

Well Name: **Dowdy 41-10**

Surface Location: Dowdy 4-2-10 Pad Sec.10-T2N-R65W  
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

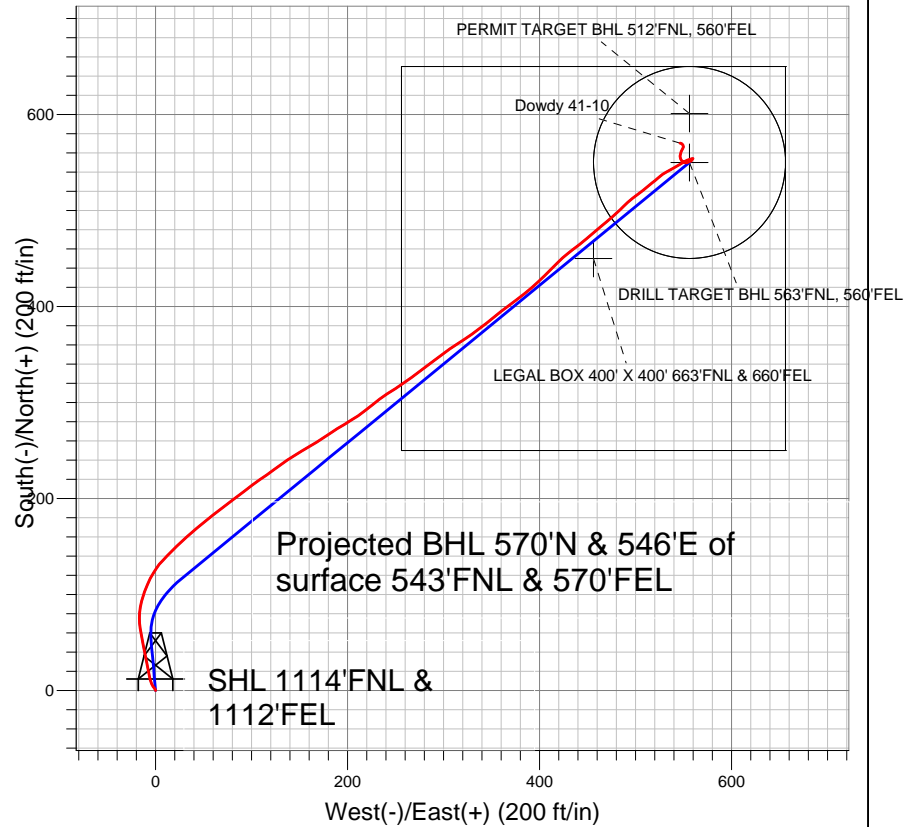
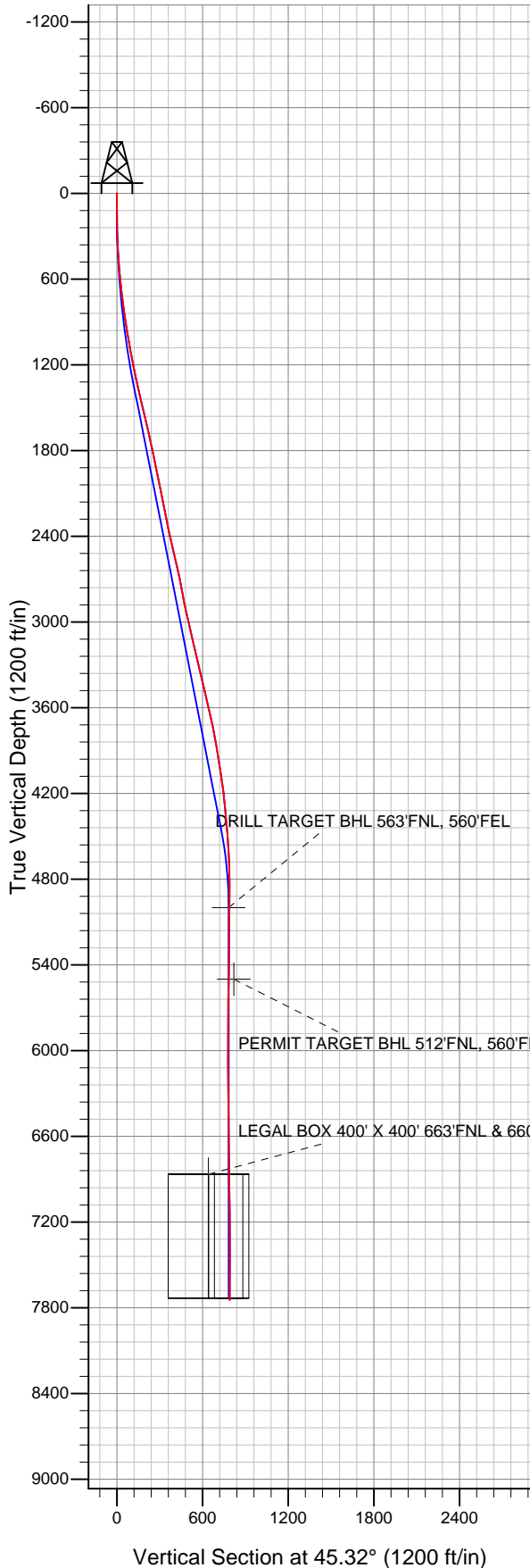
Ground Elevation: 4858.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1301352.18	3239128.36	40.157440	-104.644450

Original Well Elev WELL @ 4870.0ft (Original Well Elev)

Slot

## EnCana Oil & Gas Weld County CO



### LEGEND

- ✕ Dowdy 41-10, Wellbore #1, Plan #2 (10-22-12) R V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
7830'MD & 7747'TVD @ 789'VS  
0.4 deg Inc 250.8 deg AZ

Project: SEC.10-T2N-R65W  
Site: Dowdy 4-2-10 Pad Sec.10-T2N-R65W  
Well: Dowdy 41-10  
Plan: Wellbore #1



## **Directional**

### **EnCana Oil & Gas Weld County CO**

**SEC.10-T2N-R65W**

**Dowdy 4-2-10 Pad Sec.10-T2N-R65W**

**Dowdy 41-10**

**Wellbore #1**

**Survey: Survey #1**

### **Standard Survey Report**

**29 October, 2012**

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)
Main Survey	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	77.0	0.60	357.00	77.0	0.4	0.0	0.3	0.78	0.78	0.00
	166.0	1.10	320.30	166.0	1.5	-0.6	0.7	0.80	0.56	-41.24
	257.0	3.20	325.40	256.9	4.3	-2.6	1.2	2.31	2.31	5.60
	347.0	5.20	342.60	346.7	10.2	-5.2	3.5	2.60	2.22	19.11
	439.0	7.70	350.00	438.1	20.3	-7.6	8.9	2.86	2.72	8.04
	530.0	9.80	348.10	528.0	33.9	-10.2	16.6	2.33	2.31	-2.09
	621.0	9.80	349.60	617.7	49.1	-13.2	25.1	0.28	0.00	1.65
	712.0	10.30	350.30	707.3	64.7	-16.0	34.1	0.57	0.55	0.77
	803.0	10.10	4.90	796.9	80.7	-16.7	44.9	2.84	-0.22	16.04
	875.0	10.50	14.60	867.7	93.3	-14.5	55.3	2.47	0.56	13.47
	930.0	10.50	20.00	921.8	102.9	-11.5	64.2	1.79	0.00	9.82
	975.0	9.80	23.90	966.1	110.2	-8.5	71.4	2.18	-1.56	8.67

<b>Company:</b>	EnCana Oil & Gas Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Dowdy 41-10
<b>Project:</b>	SEC.10-T2N-R65W	<b>TVD Reference:</b>	WELL @ 4870.0ft (Original Well Elev)
<b>Site:</b>	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	<b>MD Reference:</b>	WELL @ 4870.0ft (Original Well Elev)
<b>Well:</b>	Dowdy 41-10	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	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)
1,060.0	9.90	30.60	1,049.8	123.1	-1.9	85.3	1.35	0.12	7.88
1,146.0	10.60	42.90	1,134.5	135.3	7.3	100.3	2.67	0.81	14.30
1,232.0	11.70	45.00	1,218.9	147.3	18.8	116.9	1.36	1.28	2.44
1,317.0	12.40	49.10	1,302.0	159.3	31.8	134.7	1.30	0.82	4.82
1,403.0	12.90	48.50	1,385.9	171.7	46.0	153.5	0.60	0.58	-0.70
1,488.0	13.50	53.60	1,468.7	183.9	61.1	172.7	1.54	0.71	6.00
1,574.0	13.50	53.10	1,552.3	195.9	77.2	192.6	0.14	0.00	-0.58
1,660.0	13.20	51.50	1,636.0	208.0	92.9	212.3	0.55	-0.35	-1.86
1,745.0	12.80	55.70	1,718.8	219.4	108.3	231.2	1.21	-0.47	4.94
1,831.0	11.50	53.50	1,802.9	229.9	123.0	249.1	1.60	-1.51	-2.56
1,916.0	12.10	55.40	1,886.1	240.0	137.2	266.3	0.84	0.71	2.24
2,002.0	12.10	60.80	1,970.2	249.5	152.5	283.8	1.32	0.00	6.28
2,088.0	12.00	57.30	2,054.3	258.7	167.8	301.3	0.86	-0.12	-4.07
2,173.0	11.50	55.60	2,137.5	268.3	182.3	318.2	0.72	-0.59	-2.00
2,259.0	11.00	60.50	2,221.8	277.1	196.5	334.6	1.25	-0.58	5.70
2,344.0	11.80	55.40	2,305.1	286.1	210.7	351.0	1.51	0.94	-6.00
2,430.0	13.50	50.60	2,389.1	297.4	225.7	369.6	2.32	1.98	-5.58
2,516.0	12.40	55.90	2,472.9	309.0	241.1	388.7	1.88	-1.28	6.16
2,601.0	12.60	57.00	2,555.9	319.2	256.4	406.7	0.37	0.24	1.29
2,687.0	14.10	54.00	2,639.5	330.4	272.8	426.3	1.92	1.74	-3.49
2,772.0	10.70	50.10	2,722.5	341.6	287.2	444.4	4.12	-4.00	-4.59
2,858.0	10.60	54.70	2,807.1	351.3	299.8	460.2	1.00	-0.12	5.35
2,944.0	12.10	57.50	2,891.4	360.7	313.8	476.8	1.86	1.74	3.26
3,029.0	13.20	54.90	2,974.3	371.0	329.3	495.0	1.46	1.29	-3.06
3,115.0	12.90	51.00	3,058.1	382.7	344.8	514.3	1.08	-0.35	-4.53
3,200.0	13.30	51.70	3,140.9	394.8	359.8	533.4	0.51	0.47	0.82
3,286.0	13.60	53.60	3,224.5	406.9	375.7	553.3	0.62	0.35	2.21
3,372.0	13.20	49.60	3,308.2	419.3	391.4	573.1	1.17	-0.47	-4.65
3,457.0	12.70	44.50	3,391.0	432.2	405.3	592.1	1.47	-0.59	-6.00
3,543.0	13.70	45.20	3,474.8	446.1	419.2	611.7	1.18	1.16	0.81
3,628.0	12.80	54.00	3,557.5	458.8	433.9	631.1	2.60	-1.06	10.35
3,714.0	13.10	49.60	3,641.3	470.7	449.0	650.2	1.20	0.35	-5.12
3,800.0	12.50	49.90	3,725.2	483.0	463.6	669.2	0.70	-0.70	0.35
3,885.0	10.70	48.90	3,808.4	494.1	476.6	686.3	2.13	-2.12	-1.18
3,971.0	8.70	44.30	3,893.2	504.0	487.1	700.8	2.49	-2.33	-5.35
4,056.0	9.20	52.20	3,977.2	512.8	497.0	713.9	1.56	0.59	9.29
4,142.0	9.00	52.00	4,062.1	521.1	507.7	727.4	0.24	-0.23	-0.23
4,228.0	7.80	50.80	4,147.2	529.0	517.5	739.9	1.41	-1.40	-1.40
4,313.0	5.50	48.20	4,231.6	535.3	525.1	749.7	2.73	-2.71	-3.06
4,399.0	5.70	62.90	4,317.2	540.0	531.9	757.9	1.68	0.23	17.09
4,484.0	5.50	59.30	4,401.8	544.0	539.2	765.9	0.48	-0.24	-4.24
4,570.0	4.70	58.90	4,487.4	547.9	545.7	773.3	0.93	-0.93	-0.47
4,656.0	4.00	61.70	4,573.2	551.2	551.4	779.6	0.85	-0.81	3.26
4,741.0	3.00	73.70	4,658.0	553.2	556.2	784.4	1.45	-1.18	14.12
4,827.0	0.90	73.00	4,744.0	554.0	559.0	787.0	2.44	-2.44	-0.81
4,998.0	0.40	245.90	4,915.0	554.2	559.7	787.6	0.76	-0.29	101.11
5,083.1	0.50	214.89	5,000.0	553.8	559.2	787.0	0.31	0.12	-36.44
<b>DRILL TARGET BHL 563'FNL, 560'FEL</b>									
5,169.0	0.70	197.60	5,086.0	552.9	558.8	786.2	0.31	0.23	-20.13
5,340.0	0.60	241.40	5,256.9	551.5	557.7	784.4	0.29	-0.06	25.61
5,512.0	0.60	264.20	5,428.9	551.0	556.0	782.8	0.14	0.00	13.26
5,582.9	0.57	249.79	5,499.8	550.8	555.3	782.2	0.21	-0.04	-20.34
<b>PERMIT TARGET BHL 512'FNL, 560'FEL</b>									
5,683.0	0.60	229.20	5,599.9	550.3	554.5	781.2	0.21	0.03	-20.56

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<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey										
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5,854.0	0.70	266.50	5,770.9	549.7	552.8	779.5	0.25	0.06	21.81	
6,025.0	1.10	291.60	5,941.9	550.2	550.2	778.1	0.32	0.23	14.68	
6,196.0	0.80	322.90	6,112.9	551.8	547.9	777.6	0.34	-0.18	18.30	
6,368.0	0.90	341.60	6,284.9	554.0	546.8	778.3	0.17	0.06	10.87	
6,539.0	0.90	2.80	6,455.8	556.6	546.4	779.9	0.19	0.00	12.40	
6,710.0	1.10	17.40	6,626.8	559.5	547.0	782.4	0.19	0.12	8.54	
6,881.0	1.10	27.80	6,797.8	562.6	548.2	785.4	0.12	0.00	6.08	
6,945.5	1.10	25.69	6,862.3	563.7	548.8	786.6	0.06	0.00	-3.27	
LEGAL BOX 400' X 400' 663'FNL & 660'FEL										
6,948.1	1.10	25.60	6,864.8	563.7	548.8	786.6	0.06	0.00	-3.28	
TARGET CIRCLE 563'FNL & 560'FEL										
7,052.0	1.10	22.20	6,968.7	565.5	549.6	788.5	0.06	0.00	-3.28	
7,224.0	0.60	315.40	7,140.7	567.7	549.6	790.0	0.60	-0.29	-38.84	
7,395.0	0.40	331.70	7,311.7	568.9	548.7	790.2	0.14	-0.12	9.53	
7,566.0	0.40	305.00	7,482.7	569.7	547.9	790.2	0.11	0.00	-15.61	
7,788.0	0.40	277.90	7,704.7	570.3	546.5	789.6	0.08	0.00	-12.21	
7,830.0	0.40	250.80	7,746.7	570.2	546.3	789.4	0.45	0.00	-64.52	

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_