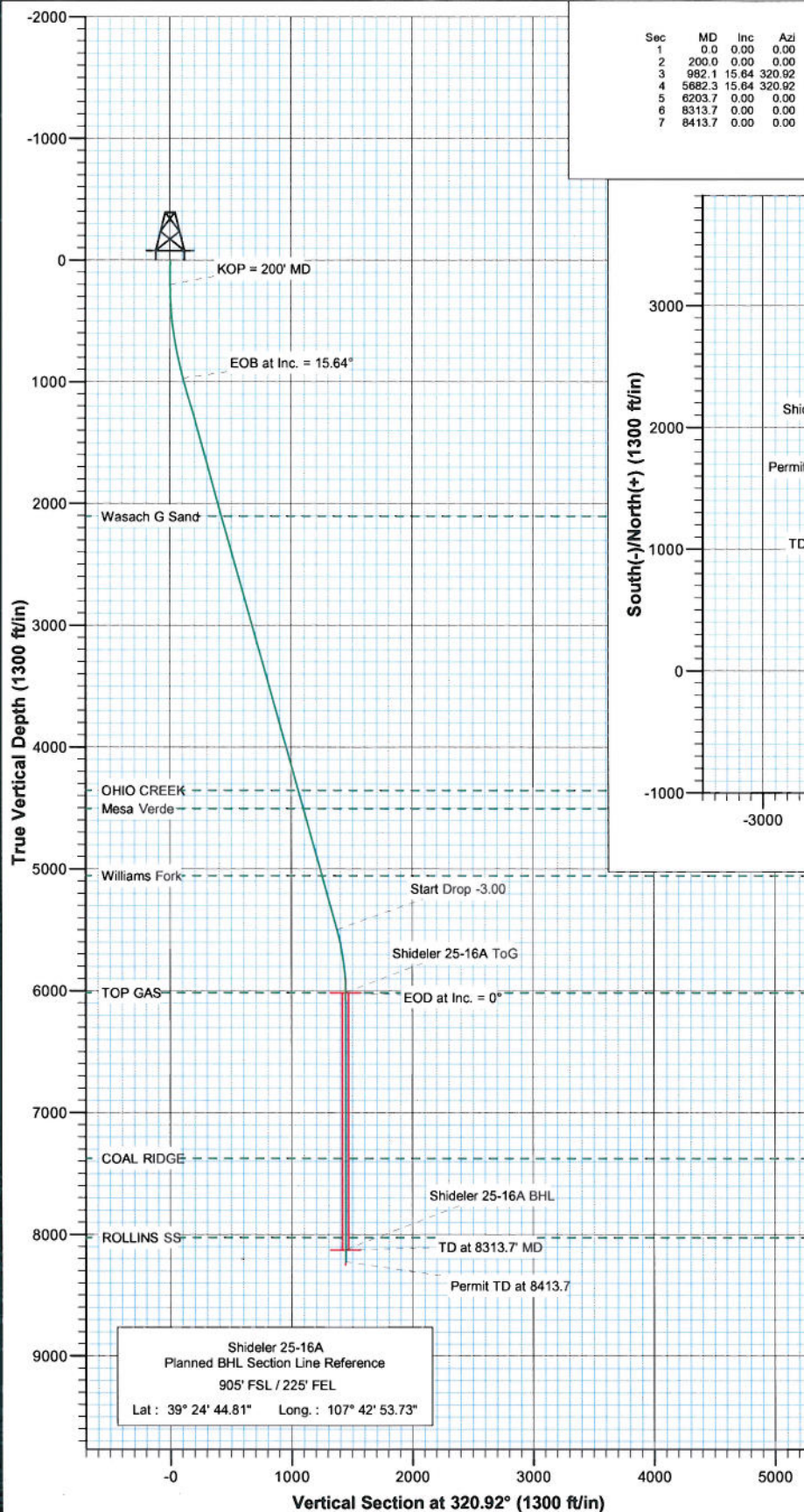


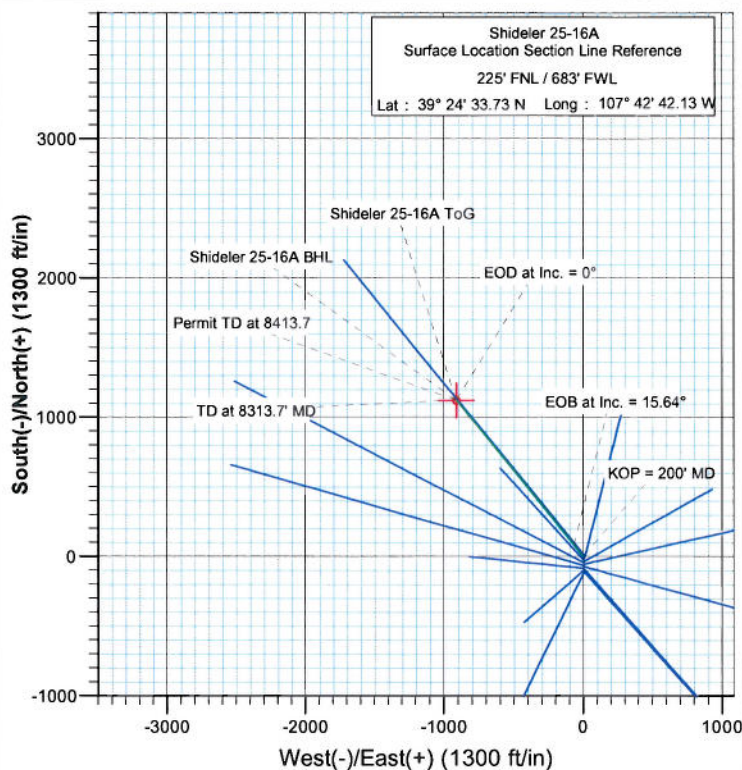


Project: Mamm Creek
Site: C31E Pad (NENW 31-7S-92W)
Well: Shideler 25-16A
Wellbore: DD
Plan: Plan #1



SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0
3	982.1	15.64	320.92	972.4	82.4	-66.9	2.00	320.92	106.1
4	5682.3	15.64	320.92	5498.5	1066.1	-865.8	0.00	0.00	1373.4
5	6203.7	0.00	0.00	6013.5	1121.0	-910.4	3.00	180.00	1444.1
6	8313.7	0.00	0.00	8123.5	1121.0	-910.4	0.00	0.00	1444.1
7	8413.7	0.00	0.00	8223.5	1121.0	-910.4	0.00	0.00	1444.1

Shideler 25-16A ToG
Shideler 25-16A BHL



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2103.5	2156.7	Wasach G Sand
4353.5	4493.2	OHIO CREEK
4503.5	4649.0	Mesa Verde
5053.5	5220.1	Williams Fork
6013.5	6203.7	TOP GAS
7373.5	7563.7	COAL RIDGE
8023.5	8213.7	ROLLINS SS



Azimuths to True North
Magnetic North: 10.44°

Magnetic Field
Strength: 52456.1nT
Dip Angle: 65.78°
Date: 7/7/2009
Model: IGRF200510

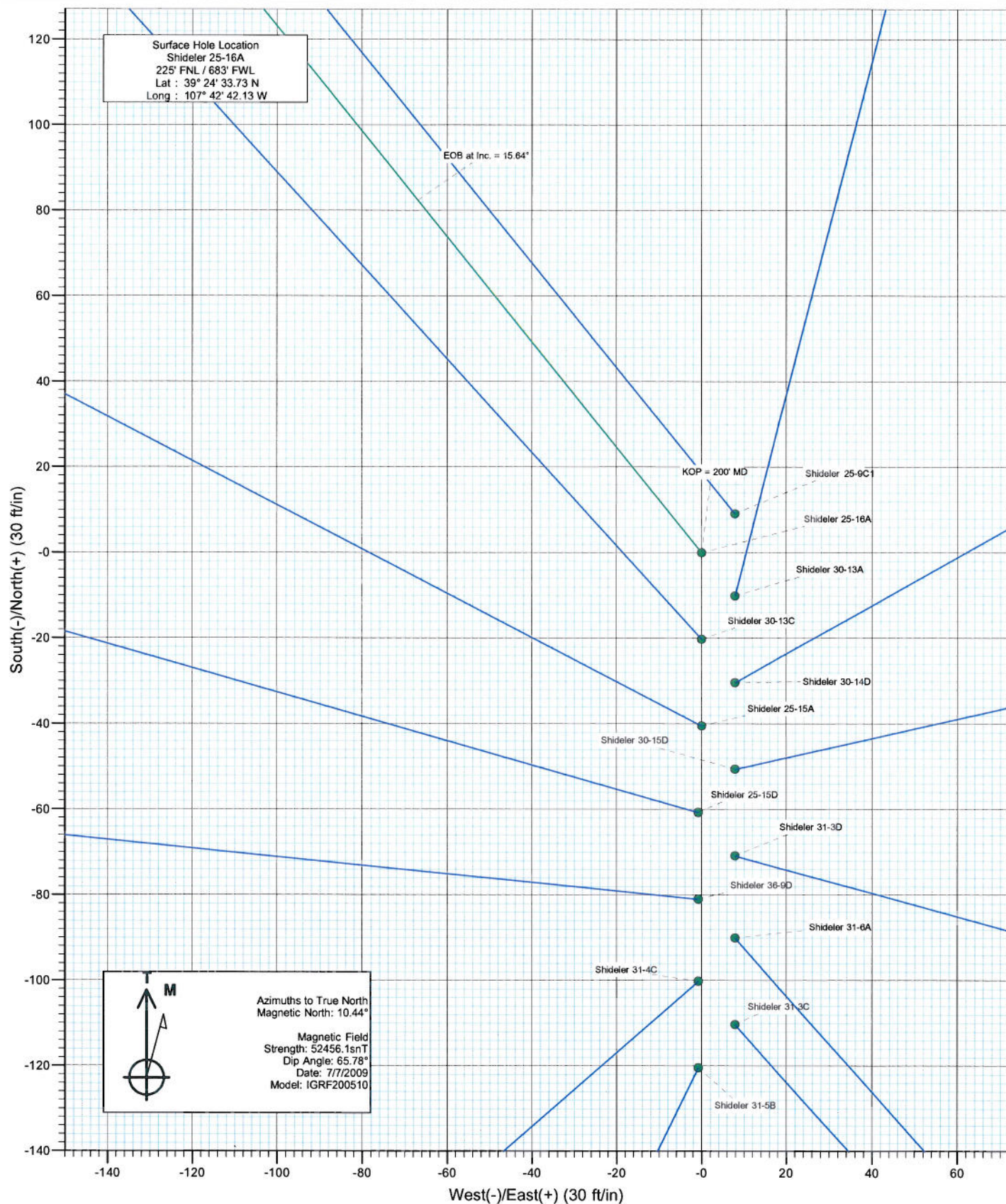
DESIGN DETAILS: Plan #1

Job# 95xxx: KR
KBE @ 6763.5ft (Original Well Elev)

Target	Azimuth	Origin Type	N/S	E/W	From TVD
Shideler 25-16A BHL	320.92	Slot	0.0	0.0	0.0



Project: Mamm Creek
Site: C31E Pad (NENW 31-7S-92W)
Well: Shideler 25-16A
Wellbore: DD
Design: Plan #1



Planning Report

Database:	US EDM 2003.21 Multi User Db	Local Co-ordinate Reference:	Well Shideler 25-16A
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6763.5ft (Original Well Elev)
Project:	Mamm Creek	MD Reference:	KBE @ 6763.5ft (Original Well Elev)
Site:	C31E Pad (NENW 31-7S-92W)	North Reference:	True
Well:	Shideler 25-16A	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	Mamm Creek		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		C31E Pad (NENW 31-7S-92W)			
Site Position:		Northing:	1,581,611.55 ft	Latitude:	39° 24' 33.82 N
From:	Lat/Long	Easting:	2,375,162.79 ft	Longitude:	107° 42' 42.03 W
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence:	-1.39 °

Well	Shideler 25-16A					
Well Position	+N-S	0.0 ft	Northing:	1,581,602.63 ft	Latitude:	39° 24' 33.73 N
	+E-W	0.0 ft	Easting:	2,375,154.72 ft	Longitude:	107° 42' 42.13 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,750.0 ft	

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	7/7/2009	10.44	65.78	52,456

Design	Plan #1			
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	320.92

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
982.1	15.64	320.92	972.4	82.4	-66.9	2.00	2.00	0.00	320.92	
5,682.3	15.64	320.92	5,498.5	1,066.1	-865.8	0.00	0.00	0.00	0.00	
6,203.7	0.00	0.00	6,013.5	1,121.0	-910.4	3.00	-3.00	0.00	180.00	Shideler 25-16A ToG
8,313.7	0.00	0.00	8,123.5	1,121.0	-910.4	0.00	0.00	0.00	0.00	Shideler 25-16A BHL
8,413.7	0.00	0.00	8,223.5	1,121.0	-910.4	0.00	0.00	0.00	0.00	

Planning Report

Database: US EDM 2003.21 Multi User Db
Company: EnCana Oil & Gas (USA) Inc
Project: Mamm Creek
Site: C31E Pad (NENW 31-7S-92W)
Well: Shideler 25-16A
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well Shideler 25-16A
TVD Reference: KBE @ 6763.5ft (Original Well Elev)
MD Reference: KBE @ 6763.5ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP = 200' MD
300.0	2.00	320.92	300.0	1.4	-1.1	1.7	2.00	2.00	
400.0	4.00	320.92	399.8	5.4	-4.4	7.0	2.00	2.00	
500.0	6.00	320.92	499.5	12.2	-9.9	15.7	2.00	2.00	
600.0	8.00	320.92	598.7	21.6	-17.6	27.9	2.00	2.00	
700.0	10.00	320.92	697.5	33.8	-27.4	43.5	2.00	2.00	
800.0	12.00	320.92	795.6	48.6	-39.5	62.6	2.00	2.00	
850.0	13.00	320.92	844.4	57.0	-46.3	73.4	2.00	2.00	Surface Casing
900.0	14.00	320.92	893.1	66.1	-53.6	85.1	2.00	2.00	
982.1	15.64	320.92	972.4	82.4	-66.9	106.1	2.00	2.00	EOB at Inc. = 15.64°
1,000.0	15.64	320.92	989.7	86.1	-69.9	110.9	0.00	0.00	
1,100.0	15.64	320.92	1,086.0	107.0	-86.9	137.9	0.00	0.00	
1,200.0	15.64	320.92	1,182.3	128.0	-103.9	164.8	0.00	0.00	
1,300.0	15.64	320.92	1,278.5	148.9	-120.9	191.8	0.00	0.00	
1,400.0	15.64	320.92	1,374.8	169.8	-137.9	218.8	0.00	0.00	
1,500.0	15.64	320.92	1,471.1	190.8	-154.9	245.7	0.00	0.00	
1,600.0	15.64	320.92	1,567.4	211.7	-171.9	272.7	0.00	0.00	
1,700.0	15.64	320.92	1,663.7	232.6	-188.9	299.7	0.00	0.00	
1,800.0	15.64	320.92	1,760.0	253.6	-205.9	326.6	0.00	0.00	
1,900.0	15.64	320.92	1,856.3	274.5	-222.9	353.6	0.00	0.00	
2,000.0	15.64	320.92	1,952.6	295.4	-239.9	380.6	0.00	0.00	
2,100.0	15.64	320.92	2,048.9	316.3	-256.9	407.5	0.00	0.00	
2,156.7	15.64	320.92	2,103.5	328.2	-266.5	422.8	0.00	0.00	Wasach G Sand
2,200.0	15.64	320.92	2,145.2	337.3	-273.9	434.5	0.00	0.00	
2,300.0	15.64	320.92	2,241.5	358.2	-290.9	461.4	0.00	0.00	
2,400.0	15.64	320.92	2,337.8	379.1	-307.9	488.4	0.00	0.00	
2,500.0	15.64	320.92	2,434.1	400.1	-324.9	515.4	0.00	0.00	
2,600.0	15.64	320.92	2,530.4	421.0	-341.9	542.3	0.00	0.00	
2,700.0	15.64	320.92	2,626.7	441.9	-358.9	569.3	0.00	0.00	
2,800.0	15.64	320.92	2,723.0	462.9	-375.9	596.3	0.00	0.00	
2,900.0	15.64	320.92	2,819.3	483.8	-392.9	623.2	0.00	0.00	
3,000.0	15.64	320.92	2,915.6	504.7	-409.9	650.2	0.00	0.00	
3,100.0	15.64	320.92	3,011.9	525.6	-426.9	677.1	0.00	0.00	
3,200.0	15.64	320.92	3,108.2	546.6	-443.9	704.1	0.00	0.00	
3,300.0	15.64	320.92	3,204.5	567.5	-460.9	731.1	0.00	0.00	
3,400.0	15.64	320.92	3,300.8	588.4	-477.9	758.0	0.00	0.00	
3,500.0	15.64	320.92	3,397.1	609.4	-494.9	785.0	0.00	0.00	
3,600.0	15.64	320.92	3,493.4	630.3	-511.9	812.0	0.00	0.00	
3,700.0	15.64	320.92	3,589.7	651.2	-528.9	838.9	0.00	0.00	
3,800.0	15.64	320.92	3,686.0	672.2	-545.9	865.9	0.00	0.00	
3,900.0	15.64	320.92	3,782.3	693.1	-562.9	892.9	0.00	0.00	
4,000.0	15.64	320.92	3,878.5	714.0	-579.9	919.8	0.00	0.00	
4,100.0	15.64	320.92	3,974.8	735.0	-596.9	946.8	0.00	0.00	
4,200.0	15.64	320.92	4,071.1	755.9	-613.8	973.7	0.00	0.00	
4,300.0	15.64	320.92	4,167.4	776.8	-630.8	1,000.7	0.00	0.00	
4,400.0	15.64	320.92	4,263.7	797.7	-647.8	1,027.7	0.00	0.00	
4,493.2	15.64	320.92	4,353.5	817.3	-663.7	1,052.8	0.00	0.00	OHIO CREEK
4,500.0	15.64	320.92	4,360.0	818.7	-664.8	1,054.6	0.00	0.00	
4,600.0	15.64	320.92	4,456.3	839.6	-681.8	1,081.6	0.00	0.00	
4,649.0	15.64	320.92	4,503.5	849.9	-690.2	1,094.8	0.00	0.00	Mesa Verde

Planning Report

Database: US EDM 2003.21 Multi User Db
 Company: EnCana Oil & Gas (USA) Inc
 Project: Mamm Creek
 Site: C31E Pad (NENW 31-7S-92W)
 Well: Shideler 25-16A
 Wellbore: DD
 Design: Plan #1

Local Co-ordinate Reference: Well Shideler 25-16A
 TVD Reference: KBE @ 6763.5ft (Original Well Elev)
 MD Reference: KBE @ 6763.5ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

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)	Comments / Formations
4,700.0	15.64	320.92	4,552.6	860.5	-698.8	1,108.6	0.00	0.00	
4,800.0	15.64	320.92	4,648.9	881.5	-715.8	1,135.5	0.00	0.00	
4,900.0	15.64	320.92	4,745.2	902.4	-732.8	1,162.5	0.00	0.00	
5,000.0	15.64	320.92	4,841.5	923.3	-749.8	1,189.4	0.00	0.00	
5,100.0	15.64	320.92	4,937.8	944.3	-766.8	1,216.4	0.00	0.00	
5,200.0	15.64	320.92	5,034.1	965.2	-783.8	1,243.4	0.00	0.00	
5,220.1	15.64	320.92	5,053.5	969.4	-787.2	1,248.8	0.00	0.00	Williams Fork
5,300.0	15.64	320.92	5,130.4	986.1	-800.8	1,270.3	0.00	0.00	
5,400.0	15.64	320.92	5,226.7	1,007.1	-817.8	1,297.3	0.00	0.00	
5,500.0	15.64	320.92	5,323.0	1,028.0	-834.8	1,324.3	0.00	0.00	
5,600.0	15.64	320.92	5,419.3	1,048.9	-851.8	1,351.2	0.00	0.00	
5,682.3	15.64	320.92	5,498.5	1,066.1	-865.8	1,373.4	0.00	0.00	Start Drop -3.00
5,700.0	15.11	320.92	5,515.6	1,069.8	-868.8	1,378.1	3.00	-3.00	
5,800.0	12.11	320.92	5,612.8	1,088.1	-883.6	1,401.6	3.00	-3.00	
5,900.0	9.11	320.92	5,711.1	1,102.3	-895.2	1,420.1	3.00	-3.00	
6,000.0	6.11	320.92	5,810.2	1,112.6	-903.6	1,433.3	3.00	-3.00	
6,100.0	3.11	320.92	5,909.8	1,118.9	-908.6	1,441.3	3.00	-3.00	
6,200.0	0.11	320.92	6,009.8	1,121.0	-910.4	1,444.1	3.00	-3.00	
6,203.7	0.00	0.00	6,013.5	1,121.0	-910.4	1,444.1	3.00	-3.00	EOD at Inc. = 0° - TOP GAS - Shideler 25-16A
6,300.0	0.00	0.00	6,109.8	1,121.0	-910.4	1,444.1	0.00	0.00	
6,400.0	0.00	0.00	6,209.8	1,121.0	-910.4	1,444.1	0.00	0.00	
6,500.0	0.00	0.00	6,309.8	1,121.0	-910.4	1,444.1	0.00	0.00	
6,600.0	0.00	0.00	6,409.8	1,121.0	-910.4	1,444.1	0.00	0.00	
6,700.0	0.00	0.00	6,509.8	1,121.0	-910.4	1,444.1	0.00	0.00	
6,800.0	0.00	0.00	6,609.8	1,121.0	-910.4	1,444.1	0.00	0.00	
6,900.0	0.00	0.00	6,709.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,000.0	0.00	0.00	6,809.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,100.0	0.00	0.00	6,909.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,200.0	0.00	0.00	7,009.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,300.0	0.00	0.00	7,109.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,400.0	0.00	0.00	7,209.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,500.0	0.00	0.00	7,309.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,563.7	0.00	0.00	7,373.5	1,121.0	-910.4	1,444.1	0.00	0.00	COAL RIDGE
7,600.0	0.00	0.00	7,409.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,700.0	0.00	0.00	7,509.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,800.0	0.00	0.00	7,609.8	1,121.0	-910.4	1,444.1	0.00	0.00	
7,900.0	0.00	0.00	7,709.8	1,121.0	-910.4	1,444.1	0.00	0.00	
8,000.0	0.00	0.00	7,809.8	1,121.0	-910.4	1,444.1	0.00	0.00	
8,100.0	0.00	0.00	7,909.8	1,121.0	-910.4	1,444.1	0.00	0.00	
8,200.0	0.00	0.00	8,009.8	1,121.0	-910.4	1,444.1	0.00	0.00	
8,213.7	0.00	0.00	8,023.5	1,121.0	-910.4	1,444.1	0.00	0.00	ROLLINS SS
8,300.0	0.00	0.00	8,109.8	1,121.0	-910.4	1,444.1	0.00	0.00	
8,313.7	0.00	0.00	8,123.5	1,121.0	-910.4	1,444.1	0.00	0.00	TD at 8313.7' MD - Shideler 25-16A BHL
8,400.0	0.00	0.00	8,209.8	1,121.0	-910.4	1,444.1	0.00	0.00	
8,413.7	0.00	0.00	8,223.5	1,121.0	-910.4	1,444.1	0.00	0.00	Permit TD at 8413.7

Planning Report

Database: US EDM 2003.21 Multi User Db
Company: EnCana Oil & Gas (USA) Inc
Project: Mamm Creek
Site: C31E Pad (NENW 31-7S-92W)
Well: Shideler 25-16A
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well Shideler 25-16A
TVD Reference: KBE @ 6763.5ft (Original Well Elev)
MD Reference: KBE @ 6763.5ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

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									
Shideler 25-16A ToG	0.00	0.00	6,013.5	1,121.0	-910.4	1,582,745.51	2,374,271.88	39° 24' 44.81 N	107° 42' 53.73 W
- plan hits target center									
- Point									
Shideler 25-16A BHL	0.00	0.00	8,123.5	1,121.0	-910.4	1,582,745.51	2,374,271.88	39° 24' 44.81 N	107° 42' 53.73 W
- plan hits target center									
- Circle (radius 25.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
850.0	844.4	Surface Casing	5.500	6.000

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,156.7	2,103.5	Wasach G Sand			
4,493.2	4,353.5	OHIO CREEK			
4,649.0	4,503.5	Mesa Verde			
5,220.1	5,053.5	Williams Fork			
6,203.7	6,013.5	TOP GAS			
7,563.7	7,373.5	COAL RIDGE			
8,213.7	8,023.5	ROLLINS SS			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP = 200' MD
982.1	972.4	82.4	-66.9	EOB at Inc. = 15.64°
5,682.3	5,498.5	1,066.1	-865.8	Start Drop -3.00
6,203.7	6,013.5	1,121.0	-910.4	EOD at Inc. = 0°
8,313.7	8,123.5	1,121.0	-910.4	TD at 8313.7' MD
8,413.7	8,223.5	1,121.0	-910.4	Permit TD at 8413.7