

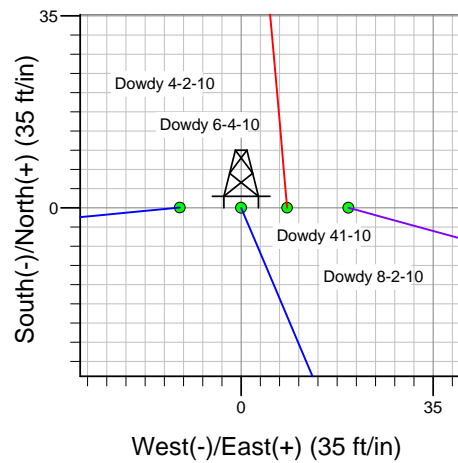
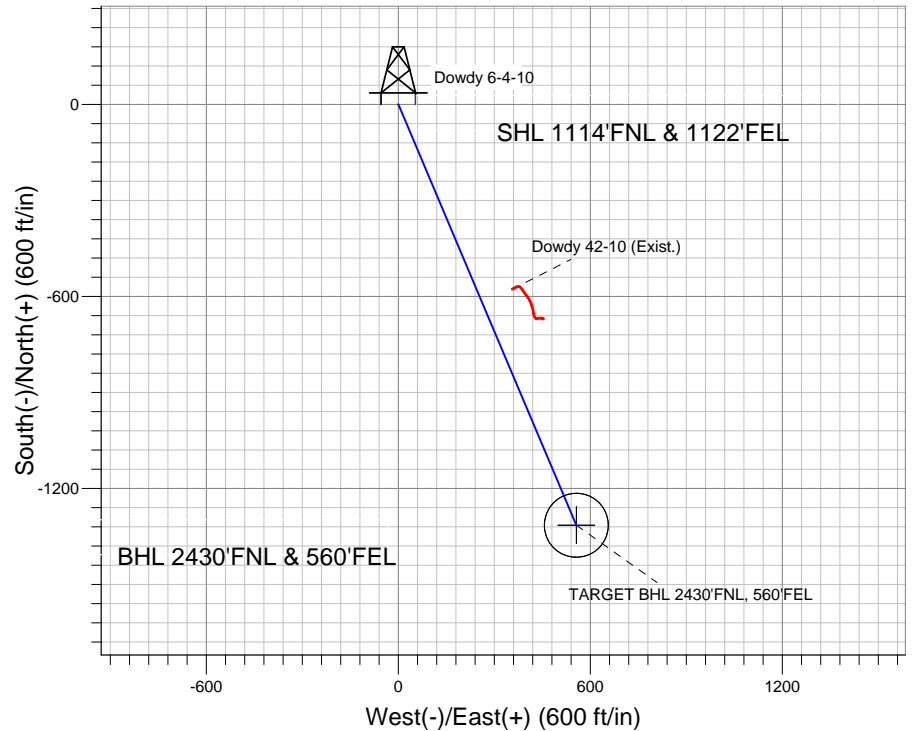
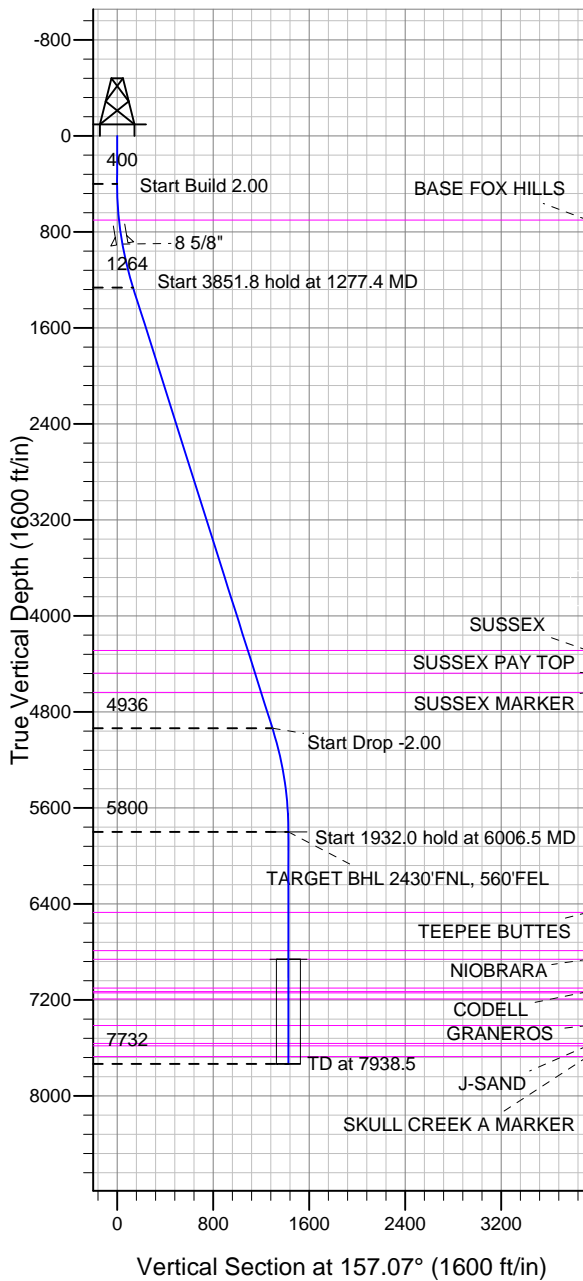
ENSIGN

Directional

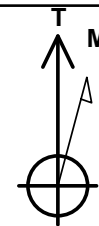
Well Name: Dowdy 6-4-10

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 Slot
 0.0 0.0 1301352.11 3239119.97 40.157440 -104.644480
 Original Well Elev WELL @ 4870.0ft (Original Well Elev)

EnCana Oil & Gas Weld County CO



Dowdy 4-2-10 Pad Sec.10-T2N-R65W
 Dowdy 6-4-10
 Plan #2 (7-20-12)
 9:34, July 23 2012



Azimuths to True North
 Magnetic North: 8.63°

Magnetic Field
 Strength: 52900.0nT
 Dip Angle: 66.84°
 Date: 7/23/2012
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2430'FNL, 560'FEL	5800.0	-1315.1	556.3	40.153830	-104.642490	Point
TARGET CIRCLE 2430'FNL & 560'FEL	6860.0	-1315.1	556.3	40.153830	-104.642490	Circle (Radius: 100.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	1277.4	17.55	157.07	1263.7	-122.8	51.9	2.00	157.07	133.3	
4	5129.2	17.55	157.07	4936.3	-1192.3	504.3	0.00	0.00	1294.6	
5	6006.5	0.00	0.00	5800.0	-1315.1	556.3	2.00	180.00	1427.9	TARGET BHL 2430'FNL, 560'FEL
6	7938.5	0.00	0.00	7732.0	-1315.1	556.3	0.00	0.00	1427.9	



Directional

EnCana Oil & Gas Weld County CO

SEC.10-T2N-R65W

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

Dowdy 6-4-10

Wellbore #1

Plan: Plan #2 (7-20-12)

Standard Planning Report

23 July, 2012

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Company:	EnCana Oil & Gas Weld County CO	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Project:	SEC.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		

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 4-2-10 Pad Sec.10-T2N-R65W											
Site Position:						Northing:			1,301,352.02 ft			Latitude:			40.157440		
From:			Lat/Long			Easting:			3,239,108.79 ft			Longitude:			-104.644520		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.55 °		

Well	Dowdy 6-4-10					
Well Position	+N-S	0.0 ft	Northing:	1,301,352.11 ft	Latitude:	40.157440
	+E-W	11.2 ft	Easting:	3,239,119.97 ft	Longitude:	-104.644480
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,858.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/23/2012	8.63	66.84	52,900

Design	Plan #2 (7-20-12)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	157.07

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,277.4	17.55	157.07	1,263.7	-122.8	51.9	2.00	2.00	0.00	157.07	
5,129.2	17.55	157.07	4,936.3	-1,192.3	504.3	0.00	0.00	0.00	0.00	
6,006.5	0.00	0.00	5,800.0	-1,315.1	556.3	2.00	-2.00	0.00	180.00	TARGET BHL 243C
7,938.5	0.00	0.00	7,732.0	-1,315.1	556.3	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Company:	EnCana Oil & Gas Weld County CO	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Project:	SEC.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		

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)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.80	157.07	440.0	-0.3	0.1	0.3	2.00	2.00	0.00
480.0	1.60	157.07	480.0	-1.0	0.4	1.1	2.00	2.00	0.00
520.0	2.40	157.07	520.0	-2.3	1.0	2.5	2.00	2.00	0.00
560.0	3.20	157.07	559.9	-4.1	1.7	4.5	2.00	2.00	0.00
600.0	4.00	157.07	599.8	-6.4	2.7	7.0	2.00	2.00	0.00
640.0	4.80	157.07	639.7	-9.3	3.9	10.0	2.00	2.00	0.00
680.0	5.60	157.07	679.6	-12.6	5.3	13.7	2.00	2.00	0.00
701.6	6.03	157.07	701.0	-14.6	6.2	15.9	2.00	2.00	0.00
BASE FOX HILLS									
720.0	6.40	157.07	719.3	-16.4	7.0	17.9	2.00	2.00	0.00
760.0	7.20	157.07	759.1	-20.8	8.8	22.6	2.00	2.00	0.00
800.0	8.00	157.07	798.7	-25.7	10.9	27.9	2.00	2.00	0.00
840.0	8.80	157.07	838.3	-31.1	13.1	33.7	2.00	2.00	0.00
880.0	9.60	157.07	877.8	-36.9	15.6	40.1	2.00	2.00	0.00
902.6	10.05	157.07	900.0	-40.5	17.1	44.0	2.00	2.00	0.00
8 5/8"									
920.0	10.40	157.07	917.1	-43.3	18.3	47.1	2.00	2.00	0.00
960.0	11.20	157.07	956.4	-50.2	21.3	54.6	2.00	2.00	0.00
1,000.0	12.00	157.07	995.6	-57.7	24.4	62.6	2.00	2.00	0.00
1,040.0	12.80	157.07	1,034.7	-65.6	27.7	71.2	2.00	2.00	0.00
1,080.0	13.60	157.07	1,073.6	-74.0	31.3	80.3	2.00	2.00	0.00
1,120.0	14.40	157.07	1,112.4	-82.9	35.1	90.0	2.00	2.00	0.00
1,160.0	15.20	157.07	1,151.1	-92.3	39.0	100.2	2.00	2.00	0.00
1,200.0	16.00	157.07	1,189.6	-102.2	43.2	111.0	2.00	2.00	0.00
1,240.0	16.80	157.07	1,228.0	-112.6	47.6	122.3	2.00	2.00	0.00
1,277.4	17.55	157.07	1,263.7	-122.8	51.9	133.3	2.00	2.00	0.00
1,280.0	17.55	157.07	1,266.2	-123.5	52.2	134.1	0.00	0.00	0.00
1,320.0	17.55	157.07	1,304.4	-134.6	56.9	146.2	0.00	0.00	0.00
1,360.0	17.55	157.07	1,342.5	-145.7	61.6	158.2	0.00	0.00	0.00
1,400.0	17.55	157.07	1,380.6	-156.8	66.3	170.3	0.00	0.00	0.00
1,440.0	17.55	157.07	1,418.8	-167.9	71.0	182.3	0.00	0.00	0.00
1,480.0	17.55	157.07	1,456.9	-179.0	75.7	194.4	0.00	0.00	0.00
1,520.0	17.55	157.07	1,495.1	-190.1	80.4	206.5	0.00	0.00	0.00
1,560.0	17.55	157.07	1,533.2	-201.3	85.1	218.5	0.00	0.00	0.00
1,600.0	17.55	157.07	1,571.3	-212.4	89.8	230.6	0.00	0.00	0.00
1,640.0	17.55	157.07	1,609.5	-223.5	94.5	242.6	0.00	0.00	0.00
1,680.0	17.55	157.07	1,647.6	-234.6	99.2	254.7	0.00	0.00	0.00
1,720.0	17.55	157.07	1,685.8	-245.7	103.9	266.8	0.00	0.00	0.00
1,760.0	17.55	157.07	1,723.9	-256.8	108.6	278.8	0.00	0.00	0.00
1,800.0	17.55	157.07	1,762.0	-267.9	113.3	290.9	0.00	0.00	0.00
1,840.0	17.55	157.07	1,800.2	-279.0	118.0	302.9	0.00	0.00	0.00
1,880.0	17.55	157.07	1,838.3	-290.1	122.7	315.0	0.00	0.00	0.00
1,920.0	17.55	157.07	1,876.4	-301.2	127.4	327.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Company:	EnCana Oil & Gas Weld County CO	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Project:	SEC.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		

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)	Turn Rate (°/100ft)
1,960.0	17.55	157.07	1,914.6	-312.3	132.1	339.1	0.00	0.00	0.00
2,000.0	17.55	157.07	1,952.7	-323.4	136.8	351.2	0.00	0.00	0.00
2,040.0	17.55	157.07	1,990.9	-334.5	141.5	363.2	0.00	0.00	0.00
2,080.0	17.55	157.07	2,029.0	-345.6	146.2	375.3	0.00	0.00	0.00
2,120.0	17.55	157.07	2,067.1	-356.8	150.9	387.4	0.00	0.00	0.00
2,160.0	17.55	157.07	2,105.3	-367.9	155.6	399.4	0.00	0.00	0.00
2,200.0	17.55	157.07	2,143.4	-379.0	160.3	411.5	0.00	0.00	0.00
2,240.0	17.55	157.07	2,181.6	-390.1	165.0	423.5	0.00	0.00	0.00
2,280.0	17.55	157.07	2,219.7	-401.2	169.7	435.6	0.00	0.00	0.00
2,320.0	17.55	157.07	2,257.8	-412.3	174.4	447.7	0.00	0.00	0.00
2,360.0	17.55	157.07	2,296.0	-423.4	179.1	459.7	0.00	0.00	0.00
2,400.0	17.55	157.07	2,334.1	-434.5	183.8	471.8	0.00	0.00	0.00
2,440.0	17.55	157.07	2,372.2	-445.6	188.5	483.8	0.00	0.00	0.00
2,480.0	17.55	157.07	2,410.4	-456.7	193.2	495.9	0.00	0.00	0.00
2,520.0	17.55	157.07	2,448.5	-467.8	197.9	508.0	0.00	0.00	0.00
2,560.0	17.55	157.07	2,486.7	-478.9	202.6	520.0	0.00	0.00	0.00
2,600.0	17.55	157.07	2,524.8	-490.0	207.3	532.1	0.00	0.00	0.00
2,640.0	17.55	157.07	2,562.9	-501.1	212.0	544.1	0.00	0.00	0.00
2,680.0	17.55	157.07	2,601.1	-512.2	216.7	556.2	0.00	0.00	0.00
2,720.0	17.55	157.07	2,639.2	-523.4	221.4	568.2	0.00	0.00	0.00
2,760.0	17.55	157.07	2,677.4	-534.5	226.1	580.3	0.00	0.00	0.00
2,800.0	17.55	157.07	2,715.5	-545.6	230.8	592.4	0.00	0.00	0.00
2,840.0	17.55	157.07	2,753.6	-556.7	235.5	604.4	0.00	0.00	0.00
2,880.0	17.55	157.07	2,791.8	-567.8	240.2	616.5	0.00	0.00	0.00
2,920.0	17.55	157.07	2,829.9	-578.9	244.9	628.5	0.00	0.00	0.00
2,960.0	17.55	157.07	2,868.1	-590.0	249.6	640.6	0.00	0.00	0.00
3,000.0	17.55	157.07	2,906.2	-601.1	254.3	652.7	0.00	0.00	0.00
3,040.0	17.55	157.07	2,944.3	-612.2	259.0	664.7	0.00	0.00	0.00
3,080.0	17.55	157.07	2,982.5	-623.3	263.7	676.8	0.00	0.00	0.00
3,120.0	17.55	157.07	3,020.6	-634.4	268.4	688.8	0.00	0.00	0.00
3,160.0	17.55	157.07	3,058.7	-645.5	273.1	700.9	0.00	0.00	0.00
3,200.0	17.55	157.07	3,096.9	-656.6	277.8	713.0	0.00	0.00	0.00
3,240.0	17.55	157.07	3,135.0	-667.7	282.5	725.0	0.00	0.00	0.00
3,280.0	17.55	157.07	3,173.2	-678.9	287.1	737.1	0.00	0.00	0.00
3,320.0	17.55	157.07	3,211.3	-690.0	291.8	749.1	0.00	0.00	0.00
3,360.0	17.55	157.07	3,249.4	-701.1	296.5	761.2	0.00	0.00	0.00
3,400.0	17.55	157.07	3,287.6	-712.2	301.2	773.3	0.00	0.00	0.00
3,440.0	17.55	157.07	3,325.7	-723.3	305.9	785.3	0.00	0.00	0.00
3,480.0	17.55	157.07	3,363.9	-734.4	310.6	797.4	0.00	0.00	0.00
3,520.0	17.55	157.07	3,402.0	-745.5	315.3	809.4	0.00	0.00	0.00
3,560.0	17.55	157.07	3,440.1	-756.6	320.0	821.5	0.00	0.00	0.00
3,600.0	17.55	157.07	3,478.3	-767.7	324.7	833.6	0.00	0.00	0.00
3,640.0	17.55	157.07	3,516.4	-778.8	329.4	845.6	0.00	0.00	0.00
3,680.0	17.55	157.07	3,554.5	-789.9	334.1	857.7	0.00	0.00	0.00
3,720.0	17.55	157.07	3,592.7	-801.0	338.8	869.7	0.00	0.00	0.00
3,760.0	17.55	157.07	3,630.8	-812.1	343.5	881.8	0.00	0.00	0.00
3,800.0	17.55	157.07	3,669.0	-823.2	348.2	893.9	0.00	0.00	0.00
3,840.0	17.55	157.07	3,707.1	-834.4	352.9	905.9	0.00	0.00	0.00
3,880.0	17.55	157.07	3,745.2	-845.5	357.6	918.0	0.00	0.00	0.00
3,920.0	17.55	157.07	3,783.4	-856.6	362.3	930.0	0.00	0.00	0.00
3,960.0	17.55	157.07	3,821.5	-867.7	367.0	942.1	0.00	0.00	0.00
4,000.0	17.55	157.07	3,859.7	-878.8	371.7	954.2	0.00	0.00	0.00
4,040.0	17.55	157.07	3,897.8	-889.9	376.4	966.2	0.00	0.00	0.00
4,080.0	17.55	157.07	3,935.9	-901.0	381.1	978.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
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Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		

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)	Turn Rate (°/100ft)
4,120.0	17.55	157.07	3,974.1	-912.1	385.8	990.3	0.00	0.00	0.00
4,160.0	17.55	157.07	4,012.2	-923.2	390.5	1,002.4	0.00	0.00	0.00
4,200.0	17.55	157.07	4,050.4	-934.3	395.2	1,014.5	0.00	0.00	0.00
4,240.0	17.55	157.07	4,088.5	-945.4	399.9	1,026.5	0.00	0.00	0.00
4,280.0	17.55	157.07	4,126.6	-956.5	404.6	1,038.6	0.00	0.00	0.00
4,320.0	17.55	157.07	4,164.8	-967.6	409.3	1,050.6	0.00	0.00	0.00
4,360.0	17.55	157.07	4,202.9	-978.7	414.0	1,062.7	0.00	0.00	0.00
4,400.0	17.55	157.07	4,241.0	-989.8	418.7	1,074.8	0.00	0.00	0.00
4,440.0	17.55	157.07	4,279.2	-1,001.0	423.4	1,086.8	0.00	0.00	0.00
4,449.2	17.55	157.07	4,288.0	-1,003.5	424.5	1,089.6	0.00	0.00	0.00
SUSSEX									
4,480.0	17.55	157.07	4,317.3	-1,012.1	428.1	1,098.9	0.00	0.00	0.00
4,520.0	17.55	157.07	4,355.5	-1,023.2	432.8	1,110.9	0.00	0.00	0.00
4,560.0	17.55	157.07	4,393.6	-1,034.3	437.5	1,123.0	0.00	0.00	0.00
4,600.0	17.55	157.07	4,431.7	-1,045.4	442.2	1,135.1	0.00	0.00	0.00
4,640.0	17.55	157.07	4,469.9	-1,056.5	446.9	1,147.1	0.00	0.00	0.00
4,647.5	17.55	157.07	4,477.0	-1,058.6	447.8	1,149.4	0.00	0.00	0.00
SUSSEX PAY TOP									
4,680.0	17.55	157.07	4,508.0	-1,067.6	451.6	1,159.2	0.00	0.00	0.00
4,720.0	17.55	157.07	4,546.2	-1,078.7	456.3	1,171.2	0.00	0.00	0.00
4,760.0	17.55	157.07	4,584.3	-1,089.8	461.0	1,183.3	0.00	0.00	0.00
4,800.0	17.55	157.07	4,622.4	-1,100.9	465.7	1,195.4	0.00	0.00	0.00
4,814.2	17.55	157.07	4,636.0	-1,104.9	467.4	1,199.6	0.00	0.00	0.00
SUSSEX MARKER									
4,840.0	17.55	157.07	4,660.6	-1,112.0	470.4	1,207.4	0.00	0.00	0.00
4,880.0	17.55	157.07	4,698.7	-1,123.1	475.1	1,219.5	0.00	0.00	0.00
4,920.0	17.55	157.07	4,736.8	-1,134.2	479.8	1,231.5	0.00	0.00	0.00
4,960.0	17.55	157.07	4,775.0	-1,145.3	484.5	1,243.6	0.00	0.00	0.00
5,000.0	17.55	157.07	4,813.1	-1,156.5	489.2	1,255.7	0.00	0.00	0.00
5,040.0	17.55	157.07	4,851.3	-1,167.6	493.9	1,267.7	0.00	0.00	0.00
5,080.0	17.55	157.07	4,889.4	-1,178.7	498.6	1,279.8	0.00	0.00	0.00
5,120.0	17.55	157.07	4,927.5	-1,189.8	503.3	1,291.8	0.00	0.00	0.00
5,129.2	17.55	157.07	4,936.3	-1,192.3	504.3	1,294.6	0.00	0.00	0.00
5,160.0	16.93	157.07	4,965.7	-1,200.7	507.9	1,303.7	2.00	-2.00	0.00
5,200.0	16.13	157.07	5,004.1	-1,211.2	512.3	1,315.1	2.00	-2.00	0.00
5,240.0	15.33	157.07	5,042.6	-1,221.2	516.6	1,326.0	2.00	-2.00	0.00
5,280.0	14.53	157.07	5,081.2	-1,230.7	520.6	1,336.3	2.00	-2.00	0.00
5,320.0	13.73	157.07	5,120.0	-1,239.7	524.4	1,346.0	2.00	-2.00	0.00
5,360.0	12.93	157.07	5,158.9	-1,248.2	528.0	1,355.3	2.00	-2.00	0.00
5,400.0	12.13	157.07	5,198.0	-1,256.2	531.4	1,363.9	2.00	-2.00	0.00
5,440.0	11.33	157.07	5,237.2	-1,263.7	534.5	1,372.1	2.00	-2.00	0.00
5,480.0	10.53	157.07	5,276.4	-1,270.7	537.5	1,379.7	2.00	-2.00	0.00
5,520.0	9.73	157.07	5,315.8	-1,277.1	540.2	1,386.7	2.00	-2.00	0.00
5,560.0	8.93	157.07	5,355.3	-1,283.1	542.7	1,393.2	2.00	-2.00	0.00
5,600.0	8.13	157.07	5,394.8	-1,288.6	545.1	1,399.1	2.00	-2.00	0.00
5,640.0	7.33	157.07	5,434.5	-1,293.5	547.2	1,404.5	2.00	-2.00	0.00
5,680.0	6.53	157.07	5,474.2	-1,298.0	549.0	1,409.3	2.00	-2.00	0.00
5,720.0	5.73	157.07	5,513.9	-1,301.9	550.7	1,413.6	2.00	-2.00	0.00
5,760.0	4.93	157.07	5,553.8	-1,305.3	552.1	1,417.3	2.00	-2.00	0.00
5,800.0	4.13	157.07	5,593.6	-1,308.2	553.4	1,420.5	2.00	-2.00	0.00
5,840.0	3.33	157.07	5,633.6	-1,310.6	554.4	1,423.1	2.00	-2.00	0.00
5,880.0	2.53	157.07	5,673.5	-1,312.5	555.2	1,425.1	2.00	-2.00	0.00
5,920.0	1.73	157.07	5,713.5	-1,313.9	555.8	1,426.6	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Company:	EnCana Oil & Gas Weld County CO	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Project:	SEC.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		

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)	Turn Rate (°/100ft)
5,960.0	0.93	157.07	5,753.5	-1,314.7	556.1	1,427.5	2.00	-2.00	0.00
6,000.0	0.13	157.07	5,793.5	-1,315.1	556.3	1,427.9	2.00	-2.00	0.00
6,006.5	0.00	0.00	5,800.0	-1,315.1	556.3	1,427.9	2.00	-2.00	0.00
6,040.0	0.00	0.00	5,833.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,873.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,120.0	0.00	0.00	5,913.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,160.0	0.00	0.00	5,953.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,200.0	0.00	0.00	5,993.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,240.0	0.00	0.00	6,033.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,073.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,113.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,153.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,193.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,233.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,273.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,313.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,353.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,393.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,433.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,676.5	0.00	0.00	6,470.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
TEEPEE BUTTES									
6,680.0	0.00	0.00	6,473.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,513.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,553.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,593.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,633.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,673.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,920.0	0.00	0.00	6,713.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,753.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
6,995.5	0.00	0.00	6,789.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
SHARON SPRINGS									
7,000.0	0.00	0.00	6,793.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,040.0	0.00	0.00	6,833.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,066.5	0.00	0.00	6,860.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
NIOBRARA									
7,080.0	0.00	0.00	6,873.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,120.0	0.00	0.00	6,913.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,160.0	0.00	0.00	6,953.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,200.0	0.00	0.00	6,993.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,240.0	0.00	0.00	7,033.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,073.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,306.5	0.00	0.00	7,100.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
FT. HAYES									
7,320.0	0.00	0.00	7,113.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,336.5	0.00	0.00	7,130.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
CODELL									
7,347.5	0.00	0.00	7,141.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
FAIRPORT									
7,360.0	0.00	0.00	7,153.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,397.5	0.00	0.00	7,191.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
GREENHORN									
7,400.0	0.00	0.00	7,193.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,440.0	0.00	0.00	7,233.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Company:	EnCana Oil & Gas Weld County CO	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Project:	SEC.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		

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)	Turn Rate (°/100ft)
7,480.0	0.00	0.00	7,273.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,520.0	0.00	0.00	7,313.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,560.0	0.00	0.00	7,353.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,393.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,618.5	0.00	0.00	7,412.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
GRANEROS									
7,640.0	0.00	0.00	7,433.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,680.0	0.00	0.00	7,473.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,720.0	0.00	0.00	7,513.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,760.0	0.00	0.00	7,553.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,768.5	0.00	0.00	7,562.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
MOWRY									
7,788.5	0.00	0.00	7,582.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
J-SAND									
7,800.0	0.00	0.00	7,593.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,840.0	0.00	0.00	7,633.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,877.5	0.00	0.00	7,671.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
SKULL CREEK A MARKER									
7,880.0	0.00	0.00	7,673.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,920.0	0.00	0.00	7,713.5	-1,315.1	556.3	1,427.9	0.00	0.00	0.00
7,938.5	0.00	0.00	7,732.0	-1,315.1	556.3	1,427.9	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
902.6	900.0	8 5/8"	8-5/8	12-1/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
701.6	701.0	BASE FOX HILLS		0.00	
4,449.2	4,288.0	SUSSEX		0.00	
4,647.5	4,477.0	SUSSEX PAY TOP		0.00	
4,814.2	4,636.0	SUSSEX MARKER		0.00	
6,676.5	6,470.0	TEEPEE BUTTES		0.00	
6,995.5	6,789.0	SHARON SPRINGS		0.00	
7,066.5	6,860.0	NIOBRARA		0.00	
7,306.5	7,100.0	FT. HAYES		0.00	
7,336.5	7,130.0	CODELL		0.00	
7,347.5	7,141.0	FAIRPORT		0.00	
7,397.5	7,191.0	GREENHORN		0.00	
7,618.5	7,412.0	GRANEROS		0.00	
7,768.5	7,562.0	MOWRY		0.00	
7,788.5	7,582.0	J-SAND		0.00	
7,877.5	7,671.0	SKULL CREEK A MARKER		0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Company:	EnCana Oil & Gas Weld County CO	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Project:	SEC.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	North Reference:	True
Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (7-20-12)		



Directional

EnCana Oil & Gas Weld County CO

SEC.10-T2N-R65W

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

Dowdy 6-4-10

Wellbore #1

Plan #2 (7-20-12)

Anticollision Report

23 July, 2012

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Reference Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-20-12)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
1,900.0	1,857.4	1,817.7	1,798.3	7.4	5.5	-156.02	184.3	118.3	483.7	474.2	9.41	51.380	
2,000.0	1,952.7	1,909.6	1,888.5	8.0	5.8	-155.71	195.6	132.0	523.0	512.9	10.07	51.927	
2,100.0	2,048.1	2,001.5	1,978.6	8.6	6.2	-155.44	206.9	145.8	562.4	551.7	10.74	52.376	
2,200.0	2,143.4	2,093.3	2,068.8	9.2	6.6	-155.21	218.2	159.6	601.8	590.4	11.41	52.750	
2,300.0	2,238.8	2,185.2	2,158.9	9.9	7.0	-155.00	229.5	173.3	641.2	629.1	12.08	53.063	
2,400.0	2,334.1	2,277.1	2,249.1	10.5	7.3	-154.82	240.8	187.1	680.6	667.8	12.76	53.329	
2,500.0	2,429.5	2,369.0	2,339.2	11.1	7.7	-154.66	252.0	200.9	720.0	706.6	13.44	53.555	
2,600.0	2,524.8	2,460.9	2,429.4	11.7	8.1	-154.52	263.3	214.7	759.4	745.3	14.13	53.750	
2,700.0	2,620.2	2,552.8	2,519.5	12.4	8.5	-154.39	274.6	228.4	798.8	784.0	14.82	53.919	
2,800.0	2,715.5	2,644.7	2,609.6	13.0	8.9	-154.27	285.9	242.2	838.3	822.8	15.50	54.066	
2,900.0	2,810.8	2,736.6	2,699.8	13.6	9.2	-154.16	297.2	256.0	877.7	861.5	16.20	54.194	
3,000.0	2,906.2	2,828.5	2,789.9	14.2	9.6	-154.06	308.5	269.8	917.1	900.2	16.89	54.307	
3,100.0	3,001.5	2,920.3	2,880.1	14.9	10.0	-153.97	319.8	283.5	956.5	939.0	17.58	54.406	
3,200.0	3,096.9	3,012.2	2,970.2	15.5	10.4	-153.89	331.0	297.3	996.0	977.7	18.28	54.495	
3,300.0	3,192.2	3,104.1	3,060.4	16.1	10.8	-153.82	342.3	311.1	1,035.4	1,016.4	18.97	54.573	
3,400.0	3,287.6	3,196.0	3,150.5	16.7	11.2	-153.75	353.6	324.8	1,074.8	1,055.2	19.67	54.644	
3,500.0	3,382.9	3,287.9	3,240.7	17.4	11.6	-153.68	364.9	338.6	1,114.3	1,093.9	20.37	54.707	
3,600.0	3,478.3	3,379.8	3,330.8	18.0	11.9	-153.62	376.2	352.4	1,153.7	1,132.6	21.07	54.763	
3,700.0	3,573.6	3,471.7	3,421.0	18.6	12.3	-153.56	387.5	366.2	1,193.1	1,171.4	21.77	54.814	
3,800.0	3,669.0	3,563.6	3,511.1	19.3	12.7	-153.51	398.8	379.9	1,232.6	1,210.1	22.47	54.860	
3,900.0	3,764.3	3,655.5	3,601.3	19.9	13.1	-153.46	410.1	393.7	1,272.0	1,248.8	23.17	54.902	
4,000.0	3,859.7	3,747.3	3,691.4	20.5	13.5	-153.41	421.3	407.5	1,311.4	1,287.6	23.87	54.940	
4,100.0	3,955.0	3,839.2	3,781.6	21.1	13.9	-153.37	432.6	421.2	1,350.9	1,326.3	24.57	54.975	
4,200.0	4,050.4	3,931.1	3,871.7	21.8	14.3	-153.32	443.9	435.0	1,390.3	1,365.1	25.28	55.006	
4,300.0	4,145.7	4,023.0	3,961.9	22.4	14.7	-153.28	455.2	448.8	1,429.8	1,403.8	25.98	55.035	
4,400.0	4,241.0	4,114.9	4,052.0	23.0	15.1	-153.25	466.5	462.6	1,469.2	1,442.5	26.68	55.061	
4,500.0	4,336.4	4,206.8	4,142.2	23.6	15.4	-153.21	477.8	476.3	1,508.7	1,481.3	27.39	55.085	
4,600.0	4,431.7	4,298.7	4,232.3	24.3	15.8	-153.18	489.1	490.1	1,548.1	1,520.0	28.09	55.107	
4,700.0	4,527.1	4,390.6	4,322.5	24.9	16.2	-153.15	500.3	503.9	1,587.5	1,558.7	28.80	55.127	
4,800.0	4,622.4	4,482.5	4,412.6	25.5	16.6	-153.11	511.6	517.7	1,627.0	1,597.5	29.50	55.146	
4,900.0	4,717.8	4,611.6	4,539.6	26.2	17.1	-153.12	526.5	535.8	1,665.8	1,635.5	30.28	55.019	
5,000.0	4,813.1	4,764.8	4,691.4	26.8	17.5	-153.32	539.5	551.7	1,701.5	1,670.5	30.98	54.925	
5,100.0	4,908.5	4,821.4	4,847.4	27.4	17.8	-153.73	547.5	561.4	1,733.9	1,702.3	31.61	54.859	
5,129.2	4,936.3	4,967.6	4,893.6	27.6	17.9	-153.89	548.8	563.1	1,742.7	1,710.9	31.77	54.849	
5,200.0	5,004.1	5,078.1	5,004.1	28.0	18.0	-154.49	550.1	564.6	1,762.1	1,729.9	32.22	54.685	
5,300.0	5,100.6	5,174.6	5,100.6	28.4	18.2	-155.06	550.1	564.6	1,785.8	1,753.1	32.74	54.540	
5,400.0	5,198.0	5,272.0	5,198.0	28.7	18.3	-155.53	550.1	564.6	1,806.6	1,773.3	33.23	54.361	
5,500.0	5,296.1	5,370.1	5,296.1	29.1	18.4	-155.93	550.1	564.6	1,824.2	1,790.5	33.68	54.156	
5,600.0	5,394.8	5,468.9	5,394.8	29.3	18.6	-156.25	550.1	564.6	1,838.8	1,804.7	34.10	53.927	
5,700.0	5,494.1	5,568.1	5,494.1	29.6	18.7	-156.50	550.1	564.6	1,850.2	1,815.7	34.47	53.674	
5,800.0	5,593.6	5,667.7	5,593.6	29.7	18.8	-156.67	550.1	564.6	1,858.4	1,823.6	34.80	53.398	
5,900.0	5,693.5	5,767.5	5,693.5	29.9	19.0	-156.78	550.1	564.6	1,863.4	1,828.3	35.09	53.099	
6,006.5	5,800.0	5,874.0	5,800.0	30.0	19.1	0.26	550.1	564.6	1,865.2	1,829.8	35.37	52.737	
6,100.0	5,893.5	5,967.5	5,893.5	30.1	19.3	0.26	550.1	564.6	1,865.2	1,829.6	35.65	52.325	
6,200.0	5,993.5	6,067.5	5,993.5	30.2	19.4	0.26	550.1	564.6	1,865.2	1,829.3	35.94	51.899	
6,300.0	6,093.5	6,167.5	6,093.5	30.2	19.6	0.26	550.1	564.6	1,865.2	1,829.0	36.24	51.475	
6,400.0	6,193.5	6,267.5	6,193.5	30.3	19.7	0.26	550.1	564.6	1,865.2	1,828.7	36.53	51.054	
6,500.0	6,293.5	6,367.5	6,293.5	30.4	19.9	0.26	550.1	564.6	1,865.2	1,828.4	36.84	50.636	
6,600.0	6,393.5	6,467.5	6,393.5	30.5	20.0	0.26	550.1	564.6	1,865.2	1,828.1	37.14	50.220	
6,700.0	6,493.5	6,567.5	6,493.5	30.6	20.2	0.26	550.1	564.6	1,865.2	1,827.8	37.45	49.808	
6,800.0	6,593.5	6,667.5	6,593.5	30.6	20.3	0.26	550.1	564.6	1,865.2	1,827.4	37.76	49.398	
6,900.0	6,693.5	6,767.5	6,693.5	30.7	20.5	0.26	550.1	564.6	1,865.2	1,827.1	38.07	48.992	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Reference Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-20-12)	Offset TVD Reference:	Offset Datum

Offset Design Dowdy 4-2-10 Pad Sec.10-T2N-R65W - Dowdy 41-10 - Wellbore #1 - Plan #2 (7-20-12)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,000.0	6,793.5	6,867.5	6,793.5	30.8	20.6	0.26	550.1	564.6	1,865.2	1,826.8	38.39	48.589	
7,100.0	6,893.5	6,967.5	6,893.5	30.9	20.8	0.26	550.1	564.6	1,865.2	1,826.5	38.71	48.190	
7,200.0	6,993.5	7,067.5	6,993.5	31.0	20.9	0.26	550.1	564.6	1,865.2	1,826.2	39.03	47.793	
7,300.0	7,093.5	7,167.5	7,093.5	31.1	21.1	0.26	550.1	564.6	1,865.2	1,825.9	39.35	47.401	
7,400.0	7,193.5	7,267.5	7,193.5	31.2	21.3	0.26	550.1	564.6	1,865.2	1,825.5	39.68	47.012	
7,500.0	7,293.5	7,367.5	7,293.5	31.3	21.4	0.26	550.1	564.6	1,865.2	1,825.2	40.00	46.626	
7,600.0	7,393.5	7,467.5	7,393.5	31.4	21.6	0.26	550.1	564.6	1,865.2	1,824.9	40.33	46.244	
7,700.0	7,493.5	7,567.5	7,493.5	31.5	21.8	0.26	550.1	564.6	1,865.2	1,824.5	40.67	45.866	
7,800.0	7,593.5	7,667.5	7,593.5	31.6	21.9	0.26	550.1	564.6	1,865.2	1,824.2	41.00	45.491	
7,900.0	7,693.5	7,767.5	7,693.5	31.7	22.0	0.26	550.1	564.6	1,865.2	1,823.9	41.28	45.189	
7,938.5	7,732.0	7,806.0	7,732.0	31.7	22.1	0.26	550.1	564.6	1,865.2	1,823.8	41.37	45.085	

Dowdy 4-2-10 Pad Sec.10-T2N-R65W - Dowdy 4-2-10 - Wellbore #1 - Plan #1 (7-09-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.96	0.0	-11.2	11.2	11.2	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-89.96	0.0	-11.2	11.2	11.0	0.22	49.744		
200.0	200.0	200.0	200.0	0.3	0.3	-89.96	0.0	-11.2	11.2	10.5	0.67	16.581 CC, ES		
300.0	300.0	299.6	299.6	0.6	0.6	-90.69	-0.2	-12.9	12.9	11.8	1.11	11.606 SF		
400.0	400.0	398.9	398.7	0.8	0.8	-92.05	-0.6	-18.1	18.1	16.5	1.56	11.619		
500.0	500.0	497.7	497.2	1.0	1.0	113.04	-1.5	-26.6	27.4	25.4	1.99	13.739		
600.0	599.8	595.5	594.2	1.2	1.3	117.75	-2.6	-38.3	41.6	39.2	2.43	17.099		
700.0	699.5	691.8	689.4	1.4	1.6	121.96	-4.0	-53.1	61.0	58.1	2.91	20.977		
800.0	798.7	786.3	782.2	1.7	2.0	125.17	-5.7	-70.7	85.6	82.2	3.42	25.039		
900.0	897.5	878.6	872.3	2.0	2.4	127.51	-7.6	-90.8	115.4	111.4	3.97	29.066		
1,000.0	995.6	968.4	959.2	2.3	2.8	129.19	-9.7	-113.2	150.1	145.6	4.56	32.928		
1,100.0	1,093.1	1,056.5	1,043.8	2.8	3.3	130.41	-12.0	-137.7	189.8	184.6	5.20	36.506		
1,200.0	1,189.6	1,145.3	1,128.7	3.2	3.9	131.48	-14.5	-163.7	232.9	227.0	5.87	39.696		
1,277.4	1,263.7	1,214.2	1,194.5	3.7	4.3	132.33	-16.4	-183.9	267.8	261.4	6.41	41.807		
1,300.0	1,285.3	1,234.2	1,213.6	3.8	4.4	132.73	-17.0	-189.8	278.2	271.7	6.57	42.344		
1,400.0	1,380.6	1,322.6	1,298.1	4.4	4.9	134.19	-19.5	-215.7	324.4	317.1	7.33	44.283		
1,500.0	1,476.0	1,411.1	1,382.6	5.0	5.5	135.29	-21.9	-241.7	370.7	362.6	8.09	45.842		
1,600.0	1,571.3	1,499.5	1,467.2	5.6	6.0	136.15	-24.4	-267.6	417.1	408.2	8.86	47.080		
1,700.0	1,666.7	1,588.0	1,551.7	6.2	6.6	136.83	-26.9	-293.5	463.5	453.8	9.64	48.084		
1,800.0	1,762.0	1,676.4	1,636.2	6.8	7.1	137.39	-29.3	-319.5	509.9	499.5	10.43	48.912		
1,900.0	1,857.4	1,764.9	1,720.7	7.4	7.7	137.86	-31.8	-345.4	556.4	545.2	11.22	49.606		
2,000.0	1,952.7	1,853.3	1,805.3	8.0	8.2	138.25	-34.3	-371.3	603.0	591.0	12.01	50.194		
2,100.0	2,048.1	1,941.8	1,889.8	8.6	8.8	138.59	-36.7	-397.3	649.5	636.7	12.81	50.697		
2,200.0	2,143.4	2,030.2	1,974.3	9.2	9.3	138.89	-39.2	-423.2	696.1	682.5	13.61	51.132		
2,300.0	2,238.8	2,118.6	2,058.8	9.9	9.9	139.14	-41.7	-449.1	742.6	728.2	14.42	51.512		
2,400.0	2,334.1	2,207.1	2,143.3	10.5	10.4	139.37	-44.2	-475.1	789.2	774.0	15.22	51.846		
2,500.0	2,429.5	2,295.5	2,227.9	11.1	11.0	139.57	-46.6	-501.0	835.8	819.8	16.03	52.142		
2,600.0	2,524.8	2,384.0	2,312.4	11.7	11.6	139.75	-49.1	-526.9	882.4	865.6	16.84	52.405		
2,700.0	2,620.2	2,472.4	2,396.9	12.4	12.1	139.91	-51.6	-552.9	929.0	911.4	17.65	52.640		
2,800.0	2,715.5	2,560.9	2,481.4	13.0	12.7	140.06	-54.0	-578.8	975.6	957.2	18.46	52.852		
2,900.0	2,810.8	2,649.3	2,566.0	13.6	13.2	140.19	-56.5	-604.8	1,022.2	1,003.0	19.27	53.045		
3,000.0	2,906.2	2,737.8	2,650.5	14.2	13.8	140.31	-59.0	-630.7	1,068.8	1,048.8	20.08	53.219		
3,100.0	3,001.5	2,826.2	2,735.0	14.9	14.3	140.43	-61.4	-656.6	1,115.5	1,094.6	20.90	53.378		
3,200.0	3,096.9	2,914.7	2,819.5	15.5	14.9	140.53	-63.9	-682.6	1,162.1	1,140.4	21.71	53.524		
3,300.0	3,192.2	3,003.1	2,904.1	16.1	15.5	140.62	-66.4	-708.5	1,208.7	1,186.2	22.53	53.658		
3,400.0	3,287.6	3,091.6	2,988.6	16.7	16.0	140.71	-68.8	-734.4	1,255.3	1,232.0	23.34	53.781		
3,500.0	3,382.9	3,180.0	3,073.1	17.4	16.6	140.79	-71.3	-760.4	1,302.0	1,277.8	24.16	53.895		
3,600.0	3,478.3	3,268.5	3,157.6	18.0	17.1	140.87	-73.8	-786.3	1,348.6	1,323.6	24.97	54.001		
3,700.0	3,573.6	3,356.9	3,242.2	18.6	17.7	140.94	-76.3	-812.2	1,395.2	1,369.4	25.79	54.099		
3,800.0	3,669.0	3,445.4	3,326.7	19.3	18.3	141.00	-78.7	-838.2	1,441.9	1,415.3	26.61	54.190		
3,900.0	3,764.3	3,533.8	3,411.2	19.9	18.8	141.07	-81.2	-864.1	1,488.5	1,461.1	27.43	54.275		
4,000.0	3,859.7	3,622.3	3,495.7	20.5	19.4	141.12	-83.7	-890.0	1,535.2	1,506.9	28.24	54.355		
4,100.0	3,955.0	3,710.7	3,580.3	21.1	19.9	141.18	-86.1	-916.0	1,581.8	1,552.7	29.06	54.429		
4,200.0	4,050.4	3,799.2	3,664.8	21.8	20.5	141.23	-88.6	-941.9	1,628.4	1,598.6	29.88	54.499		
4,300.0	4,145.7	3,887.6	3,749.3	22.4	21.0	141.28	-91.1	-967.8	1,675.1	1,644.4	30.70	54.565		
4,400.0	4,241.0	3,976.1	3,833.8	23.0	21.6	141.32	-93.5	-993.8	1,721.7	1,690.2	31.52	54.627		
4,500.0	4,336.4	4,064.5	3,918.3	23.6	22.2	141.37	-96.0	-1,019.7	1,768.4	1,736.0	32.34	54.685		
4,600.0	4,431.7	4,152.9	4,002.9	24.3	22.7	141.41	-98.5	-1,045.7	1,815.0	1,781.8	33.16	54.740		
4,700.0	4,527.1	4,241.4	4,087.4	24.9	23.3	141.45	-100.9	-1,071.6	1,861.6	1,827.7	33.98	54.792		
4,800.0	4,622.4	4,329.8	4,171.9	25.5	23.8	141.49	-103.4	-1,097.5	1,908.3	1,873.5	34.80	54.841		
4,900.0	4,717.8	4,418.3	4,256.4	26.2	24.4	141.52	-105.9	-1,123.5	1,954.9	1,919.3	35.62	54.888		
5,000.0	4,813.1	4,506.7	4,341.0	26.8	25.0	141.56	-108.4	-1,149.4	2,001.6	1,965.1	36.44	54.932		

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Reference Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-20-12)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Dowdy 4-2-10 Pad Sec.10-T2N-R65W - Dowdy 4-2-10 - Wellbore #1 - Plan #1 (7-09-12)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	4,908.5	4,595.2	4,425.5	27.4	25.5	141.59	-110.8	-1,175.3	2,048.2	2,011.0	37.26	54.974	
5,129.2	4,936.3	4,621.0	4,450.1	27.6	25.7	141.60	-111.5	-1,182.9	2,061.8	2,024.3	37.50	54.986	
5,200.0	5,004.1	4,684.0	4,510.3	28.0	26.1	142.05	-113.3	-1,201.4	2,094.3	2,056.1	38.19	54.843	
5,300.0	5,100.6	4,773.9	4,596.3	28.4	26.6	142.60	-115.8	-1,227.7	2,138.0	2,098.9	39.08	54.714	
5,400.0	5,198.0	4,864.9	4,683.3	28.7	27.2	143.04	-118.4	-1,254.4	2,179.1	2,139.2	39.93	54.576	
5,500.0	5,296.1	4,957.0	4,771.2	29.1	27.8	143.38	-120.9	-1,281.4	2,217.8	2,177.0	40.74	54.435	
5,600.0	5,394.8	5,049.9	4,860.1	29.3	28.4	143.62	-123.5	-1,308.7	2,253.8	2,212.3	41.51	54.295	
5,700.0	5,494.1	5,143.7	4,949.6	29.6	29.0	143.78	-126.1	-1,336.2	2,287.3	2,245.0	42.23	54.161	
5,800.0	5,593.6	5,240.5	5,019.9	29.7	30.1	143.46	-132.4	-1,401.9	2,314.9	2,271.6	43.29	53.471	
5,900.0	5,693.5	5,342.1	5,119.7	29.9	30.9	143.22	-136.7	-1,447.5	2,332.2	2,288.1	44.12	52.861	
6,006.5	5,800.0	5,457.0	5,236.2	30.0	31.4	-59.79	-138.4	-1,464.7	2,338.6	2,293.9	44.71	52.302	
6,100.0	5,893.5	5,550.5	5,333.5	30.1	31.5	-59.79	-138.4	-1,464.7	2,338.6	2,293.7	44.92	52.060	
6,200.0	5,993.5	5,650.5	5,433.5	30.2	31.6	-59.79	-138.4	-1,464.7	2,338.6	2,293.4	45.13	51.816	
6,300.0	6,093.5	5,750.5	5,533.5	30.2	31.6	-59.79	-138.4	-1,464.7	2,338.6	2,293.2	45.35	51.571	
6,400.0	6,193.5	5,850.5	5,633.5	30.3	31.7	-59.79	-138.4	-1,464.7	2,338.6	2,293.0	45.57	51.324	
6,500.0	6,293.5	5,950.5	5,733.5	30.4	31.8	-59.79	-138.4	-1,464.7	2,338.6	2,292.8	45.79	51.075	
6,600.0	6,393.5	6,050.5	5,833.5	30.5	31.9	-59.79	-138.4	-1,464.7	2,338.6	2,292.6	46.01	50.826	
6,700.0	6,493.5	6,150.5	5,933.5	30.6	32.0	-59.79	-138.4	-1,464.7	2,338.6	2,292.3	46.24	50.575	
6,800.0	6,593.5	6,250.5	6,033.5	30.6	32.1	-59.79	-138.4	-1,464.7	2,338.6	2,292.1	46.47	50.323	
6,900.0	6,693.5	6,350.5	6,133.5	30.7	32.2	-59.79	-138.4	-1,464.7	2,338.6	2,291.9	46.71	50.070	
7,000.0	6,793.5	6,450.5	6,233.5	30.8	32.3	-59.79	-138.4	-1,464.7	2,338.6	2,291.6	46.94	49.817	
7,100.0	6,893.5	6,550.5	6,333.5	30.9	32.4	-59.79	-138.4	-1,464.7	2,338.6	2,291.4	47.18	49.562	
7,200.0	6,993.5	6,650.5	6,433.5	31.0	32.5	-59.79	-138.4	-1,464.7	2,338.6	2,291.1	47.43	49.307	
7,300.0	7,093.5	6,750.5	6,533.5	31.1	32.6	-59.79	-138.4	-1,464.7	2,338.6	2,290.9	47.68	49.052	
7,400.0	7,193.5	6,850.5	6,633.5	31.2	32.7	-59.79	-138.4	-1,464.7	2,338.6	2,290.7	47.93	48.796	
7,500.0	7,293.5	6,950.5	6,733.5	31.3	32.8	-59.79	-138.4	-1,464.7	2,338.6	2,290.4	48.18	48.540	
7,600.0	7,393.5	7,050.5	6,833.5	31.4	32.9	-59.79	-138.4	-1,464.7	2,338.6	2,290.1	48.43	48.284	
7,700.0	7,493.5	7,150.5	6,933.5	31.5	33.0	-59.79	-138.4	-1,464.7	2,338.6	2,289.9	48.69	48.028	
7,800.0	7,593.5	7,250.5	7,033.5	31.6	33.1	-59.79	-138.4	-1,464.7	2,338.6	2,289.6	48.95	47.772	
7,900.0	7,693.5	7,350.5	7,133.5	31.7	33.2	-59.79	-138.4	-1,464.7	2,338.6	2,289.4	49.22	47.516	
7,938.5	7,732.0	7,389.0	7,172.0	31.7	33.3	-59.79	-138.4	-1,464.7	2,338.6	2,289.3	49.32	47.417	

Dowdy 4-2-10 Pad Sec.10-T2N-R65W - Dowdy 42-10 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	145.96	-670.3	452.8	808.9					
100.0	100.0	103.6	103.6	0.1	0.1	145.98	-670.2	452.4	808.6	808.4	0.25	3,182.715		
200.0	200.0	200.0	200.0	0.3	0.4	146.01	-670.2	451.9	808.3	807.6	0.72	1,121.960		
300.0	300.0	300.0	300.0	0.6	0.6	146.01	-670.2	451.8	808.3	807.1	1.13	714.546		
400.0	400.0	401.3	401.3	0.8	0.7	146.00	-669.9	451.9	808.1	806.5	1.53	528.397		
500.0	500.0	503.7	503.7	1.0	1.0	-11.12	-669.5	451.7	805.9	804.0	1.96	410.467		
600.0	599.8	603.7	603.7	1.2	1.2	-11.21	-668.9	451.4	800.2	797.8	2.41	332.172		
700.0	699.5	702.9	702.9	1.4	1.5	-11.36	-668.5	451.0	791.0	788.2	2.86	276.545		
800.0	798.7	801.7	801.7	1.7	1.7	-11.56	-668.3	450.3	778.6	775.3	3.31	235.459		
900.0	897.5	899.4	899.3	2.0	2.0	-11.81	-668.3	449.6	762.8	759.1	3.75	203.458		
1,000.0	995.6	998.0	998.0	2.3	2.2	-12.15	-668.3	448.9	743.7	739.5	4.20	176.914		
1,100.0	1,093.1	1,095.0	1,095.0	2.8	2.4	-12.57	-668.3	448.2	721.3	716.6	4.67	154.549		
1,200.0	1,189.6	1,190.2	1,190.2	3.2	2.7	-13.11	-668.3	447.7	695.7	690.6	5.14	135.264		
1,277.4	1,263.7	1,265.8	1,265.8	3.7	2.9	-13.64	-668.2	447.3	673.7	668.2	5.53	121.807		
1,300.0	1,285.3	1,287.9	1,287.9	3.8	2.9	-13.78	-668.2	447.2	666.9	661.3	5.65	117.960		
1,400.0	1,380.6	1,383.3	1,383.3	4.4	3.2	-14.37	-668.1	446.4	637.1	630.9	6.20	102.806		
1,500.0	1,476.0	1,478.5	1,478.5	5.0	3.4	-14.99	-668.2	445.4	607.3	600.5	6.75	90.002		
1,600.0	1,571.3	1,573.8	1,573.8	5.6	3.6	-15.67	-668.2	444.4	577.5	570.2	7.31	79.033		
1,700.0	1,666.7	1,669.5	1,669.4	6.2	3.9	-16.40	-668.5	443.1	547.9	540.0	7.88	69.536		
1,800.0	1,762.0	1,763.0	1,763.0	6.8	4.1	-17.19	-668.7	441.9	518.3	509.9	8.45	61.330		
1,900.0	1,857.4	1,861.1	1,861.0	7.4	4.3	-18.17	-668.9	441.1	489.0	480.0	9.05	54.034		
2,000.0	1,952.7	1,956.4	1,956.4	8.0	4.6	-19.29	-668.3	440.0	459.2	449.5	9.67	47.487		
2,100.0	2,048.1	2,049.5	2,049.5	8.6	4.8	-20.47	-668.3	439.0	430.0	419.7	10.31	41.720		
2,200.0	2,143.4	2,144.6	2,144.5	9.2	5.1	-21.88	-668.3	438.2	401.2	390.3	10.98	36.545		
2,300.0	2,238.8	2,240.1	2,240.1	9.9	5.3	-23.51	-668.3	437.4	372.6	361.0	11.69	31.884		
2,400.0	2,334.1	2,334.9	2,334.9	10.5	5.5	-25.35	-668.5	436.5	344.4	332.0	12.43	27.717		
2,500.0	2,429.5	2,430.1	2,430.0	11.1	5.8	-27.48	-668.9	435.5	316.7	303.5	13.21	23.984		
2,600.0	2,524.8	2,526.1	2,526.0	11.7	6.0	-29.99	-669.4	434.3	289.4	275.3	14.05	20.593		
2,700.0	2,620.2	2,621.4	2,621.3	12.4	6.2	-33.01	-669.8	433.1	262.6	247.6	14.99	17.519		
2,800.0	2,715.5	2,717.2	2,717.1	13.0	6.5	-36.79	-669.8	432.0	236.5	220.5	16.05	14.734		
2,900.0	2,810.8	2,812.3	2,812.2	13.6	6.7	-41.49	-669.6	430.9	211.6	194.3	17.26	12.257		
3,000.0	2,906.2	2,907.7	2,907.6	14.2	7.0	-47.43	-669.1	429.9	188.3	169.7	18.65	10.102		
3,100.0	3,001.5	3,002.6	3,002.5	14.9	7.2	-54.92	-668.3	428.9	167.6	147.4	20.19	8.302		
3,200.0	3,096.9	3,097.5	3,097.4	15.5	7.4	-64.27	-667.3	428.0	150.7	128.8	21.84	6.898		
3,300.0	3,192.2	3,192.8	3,192.6	16.1	7.7	-75.59	-665.9	427.0	138.8	115.3	23.42	5.926		
3,400.0	3,287.6	3,286.7	3,286.6	16.7	7.9	-88.18	-664.2	426.1	133.7	109.1	24.60	5.437		
3,412.0	3,299.0	3,298.0	3,297.8	16.8	7.9	-89.72	-664.0	426.0	133.7	109.0	24.70	5.412 CC, ES, SF		
3,500.0	3,382.9	3,381.6	3,381.4	17.4	8.1	-101.14	-662.3	425.3	136.5	111.4	25.16	5.426		
3,600.0	3,478.3	3,475.4	3,475.2	18.0	8.3	-113.19	-659.8	424.1	146.7	121.6	25.14	5.836		
3,700.0	3,573.6	3,568.0	3,567.7	18.6	8.5	-123.45	-656.5	423.0	163.8	139.1	24.76	6.616		
3,800.0	3,669.0	3,661.3	3,661.0	19.3	8.6	-131.73	-652.4	422.4	186.4	162.1	24.31	7.667		
3,900.0	3,764.3	3,755.9	3,755.4	19.9	8.8	-138.27	-648.4	422.0	212.0	188.1	23.93	8.859		
4,000.0	3,859.7	3,850.1	3,849.6	20.5	9.0	-143.42	-644.7	421.3	239.5	215.8	23.69	10.109		
4,100.0	3,955.0	3,943.8	3,943.2	21.1	9.2	-147.56	-640.8	420.4	268.6	245.0	23.58	11.390		
4,200.0	4,050.4	4,037.8	4,037.0	21.8	9.4	-150.93	-636.8	419.4	298.7	275.2	23.58	12.668		
4,300.0	4,145.7	4,131.2	4,130.4	22.4	9.6	-153.73	-632.8	418.1	329.8	306.1	23.68	13.928		
4,400.0	4,241.0	4,223.9	4,222.9	23.0	9.8	-156.07	-628.6	416.6	361.7	337.8	23.85	15.167		
4,500.0	4,336.4	4,316.7	4,315.6	23.6	10.0	-158.02	-624.1	415.3	394.3	370.3	24.08	16.378		
4,600.0	4,431.7	4,410.3	4,409.1	24.3	10.2	-159.71	-619.4	413.8	427.5	403.1	24.36	17.551		
4,700.0	4,527.1	4,504.8	4,503.4	24.9	10.5	-161.22	-614.8	411.9	460.8	436.1	24.67	18.678		
4,800.0	4,622.4	4,598.5	4,597.0	25.5	10.7	-162.58	-610.4	409.6	494.3	469.3	25.02	19.758		
4,900.0	4,717.8	4,692.6	4,691.0	26.2	10.9	-163.81	-606.1	406.9	527.9	502.6	25.39	20.794		

COMPASS 2003.21 Build 46

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Reference Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-20-12)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,813.1	4,788.2	4,786.5	26.8	11.2	-164.91	-601.9	404.1	561.6	535.8	25.79	21.778	
5,100.0	4,908.5	4,884.7	4,882.8	27.4	11.4	-165.90	-598.1	401.5	595.0	568.8	26.21	22.702	
5,129.2	4,936.3	4,912.6	4,910.7	27.6	11.5	-166.16	-597.1	400.7	604.7	578.4	26.33	22.962	
5,200.0	5,004.1	4,979.7	4,977.8	28.0	11.7	-166.85	-594.7	398.9	627.4	600.7	26.70	23.501	
5,300.0	5,100.6	5,077.5	5,075.5	28.4	11.9	-167.69	-591.3	396.3	656.7	629.5	27.19	24.151	
5,400.0	5,198.0	5,175.2	5,173.1	28.7	12.2	-168.37	-588.2	393.9	682.4	654.7	27.67	24.662	
5,500.0	5,296.1	5,273.8	5,271.6	29.1	12.4	-168.92	-585.3	391.5	704.7	676.5	28.13	25.052	
5,600.0	5,394.8	5,369.4	5,367.1	29.3	12.7	-169.38	-582.5	389.0	723.7	695.1	28.55	25.346	
5,700.0	5,494.1	5,466.8	5,464.4	29.6	12.9	-169.71	-579.1	386.9	739.7	710.7	28.95	25.553	
5,800.0	5,593.6	5,571.8	5,569.4	29.7	13.2	-169.97	-575.7	384.9	752.1	722.7	29.32	25.647	
5,900.0	5,693.5	5,680.7	5,678.3	29.9	13.5	-170.16	-573.3	383.2	759.9	730.2	29.68	25.604	
6,006.5	5,800.0	5,788.1	5,785.7	30.0	13.8	-13.22	-571.7	381.7	763.7	733.7	30.01	25.447	
6,100.0	5,893.5	5,883.8	5,881.3	30.1	14.0	-13.30	-570.5	380.3	765.2	734.8	30.39	25.176	
6,200.0	5,993.5	5,988.7	5,986.2	30.2	14.3	-13.41	-569.6	378.5	766.4	735.6	30.79	24.887	
6,300.0	6,093.5	6,090.6	6,088.1	30.2	14.5	-13.53	-569.3	376.9	767.1	735.9	31.18	24.600	
6,400.0	6,193.5	6,189.3	6,186.8	30.3	14.8	-13.64	-569.1	375.3	767.7	736.1	31.56	24.323	
6,500.0	6,293.5	6,293.8	6,291.3	30.4	15.0	-13.77	-569.0	373.4	768.2	736.2	31.94	24.048	
6,600.0	6,393.5	6,395.0	6,392.4	30.5	15.3	-13.90	-569.4	371.7	768.2	735.9	32.30	23.781	
6,700.0	6,493.5	6,496.6	6,494.0	30.6	15.5	-14.03	-569.9	370.0	768.1	735.5	32.66	23.520	
6,800.0	6,593.5	6,596.6	6,594.0	30.6	15.7	-14.16	-570.5	368.4	767.9	734.9	33.01	23.265	
6,900.0	6,693.5	6,700.0	6,697.4	30.7	15.9	-14.29	-571.4	366.8	767.4	734.1	33.35	23.014	
7,000.0	6,793.5	6,797.8	6,795.2	30.8	16.1	-14.41	-572.4	365.4	766.8	733.2	33.67	22.773	
7,100.0	6,893.5	6,900.0	6,897.4	30.9	16.2	-14.53	-573.4	364.1	766.2	732.2	34.00	22.534	
7,200.0	6,993.5	6,996.2	6,993.5	31.0	16.4	-14.63	-574.3	363.0	765.6	731.3	34.33	22.301	
7,300.0	7,093.5	7,097.5	7,094.8	31.1	16.6	-14.74	-574.9	361.5	765.4	730.7	34.70	22.059	
7,339.7	7,133.2	7,134.9	7,132.2	31.1	16.7	-14.79	-575.1	361.0	765.4	730.5	34.84	21.965	
7,400.0	7,193.5	7,191.2	7,188.6	31.2	16.8	-14.86	-575.2	360.0	765.5	730.4	35.07	21.831	
7,500.0	7,293.5	7,300.0	7,297.3	31.3	17.1	-14.98	-575.6	358.4	765.5	730.0	35.45	21.593	
7,579.0	7,372.4	7,374.1	7,371.4	31.3	17.2	-15.05	-576.1	357.6	765.2	729.5	35.73	21.416	
7,600.0	7,393.5	7,393.7	7,391.0	31.4	17.3	-15.06	-576.2	357.4	765.2	729.4	35.81	21.372	
7,700.0	7,493.5	7,501.0	7,498.3	31.5	17.5	-15.15	-576.7	356.4	765.0	728.8	36.19	21.141	
7,753.7	7,547.2	7,550.0	7,547.3	31.5	17.6	-15.17	-577.2	356.1	764.6	728.2	36.34	21.040	
7,800.0	7,593.5	7,550.0	7,547.3	31.6	17.6	-15.17	-577.2	356.1	765.9	729.5	36.42	21.032	
7,900.0	7,693.5	7,550.0	7,547.3	31.7	17.6	-15.17	-577.2	356.1	778.2	741.7	36.58	21.272	
7,938.5	7,732.0	7,550.0	7,547.3	31.7	17.6	-15.17	-577.2	356.1	786.3	749.7	36.65	21.456	

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Dowdy 6-4-10
Project:	SEC.10-T2N-R65W	TVD Reference:	WELL @ 4870.0ft (Original Well Elev)
Reference Site:	Dowdy 4-2-10 Pad Sec.10-T2N-R65W	MD Reference:	WELL @ 4870.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Dowdy 6-4-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (7-20-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4870.0ft (Original Well Elev) Coordinates are relative to: Dowdy 6-4-10
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.55°



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