

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

CAMENISCH 19-2-9F pad

Camenisch 25-2

Camenisch 25-2

Plan: Camenisch 25-2 (wp01)

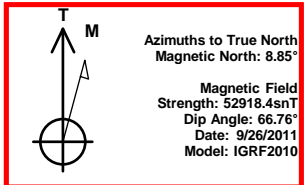
Standard Planning Report

26 September, 2011

Project: COLORADO NORTHERN ZONE - 83
Site: CAMENISCH 19-2-9F pad
Well: Camenisch 25-2
Wellbore: Camenisch 25-2
Section:
SHL:
Design: Camenisch 25-2 (wp01)
Latitude: 40.075655
Longitude: -104.863679
GL: 5032.00
KB: 15' rkb + 5032' gl @ 5047.00ft

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4131.00	4337.99	PK
4591.00	4828.13	SX
7311.00	7668.83	NIO
7621.00	7978.83	CD
7709.00	8066.83	GH
8061.00	8418.83	J

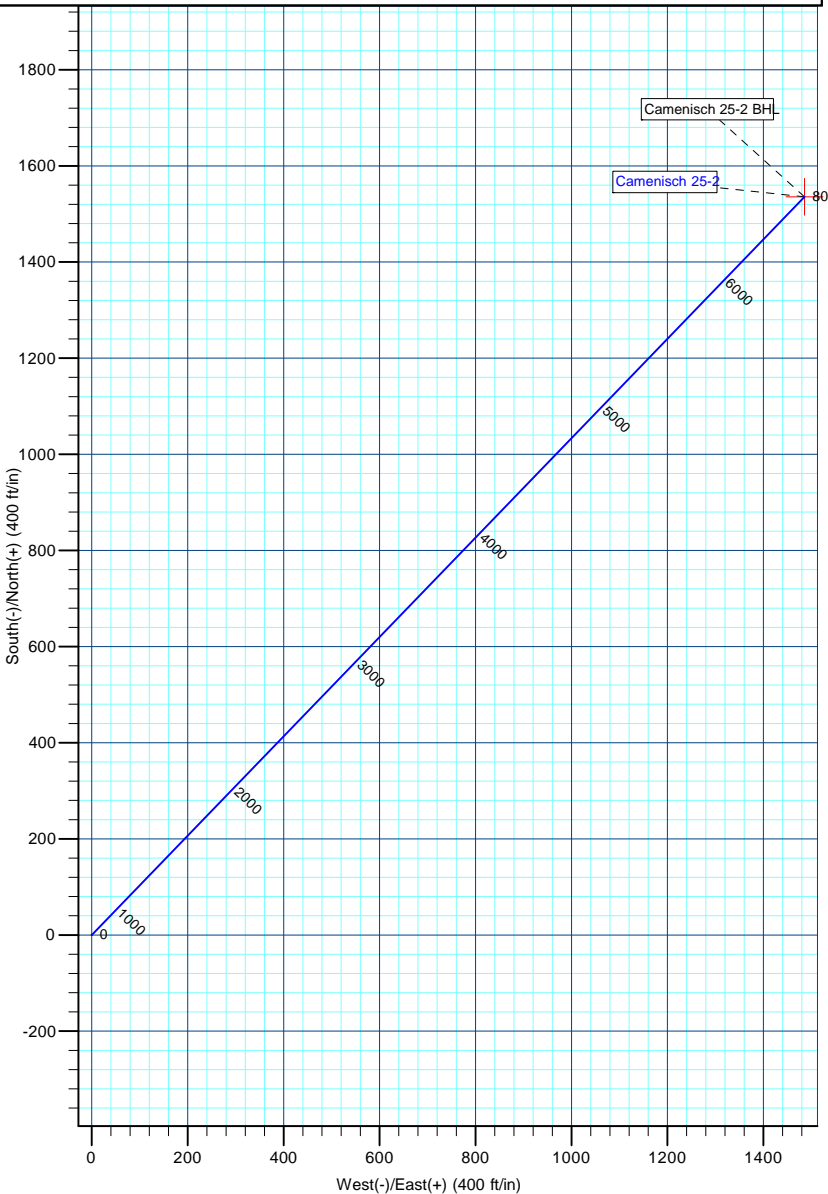
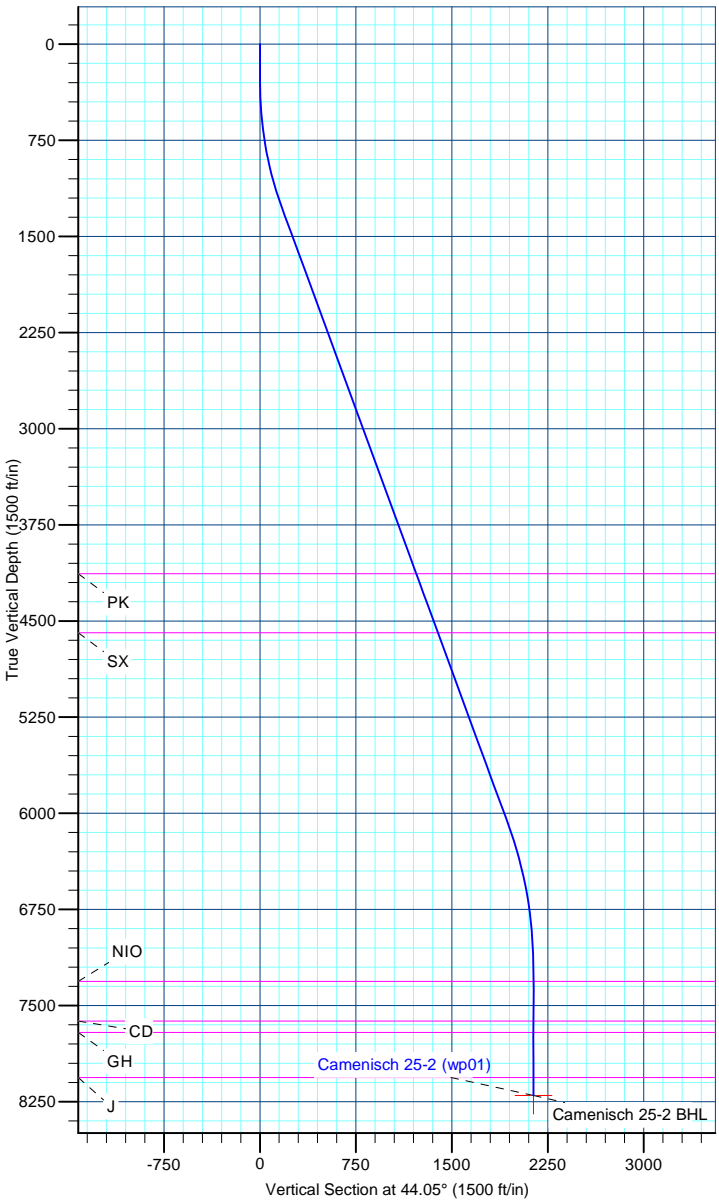
CASING DETAILS
No casing data is available



WELL DETAILS: Camenisch 25-2						
+N/-S	+E/-W	Northing	Ground Level: Easting	5032.00 Latitude	Longitude	Slot
0.00	0.00	1271044.97	3178068.32	40.075655	-104.863679	

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Camenisch 25-2 BHL	8201.00	1535.49	1485.60	1272591.07	3179542.86	40.079870	-104.858370	

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	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
1309.88	20.20	44.05	1289.10	126.61	122.49	2.00	44.05	176.16
6404.68	20.20	44.05	6070.60	1390.79	1345.60	0.00	0.00	1935.19
7558.83	0.00	0.00	7201.00	1535.49	1485.60	1.75	180.00	2136.52
8558.83	0.00	0.00	8201.00	1535.49	1485.60	0.00	0.00	2136.52



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 25-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' rkb + 5032' gl @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5032' gl @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 25-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 25-2		
Design:	Camenisch 25-2 (wp01)		

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

Site	CAMENISCH 19-2-9F pad			
Site Position:		Northing:	1,271,059.92 usft	Latitude: 40.075696
From:	Lat/Long	Easting:	3,178,068.22 usft	Longitude: -104.863679
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence: 0.41 °

Well	Camenisch 25-2			
Well Position	+N/-S	-14.95 ft	Northing:	1,271,044.97 usft
	+E/-W	0.00 ft	Easting:	3,178,068.32 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 5,032.00 ft

Wellbore	Camenisch 25-2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/26/2011	8.85	66.76	52,918

Design	Camenisch 25-2 (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	44.05

Plan Sections										
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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,309.88	20.20	44.05	1,289.10	126.61	122.49	2.00	2.00	0.00	44.05	
6,404.68	20.20	44.05	6,070.60	1,390.79	1,345.60	0.00	0.00	0.00	0.00	
7,558.83	0.00	0.00	7,201.00	1,535.49	1,485.60	1.75	-1.75	0.00	180.00	
8,558.83	0.00	0.00	8,201.00	1,535.49	1,485.60	0.00	0.00	0.00	0.00	Camenisch 25-2 BHL

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 25-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' rkb + 5032' gl @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5032' gl @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 25-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 25-2		
Design:	Camenisch 25-2 (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
Start Build 2.00									
400.00	2.00	44.05	399.98	1.25	1.21	1.75	2.00	2.00	0.00
500.00	4.00	44.05	499.84	5.02	4.85	6.98	2.00	2.00	0.00
600.00	6.00	44.05	599.45	11.28	10.91	15.69	2.00	2.00	0.00
700.00	8.00	44.05	698.70	20.04	19.39	27.88	2.00	2.00	0.00
800.00	10.00	44.05	797.47	31.28	30.26	43.52	2.00	2.00	0.00
900.00	12.00	44.05	895.62	44.99	43.53	62.60	2.00	2.00	0.00
1,000.00	14.00	44.05	993.06	61.16	59.17	85.10	2.00	2.00	0.00
1,100.00	16.00	44.05	1,089.64	79.76	77.17	110.98	2.00	2.00	0.00
1,200.00	18.00	44.05	1,185.27	100.77	97.49	140.21	2.00	2.00	0.00
1,300.00	20.00	44.05	1,279.82	124.17	120.13	172.77	2.00	2.00	0.00
1,309.88	20.20	44.05	1,289.10	126.61	122.49	176.16	2.00	2.00	0.00
Start 5094.80 hold at 1309.88 MD									
1,400.00	20.20	44.05	1,373.67	148.97	144.13	207.28	0.00	0.00	0.00
1,500.00	20.20	44.05	1,467.52	173.78	168.13	241.80	0.00	0.00	0.00
1,600.00	20.20	44.05	1,561.37	198.59	192.14	276.33	0.00	0.00	0.00
1,700.00	20.20	44.05	1,655.22	223.41	216.15	310.86	0.00	0.00	0.00
1,800.00	20.20	44.05	1,749.08	248.22	240.16	345.38	0.00	0.00	0.00
1,900.00	20.20	44.05	1,842.93	273.03	264.16	379.91	0.00	0.00	0.00
2,000.00	20.20	44.05	1,936.78	297.85	288.17	414.43	0.00	0.00	0.00
2,100.00	20.20	44.05	2,030.63	322.66	312.18	448.96	0.00	0.00	0.00
2,200.00	20.20	44.05	2,124.48	347.47	336.18	483.48	0.00	0.00	0.00
2,300.00	20.20	44.05	2,218.33	372.29	360.19	518.01	0.00	0.00	0.00
2,400.00	20.20	44.05	2,312.18	397.10	384.20	552.54	0.00	0.00	0.00
2,500.00	20.20	44.05	2,406.03	421.91	408.20	587.06	0.00	0.00	0.00
2,600.00	20.20	44.05	2,499.88	446.73	432.21	621.59	0.00	0.00	0.00
2,700.00	20.20	44.05	2,593.73	471.54	456.22	656.11	0.00	0.00	0.00
2,800.00	20.20	44.05	2,687.58	496.35	480.23	690.64	0.00	0.00	0.00
2,900.00	20.20	44.05	2,781.43	521.17	504.23	725.17	0.00	0.00	0.00
3,000.00	20.20	44.05	2,875.28	545.98	528.24	759.69	0.00	0.00	0.00
3,100.00	20.20	44.05	2,969.13	570.79	552.25	794.22	0.00	0.00	0.00
3,200.00	20.20	44.05	3,062.99	595.61	576.25	828.74	0.00	0.00	0.00
3,300.00	20.20	44.05	3,156.84	620.42	600.26	863.27	0.00	0.00	0.00
3,400.00	20.20	44.05	3,250.69	645.23	624.27	897.80	0.00	0.00	0.00
3,500.00	20.20	44.05	3,344.54	670.05	648.28	932.32	0.00	0.00	0.00
3,600.00	20.20	44.05	3,438.39	694.86	672.28	966.85	0.00	0.00	0.00
3,700.00	20.20	44.05	3,532.24	719.67	696.29	1,001.37	0.00	0.00	0.00
3,800.00	20.20	44.05	3,626.09	744.49	720.30	1,035.90	0.00	0.00	0.00
3,900.00	20.20	44.05	3,719.94	769.30	744.30	1,070.43	0.00	0.00	0.00
4,000.00	20.20	44.05	3,813.79	794.11	768.31	1,104.95	0.00	0.00	0.00
4,100.00	20.20	44.05	3,907.64	818.93	792.32	1,139.48	0.00	0.00	0.00
4,200.00	20.20	44.05	4,001.49	843.74	816.33	1,174.00	0.00	0.00	0.00
4,300.00	20.20	44.05	4,095.34	868.55	840.33	1,208.53	0.00	0.00	0.00
4,337.99	20.20	44.05	4,131.00	877.98	849.45	1,221.65	0.00	0.00	0.00
PK									
4,400.00	20.20	44.05	4,189.19	893.37	864.34	1,243.06	0.00	0.00	0.00
4,500.00	20.20	44.05	4,283.05	918.18	888.35	1,277.58	0.00	0.00	0.00
4,600.00	20.20	44.05	4,376.90	942.99	912.35	1,312.11	0.00	0.00	0.00
4,700.00	20.20	44.05	4,470.75	967.81	936.36	1,346.63	0.00	0.00	0.00

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Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 25-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' rkb + 5032' gl @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5032' gl @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 25-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 25-2		
Design:	Camenisch 25-2 (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)
4,800.00	20.20	44.05	4,564.60	992.62	960.37	1,381.16	0.00	0.00	0.00
4,828.13	20.20	44.05	4,591.00	999.60	967.12	1,390.87	0.00	0.00	0.00
SX									
4,900.00	20.20	44.05	4,658.45	1,017.43	984.37	1,415.68	0.00	0.00	0.00
5,000.00	20.20	44.05	4,752.30	1,042.25	1,008.38	1,450.21	0.00	0.00	0.00
5,100.00	20.20	44.05	4,846.15	1,067.06	1,032.39	1,484.74	0.00	0.00	0.00
5,200.00	20.20	44.05	4,940.00	1,091.87	1,056.40	1,519.26	0.00	0.00	0.00
5,300.00	20.20	44.05	5,033.85	1,116.69	1,080.40	1,553.79	0.00	0.00	0.00
5,400.00	20.20	44.05	5,127.70	1,141.50	1,104.41	1,588.31	0.00	0.00	0.00
5,500.00	20.20	44.05	5,221.55	1,166.31	1,128.42	1,622.84	0.00	0.00	0.00
5,600.00	20.20	44.05	5,315.40	1,191.13	1,152.42	1,657.37	0.00	0.00	0.00
5,700.00	20.20	44.05	5,409.25	1,215.94	1,176.43	1,691.89	0.00	0.00	0.00
5,800.00	20.20	44.05	5,503.10	1,240.75	1,200.44	1,726.42	0.00	0.00	0.00
5,900.00	20.20	44.05	5,596.96	1,265.57	1,224.45	1,760.94	0.00	0.00	0.00
6,000.00	20.20	44.05	5,690.81	1,290.38	1,248.45	1,795.47	0.00	0.00	0.00
6,100.00	20.20	44.05	5,784.66	1,315.19	1,272.46	1,830.00	0.00	0.00	0.00
6,200.00	20.20	44.05	5,878.51	1,340.01	1,296.47	1,864.52	0.00	0.00	0.00
6,300.00	20.20	44.05	5,972.36	1,364.82	1,320.47	1,899.05	0.00	0.00	0.00
6,400.00	20.20	44.05	6,066.21	1,389.63	1,344.48	1,933.57	0.00	0.00	0.00
6,404.68	20.20	44.05	6,070.60	1,390.79	1,345.60	1,935.19	0.00	0.00	0.00
Start Drop -1.75									
6,500.00	18.53	44.05	6,160.53	1,413.51	1,367.58	1,966.79	1.75	-1.75	0.00
6,600.00	16.78	44.05	6,255.81	1,435.30	1,388.67	1,997.12	1.75	-1.75	0.00
6,700.00	15.03	44.05	6,351.98	1,455.00	1,407.72	2,024.52	1.75	-1.75	0.00
6,800.00	13.28	44.05	6,448.94	1,472.57	1,424.72	2,048.97	1.75	-1.75	0.00
6,900.00	11.53	44.05	6,546.60	1,488.01	1,439.66	2,070.46	1.75	-1.75	0.00
7,000.00	9.78	44.05	6,644.88	1,501.29	1,452.51	2,088.94	1.75	-1.75	0.00
7,100.00	8.03	44.05	6,743.67	1,512.42	1,463.28	2,104.42	1.75	-1.75	0.00
7,200.00	6.28	44.05	6,842.88	1,521.37	1,471.94	2,116.88	1.75	-1.75	0.00
7,300.00	4.53	44.05	6,942.44	1,528.14	1,478.49	2,126.29	1.75	-1.75	0.00
7,400.00	2.78	44.05	7,042.23	1,532.72	1,482.92	2,132.67	1.75	-1.75	0.00
7,500.00	1.03	44.05	7,142.17	1,535.11	1,485.23	2,135.99	1.75	-1.75	0.00
7,558.83	0.00	0.00	7,201.00	1,535.49	1,485.60	2,136.52	1.75	-1.75	0.00
Start 1000.00 hold at 7558.83 MD									
7,600.00	0.00	0.00	7,242.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
7,668.83	0.00	0.00	7,311.00	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
NIO									
7,700.00	0.00	0.00	7,342.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
7,800.00	0.00	0.00	7,442.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
7,900.00	0.00	0.00	7,542.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
7,978.83	0.00	0.00	7,621.00	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
CD									
8,000.00	0.00	0.00	7,642.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
8,066.83	0.00	0.00	7,709.00	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
GH									
8,100.00	0.00	0.00	7,742.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
8,200.00	0.00	0.00	7,842.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
8,300.00	0.00	0.00	7,942.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
8,400.00	0.00	0.00	8,042.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
8,418.83	0.00	0.00	8,061.00	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
J									
8,500.00	0.00	0.00	8,142.17	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00
8,558.83	0.00	0.00	8,201.00	1,535.49	1,485.60	2,136.52	0.00	0.00	0.00

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 25-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' rkb + 5032' gl @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' rkb + 5032' gl @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 25-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 25-2		
Design:	Camenisch 25-2 (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)
TD at 8558.83 - Camenisch 25-2 BHL									

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									
Camenisch 25-2 BHL	0.00	0.00	8,201.00	1,535.49	1,485.60	1,272,591.07	3,179,542.86	40.079870	-104.858370
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,337.99	4,131.00	PK		0.00		
4,828.13	4,591.00	SX		0.00		
7,668.83	7,311.00	NIO		0.00		
7,978.83	7,621.00	CD		0.00		
8,066.83	7,709.00	GH		0.00		
8,418.83	8,061.00	J		0.00		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
1,309.88	1,289.10	126.61	122.49	Start 5094.80 hold at 1309.88 MD
6,404.68	6,070.60	1,390.79	1,345.60	Start Drop -1.75
7,558.83	7,201.00	1,535.49	1,485.60	Start 1000.00 hold at 7558.83 MD
8,558.83	8,201.00	1,535.49	1,485.60	TD at 8558.83