



# ENCANA OIL & GAS (USA) INC

Location: COLORADO Slot: Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL  
 Field: GARFIELD COUNTY (NEW) Well: Federal 25-2BB  
 Facility: SEC.25-T7S-R96W Wellbore: Federal 25-2BB PWB

Plot reference wellbore is Federal 25-2BB PWB Rev-A-0		Grid System: NAD83 / Lambert Colorado State Planes, Central Zone (502), US feet	
True vertical depths are referenced to Rig on Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL (RT)		North Reference: True north	
Measured depths are referenced to Rig on Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL (RT)		Scale: True distance	
Rig on Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL (RT) to Mean Sea Level: 6086 feet		Depths are in feet	
Mean Sea Level to Mud line (Facility: SEC.25-T7S-R96W): 0 feet		Coordinates are in feet referenced to Slot	
Created by: thomsuzc on 10/16/2009			

### Location Information

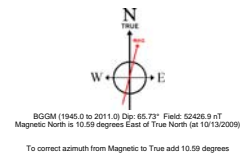
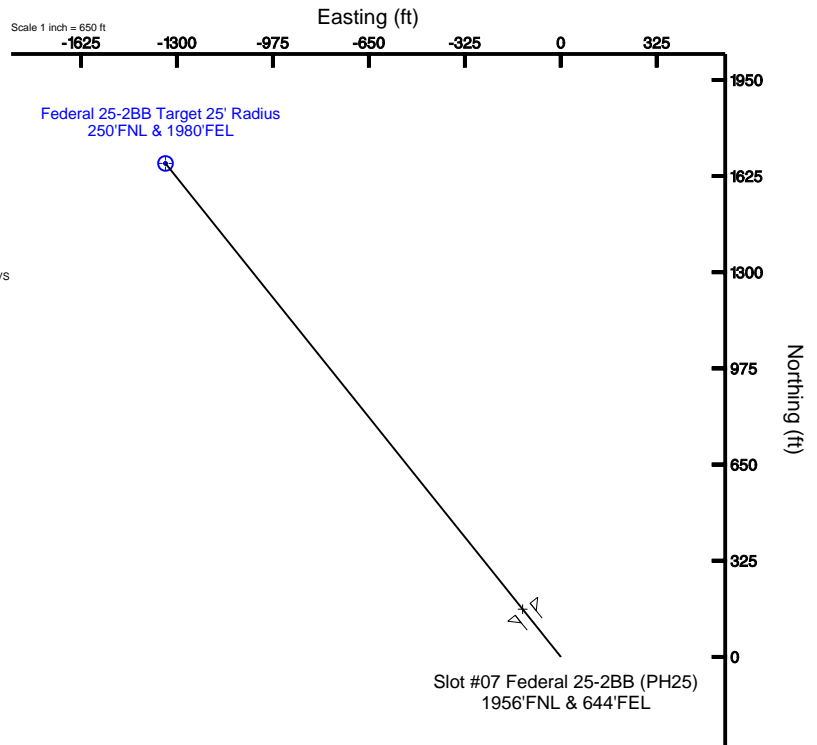
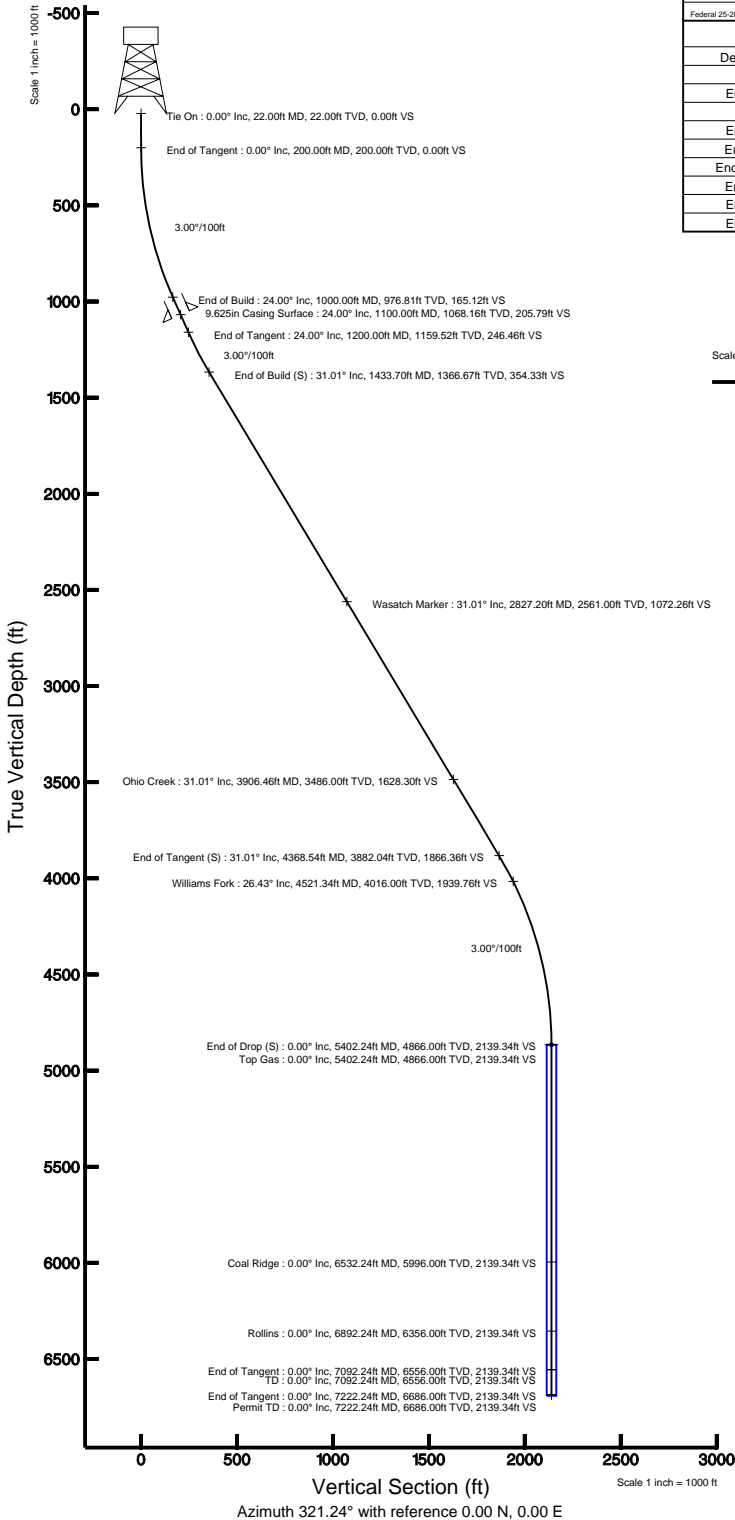
Facility Name		Grid East (USF)	Grid North (USF)	Latitude	Longitude	
SEC.25-T7S-R96W		227938.355	1584500.194	39°24'37.584"N	108°03'02.808"W	
Slot	Local N (ft)	Local E (ft)	Grid East (USF)	Grid North (USF)	Latitude	Longitude
Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL	0.00	-53.69	2279334.692	1584501.701	39°24'37.584"N	108°03'03.492"W
Rig on Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL (RT) to Mud line (Facility: SEC.25-T7S-R96W)				6086ft		
Mean Sea Level to Mud line (Facility: SEC.25-T7S-R96W)				0ft		
Rig on Slot #07 Federal 25-2BB (PH25) 1956FNL & 644FEL (RT) to Mean Sea Level				6086ft		

### Targets

Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (USF)	Grid North (USF)	Latitude	Longitude
Federal 25-2BB Target 25' Radius 250'FNL & 1980'FEL	5402.24	4866.00	1668.30	-1339.24	2278042.89	1586206.86	39°24'54.072"N	108°03'20.556"W

### Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	22.00	0.000	321.244	22.00	0.00	0.00	0.00	0.00
End of Tangent	200.00	0.000	321.244	200.00	0.00	0.00	0.00	0.00
End of Build	1000.00	24.000	321.244	976.81	128.76	-103.36	3.00	165.12
End of Tangent	1200.00	24.000	321.244	1159.52	192.20	-154.29	0.00	246.46
End of Build (S)	1433.70	31.011	321.244	1366.67	276.31	-221.81	3.00	354.33
End of Tangent (S)	4368.54	31.011	321.244	3882.04	1455.43	-1168.35	0.00	1866.36
End of Drop (S)	5402.24	0.000	321.244	4866.00	1668.30	-1339.24	3.00	2139.34
End of Tangent	7092.24	0.000	321.244	6556.00	1668.30	-1339.24	0.00	2139.34
End of Tangent	7222.24	0.000	321.244	6686.00	1668.30	-1339.24	0.00	2139.34





# Planned Wellpath Report

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## REFERENCE WELLPATH IDENTIFICATION

Operator	ENCANA OIL & GAS (USA) INC	Slot	Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL
Area	COLORADO	Well	Federal 25-2BB
Field	GARFIELD COUNTY (NEW)	Wellbore	Federal 25-2BB PWB
Facility	SEC.25-T7S-R96W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado State Planes, Central Zone (502), US feet	Software System	WellArchitect® 2.0
North Reference	True	User	Thomsuzc
Scale	0.99995	Report Generated	10/16/2009 at 9:47:58 PM
Convergence at slot	1.61° West	Database/Source file	Denver/Federal_25-2BB_PWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	-53.69	2279334.69	1584501.70	39°24'37.584"N	108°03'03.492"W
Facility Reference Pt			2279388.36	1584500.19	39°24'37.584"N	108°03'02.808"W
Field Reference Pt			3000000.01	4560984.48	47°34'21.070"N	105°30'00.000"W

## WELLPATH DATUM

Calculation method	Minimum curvature	Rig on Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL (RT) to Facility Vertical Datum	6086.00ft
Horizontal Reference Pt	Slot	Rig on Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL (RT) to Mean Sea Level	6086.00ft
Vertical Reference Pt	Rig on Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	321.24°



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Area	COLORADO	Well	Federal 25-2BB
Field	GARFIELD COUNTY (NEW)	Wellbore	Federal 25-2BB PWB
Facility	SEC.25-T7S-R96W		

## WELLPATH DATA (82 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
0.00†	0.000	321.244	0.00	0.00	0.00	0.00	0.00
22.00	0.000	321.244	22.00	0.00	0.00	0.00	0.00
122.00†	0.000	321.244	122.00	0.00	0.00	0.00	0.00
200.00	0.000	321.244	200.00	0.00	0.00	0.00	0.00
222.00†	0.660	321.244	222.00	0.13	0.10	-0.08	3.00
322.00†	3.660	321.244	321.92	3.90	3.04	-2.44	3.00
422.00†	6.660	321.244	421.50	12.89	10.05	-8.07	3.00
522.00†	9.660	321.244	520.48	27.08	21.12	-16.95	3.00
622.00†	12.660	321.244	618.57	46.43	36.21	-29.07	3.00
722.00†	15.660	321.244	715.53	70.89	55.28	-44.38	3.00
822.00†	18.660	321.244	811.06	100.39	78.29	-62.85	3.00
922.00†	21.660	321.244	904.93	134.85	105.16	-84.42	3.00
1000.00	24.000	321.244	976.81	165.12	128.76	-103.36	3.00
1022.00†	24.000	321.244	996.91	174.06	135.74	-108.97	0.00
1122.00†	24.000	321.244	1088.26	214.74	167.46	-134.43	0.00
1200.00	24.000	321.244	1159.52	246.46	192.20	-154.29	0.00
1222.00†	24.660	321.244	1179.56	255.53	199.26	-159.96	3.00
1322.00†	27.660	321.244	1269.31	299.61	233.64	-187.56	3.00
1422.00†	30.660	321.244	1356.63	348.33	271.63	-218.06	3.00
1433.70	31.011	321.244	1366.67	354.33	276.31	-221.81	3.00
1522.00†	31.011	321.244	1442.35	399.82	311.79	-250.29	0.00
1622.00†	31.011	321.244	1528.06	451.34	351.96	-282.54	0.00
1722.00†	31.011	321.244	1613.77	502.86	392.14	-314.79	0.00
1822.00†	31.011	321.244	1699.47	554.38	432.32	-347.04	0.00
1922.00†	31.011	321.244	1785.18	605.90	472.49	-379.30	0.00
2022.00†	31.011	321.244	1870.89	657.42	512.67	-411.55	0.00
2122.00†	31.011	321.244	1956.59	708.94	552.84	-443.80	0.00
2222.00†	31.011	321.244	2042.30	760.46	593.02	-476.05	0.00
2322.00†	31.011	321.244	2128.01	811.98	633.20	-508.30	0.00
2422.00†	31.011	321.244	2213.71	863.50	673.37	-540.56	0.00
2522.00†	31.011	321.244	2299.42	915.02	713.55	-572.81	0.00
2622.00†	31.011	321.244	2385.13	966.54	753.73	-605.06	0.00
2722.00†	31.011	321.244	2470.84	1018.06	793.90	-637.31	0.00
2822.00†	31.011	321.244	2556.54	1069.58	834.08	-669.56	0.00
2922.00†	31.011	321.244	2642.25	1121.10	874.26	-701.81	0.00
3022.00†	31.011	321.244	2727.96	1172.62	914.43	-734.07	0.00
3122.00†	31.011	321.244	2813.66	1224.14	954.61	-766.32	0.00
3222.00†	31.011	321.244	2899.37	1275.66	994.79	-798.57	0.00
3322.00†	31.011	321.244	2985.08	1327.18	1034.96	-830.82	0.00
3422.00†	31.011	321.244	3070.78	1378.70	1075.14	-863.07	0.00
3522.00†	31.011	321.244	3156.49	1430.22	1115.31	-895.33	0.00
3622.00†	31.011	321.244	3242.20	1481.74	1155.49	-927.58	0.00
3722.00†	31.011	321.244	3327.90	1533.26	1195.67	-959.83	0.00
3822.00†	31.011	321.244	3413.61	1584.78	1235.84	-992.08	0.00
3922.00†	31.011	321.244	3499.32	1636.30	1276.02	-1024.33	0.00



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## REFERENCE WELLPATH IDENTIFICATION

Operator	ENCANA OIL & GAS (USA) INC	Slot	Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL
Area	COLORADO	Well	Federal 25-2BB
Field	GARFIELD COUNTY (NEW)	Wellbore	Federal 25-2BB PWB
Facility	SEC.25-T7S-R96W		

## WELLPATH DATA (82 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]
4022.00†	31.011	321.244	3585.03	1687.82	1316.20	-1056.59	0.00
4122.00†	31.011	321.244	3670.73	1739.34	1356.37	-1088.84	0.00
4222.00†	31.011	321.244	3756.44	1790.86	1396.55	-1121.09	0.00
4322.00†	31.011	321.244	3842.15	1842.38	1436.73	-1153.34	0.00
4368.54	31.011	321.244	3882.04	1866.36	1455.43	-1168.35	0.00
4422.00†	29.407	321.244	3928.23	1893.26	1476.40	-1185.19	3.00
4522.00†	26.407	321.244	4016.59	1940.06	1512.89	-1214.49	3.00
4622.00†	23.407	321.244	4107.28	1982.17	1545.73	-1240.85	3.00
4722.00†	20.407	321.244	4200.05	2019.47	1574.83	-1264.20	3.00
4822.00†	17.407	321.244	4294.64	2051.87	1600.09	-1284.48	3.00
4922.00†	14.407	321.244	4390.80	2079.28	1621.46	-1301.64	3.00
5022.00†	11.407	321.244	4488.26	2101.61	1638.88	-1315.62	3.00
5122.00†	8.407	321.244	4586.76	2118.82	1652.30	-1326.39	3.00
5222.00†	5.407	321.244	4686.03	2130.84	1661.67	-1333.92	3.00
5322.00†	2.407	321.244	4785.78	2137.66	1666.99	-1338.18	3.00
5402.24	0.000	321.244	4866.00 <sup>1</sup>	2139.34	1668.30	-1339.24	3.00
5422.00†	0.000	321.244	4885.76	2139.34	1668.30	-1339.24	0.00
5522.00†	0.000	321.244	4985.76	2139.34	1668.30	-1339.24	0.00
5622.00†	0.000	321.244	5085.76	2139.34	1668.30	-1339.24	0.00
5722.00†	0.000	321.244	5185.76	2139.34	1668.30	-1339.24	0.00
5822.00†	0.000	321.244	5285.76	2139.34	1668.30	-1339.24	0.00
5922.00†	0.000	321.244	5385.76	2139.34	1668.30	-1339.24	0.00
6022.00†	0.000	321.244	5485.76	2139.34	1668.30	-1339.24	0.00
6122.00†	0.000	321.244	5585.76	2139.34	1668.30	-1339.24	0.00
6222.00†	0.000	321.244	5685.76	2139.34	1668.30	-1339.24	0.00
6322.00†	0.000	321.244	5785.76	2139.34	1668.30	-1339.24	0.00
6422.00†	0.000	321.244	5885.76	2139.34	1668.30	-1339.24	0.00
6522.00†	0.000	321.244	5985.76	2139.34	1668.30	-1339.24	0.00
6622.00†	0.000	321.244	6085.76	2139.34	1668.30	-1339.24	0.00
6722.00†	0.000	321.244	6185.76	2139.34	1668.30	-1339.24	0.00
6822.00†	0.000	321.244	6285.76	2139.34	1668.30	-1339.24	0.00
6922.00†	0.000	321.244	6385.76	2139.34	1668.30	-1339.24	0.00
7022.00†	0.000	321.244	6485.76	2139.34	1668.30	-1339.24	0.00
7092.24	0.000	321.244	6556.00	2139.34	1668.30	-1339.24	0.00
7122.00†	0.000	321.244	6585.76	2139.34	1668.30	-1339.24	0.00
7222.00†	0.000	321.244	6685.76	2139.34	1668.30	-1339.24	0.00
7222.24	0.000	321.244	6686.00	2139.34	1668.30	-1339.24	0.00



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## REFERENCE WELLPATH IDENTIFICATION

Operator	ENCANA OIL & GAS (USA) INC	Slot	Slot #07 Federal 25-2BB (PH25) 1956'FNL & 644'FEL
Area	COLORADO	Well	Federal 25-2BB
Field	GARFIELD COUNTY (NEW)	Wellbore	Federal 25-2BB PWB
Facility	SEC.25-T7S-R96W		

## HOLE & CASING SECTIONS Ref Wellbore: Federal 25-2BB PWB Ref Wellpath: Federal 25-2BB PWP Rev-A.0

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
12.25in Open Hole	22.00	1100.00	1078.00	22.00	1068.16	0.00	0.00	160.48	-128.83
9.625in Casing Surface	22.00	1100.00	1078.00	22.00	1068.16	0.00	0.00	160.48	-128.83

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) Federal 25-2BB Target 25' Radius 250'FNL & 1980'FEL	5402.24	4866.00	1668.30	-1339.24	2278042.89	1586206.86	39°24'54.072"N	108°03'20.556"W	circle

## SURVEY PROGRAM Ref Wellbore: Federal 25-2BB PWB Ref Wellpath: Federal 25-2BB PWP Rev-A.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.00	7222.24	MTC (Collar, post-2000) (Standard)		Federal 25-2BB PWB



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Area	COLORADO	Well	Federal 25-2BB
Field	GARFIELD COUNTY (NEW)	Wellbore	Federal 25-2BB PWB
Facility	SEC.25-T7S-R96W		

## WELLPATH COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
2827.20	31.011	321.244	2561.00	Wasatch Marker
3906.46	31.011	321.244	3486.00	Ohio Creek
4521.34	26.427	321.244	4016.00	Williams Fork
5402.24	0.000	321.244	4866.00	Top Gas
6532.24	0.000	321.244	5996.00	Coal Ridge
6892.24	0.000	321.244	6356.00	Rollins
7092.24	0.000	321.244	6556.00	TD
7222.24	0.000	321.244	6686.00	Permit TD