

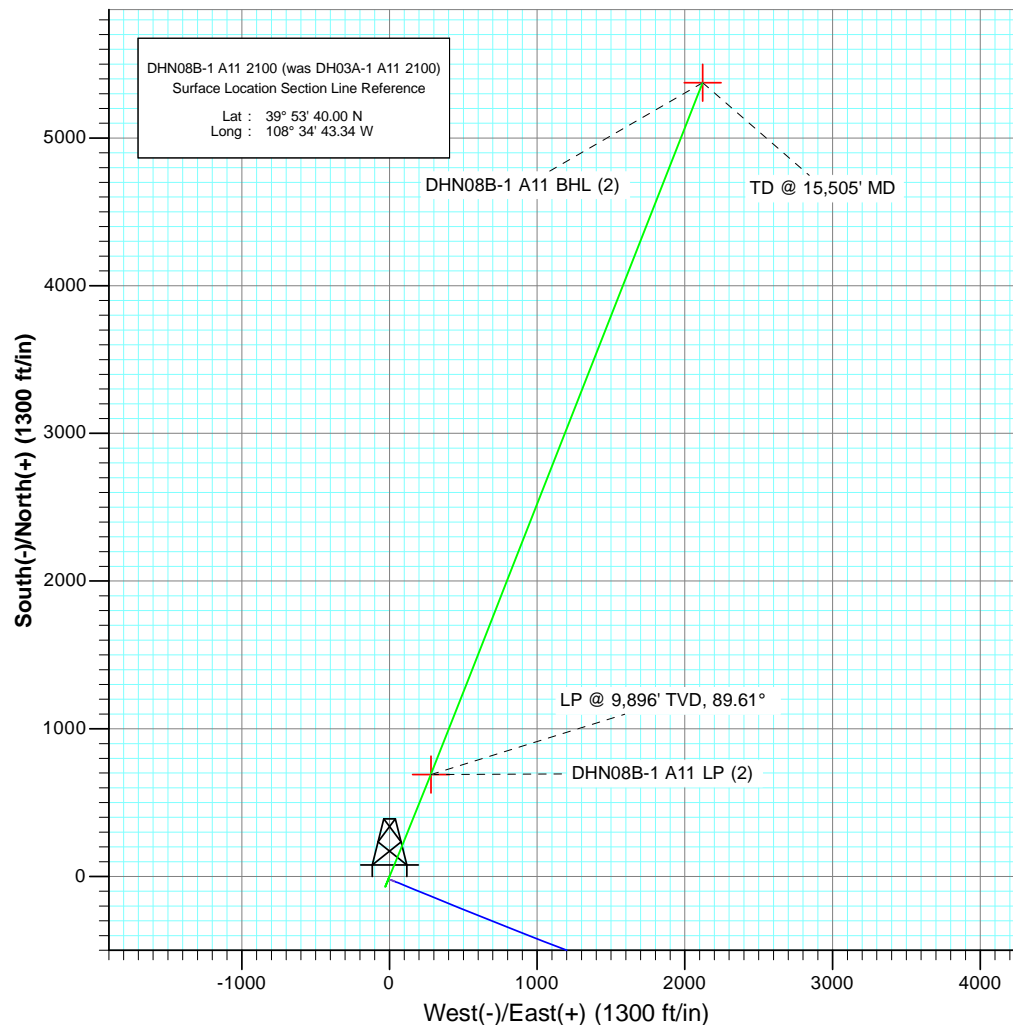
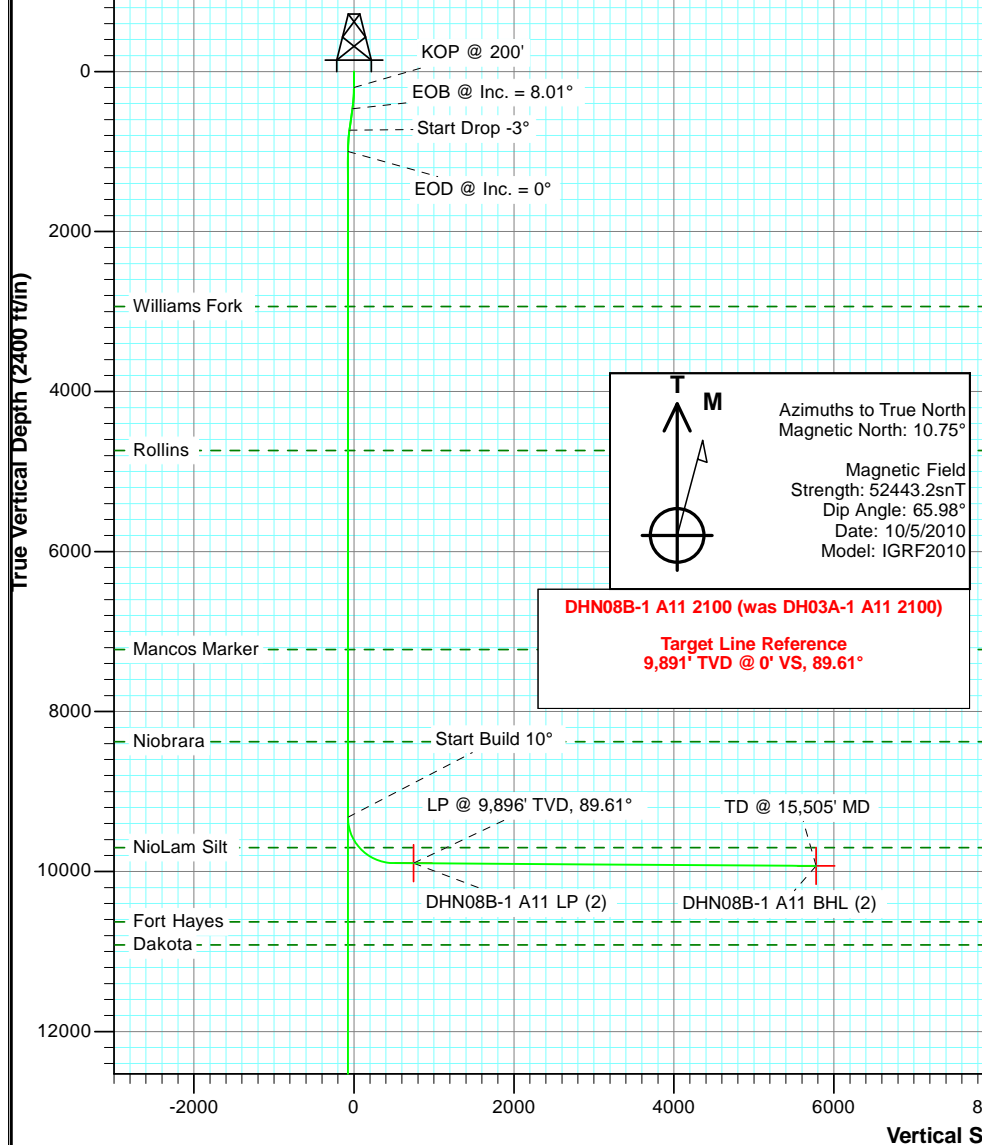


Project: Buckhorn Draw (HZ)  
Site: Sec 11-2S-R100W  
Well: DHN08B-1 A11 2100 (was DH03A-1 A11 2100)  
Wellbore: Hz  
Plan: Plan #2



#### SECTION DETAILS

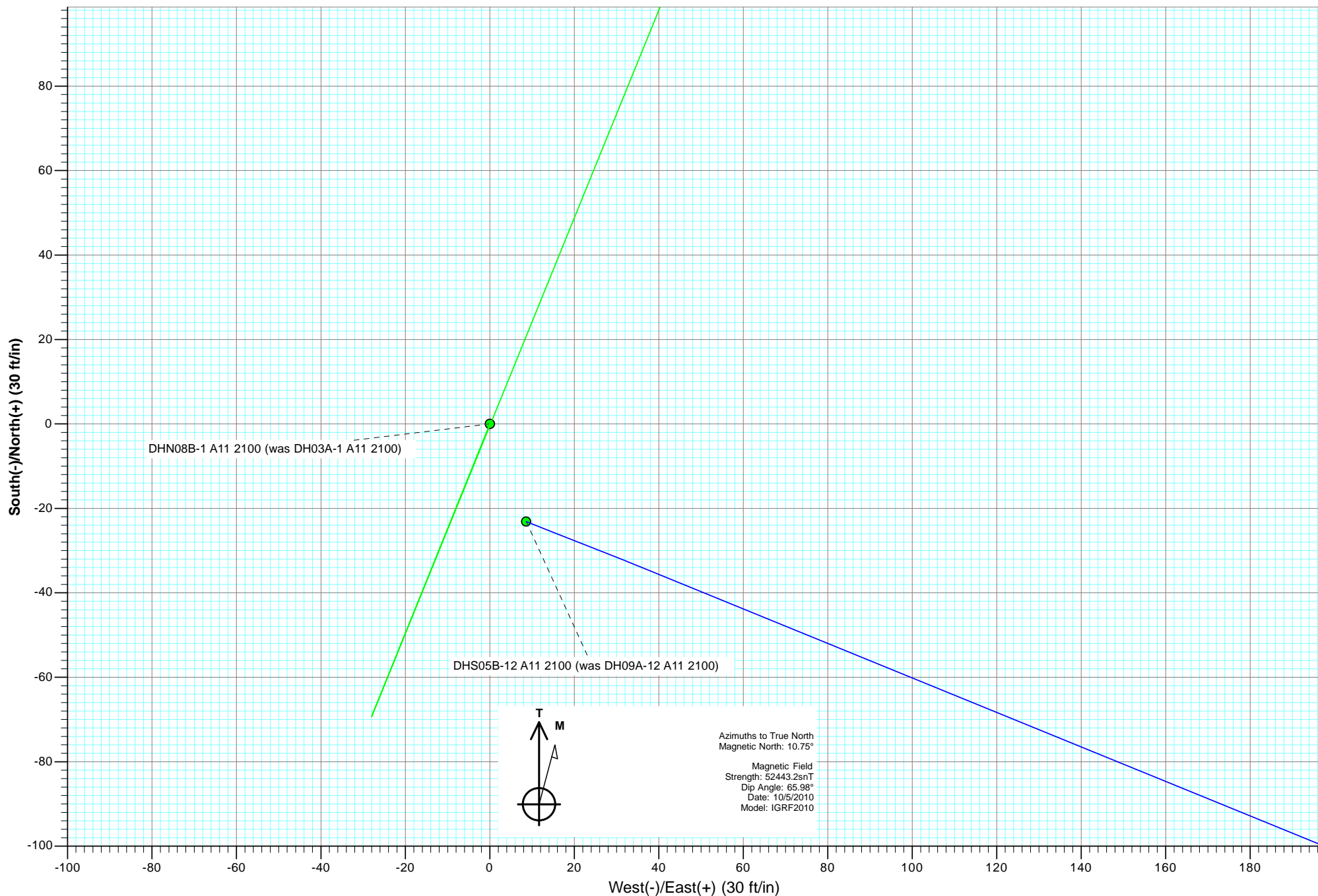
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	467.0	8.01	202.00	466.1	-17.3	-7.0	3.00	202.00	-18.6	
4	736.2	8.01	202.00	732.7	-52.1	-21.0	0.00	0.00	-56.1	
5	1003.2	0.00	0.00	998.8	-69.3	-28.0	3.00	180.00	-74.8	
6	9325.7	0.00	0.00	9321.4	-69.3	-28.0	0.00	0.00	-74.8	
7	10221.8	89.61	22.12	9894.3	457.8	186.2	10.00	22.12	494.2	
8	10465.8	89.61	22.12	9896.0	683.8	278.1	0.00	0.00	738.1	
9	10472.6	89.61	21.44	9896.0	690.1	280.6	10.00	-89.67	745.0	DHN08B-1 A11 LP (2)
10	15505.1	89.61	21.44	9930.0	5374.4	2119.7	0.00	0.00	5777.3	DHN08B-1 A11 BHL (2)



Plan #2 DHN08B-1 A11 2100 (was DH03A-1 A11 2100) 115XXX; SC						
KBE @ 7963.0ft (Revised Well Elevation) North American Datum 1983 Well DHN08B-1 A11 2100 (was DH03A-1 A11 2100), True North						
Type	Target	Azimuth	Origin	N/S	E/W	From
TD	No Target (Freehand)	21.52	Type Slot	0.0	0.0	TVD
Name		TVD				
DHN08B-1 A11 LP (2)		9896.0	+N/-S			Longitude
DHN08B-1 A11 BHL (2)		9930.0	+E/-W	39° 53' 46.82 N	108° 34' 39.74 W	
				39° 54' 33.11 N	108° 34' 16.14 W	



Project: Buckhorn Draw (HZ)  
Site: Sec 11-2S-R100W  
Well: DHN08B-1 A11 2100 (was DH03A-1 A11 2100)  
Wellbore: HZ  
Plan: Plan #2



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DHN08B-1 A11 2100 (was DH03A-1 A11 21
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Project:</b>	Buckhorn Draw (HZ)	<b>MD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Site:</b>	Sec 11-2S-R100W	<b>North Reference:</b>	True
<b>Well:</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

<b>Project</b>	Buckhorn Draw (HZ)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

<b>Site</b>	Sec 11-2S-R100W			
<b>Site Position:</b>		<b>Northing:</b>	1,765,302.83 ft	<b>Latitude:</b> 39° 53' 39.77 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,136,283.89 ft	<b>Longitude:</b> 108° 34' 43.23 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.94 °

<b>Well</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)			
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,765,326.20 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,136,276.11 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	7,941.0 ft

<b>Wellbore</b>	Hz				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	10/5/2010	10.75	65.98	52,443

<b>Design</b>	Plan #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	21.52

<b>Plan Sections</b>										
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	
467.0	8.01	202.00	466.1	-17.3	-7.0	3.00	3.00	0.00	202.00	
736.2	8.01	202.00	732.7	-52.1	-21.0	0.00	0.00	0.00	0.00	
1,003.2	0.00	0.00	998.8	-69.3	-28.0	3.00	-3.00	0.00	180.00	
9,325.7	0.00	0.00	9,321.4	-69.3	-28.0	0.00	0.00	0.00	0.00	
10,221.8	89.61	22.12	9,894.3	457.8	186.2	10.00	10.00	0.00	22.12	
10,465.8	89.61	22.12	9,896.0	683.8	278.1	0.00	0.00	0.00	0.00	
10,472.6	89.61	21.44	9,896.0	690.1	280.6	10.00	0.06	-10.00	-89.67	DHN08B-1 A11 LP (2
15,505.1	89.61	21.44	9,930.0	5,374.4	2,119.7	0.00	0.00	0.00	0.00	DHN08B-1 A11 BHL (

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DHN08B-1 A11 2100 (was DH03A-1 A11 21
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Project:</b>	Buckhorn Draw (HZ)	<b>MD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Site:</b>	Sec 11-2S-R100W	<b>North Reference:</b>	True
<b>Well:</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

### 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'
300.0	3.00	202.00	300.0	-2.4	-1.0	-2.6	3.00	3.00	
400.0	6.00	202.00	399.6	-9.7	-3.9	-10.5	3.00	3.00	
467.0	8.01	202.00	466.1	-17.3	-7.0	-18.6	3.00	3.00	EOB @ Inc. = 8.01°
500.0	8.01	202.00	498.8	-21.5	-8.7	-23.2	0.00	0.00	
600.0	8.01	202.00	597.8	-34.5	-13.9	-37.2	0.00	0.00	
700.0	8.01	202.00	696.9	-47.4	-19.1	-51.1	0.00	0.00	
736.2	8.01	202.00	732.7	-52.1	-21.0	-56.1	0.00	0.00	Start Drop -3°
800.0	6.10	202.00	796.0	-59.3	-24.0	-64.0	3.00	-3.00	
900.0	3.10	202.00	895.7	-66.7	-27.0	-72.0	3.00	-3.00	
1,003.2	0.00	0.00	998.8	-69.3	-28.0	-74.8	3.00	-3.00	EOD @ Inc. = 0°
1,100.0	0.00	0.00	1,095.6	-69.3	-28.0	-74.8	0.00	0.00	
1,200.0	0.00	0.00	1,195.6	-69.3	-28.0	-74.8	0.00	0.00	
1,300.0	0.00	0.00	1,295.6	-69.3	-28.0	-74.8	0.00	0.00	
1,400.0	0.00	0.00	1,395.6	-69.3	-28.0	-74.8	0.00	0.00	
1,500.0	0.00	0.00	1,495.6	-69.3	-28.0	-74.8	0.00	0.00	
1,600.0	0.00	0.00	1,595.6	-69.3	-28.0	-74.8	0.00	0.00	
1,700.0	0.00	0.00	1,695.6	-69.3	-28.0	-74.8	0.00	0.00	
1,800.0	0.00	0.00	1,795.6	-69.3	-28.0	-74.8	0.00	0.00	
1,900.0	0.00	0.00	1,895.6	-69.3	-28.0	-74.8	0.00	0.00	
2,000.0	0.00	0.00	1,995.6	-69.3	-28.0	-74.8	0.00	0.00	
2,100.0	0.00	0.00	2,095.6	-69.3	-28.0	-74.8	0.00	0.00	
2,200.0	0.00	0.00	2,195.6	-69.3	-28.0	-74.8	0.00	0.00	
2,300.0	0.00	0.00	2,295.6	-69.3	-28.0	-74.8	0.00	0.00	
2,400.0	0.00	0.00	2,395.6	-69.3	-28.0	-74.8	0.00	0.00	
2,500.0	0.00	0.00	2,495.6	-69.3	-28.0	-74.8	0.00	0.00	
2,600.0	0.00	0.00	2,595.6	-69.3	-28.0	-74.8	0.00	0.00	
2,700.0	0.00	0.00	2,695.6	-69.3	-28.0	-74.8	0.00	0.00	
2,800.0	0.00	0.00	2,795.6	-69.3	-28.0	-74.8	0.00	0.00	
2,900.0	0.00	0.00	2,895.6	-69.3	-28.0	-74.8	0.00	0.00	
2,942.4	0.00	0.00	2,938.0	-69.3	-28.0	-74.8	0.00	0.00	Williams Fork
3,000.0	0.00	0.00	2,995.6	-69.3	-28.0	-74.8	0.00	0.00	
3,100.0	0.00	0.00	3,095.6	-69.3	-28.0	-74.8	0.00	0.00	
3,200.0	0.00	0.00	3,195.6	-69.3	-28.0	-74.8	0.00	0.00	
3,300.0	0.00	0.00	3,295.6	-69.3	-28.0	-74.8	0.00	0.00	
3,400.0	0.00	0.00	3,395.6	-69.3	-28.0	-74.8	0.00	0.00	
3,500.0	0.00	0.00	3,495.6	-69.3	-28.0	-74.8	0.00	0.00	
3,600.0	0.00	0.00	3,595.6	-69.3	-28.0	-74.8	0.00	0.00	
3,700.0	0.00	0.00	3,695.6	-69.3	-28.0	-74.8	0.00	0.00	
3,800.0	0.00	0.00	3,795.6	-69.3	-28.0	-74.8	0.00	0.00	
3,900.0	0.00	0.00	3,895.6	-69.3	-28.0	-74.8	0.00	0.00	
4,000.0	0.00	0.00	3,995.6	-69.3	-28.0	-74.8	0.00	0.00	
4,100.0	0.00	0.00	4,095.6	-69.3	-28.0	-74.8	0.00	0.00	
4,200.0	0.00	0.00	4,195.6	-69.3	-28.0	-74.8	0.00	0.00	
4,300.0	0.00	0.00	4,295.6	-69.3	-28.0	-74.8	0.00	0.00	
4,400.0	0.00	0.00	4,395.6	-69.3	-28.0	-74.8	0.00	0.00	
4,500.0	0.00	0.00	4,495.6	-69.3	-28.0	-74.8	0.00	0.00	
4,600.0	0.00	0.00	4,595.6	-69.3	-28.0	-74.8	0.00	0.00	
4,700.0	0.00	0.00	4,695.6	-69.3	-28.0	-74.8	0.00	0.00	
4,743.4	0.00	0.00	4,739.0	-69.3	-28.0	-74.8	0.00	0.00	Rollins

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DHN08B-1 A11 2100 (was DH03A-1 A11 21
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Project:</b>	Buckhorn Draw (HZ)	<b>MD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Site:</b>	Sec 11-2S-R100W	<b>North Reference:</b>	True
<b>Well:</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

### 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
4,800.0	0.00	0.00	4,795.6	-69.3	-28.0	-74.8	0.00	0.00	
4,900.0	0.00	0.00	4,895.6	-69.3	-28.0	-74.8	0.00	0.00	
5,000.0	0.00	0.00	4,995.6	-69.3	-28.0	-74.8	0.00	0.00	
5,100.0	0.00	0.00	5,095.6	-69.3	-28.0	-74.8	0.00	0.00	
5,200.0	0.00	0.00	5,195.6	-69.3	-28.0	-74.8	0.00	0.00	
5,300.0	0.00	0.00	5,295.6	-69.3	-28.0	-74.8	0.00	0.00	
5,400.0	0.00	0.00	5,395.6	-69.3	-28.0	-74.8	0.00	0.00	
5,500.0	0.00	0.00	5,495.6	-69.3	-28.0	-74.8	0.00	0.00	
5,600.0	0.00	0.00	5,595.6	-69.3	-28.0	-74.8	0.00	0.00	
5,700.0	0.00	0.00	5,695.6	-69.3	-28.0	-74.8	0.00	0.00	
5,800.0	0.00	0.00	5,795.6	-69.3	-28.0	-74.8	0.00	0.00	
5,900.0	0.00	0.00	5,895.6	-69.3	-28.0	-74.8	0.00	0.00	
6,000.0	0.00	0.00	5,995.6	-69.3	-28.0	-74.8	0.00	0.00	
6,100.0	0.00	0.00	6,095.6	-69.3	-28.0	-74.8	0.00	0.00	
6,200.0	0.00	0.00	6,195.6	-69.3	-28.0	-74.8	0.00	0.00	
6,300.0	0.00	0.00	6,295.6	-69.3	-28.0	-74.8	0.00	0.00	
6,400.0	0.00	0.00	6,395.6	-69.3	-28.0	-74.8	0.00	0.00	
6,500.0	0.00	0.00	6,495.6	-69.3	-28.0	-74.8	0.00	0.00	
6,600.0	0.00	0.00	6,595.6	-69.3	-28.0	-74.8	0.00	0.00	
6,700.0	0.00	0.00	6,695.6	-69.3	-28.0	-74.8	0.00	0.00	
6,800.0	0.00	0.00	6,795.6	-69.3	-28.0	-74.8	0.00	0.00	
6,900.0	0.00	0.00	6,895.6	-69.3	-28.0	-74.8	0.00	0.00	
7,000.0	0.00	0.00	6,995.6	-69.3	-28.0	-74.8	0.00	0.00	
7,100.0	0.00	0.00	7,095.6	-69.3	-28.0	-74.8	0.00	0.00	
7,200.0	0.00	0.00	7,195.6	-69.3	-28.0	-74.8	0.00	0.00	
7,229.4	0.00	0.00	7,225.0	-69.3	-28.0	-74.8	0.00	0.00	Mancos Marker
7,300.0	0.00	0.00	7,295.6	-69.3	-28.0	-74.8	0.00	0.00	
7,400.0	0.00	0.00	7,395.6	-69.3	-28.0	-74.8	0.00	0.00	
7,500.0	0.00	0.00	7,495.6	-69.3	-28.0	-74.8	0.00	0.00	
7,600.0	0.00	0.00	7,595.6	-69.3	-28.0	-74.8	0.00	0.00	
7,700.0	0.00	0.00	7,695.6	-69.3	-28.0	-74.8	0.00	0.00	
7,800.0	0.00	0.00	7,795.6	-69.3	-28.0	-74.8	0.00	0.00	
7,900.0	0.00	0.00	7,895.6	-69.3	-28.0	-74.8	0.00	0.00	
8,000.0	0.00	0.00	7,995.6	-69.3	-28.0	-74.8	0.00	0.00	
8,100.0	0.00	0.00	8,095.6	-69.3	-28.0	-74.8	0.00	0.00	
8,200.0	0.00	0.00	8,195.6	-69.3	-28.0	-74.8	0.00	0.00	
8,300.0	0.00	0.00	8,295.6	-69.3	-28.0	-74.8	0.00	0.00	
8,380.4	0.00	0.00	8,376.0	-69.3	-28.0	-74.8	0.00	0.00	Niobrara
8,400.0	0.00	0.00	8,395.6	-69.3	-28.0	-74.8	0.00	0.00	
8,500.0	0.00	0.00	8,495.6	-69.3	-28.0	-74.8	0.00	0.00	
8,600.0	0.00	0.00	8,595.6	-69.3	-28.0	-74.8	0.00	0.00	
8,700.0	0.00	0.00	8,695.6	-69.3	-28.0	-74.8	0.00	0.00	
8,800.0	0.00	0.00	8,795.6	-69.3	-28.0	-74.8	0.00	0.00	
8,900.0	0.00	0.00	8,895.6	-69.3	-28.0	-74.8	0.00	0.00	
9,000.0	0.00	0.00	8,995.6	-69.3	-28.0	-74.8	0.00	0.00	
9,100.0	0.00	0.00	9,095.6	-69.3	-28.0	-74.8	0.00	0.00	
9,200.0	0.00	0.00	9,195.6	-69.3	-28.0	-74.8	0.00	0.00	
9,300.0	0.00	0.00	9,295.6	-69.3	-28.0	-74.8	0.00	0.00	
9,325.7	0.00	0.00	9,321.4	-69.3	-28.0	-74.8	0.00	0.00	Start Build 10°
9,350.0	2.43	22.12	9,345.6	-68.9	-27.8	-74.3	10.00	10.00	
9,400.0	7.43	22.12	9,395.4	-64.9	-26.2	-70.0	10.00	10.00	
9,450.0	12.43	22.12	9,444.7	-56.9	-23.0	-61.4	10.00	10.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DHN08B-1 A11 2100 (was DH03A-1 A11 21
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Project:</b>	Buckhorn Draw (HZ)	<b>MD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Site:</b>	Sec 11-2S-R100W	<b>North Reference:</b>	True
<b>Well:</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

### 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
9,500.0	17.43	22.12	9,493.0	-45.0	-18.1	-48.5	10.00	10.00	
9,550.0	22.43	22.12	9,540.0	-29.2	-11.7	-31.5	10.00	10.00	
9,600.0	27.43	22.12	9,585.3	-9.7	-3.8	-10.4	10.00	10.00	
9,650.0	32.43	22.12	9,628.6	13.4	5.6	14.5	10.00	10.00	
9,700.0	37.43	22.12	9,669.6	39.9	16.4	43.2	10.00	10.00	
9,739.4	41.36	22.12	9,700.0	63.1	25.8	68.1	10.00	10.00	NioLam Silt
9,750.0	42.43	22.12	9,707.9	69.7	28.5	75.2	10.00	10.00	
9,800.0	47.43	22.12	9,743.3	102.4	41.8	110.5	10.00	10.00	
9,850.0	52.43	22.12	9,775.5	137.8	56.2	148.8	10.00	10.00	
9,900.0	57.43	22.12	9,804.2	175.7	71.6	189.7	10.00	10.00	
9,950.0	62.43	22.12	9,829.3	215.8	87.8	232.9	10.00	10.00	
10,000.0	67.43	22.12	9,850.4	257.7	104.9	278.2	10.00	10.00	
10,050.0	72.43	22.12	9,867.6	301.2	122.6	325.2	10.00	10.00	
10,100.0	77.43	22.12	9,880.6	345.9	140.7	373.4	10.00	10.00	
10,150.0	82.43	22.12	9,889.3	391.5	159.3	422.6	10.00	10.00	
10,200.0	87.43	22.12	9,893.8	437.6	178.0	472.4	10.00	10.00	
10,221.8	89.61	22.12	9,894.3	457.8	186.2	494.2	10.02	10.02	
10,300.0	89.61	22.12	9,894.8	530.3	215.7	572.4	0.00	0.00	
10,400.0	89.61	22.12	9,895.5	622.9	253.3	672.4	0.00	0.00	
10,465.8	89.61	22.12	9,896.0	683.8	278.1	738.1	0.00	0.00	
10,472.6	89.61	21.44	9,896.0	690.2	280.6	745.0	9.97	0.06	LP @ 9,896' TVD, 89.61°
10,500.0	89.61	21.44	9,896.2	715.7	290.6	772.4	0.00	0.00	
10,600.0	89.61	21.44	9,896.9	808.7	327.2	872.4	0.00	0.00	
10,700.0	89.61	21.44	9,897.5	901.8	363.7	972.4	0.00	0.00	
10,800.0	89.61	21.44	9,898.2	994.9	400.2	1,072.4	0.00	0.00	
10,900.0	89.61	21.44	9,898.9	1,088.0	436.8	1,172.4	0.00	0.00	
11,000.0	89.61	21.44	9,899.6	1,181.1	473.3	1,272.4	0.00	0.00	
11,100.0	89.61	21.44	9,900.2	1,274.2	509.9	1,372.4	0.00	0.00	
11,200.0	89.61	21.44	9,900.9	1,367.2	546.4	1,472.4	0.00	0.00	
11,300.0	89.61	21.44	9,901.6	1,460.3	583.0	1,572.4	0.00	0.00	
11,400.0	89.61	21.44	9,902.3	1,553.4	619.5	1,672.4	0.00	0.00	
11,500.0	89.61	21.44	9,902.9	1,646.5	656.1	1,772.4	0.00	0.00	
11,600.0	89.61	21.44	9,903.6	1,739.6	692.6	1,872.4	0.00	0.00	
11,700.0	89.61	21.44	9,904.3	1,832.6	729.1	1,972.4	0.00	0.00	
11,800.0	89.61	21.44	9,905.0	1,925.7	765.7	2,072.4	0.00	0.00	
11,900.0	89.61	21.44	9,905.6	2,018.8	802.2	2,172.3	0.00	0.00	
12,000.0	89.61	21.44	9,906.3	2,111.9	838.8	2,272.3	0.00	0.00	
12,100.0	89.61	21.44	9,907.0	2,205.0	875.3	2,372.3	0.00	0.00	
12,200.0	89.61	21.44	9,907.7	2,298.0	911.9	2,472.3	0.00	0.00	
12,300.0	89.61	21.44	9,908.3	2,391.1	948.4	2,572.3	0.00	0.00	
12,400.0	89.61	21.44	9,909.0	2,484.2	985.0	2,672.3	0.00	0.00	
12,500.0	89.61	21.44	9,909.7	2,577.3	1,021.5	2,772.3	0.00	0.00	
12,600.0	89.61	21.44	9,910.4	2,670.4	1,058.0	2,872.3	0.00	0.00	
12,700.0	89.61	21.44	9,911.0	2,763.4	1,094.6	2,972.3	0.00	0.00	
12,800.0	89.61	21.44	9,911.7	2,856.5	1,131.1	3,072.3	0.00	0.00	
12,900.0	89.61	21.44	9,912.4	2,949.6	1,167.7	3,172.3	0.00	0.00	
13,000.0	89.61	21.44	9,913.1	3,042.7	1,204.2	3,272.3	0.00	0.00	
13,100.0	89.61	21.44	9,913.8	3,135.8	1,240.8	3,372.3	0.00	0.00	
13,200.0	89.61	21.44	9,914.4	3,228.9	1,277.3	3,472.3	0.00	0.00	
13,300.0	89.61	21.44	9,915.1	3,321.9	1,313.8	3,572.3	0.00	0.00	
13,400.0	89.61	21.44	9,915.8	3,415.0	1,350.4	3,672.3	0.00	0.00	
13,500.0	89.61	21.44	9,916.5	3,508.1	1,386.9	3,772.3	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DHN08B-1 A11 2100 (was DH03A-1 A11 21
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Project:</b>	Buckhorn Draw (HZ)	<b>MD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Site:</b>	Sec 11-2S-R100W	<b>North Reference:</b>	True
<b>Well:</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #2		

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
13,600.0	89.61	21.44	9,917.1	3,601.2	1,423.5	3,872.3	0.00	0.00	
13,700.0	89.61	21.44	9,917.8	3,694.3	1,460.0	3,972.3	0.00	0.00	
13,800.0	89.61	21.44	9,918.5	3,787.3	1,496.6	4,072.3	0.00	0.00	
13,900.0	89.61	21.44	9,919.2	3,880.4	1,533.1	4,172.3	0.00	0.00	
14,000.0	89.61	21.44	9,919.8	3,973.5	1,569.7	4,272.3	0.00	0.00	
14,100.0	89.61	21.44	9,920.5	4,066.6	1,606.2	4,372.3	0.00	0.00	
14,200.0	89.61	21.44	9,921.2	4,159.7	1,642.7	4,472.3	0.00	0.00	
14,300.0	89.61	21.44	9,921.9	4,252.7	1,679.3	4,572.3	0.00	0.00	
14,400.0	89.61	21.44	9,922.5	4,345.8	1,715.8	4,672.3	0.00	0.00	
14,500.0	89.61	21.44	9,923.2	4,438.9	1,752.4	4,772.3	0.00	0.00	
14,600.0	89.61	21.44	9,923.9	4,532.0	1,788.9	4,872.3	0.00	0.00	
14,700.0	89.61	21.44	9,924.6	4,625.1	1,825.5	4,972.3	0.00	0.00	
14,800.0	89.61	21.44	9,925.2	4,718.2	1,862.0	5,072.3	0.00	0.00	
14,900.0	89.61	21.44	9,925.9	4,811.2	1,898.6	5,172.3	0.00	0.00	
15,000.0	89.61	21.44	9,926.6	4,904.3	1,935.1	5,272.3	0.00	0.00	
15,100.0	89.61	21.44	9,927.3	4,997.4	1,971.6	5,372.3	0.00	0.00	
15,200.0	89.61	21.44	9,927.9	5,090.5	2,008.2	5,472.3	0.00	0.00	
15,300.0	89.61	21.44	9,928.6	5,183.6	2,044.7	5,572.3	0.00	0.00	
15,400.0	89.61	21.44	9,929.3	5,276.6	2,081.3	5,672.3	0.00	0.00	
15,505.1	89.61	21.44	9,930.0	5,374.4	2,119.7	5,777.3	0.00	0.00	TD @ 15,505' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
DHN08B-1 A11 BHL (2) - hit/miss target - Shape - Point	0.00	0.00	9,930.0	5,374.4	2,119.7	1,770,625.73	2,138,576.66	39° 54' 33.11 N	108° 34' 16.14 W
DHN08B-1 BHL (2) - plan misses target center by 7963.0ft at 15505.1ft MD (9930.0 TVD, 5374.4 N, 2119.7 E) - Point	0.00	0.00	17,893.0	5,374.4	2,119.7	1,770,625.73	2,138,576.66	39° 54' 33.11 N	108° 34' 16.14 W
DHN08B-1 A11 LP (2) - plan hits target center - Point	0.00	0.00	9,896.0	690.1	280.6	1,766,006.44	2,136,579.92	39° 53' 46.82 N	108° 34' 39.74 W
DH03A-1 Permit TD - plan misses target center by 697.4ft at 15505.1ft MD (9930.0 TVD, 5374.4 N, 2119.7 E) - Point	0.00	0.00	10,627.0	5,394.4	2,131.0	1,770,645.25	2,138,588.70	39° 54' 33.31 N	108° 34' 15.99 W
DH03A-1 Landing Pt - plan misses target center by 905.6ft at 10534.2ft MD (9896.4 TVD, 747.5 N, 303.1 E) - Point	0.00	0.00	10,802.0	744.4	294.3	1,766,060.23	2,136,595.48	39° 53' 47.36 N	108° 34' 39.56 W
DHN08B-1 Landing Pt (2) - plan misses target center by 7962.8ft at 10526.4ft MD (9896.4 TVD, 740.2 N, 300.3 E) - Point	0.00	0.00	17,859.0	690.1	280.6	1,766,006.44	2,136,579.92	39° 53' 46.82 N	108° 34' 39.74 W

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DHN08B-1 A11 2100 (was DH03A-1 A11 21
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Project:</b>	Buckhorn Draw (HZ)	<b>MD Reference:</b>	KBE @ 7963.0ft (Revised Welle Elevation)
<b>Site:</b>	Sec 11-2S-R100W	<b>North Reference:</b>	True
<b>Well:</b>	DHN08B-1 A11 2100 (was DH03A-1 A11 2100)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Hz		
<b>Design:</b>	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,942.4	2,938.0	Williams Fork		0.00		
4,743.4	4,739.0	Rollins		0.00		
7,229.4	7,225.0	Mancos Marker		0.00		
8,380.4	8,376.0	Niobrara		0.00		
9,739.4	9,700.0	NioLam Silt		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP @ 200'	
467.0	466.1	-17.3	-7.0	EOB @ Inc. = 8.01°	
736.2	732.7	-52.1	-21.0	Start Drop -3°	
1,003.2	998.8	-69.3	-28.0	EOD @ Inc. = 0°	
9,325.7	9,321.4	-69.3	-28.0	Start Build 10°	
10,472.6	9,896.0	690.2	280.6	LP @ 9,896' TVD, 89.61°	
15,505.1	9,930.0	5,374.4	2,119.7	TD @ 15,505' MD	