

Well Name: **Dowdy 8-6-10**

Surface Location: Dowdy 8-4-10 Pad Sec.10-T2N-R65W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

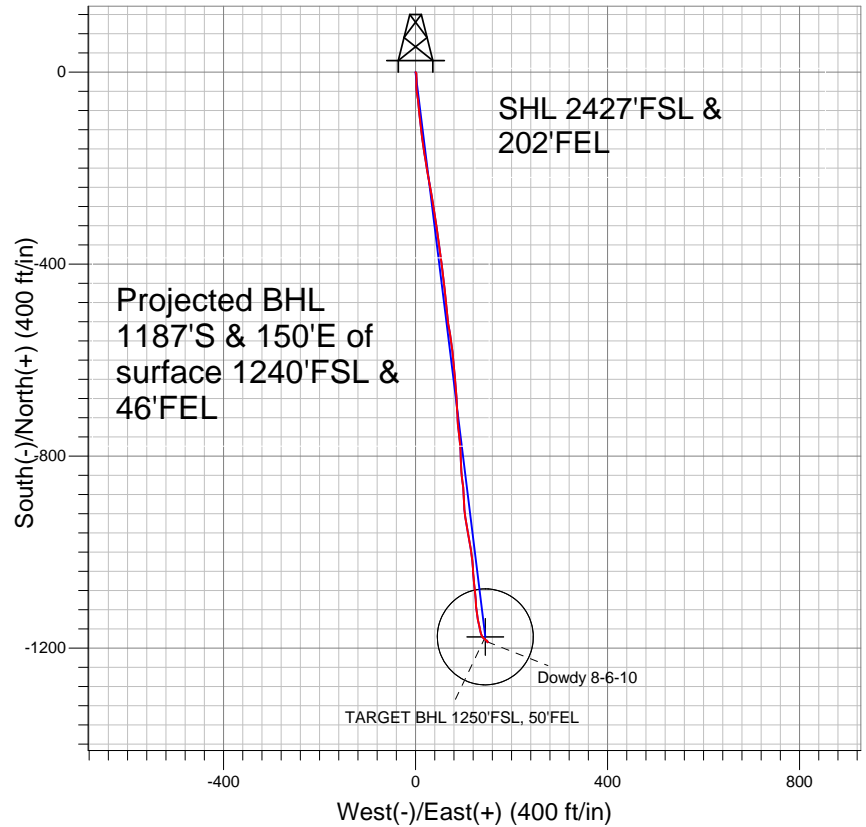
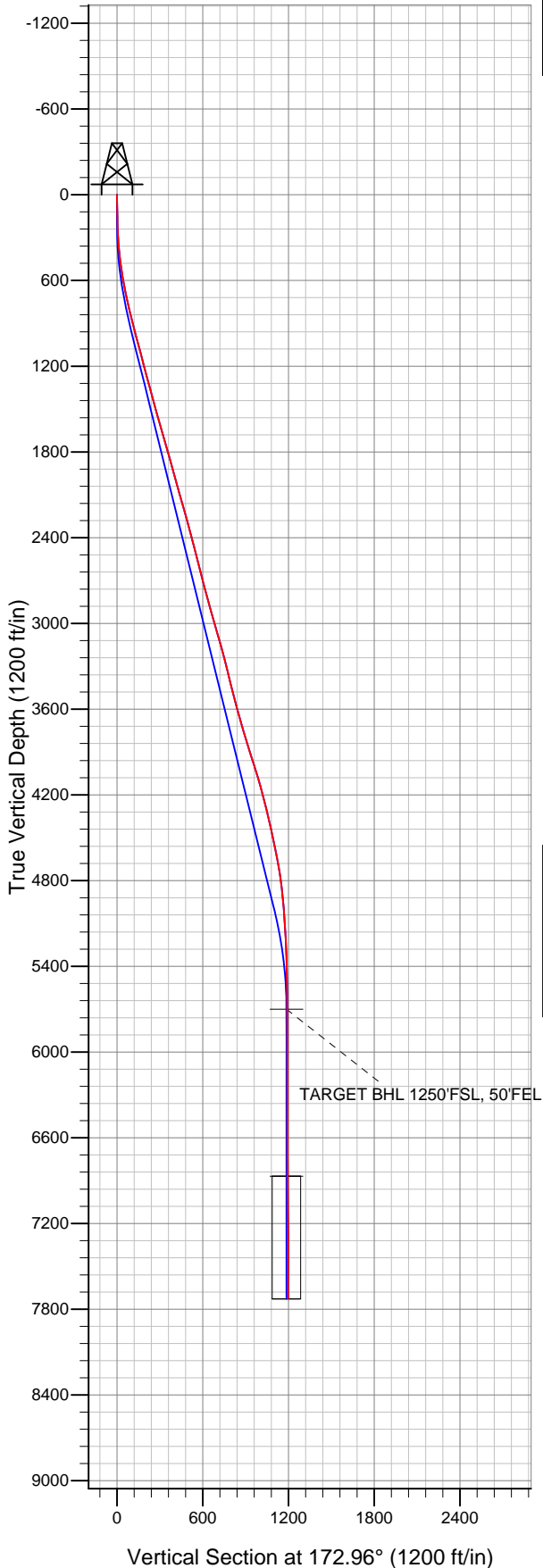
Ground Elevation: 4861.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1299597.89	3240048.19	40.152600	-104.641220

Original Well Elev WELL @ 4874.0ft (Original Well Elev)

Slot

EnCana Oil & Gas Weld County CO



LEGEND

- + Dowdy 8-6-10, Wellbore #1, Plan #1 (7-09-12) V0
- + Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7875'MD & 7726'TVD @ 1197'VS
0.2 deg Inc 287 deg AZ

Project: SEC.10-T2N-R65W
Site: Dowdy 8-4-10 Pad Sec.10-T2N-R65W
Well: Dowdy 8-6-10
Plan: Wellbore #1



Directional

EnCana Oil & Gas Weld County CO

SEC.10-T2N-R65W

Dowdy 8-4-10 Pad Sec.10-T2N-R65W

Dowdy 8-6-10

Wellbore #1

Survey: Survey #1

Standard Survey Report

04 October, 2012

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 8-6-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4874.0ft (Original Well Elev)
Site:	Dowdy 8-4-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4874.0ft (Original Well Elev)
Well:	Dowdy 8-6-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.10-T2N-R65W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Dowdy 8-4-10 Pad Sec.10-T2N-R65W			
Position:		Northing:	1,299,627.04 ft	Latitude:	40.152680
From:	Lat/Long	Easting:	3,240,047.91 ft	Longitude:	-104.641220
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.55 °

Well	Dowdy 8-6-10					
Well Position	+N-S	0.0 ft	Northing:	1,299,597.89 ft	Latitude:	40.152600
	+E-W	0.0 ft	Easting:	3,240,048.19 ft	Longitude:	-104.641220
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,861.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/9/2012	8.63	66.83	52,902

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	172.96	

Survey Program		Date	10/4/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
77.0	7,875.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

Survey	Wellbore Data									
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Survey A	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	77.0	1.10	155.90	77.0	-0.7	0.3	0.7	1.43	1.43	0.00
	165.0	1.10	148.20	165.0	-2.2	1.1	2.3	0.17	0.00	-8.75
	257.0	2.20	169.60	256.9	-4.7	1.9	4.8	1.35	1.20	23.26
	346.0	4.50	181.60	345.8	-9.8	2.1	10.0	2.69	2.58	13.48
	438.0	6.80	181.60	437.3	-18.9	1.8	19.0	2.50	2.50	0.00
	529.0	8.50	178.20	527.5	-31.0	1.9	31.0	1.93	1.87	-3.74
	620.0	10.30	171.70	617.3	-45.8	3.3	45.8	2.29	1.98	-7.14
	711.0	12.20	175.10	706.5	-63.4	5.3	63.6	2.21	2.09	3.74
	802.0	13.70	172.30	795.2	-83.7	7.5	83.9	1.79	1.65	-3.08
	874.0	14.40	172.80	865.1	-101.0	9.8	101.4	0.99	0.97	0.69
	953.0	14.10	173.80	941.6	-120.3	12.1	120.9	0.49	-0.38	1.27
1,038.0	14.60	174.40	1,024.0	-141.2	14.2	141.9	0.61	0.59	0.71	

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 8-6-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4874.0ft (Original Well Elev)
Site:	Dowdy 8-4-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4874.0ft (Original Well Elev)
Well:	Dowdy 8-6-10	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
1,124.0	15.00	170.00	1,107.1	-163.0	17.2	163.9	1.39	0.47	-5.12	
1,209.0	14.90	170.70	1,189.3	-184.6	20.9	185.8	0.24	-0.12	0.82	
1,295.0	15.00	170.30	1,272.4	-206.5	24.6	208.0	0.17	0.12	-0.47	
1,381.0	15.10	169.10	1,355.4	-228.5	28.6	230.2	0.38	0.12	-1.40	
1,466.0	15.30	170.80	1,437.4	-250.4	32.4	252.5	0.57	0.24	2.00	
1,552.0	15.20	171.40	1,520.4	-272.8	35.9	275.1	0.22	-0.12	0.70	
1,637.0	16.40	171.50	1,602.2	-295.6	39.4	298.2	1.41	1.41	0.12	
1,723.0	15.90	171.40	1,684.8	-319.3	42.9	322.2	0.58	-0.58	-0.12	
1,809.0	16.10	170.70	1,767.5	-342.7	46.6	345.8	0.32	0.23	-0.81	
1,894.0	15.20	171.50	1,849.3	-365.4	50.2	368.8	1.09	-1.06	0.94	
1,980.0	15.70	173.30	1,932.2	-388.1	53.2	391.7	0.81	0.58	2.09	
2,065.0	15.60	174.90	2,014.1	-410.9	55.6	414.6	0.52	-0.12	1.88	
2,151.0	16.10	173.10	2,096.8	-434.2	58.0	438.1	0.82	0.58	-2.09	
2,237.0	15.30	173.30	2,179.6	-457.3	60.8	461.3	0.93	-0.93	0.23	
2,322.0	15.20	173.50	2,261.6	-479.6	63.4	483.7	0.13	-0.12	0.24	
2,408.0	15.70	174.50	2,344.5	-502.3	65.7	506.6	0.66	0.58	1.16	
2,493.0	15.20	172.80	2,426.4	-524.8	68.2	529.2	0.79	-0.59	-2.00	
2,579.0	14.60	170.00	2,509.5	-546.7	71.5	551.3	1.09	-0.70	-3.26	
2,665.0	13.70	171.50	2,592.9	-567.4	74.9	572.4	1.13	-1.05	1.74	
2,750.0	14.60	174.20	2,675.3	-588.1	77.5	593.1	1.31	1.06	3.18	
2,836.0	14.40	174.20	2,758.6	-609.5	79.7	614.7	0.23	-0.23	0.00	
2,921.0	16.10	176.30	2,840.6	-631.8	81.5	637.0	2.10	2.00	2.47	
3,007.0	15.30	174.20	2,923.4	-654.9	83.4	660.2	1.14	-0.93	-2.44	
3,093.0	16.00	175.80	3,006.2	-678.1	85.4	683.4	0.96	0.81	1.86	
3,178.0	16.40	178.20	3,087.8	-701.7	86.7	707.1	0.92	0.47	2.82	
3,264.0	15.20	177.00	3,170.6	-725.1	87.6	730.4	1.45	-1.40	-1.40	
3,349.0	14.30	173.10	3,252.8	-746.7	89.5	752.0	1.58	-1.06	-4.59	
3,435.0	14.40	173.70	3,336.1	-767.9	91.9	773.3	0.21	0.12	0.70	
3,521.0	13.60	176.80	3,419.5	-788.6	93.7	794.1	1.27	-0.93	3.60	
3,606.0	14.50	178.80	3,502.0	-809.2	94.5	814.7	1.20	1.06	2.35	
3,692.0	15.00	176.50	3,585.1	-831.1	95.4	836.5	0.90	0.58	-2.67	
3,777.0	15.90	171.50	3,667.1	-853.6	97.7	859.1	1.89	1.06	-5.88	
3,863.0	17.00	176.50	3,749.6	-877.8	100.3	883.4	2.08	1.28	5.81	
3,949.0	17.30	178.60	3,831.7	-903.1	101.3	908.7	0.80	0.35	2.44	
4,034.0	17.10	170.80	3,912.9	-928.1	103.6	933.8	2.72	-0.24	-9.18	
4,120.0	17.70	169.40	3,995.0	-953.4	108.1	959.5	0.85	0.70	-1.63	
4,205.0	16.60	170.00	4,076.2	-978.1	112.6	984.5	1.31	-1.29	0.71	
4,291.0	14.60	172.80	4,159.1	-1,000.9	116.0	1,007.6	2.48	-2.33	3.26	
4,377.0	14.90	175.40	4,242.2	-1,022.7	118.3	1,029.5	0.84	0.35	3.02	
4,462.0	14.20	175.60	4,324.5	-1,044.0	120.0	1,050.8	0.83	-0.82	0.24	
4,548.0	12.30	174.50	4,408.2	-1,063.6	121.7	1,070.5	2.23	-2.21	-1.28	
4,633.0	11.80	173.30	4,491.3	-1,081.3	123.5	1,088.3	0.66	-0.59	-1.41	
4,719.0	11.50	176.50	4,575.6	-1,098.6	125.1	1,105.6	0.83	-0.35	3.72	
4,805.0	11.10	175.20	4,659.9	-1,115.4	126.3	1,122.4	0.55	-0.47	-1.51	
4,890.0	8.90	171.00	4,743.6	-1,130.0	128.0	1,137.2	2.73	-2.59	-4.94	
4,976.0	7.00	168.40	4,828.8	-1,141.7	130.1	1,149.1	2.25	-2.21	-3.02	
5,061.0	6.00	170.10	4,913.2	-1,151.2	131.9	1,158.7	1.20	-1.18	2.00	
5,147.0	4.40	166.10	4,998.9	-1,158.8	133.5	1,166.4	1.91	-1.86	-4.65	
5,233.0	3.80	165.20	5,084.6	-1,164.8	135.0	1,172.5	0.70	-0.70	-1.05	
5,318.0	3.20	163.10	5,169.5	-1,169.7	136.4	1,177.6	0.72	-0.71	-2.47	
5,404.0	2.60	155.70	5,255.4	-1,173.8	137.9	1,181.9	0.82	-0.70	-8.60	
5,489.0	2.10	150.60	5,340.3	-1,176.9	139.5	1,185.2	0.64	-0.59	-6.00	
5,575.0	1.60	126.00	5,426.3	-1,179.0	141.2	1,187.4	1.08	-0.58	-28.60	
5,746.0	0.80	132.90	5,597.2	-1,181.2	144.0	1,190.0	0.47	-0.47	4.04	

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
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5,848.7	0.55	141.86	5,700.0	-1,182.1	144.9	1,190.9	0.26	-0.24	8.72
TARGET BHL 1250'FSL, 50'FEL									
5,917.0	0.40	153.80	5,768.2	-1,182.6	145.2	1,191.5	0.26	-0.22	17.49
6,089.0	0.10	120.60	5,940.2	-1,183.2	145.6	1,192.1	0.19	-0.17	-19.30
6,260.0	0.00	358.10	6,111.2	-1,183.3	145.7	1,192.2	0.06	-0.06	0.00
6,431.0	0.00	110.50	6,282.2	-1,183.3	145.7	1,192.2	0.00	0.00	0.00
6,602.0	0.30	120.00	6,453.2	-1,183.5	146.1	1,192.5	0.18	0.18	0.00
6,773.0	0.40	96.30	6,624.2	-1,183.8	147.1	1,192.9	0.10	0.06	-13.86
6,945.0	0.40	114.40	6,796.2	-1,184.1	148.2	1,193.3	0.07	0.00	10.52
7,017.7	0.46	133.69	6,868.9	-1,184.4	148.6	1,193.7	0.21	0.08	26.52
TARGET CIRCLE 1250'FSL & 50'FEL									
7,116.0	0.60	151.00	6,967.2	-1,185.1	149.2	1,194.5	0.21	0.14	17.62
7,287.0	0.50	159.40	7,138.2	-1,186.6	149.9	1,196.0	0.07	-0.06	4.91
7,458.0	0.30	143.80	7,309.2	-1,187.7	150.4	1,197.1	0.13	-0.12	-9.12
7,629.0	0.20	338.50	7,480.2	-1,187.7	150.6	1,197.2	0.29	-0.06	-96.67
7,803.0	0.40	292.00	7,654.2	-1,187.2	149.9	1,196.7	0.17	0.11	-26.72
7,833.0	0.20	287.00	7,684.2	-1,187.2	149.7	1,196.6	0.67	-0.67	-16.67
7,875.0	0.20	287.00	7,726.2	-1,187.1	149.6	1,196.5	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____