	307.92	1,918.6	281.7	-361.6	458.4	0.00	0.00	0.00
2,100.0	24.98	307.92	2,009.3	307.7	-394.9	500.6	0.00	0.00	0.00
2,200.0	24.98	307.92	2,099.9	333.6	-428.2	542.9	0.00	0.00	0.00
2,300.0	24.98	307.92	2,190.6	359.6	-461.6	585.1	0.00	0.00	0.00
2,400.0	24.98	307.92	2,281.2	385.5	-494.9	627.3	0.00	0.00	0.00
2,500.0	24.98	307.92	2,371.9	411.5	-528.2	669.5	0.00	0.00	0.00
2,600.0	24.98	307.92	2,462.5	437.4	-561.5	711.7	0.00	0.00	0.00
2,700.0	24.98	307.92	2,553.2	463.3	-594.8	754.0	0.00	0.00	0.00
2,800.0	24.98	307.92	2,643.8	489.3	-628.1	796.2	0.00	0.00	0.00
2,900.0	24.98	307.92	2,734.5	515.2	-661.4	838.4	0.00	0.00	0.00
3,000.0	24.98	307.92	2,825.1	541.2	-694.7	880.6	0.00	0.00	0.00
3,100.0	24.98	307.92	2,915.8	567.1	-728.0	922.9	0.00	0.00	0.00
3,200.0	24.98	307.92	3,006.4	593.1	-761.3	965.1	0.00	0.00	0.00
3,300.0	24.98	307.92	3,097.1	619.0	-794.6	1,007.3	0.00	0.00	0.00
3,400.0	24.98	307.92	3,187.7	645.0	-828.0	1,049.5	0.00	0.00	0.00
3,500.0	24.98	307.92	3,278.4	670.9	-861.3	1,091.7	0.00	0.00	0.00
3,600.0	24.98	307.92	3,369.0	696.9	-894.6	1,134.0	0.00	0.00	0.00
3,700.0	24.98	307.92	3,459.7	722.8	-927.9	1,176.2	0.00	0.00	0.00
3,800.0	24.98	307.92	3,550.3	748.8	-961.2	1,218.4	0.00	0.00	0.00
3,900.0	24.98	307.92	3,641.0	774.7	-994.5	1,260.6	0.00	0.00	0.00
4,000.0	24.98	307.92	3,731.6	800.7	-1,027.8	1,302.9	0.00	0.00	0.00
4,100.0	24.98	307.92	3,822.3	826.6	-1,061.1	1,345.1	0.00	0.00	0.00
4,200.0	24.98	307.92	3,912.9	852.6	-1,094.4	1,387.3	0.00	0.00	0.00
PK Depth									
4,268.5	24.98	307.92	3,975.0	870.3	-1,117.2	1,416.2	0.00	0.00	0.00
4,300.0	24.98	307.92	4,003.6	878.5	-1,127.7	1,429.5	0.00	0.00	0.00
4,400.0	24.98	307.92	4,094.2	904.5	-1,161.0	1,471.8	0.00	0.00	0.00
4,500.0	24.98	307.92	4,184.9	930.4	-1,194.3	1,514.0	0.00	0.00	0.00

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Project:	ANADARKO COLORADO NORTHERN ZONE NAD 83	MD Reference:	WELL @ 4935.0ft (Original Well Elev)
Site:	WELD_Denver	North Reference:	True
Well:	DENVER 25-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	DENVER 25-18		
Design:	DENVER 25-18 (wp02)		

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	24.98	307.92	4,275.5	956.4	-1,227.7	1,556.2	0.00	0.00	0.00
4,700.0	24.98	307.92	4,366.2	982.3	-1,261.0	1,598.4	0.00	0.00	0.00
4,800.0	24.98	307.92	4,456.8	1,008.3	-1,294.3	1,640.6	0.00	0.00	0.00
4,900.0	24.98	307.92	4,547.5	1,034.2	-1,327.6	1,682.9	0.00	0.00	0.00
5,000.0	24.98	307.92	4,638.1	1,060.1	-1,360.9	1,725.1	0.00	0.00	0.00
SX Depth									
5,025.3	24.98	307.92	4,661.0	1,066.7	-1,369.3	1,735.8	0.00	0.00	0.00
5,100.0	24.98	307.92	4,728.8	1,086.1	-1,394.2	1,767.3	0.00	0.00	0.00
5,200.0	24.98	307.92	4,819.4	1,112.0	-1,427.5	1,809.5	0.00	0.00	0.00
5,300.0	24.98	307.92	4,910.1	1,138.0	-1,460.8	1,851.8	0.00	0.00	0.00
5,400.0	24.98	307.92	5,000.7	1,163.9	-1,494.1	1,894.0	0.00	0.00	0.00
5,500.0	24.98	307.92	5,091.3	1,189.9	-1,527.4	1,936.2	0.00	0.00	0.00
5,600.0	24.98	307.92	5,182.0	1,215.8	-1,560.7	1,978.4	0.00	0.00	0.00
Start Drop -2.00									
5,686.5	24.98	307.92	5,260.4	1,238.3	-1,589.6	2,014.9	0.00	0.00	0.00
5,700.0	24.71	307.92	5,272.7	1,241.8	-1,594.0	2,020.6	2.00	-2.00	0.00
5,800.0	22.71	307.92	5,364.2	1,266.5	-1,625.7	2,060.8	2.00	-2.00	0.00
5,900.0	20.71	307.92	5,457.1	1,289.2	-1,654.9	2,097.8	2.00	-2.00	0.00
6,000.0	18.71	307.92	5,551.3	1,309.9	-1,681.5	2,131.5	2.00	-2.00	0.00
6,100.0	16.71	307.92	5,646.5	1,328.6	-1,705.5	2,161.9	2.00	-2.00	0.00
6,200.0	14.71	307.92	5,742.8	1,345.2	-1,726.9	2,189.0	2.00	-2.00	0.00
6,300.0	12.71	307.92	5,839.9	1,359.8	-1,745.5	2,212.7	2.00	-2.00	0.00
6,400.0	10.71	307.92	5,937.8	1,372.3	-1,761.6	2,233.0	2.00	-2.00	0.00
6,500.0	8.71	307.92	6,036.4	1,382.6	-1,774.8	2,249.8	2.00	-2.00	0.00
6,600.0	6.71	307.92	6,135.5	1,390.9	-1,785.4	2,263.2	2.00	-2.00	0.00
6,700.0	4.71	307.92	6,235.0	1,397.0	-1,793.3	2,273.2	2.00	-2.00	0.00
6,800.0	2.71	307.92	6,334.8	1,400.9	-1,798.4	2,279.6	2.00	-2.00	0.00
6,900.0	0.71	307.92	6,434.7	1,402.8	-1,800.7	2,282.6	2.00	-2.00	0.00
Start 1600.0 hold at 6935.3 MD									
6,935.3	0.00	0.00	6,470.0	1,402.9	-1,800.9	2,282.8	2.00	-2.00	147.70
7,000.0	0.00	0.00	6,534.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,100.0	0.00	0.00	6,634.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,200.0	0.00	0.00	6,734.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,300.0	0.00	0.00	6,834.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,400.0	0.00	0.00	6,934.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,034.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
NIO Depth									
7,590.3	0.00	0.00	7,125.0	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,134.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,234.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,334.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,434.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
CD Depth									
7,950.3	0.00	0.00	7,485.0	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,534.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
GH Depth									
8,042.3	0.00	0.00	7,577.0	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
8,100.0	0.00	0.00	7,634.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
8,200.0	0.00	0.00	7,734.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
8,300.0	0.00	0.00	7,834.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
8,400.0	0.00	0.00	7,934.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
J Depth									

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Site:	WELD_Denver	North Reference:	True
Well:	DENVER 25-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	DENVER 25-18		
Design:	DENVER 25-18 (wp02)		

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)
8,400.3	0.00	0.00	7,935.0	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,034.7	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00
TD at 8535.3									
8,535.3	0.00	0.00	8,070.0	1,402.9	-1,800.9	2,282.8	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
DENVER 25-18 BHL	0.00	0.00	8,070.0	1,402.9	-1,800.9	1,262,164.34	3,190,425.55	40° 3' 3.690 N	104° 49' 11.158 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
966.0	960.0	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,400.3	7,935.0	J Depth			
4,268.5	3,975.0	PK Depth			
7,590.3	7,125.0	NIO Depth			
5,025.3	4,661.0	SX Depth			
8,042.3	7,577.0	GH Depth			
7,950.3	7,485.0	CD Depth			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
300.0	300.0	0.0	0.0	Start Build 2.00
1,548.8	1,509.6	164.6	-211.3	Start 4137.7 hold at 1548.8 MD
5,686.5	5,260.4	1,238.3	-1,589.6	Start Drop -2.00
6,935.3	6,470.0	1,402.9	-1,800.9	Start 1600.0 hold at 6935.3 MD
8,535.3	8,070.0	1,402.9	-1,800.9	TD at 8535.3