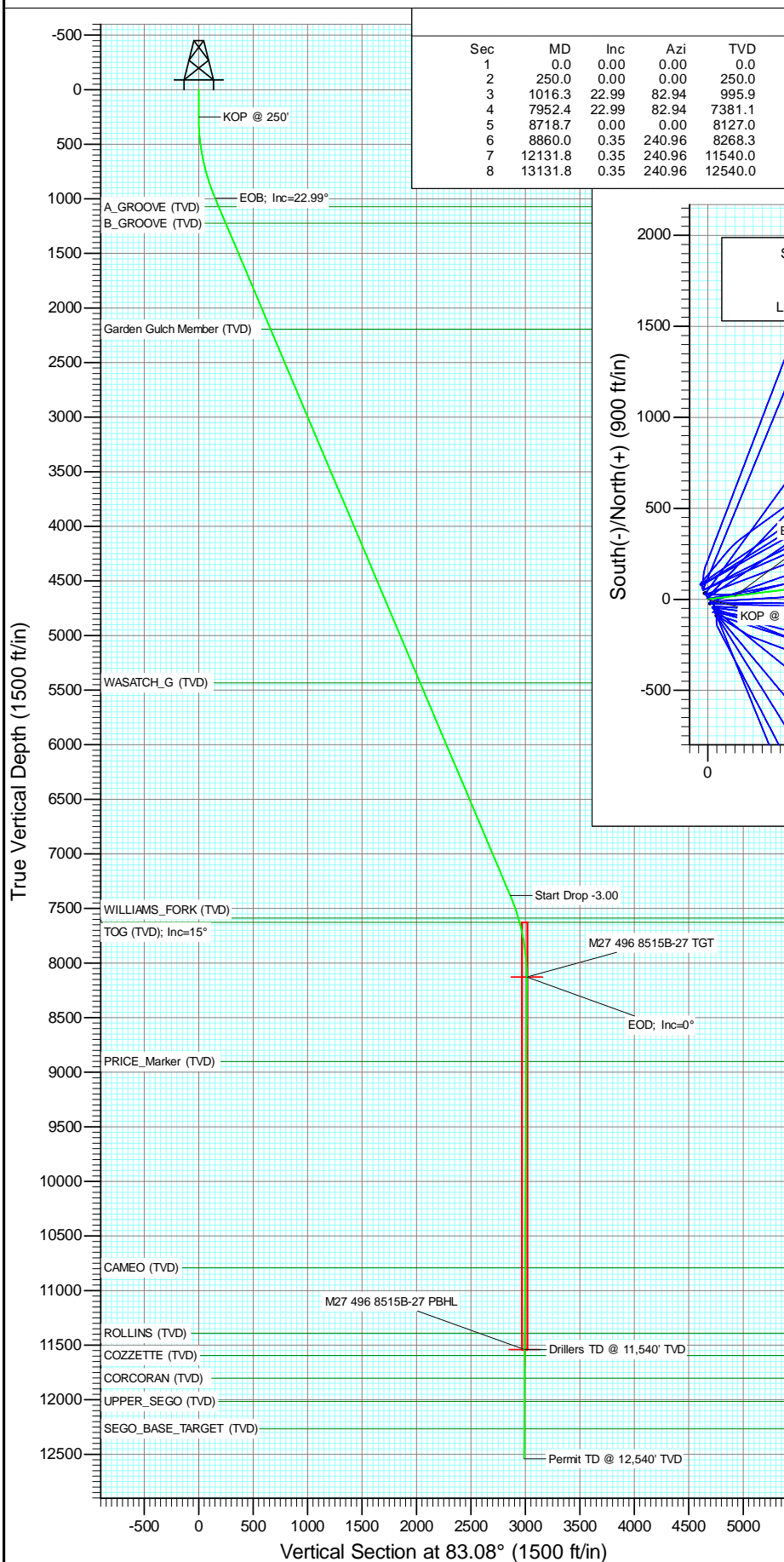


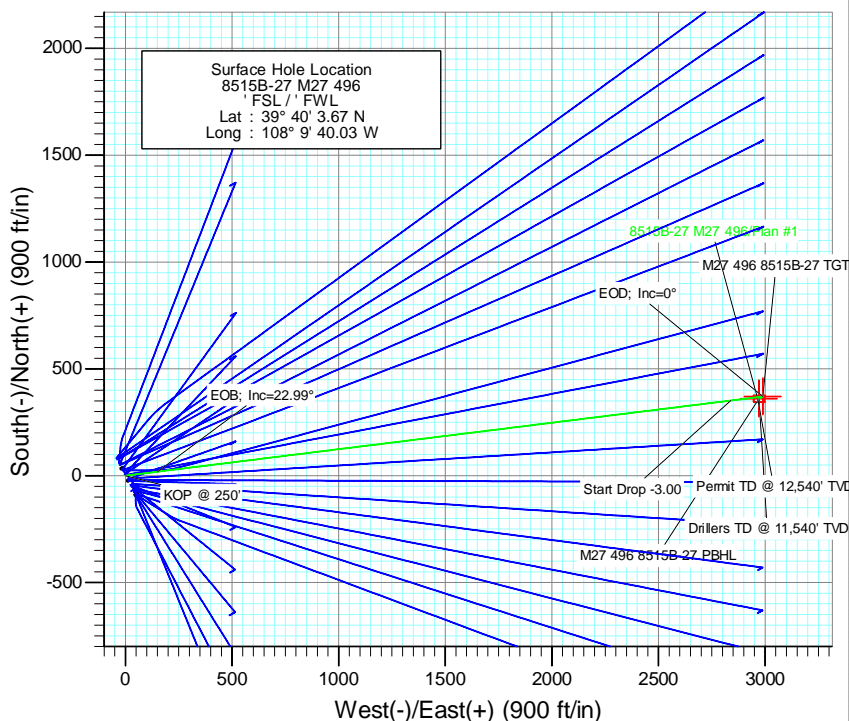


Project: Story Gulch
Site: S27-T4S-R96W (M27 496)
Well: 8515B-27 M27 496
Wellbore: DD
Design: Plan #1



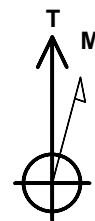
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	1016.3	22.99	82.94	995.9	18.7	150.5	3.00	82.94	151.7	
4	7952.4	22.99	82.94	7381.1	351.7	2839.0	0.00	0.00	2860.7	
5	8718.7	0.00	0.00	8127.0	370.4	2989.5	3.00	180.00	3012.3	M27 496 8515B-27 TGT
6	8860.0	0.35	240.96	8268.3	370.2	2989.1	0.25	240.96	3011.9	
7	12131.8	0.35	240.96	11540.0	360.4	2971.5	0.00	0.00	2993.3	M27 496 8515B-27 PBHL
8	13131.8	0.35	240.96	12540.0	357.4	2966.1	0.00	0.00	2987.5	



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1072.0	1099.0	A_GROOVE (TVD)
1223.0	1263.0	B_GROOVE (TVD)
2193.0	2316.7	Garden Gulch Member (TVD)
5434.0	5837.3	WASATCH_G (TVD)
7587.0	8171.2	WILLIAMS_FORK (TVD)
7627.0	8212.8	TOG (TVD); Inc=15°
8902.0	9493.7	PRICE_Marker (TVD)
10790.0	11381.7	CAMEO (TVD)
11390.0	11981.7	ROLLINS (TVD)
11594.0	12185.8	COZZETTE (TVD)
11802.0	12393.8	CORCORAN (TVD)
12016.0	12607.8	UPPER_SEGO (TVD)
12266.0	12857.8	SEGO_BASE_TARGET (TVD)



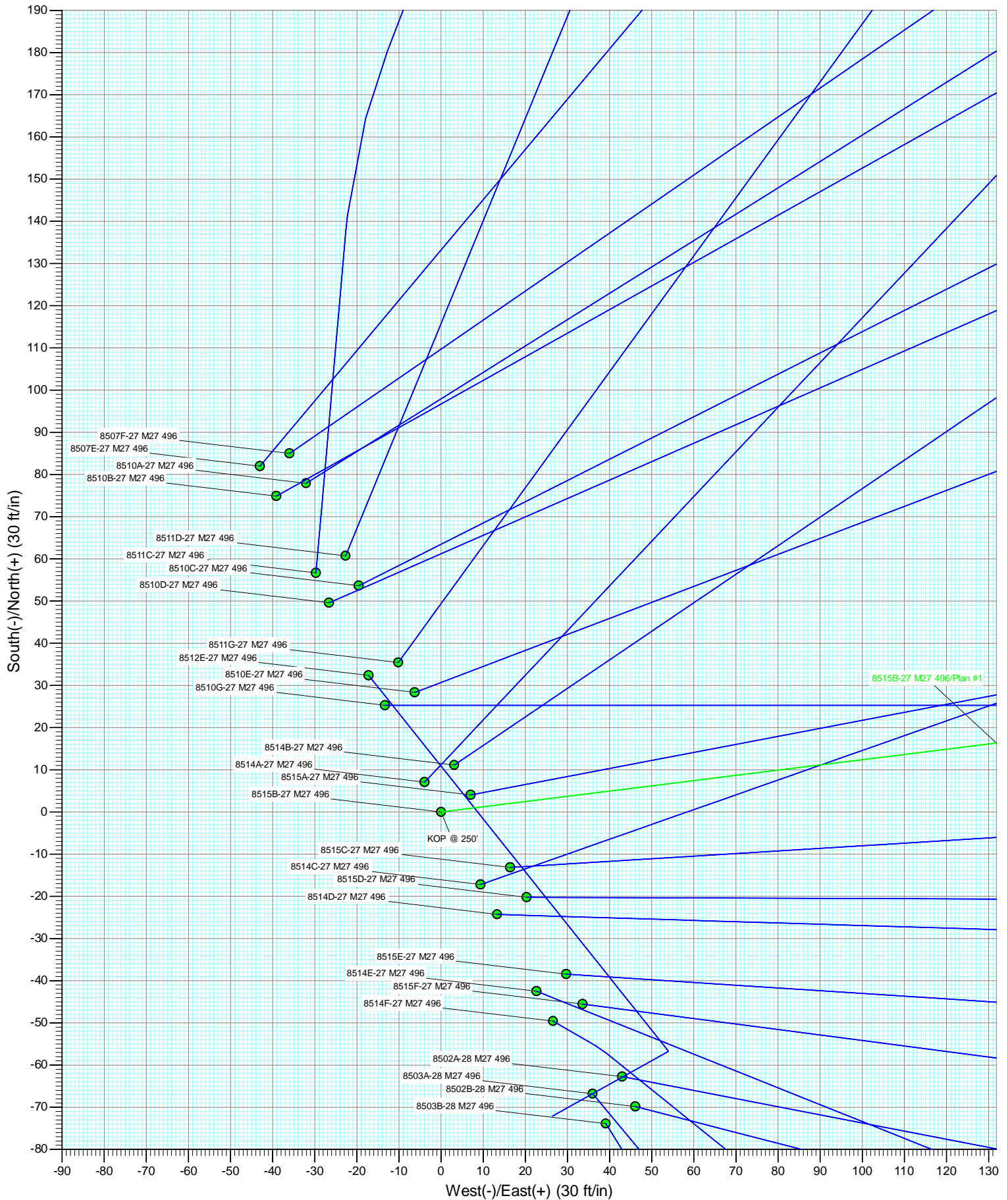
Azimuths to True North
Magnetic North: 10.41°

Magnetic Field
Strength: 52276.3snT
Dip Angle: 65.84°
Date: 9/26/2011
Model: IGRF2010

Type	Target	Target	Azimuth	Origin	N/S	E/W	From	TVD
		M27 496 8515B-27 PBHL	83.08	Spot	0.0	0.0	0.0	
Name	TVD	+N/-S	+E/-W	Latitude	Longitude			
M27 496 8515B-27 TGT	8127.0	370.4	2989.5	39° 40' 7.33 N	108° 9' 1.90 W			
M27 496 8515B-27 PBHL	11540.0	360.4	2971.5	39° 40' 7.23 N	108° 9' 2.03 W			

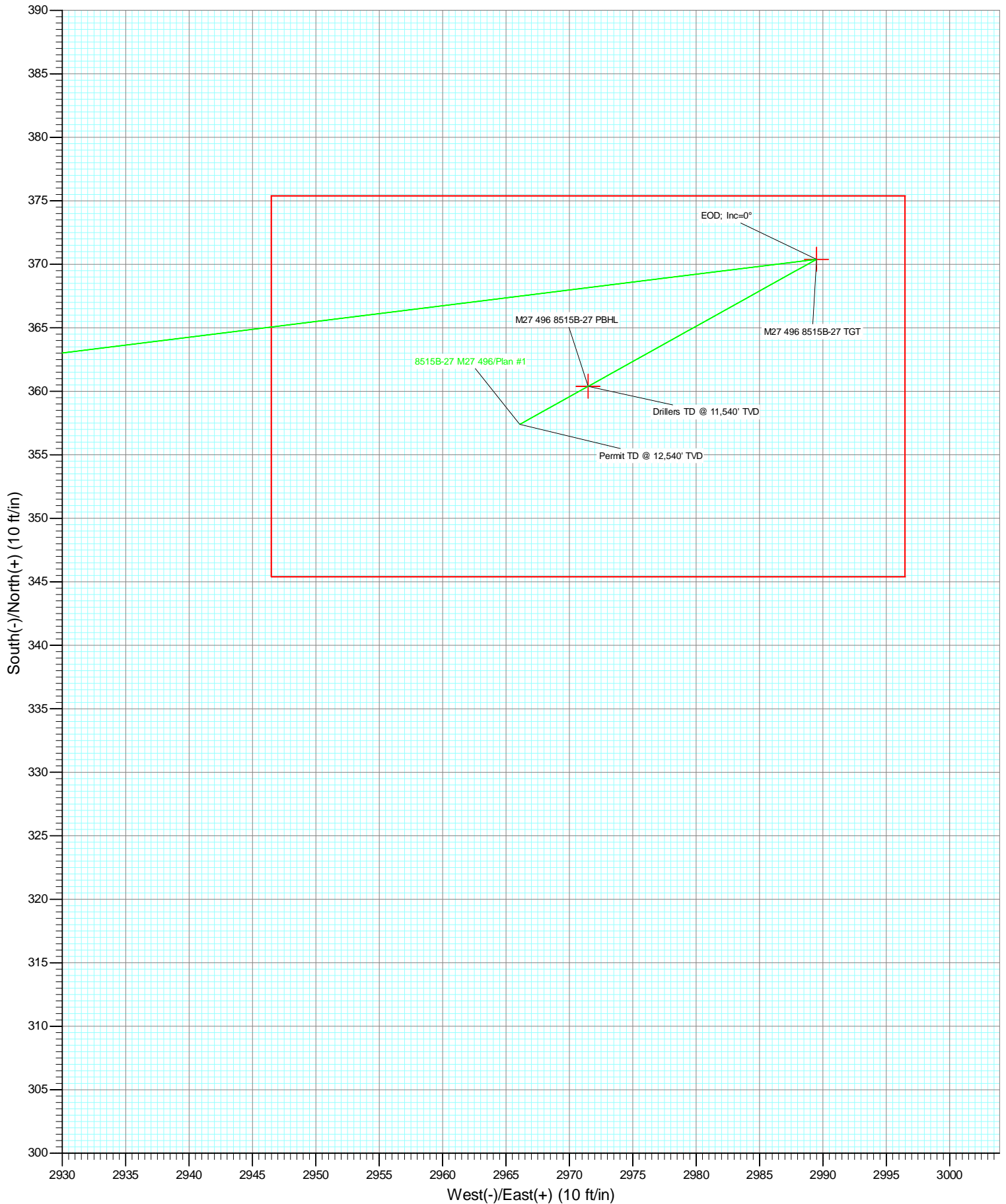


Project: Story Gulch
Site: S27-T4S-R96W (M27 496)
Well: 8515B-27 M27 496
Wellbore: DD
Design: Plan #1





Project: Story Gulch
Site: S27-T4S-R96W (M27 496)
Well: 8515B-27 M27 496
Wellbore: DD
Design: Plan #1



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8515B-27 M27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 8121.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	KBE @ 8121.0ft (Original Well Elev)
Site:	S27-T4S-R96W (M27 496)	North Reference:	True
Well:	8515B-27 M27 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

Site		S27-T4S-R96W (M27 496)			
Site Position:		Northing:	1,678,990.24 ft	Latitude:	39° 40' 3.01 N
From:	Lat/Long	Easting:	2,251,008.33 ft	Longitude:	108° 9' 39.57 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.68 °

Well	8515B-27 M27 496					
Well Position	+N/-S	0.0 ft	Northing:	1,679,058.04 ft	Latitude:	39° 40' 3.67 N
	+E/-W	0.0 ft	Easting:	2,250,974.33 ft	Longitude:	108° 9' 40.03 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,099.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/26/2011	10.41	65.84	52,276

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	83.08	

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,016.3	22.99	82.94	995.9	18.7	150.5	3.00	3.00	0.00	82.94	
7,952.4	22.99	82.94	7,381.1	351.7	2,839.0	0.00	0.00	0.00	0.00	
8,718.7	0.00	0.00	8,127.0	370.4	2,989.5	3.00	-3.00	0.00	180.00	M27 496 8515B-27 T
8,860.0	0.35	240.96	8,268.3	370.2	2,989.1	0.25	0.25	-84.23	240.96	
12,131.8	0.35	240.96	11,540.0	360.4	2,971.5	0.00	0.00	0.00	0.00	M27 496 8515B-27 PI
13,131.8	0.35	240.96	12,540.0	357.4	2,966.1	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8515B-27 M27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 8121.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	KBE @ 8121.0ft (Original Well Elev)
Site:	S27-T4S-R96W (M27 496)	North Reference:	True
Well:	8515B-27 M27 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250'
300.0	1.50	82.94	300.0	0.1	0.6	0.7	3.00	3.00	
400.0	4.50	82.94	399.8	0.7	5.8	5.9	3.00	3.00	
500.0	7.50	82.94	499.3	2.0	16.2	16.3	3.00	3.00	
600.0	10.50	82.94	598.0	3.9	31.7	32.0	3.00	3.00	
700.0	13.50	82.94	695.8	6.5	52.4	52.8	3.00	3.00	
800.0	16.50	82.94	792.4	9.7	78.1	78.6	3.00	3.00	
900.0	19.50	82.94	887.5	13.5	108.7	109.5	3.00	3.00	
1,000.0	22.50	82.94	980.9	17.9	144.3	145.4	3.00	3.00	
1,016.3	22.99	82.94	995.9	18.7	150.5	151.7	3.00	3.00	EOB; Inc=22.99°
1,099.0	22.99	82.94	1,072.0	22.6	182.6	184.0	0.00	0.00	A_GROOVE (TVD)
1,100.0	22.99	82.94	1,073.0	22.7	183.0	184.4	0.00	0.00	
1,200.0	22.99	82.94	1,165.0	27.5	221.7	223.4	0.00	0.00	
1,263.0	22.99	82.94	1,223.0	30.5	246.1	248.0	0.00	0.00	B_GROOVE (TVD)
1,300.0	22.99	82.94	1,257.1	32.3	260.5	262.5	0.00	0.00	
1,400.0	22.99	82.94	1,349.1	37.1	299.3	301.5	0.00	0.00	
1,500.0	22.99	82.94	1,441.2	41.9	338.0	340.6	0.00	0.00	
1,600.0	22.99	82.94	1,533.2	46.7	376.8	379.7	0.00	0.00	
1,700.0	22.99	82.94	1,625.3	51.5	415.5	418.7	0.00	0.00	
1,800.0	22.99	82.94	1,717.4	56.3	454.3	457.8	0.00	0.00	
1,900.0	22.99	82.94	1,809.4	61.1	493.1	496.8	0.00	0.00	
2,000.0	22.99	82.94	1,901.5	65.9	531.8	535.9	0.00	0.00	
2,100.0	22.99	82.94	1,993.5	70.7	570.6	574.9	0.00	0.00	
2,200.0	22.99	82.94	2,085.6	75.5	609.3	614.0	0.00	0.00	
2,300.0	22.99	82.94	2,177.6	80.3	648.1	653.0	0.00	0.00	
2,316.7	22.99	82.94	2,193.0	81.1	654.6	659.6	0.00	0.00	Garden Gulch Member (TVD)
2,400.0	22.99	82.94	2,269.7	85.1	686.9	692.1	0.00	0.00	
2,500.0	22.99	82.94	2,361.8	89.9	725.6	731.2	0.00	0.00	
2,600.0	22.99	82.94	2,453.8	94.7	764.4	770.2	0.00	0.00	
2,700.0	22.99	82.94	2,545.9	99.5	803.1	809.3	0.00	0.00	
2,800.0	22.99	82.94	2,637.9	104.3	841.9	848.3	0.00	0.00	
2,900.0	22.99	82.94	2,730.0	109.1	880.7	887.4	0.00	0.00	
3,000.0	22.99	82.94	2,822.0	113.9	919.4	926.4	0.00	0.00	
3,100.0	22.99	82.94	2,914.1	118.7	958.2	965.5	0.00	0.00	
3,200.0	22.99	82.94	3,006.2	123.5	996.9	1,004.6	0.00	0.00	
3,300.0	22.99	82.94	3,098.2	128.3	1,035.7	1,043.6	0.00	0.00	
3,400.0	22.99	82.94	3,190.3	133.1	1,074.5	1,082.7	0.00	0.00	
3,500.0	22.99	82.94	3,282.3	137.9	1,113.2	1,121.7	0.00	0.00	
3,600.0	22.99	82.94	3,374.4	142.7	1,152.0	1,160.8	0.00	0.00	
3,700.0	22.99	82.94	3,466.5	147.5	1,190.7	1,199.8	0.00	0.00	
3,800.0	22.99	82.94	3,558.5	152.3	1,229.5	1,238.9	0.00	0.00	
3,900.0	22.99	82.94	3,650.6	157.1	1,268.3	1,278.0	0.00	0.00	
4,000.0	22.99	82.94	3,742.6	161.9	1,307.0	1,317.0	0.00	0.00	
4,100.0	22.99	82.94	3,834.7	166.7	1,345.8	1,356.1	0.00	0.00	
4,200.0	22.99	82.94	3,926.7	171.5	1,384.5	1,395.1	0.00	0.00	
4,300.0	22.99	82.94	4,018.8	176.3	1,423.3	1,434.2	0.00	0.00	
4,400.0	22.99	82.94	4,110.9	181.1	1,462.1	1,473.2	0.00	0.00	
4,500.0	22.99	82.94	4,202.9	186.0	1,500.8	1,512.3	0.00	0.00	
4,600.0	22.99	82.94	4,295.0	190.8	1,539.6	1,551.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8515B-27 M27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 8121.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	KBE @ 8121.0ft (Original Well Elev)
Site:	S27-T4S-R96W (M27 496)	North Reference:	True
Well:	8515B-27 M27 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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	22.99	82.94	4,387.0	195.6	1,578.3	1,590.4	0.00	0.00	
4,800.0	22.99	82.94	4,479.1	200.4	1,617.1	1,629.5	0.00	0.00	
4,900.0	22.99	82.94	4,571.1	205.2	1,655.9	1,668.5	0.00	0.00	
5,000.0	22.99	82.94	4,663.2	210.0	1,694.6	1,707.6	0.00	0.00	
5,100.0	22.99	82.94	4,755.3	214.8	1,733.4	1,746.6	0.00	0.00	
5,200.0	22.99	82.94	4,847.3	219.6	1,772.1	1,785.7	0.00	0.00	
5,300.0	22.99	82.94	4,939.4	224.4	1,810.9	1,824.7	0.00	0.00	
5,400.0	22.99	82.94	5,031.4	229.2	1,849.7	1,863.8	0.00	0.00	
5,500.0	22.99	82.94	5,123.5	234.0	1,888.4	1,902.9	0.00	0.00	
5,600.0	22.99	82.94	5,215.5	238.8	1,927.2	1,941.9	0.00	0.00	
5,700.0	22.99	82.94	5,307.6	243.6	1,965.9	1,981.0	0.00	0.00	
5,800.0	22.99	82.94	5,399.7	248.4	2,004.7	2,020.0	0.00	0.00	
5,837.3	22.99	82.94	5,434.0	250.2	2,019.2	2,034.6	0.00	0.00	WASATCH_G (TVD)
5,900.0	22.99	82.94	5,491.7	253.2	2,043.5	2,059.1	0.00	0.00	
6,000.0	22.99	82.94	5,583.8	258.0	2,082.2	2,098.1	0.00	0.00	
6,100.0	22.99	82.94	5,675.8	262.8	2,121.0	2,137.2	0.00	0.00	
6,200.0	22.99	82.94	5,767.9	267.6	2,159.7	2,176.2	0.00	0.00	
6,300.0	22.99	82.94	5,859.9	272.4	2,198.5	2,215.3	0.00	0.00	
6,400.0	22.99	82.94	5,952.0	277.2	2,237.3	2,254.4	0.00	0.00	
6,500.0	22.99	82.94	6,044.1	282.0	2,276.0	2,293.4	0.00	0.00	
6,600.0	22.99	82.94	6,136.1	286.8	2,314.8	2,332.5	0.00	0.00	
6,700.0	22.99	82.94	6,228.2	291.6	2,353.5	2,371.5	0.00	0.00	
6,800.0	22.99	82.94	6,320.2	296.4	2,392.3	2,410.6	0.00	0.00	
6,900.0	22.99	82.94	6,412.3	301.2	2,431.1	2,449.6	0.00	0.00	
7,000.0	22.99	82.94	6,504.3	306.0	2,469.8	2,488.7	0.00	0.00	
7,100.0	22.99	82.94	6,596.4	310.8	2,508.6	2,527.8	0.00	0.00	
7,200.0	22.99	82.94	6,688.5	315.6	2,547.3	2,566.8	0.00	0.00	
7,300.0	22.99	82.94	6,780.5	320.4	2,586.1	2,605.9	0.00	0.00	
7,400.0	22.99	82.94	6,872.6	325.2	2,624.9	2,644.9	0.00	0.00	
7,500.0	22.99	82.94	6,964.6	330.0	2,663.6	2,684.0	0.00	0.00	
7,600.0	22.99	82.94	7,056.7	334.8	2,702.4	2,723.0	0.00	0.00	
7,700.0	22.99	82.94	7,148.8	339.6	2,741.1	2,762.1	0.00	0.00	
7,800.0	22.99	82.94	7,240.8	344.4	2,779.9	2,801.2	0.00	0.00	
7,900.0	22.99	82.94	7,332.9	349.2	2,818.7	2,840.2	0.00	0.00	
7,952.4	22.99	82.94	7,381.1	351.7	2,839.0	2,860.7	0.00	0.00	Start Drop -3.00
8,000.0	21.56	82.94	7,425.2	354.0	2,856.9	2,878.7	3.00	-3.00	
8,100.0	18.56	82.94	7,519.1	358.2	2,890.9	2,913.0	3.00	-3.00	
8,171.2	16.42	82.94	7,587.0	360.8	2,912.2	2,934.4	3.00	-3.00	WILLIAMS_FORK (TVD)
8,200.0	15.56	82.94	7,614.7	361.8	2,920.0	2,942.3	3.00	-3.00	
8,212.8	15.18	82.94	7,627.0	362.2	2,923.4	2,945.7	3.00	-3.00	TOG (TVD); Inc=15°
8,300.0	12.56	82.94	7,711.7	364.8	2,944.1	2,966.6	3.00	-3.00	
8,400.0	9.56	82.94	7,809.8	367.1	2,963.2	2,985.8	3.00	-3.00	
8,500.0	6.56	82.94	7,908.8	368.9	2,977.1	2,999.8	3.00	-3.00	
8,600.0	3.56	82.94	8,008.4	369.9	2,985.8	3,008.7	3.00	-3.00	
8,700.0	0.56	82.94	8,108.3	370.4	2,989.4	3,012.3	3.00	-3.00	
8,718.7	0.00	0.00	8,127.0	370.4	2,989.5	3,012.3	3.00	-3.00	EOD; Inc=0° - M27 496 8515B-27 TGT
8,800.0	0.20	240.96	8,208.3	370.3	2,989.4	3,012.2	0.25	0.25	
8,860.0	0.35	240.96	8,268.3	370.2	2,989.1	3,011.9	0.25	0.25	
8,900.0	0.35	240.96	8,308.3	370.1	2,988.9	3,011.7	0.00	0.00	
9,000.0	0.35	240.96	8,408.3	369.8	2,988.4	3,011.1	0.00	0.00	
9,100.0	0.35	240.96	8,508.3	369.5	2,987.8	3,010.6	0.00	0.00	
9,200.0	0.35	240.96	8,608.3	369.2	2,987.3	3,010.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8515B-27 M27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 8121.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	KBE @ 8121.0ft (Original Well Elev)
Site:	S27-T4S-R96W (M27 496)	North Reference:	True
Well:	8515B-27 M27 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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
9,300.0	0.35	240.96	8,708.3	368.9	2,986.7	3,009.4	0.00	0.00	
9,400.0	0.35	240.96	8,808.3	368.6	2,986.2	3,008.9	0.00	0.00	
9,493.7	0.35	240.96	8,902.0	368.3	2,985.7	3,008.3	0.00	0.00	PRICE_Marker (TVD)
9,500.0	0.35	240.96	8,908.3	368.3	2,985.7	3,008.3	0.00	0.00	
9,600.0	0.35	240.96	9,008.3	368.0	2,985.1	3,007.7	0.00	0.00	
9,700.0	0.35	240.96	9,108.3	367.7	2,984.6	3,007.1	0.00	0.00	
9,800.0	0.35	240.96	9,208.3	367.4	2,984.1	3,006.6	0.00	0.00	
9,900.0	0.35	240.96	9,308.3	367.1	2,983.5	3,006.0	0.00	0.00	
10,000.0	0.35	240.96	9,408.3	366.8	2,983.0	3,005.4	0.00	0.00	
10,100.0	0.35	240.96	9,508.3	366.5	2,982.4	3,004.9	0.00	0.00	
10,200.0	0.35	240.96	9,608.3	366.2	2,981.9	3,004.3	0.00	0.00	
10,300.0	0.35	240.96	9,708.3	365.9	2,981.4	3,003.7	0.00	0.00	
10,400.0	0.35	240.96	9,808.3	365.6	2,980.8	3,003.1	0.00	0.00	
10,500.0	0.35	240.96	9,908.3	365.3	2,980.3	3,002.6	0.00	0.00	
10,600.0	0.35	240.96	10,008.3	365.0	2,979.7	3,002.0	0.00	0.00	
10,700.0	0.35	240.96	10,108.3	364.7	2,979.2	3,001.4	0.00	0.00	
10,800.0	0.35	240.96	10,208.3	364.4	2,978.7	3,000.9	0.00	0.00	
10,900.0	0.35	240.96	10,308.3	364.1	2,978.1	3,000.3	0.00	0.00	
11,000.0	0.35	240.96	10,408.3	363.8	2,977.6	2,999.7	0.00	0.00	
11,100.0	0.35	240.96	10,508.3	363.5	2,977.0	2,999.1	0.00	0.00	
11,200.0	0.35	240.96	10,608.3	363.2	2,976.5	2,998.6	0.00	0.00	
11,300.0	0.35	240.96	10,708.3	362.9	2,976.0	2,998.0	0.00	0.00	
11,381.7	0.35	240.96	10,790.0	362.6	2,975.5	2,997.5	0.00	0.00	CAMEO (TVD)
11,400.0	0.35	240.96	10,808.3	362.6	2,975.4	2,997.4	0.00	0.00	
11,500.0	0.35	240.96	10,908.3	362.3	2,974.9	2,996.9	0.00	0.00	
11,600.0	0.35	240.96	11,008.3	362.0	2,974.3	2,996.3	0.00	0.00	
11,700.0	0.35	240.96	11,108.3	361.7	2,973.8	2,995.7	0.00	0.00	
11,800.0	0.35	240.96	11,208.3	361.4	2,973.3	2,995.2	0.00	0.00	
11,900.0	0.35	240.96	11,308.3	361.1	2,972.7	2,994.6	0.00	0.00	
11,981.7	0.35	240.96	11,390.0	360.8	2,972.3	2,994.1	0.00	0.00	ROLLINS (TVD)
12,000.0	0.35	240.96	11,408.2	360.8	2,972.2	2,994.0	0.00	0.00	
12,100.0	0.35	240.96	11,508.2	360.5	2,971.7	2,993.4	0.00	0.00	
12,131.8	0.35	240.96	11,540.0	360.4	2,971.5	2,993.3	0.00	0.00	Drillers TD @ 11,540' TVD - M27 496 8515B-27
12,185.8	0.35	240.96	11,594.0	360.2	2,971.2	2,992.9	0.00	0.00	COZZETTE (TVD)
12,200.0	0.35	240.96	11,608.2	360.2	2,971.1	2,992.9	0.00	0.00	
12,300.0	0.35	240.96	11,708.2	359.9	2,970.6	2,992.3	0.00	0.00	
12,393.8	0.35	240.96	11,802.0	359.6	2,970.1	2,991.8	0.00	0.00	CORCORAN (TVD)
12,400.0	0.35	240.96	11,808.2	359.6	2,970.0	2,991.7	0.00	0.00	
12,500.0	0.35	240.96	11,908.2	359.3	2,969.5	2,991.2	0.00	0.00	
12,600.0	0.35	240.96	12,008.2	359.0	2,969.0	2,990.6	0.00	0.00	
12,607.8	0.35	240.96	12,016.0	359.0	2,968.9	2,990.5	0.00	0.00	UPPER_SEGO (TVD)
12,700.0	0.35	240.96	12,108.2	358.7	2,968.4	2,990.0	0.00	0.00	
12,800.0	0.35	240.96	12,208.2	358.4	2,967.9	2,989.4	0.00	0.00	
12,857.8	0.35	240.96	12,266.0	358.2	2,967.6	2,989.1	0.00	0.00	SEGO_BASE_TARGET (TVD)
12,900.0	0.35	240.96	12,308.2	358.1	2,967.3	2,988.9	0.00	0.00	
13,000.0	0.35	240.96	12,408.2	357.8	2,966.8	2,988.3	0.00	0.00	
13,100.0	0.35	240.96	12,508.2	357.5	2,966.3	2,987.7	0.00	0.00	
13,131.8	0.35	240.96	12,540.0	357.4	2,966.1	2,987.5	0.00	0.00	Permit TD @ 12,540' TVD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8515B-27 M27 496
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 8121.0ft (Original Well Elev)
Project:	Story Gulch	MD Reference:	KBE @ 8121.0ft (Original Well Elev)
Site:	S27-T4S-R96W (M27 496)	North Reference:	True
Well:	8515B-27 M27 496	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
M27 496 8515B-27 PBH	0.00	0.00	11,540.0	360.4	2,971.5	1,679,331.25	2,253,955.09	39° 40' 7.23 N	108° 9' 2.03 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
M27 496 8515B-27 TGT	0.00	0.00	8,127.0	370.4	2,989.5	1,679,340.72	2,253,973.39	39° 40' 7.33 N	108° 9' 1.80 W
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
1,099.0	1,072.0	A_GROOVE (TVD)				
1,263.0	1,223.0	B_GROOVE (TVD)				
2,316.7	2,193.0	Garden Gulch Member (TVD)				
5,837.3	5,434.0	WASATCH_G (TVD)				
8,171.2	7,587.0	WILLIAMS_FORK (TVD)				
8,212.8	7,627.0	TOG (TVD); Inc=15°				
9,493.7	8,902.0	PRICE_Marker (TVD)				
11,381.7	10,790.0	CAMEO (TVD)				
11,981.7	11,390.0	ROLLINS (TVD)				
12,185.8	11,594.0	COZZETTE (TVD)				
12,393.8	11,802.0	CORCORAN (TVD)				
12,607.8	12,016.0	UPPER_SEGO (TVD)				
12,857.8	12,266.0	SEGO_BASE_TARGET (TVD)				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
250.0	250.0	0.0	0.0	KOP @ 250'
1,016.3	995.9	18.7	150.5	EOB; Inc=22.99°
7,952.4	7,381.1	351.7	2,839.0	Start Drop -3.00
8,718.7	8,127.0	370.4	2,989.5	EOD; Inc=0°
12,131.8	11,540.0	370.2	2,989.1	Drillers TD @ 11,540' TVD
13,131.8	12,540.0	360.4	2,971.5	Permit TD @ 12,540' TVD