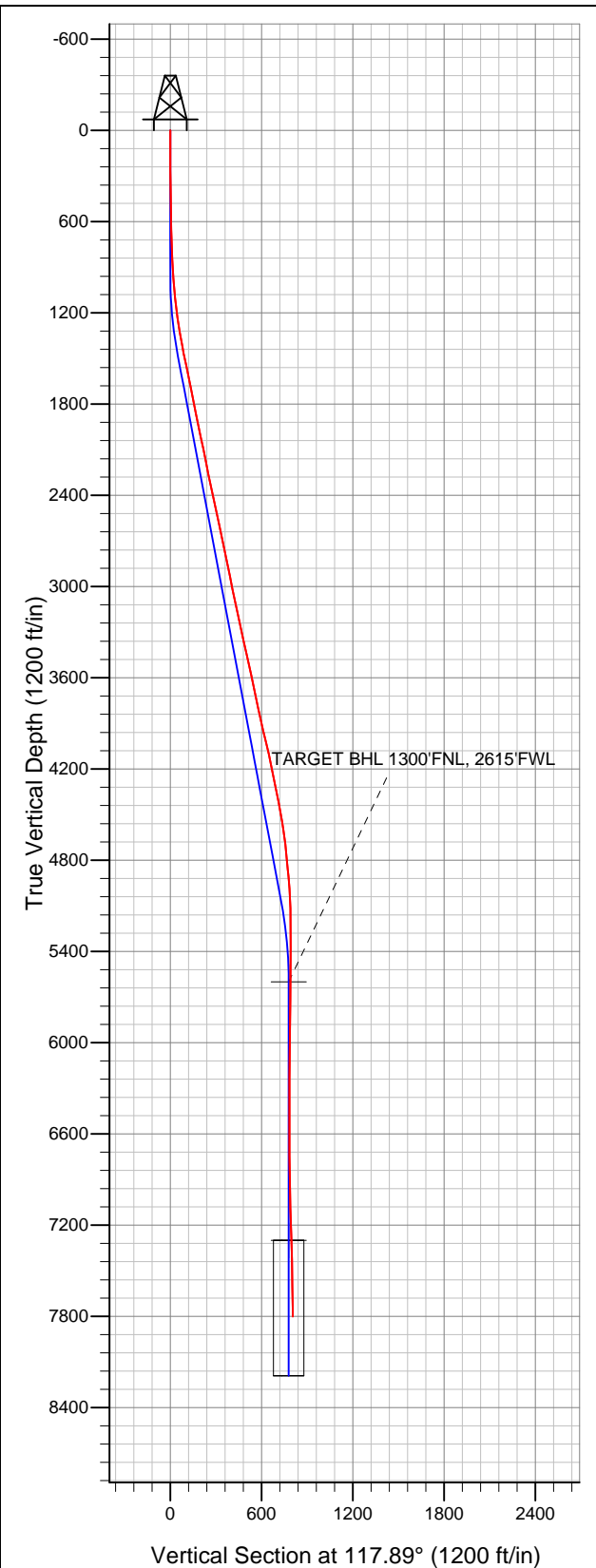


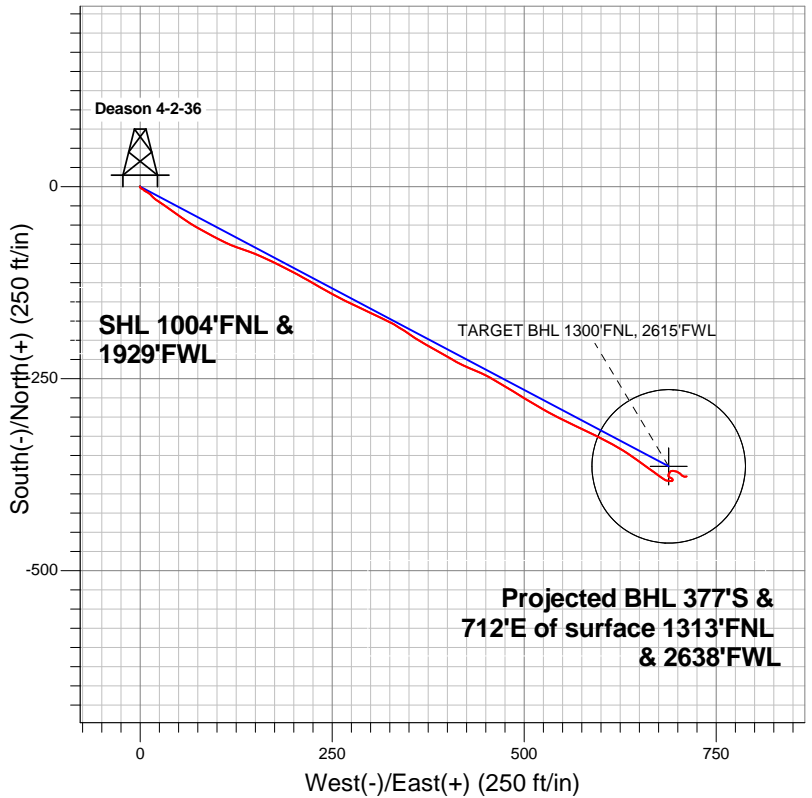
# Well Name: Deason 4-2-36

Surface Location: Deason 2-36 Pad Sec.36-T2N-R69W  
 North American Datum 1983 US State Plane 1983Colorado Northern Zone  
 Ground Elevation: 5016.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1279609.60	3121002.07	40.100110	-105.067450	
Original Well Elev			WELL @ 5029.0ft (Original Well Elev)			



## EnCana Oil & Gas Boulder County, CO



### LEGEND

- Wellbore #1
- Deason 4-2-36, Wellbore #1, Plan #1 (8-27-12) R V0
- Survey #1

## Final Survey Plot

Projected Final Survey -  
 7878'MD & 7801'TVD @ 805'VS  
 0.90 deg Inc 67.20 deg AZ

Project: SEC.36-T2N-R69W  
 Site: Deason 2-36 Pad Sec.36-T2N-R69W  
 Well: Deason 4-2-36  
 Plan: Wellbore #1



# **EnCana Oil & Gas Boulder County, CO**

**SEC.36-T2N-R69W**

**Deason 2-36 Pad Sec.36-T2N-R69W**

**Deason 4-2-36**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**04 September, 2012**

<b>Company:</b>	EnCana Oil & Gas Boulder County, CO	<b>Local Co-ordinate Reference:</b>	Well Deason 4-2-36
<b>Project:</b>	SEC.36-T2N-R69W	<b>TVD Reference:</b>	WELL @ 5029.0ft (Original Well Elev)
<b>Site:</b>	Deason 2-36 Pad Sec.36-T2N-R69W	<b>MD Reference:</b>	WELL @ 5029.0ft (Original Well Elev)
<b>Well:</b>	Deason 4-2-36	<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

<b>Project</b>	SEC.36-T2N-R69W, Boulder County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	Deason 2-36 Pad Sec.36-T2N-R69W		
<b>Site Position:</b>		<b>Northing:</b>	1,279,620.53ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,121,002.02ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40.100140
		<b>Longitude:</b>	-105.067450
		<b>Grid Convergence:</b>	0.28 °

<b>Well</b>	Deason 4-2-36		
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40.100110
		<b>Longitude:</b>	-105.067450
		<b>Ground Level:</b>	5,016.0ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	8/27/2012	8.84	66.72	52,813

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	117.89	

<b>Survey Program</b>	<b>Date</b>	9/4/2012			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
78.0	7,878.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
78.0	0.10	225.10	78.0	0.0	0.0	0.0	0.13	0.13	0.00	
170.0	0.20	238.80	170.0	-0.2	-0.2	-0.1	0.11	0.11	14.89	
261.0	0.40	143.10	261.0	-0.5	-0.2	0.1	0.51	0.22	-105.17	
353.0	0.60	157.90	353.0	-1.2	0.2	0.7	0.26	0.22	16.09	
445.0	1.70	117.50	445.0	-2.3	1.6	2.5	1.42	1.20	-43.91	
536.0	1.40	125.60	535.9	-3.6	3.7	4.9	0.41	-0.33	8.90	
628.0	1.10	138.80	627.9	-4.9	5.2	6.9	0.45	-0.33	14.35	
719.0	1.70	114.30	718.9	-6.1	7.0	9.0	0.92	0.66	-26.92	
748.0	1.80	117.70	747.9	-6.5	7.8	9.9	0.50	0.34	11.72	
803.0	1.80	117.70	802.9	-7.3	9.3	11.6	0.00	0.00	0.00	
829.0	2.10	116.40	828.8	-7.7	10.1	12.5	1.17	1.15	-5.00	
915.0	3.10	135.80	914.8	-10.1	13.1	16.3	1.53	1.16	22.56	

<b>Company:</b>	EnCana Oil & Gas Boulder County, CO	<b>Local Co-ordinate Reference:</b>	Well Deason 4-2-36
<b>Project:</b>	SEC.36-T2N-R69W	<b>TVD Reference:</b>	WELL @ 5029.0ft (Original Well Elev)
<b>Site:</b>	Deason 2-36 Pad Sec.36-T2N-R69W	<b>MD Reference:</b>	WELL @ 5029.0ft (Original Well Elev)
<b>Well:</b>	Deason 4-2-36	<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)	
1,001.0	4.70	134.50	1,000.5	-14.2	17.3	21.9	1.86	1.86	-1.51	
1,086.0	6.10	124.70	1,085.2	-19.2	23.5	29.7	1.97	1.65	-11.53	
1,172.0	7.20	121.70	1,170.6	-24.6	31.8	39.6	1.34	1.28	-3.49	
1,257.0	8.70	125.90	1,254.8	-31.2	41.5	51.3	1.89	1.76	4.94	
1,343.0	9.80	127.00	1,339.7	-39.4	52.7	65.0	1.30	1.28	1.28	
1,429.0	10.60	121.30	1,424.3	-48.0	65.3	80.1	1.50	0.93	-6.63	
1,514.0	11.90	118.20	1,507.7	-56.2	79.7	96.7	1.69	1.53	-3.65	
1,600.0	12.00	119.10	1,591.8	-64.7	95.3	114.5	0.25	0.12	1.05	
1,685.0	11.30	115.40	1,675.0	-72.6	110.5	131.6	1.20	-0.82	-4.35	
1,771.0	11.20	109.00	1,759.4	-78.9	126.0	148.3	1.46	-0.12	-7.44	
1,857.0	11.30	109.90	1,843.7	-84.5	141.9	164.9	0.23	0.12	1.05	
1,942.0	12.00	114.10	1,927.0	-90.9	157.8	182.0	1.29	0.82	4.94	
2,028.0	12.10	115.70	2,011.1	-98.5	174.0	199.9	0.41	0.12	1.86	
2,113.0	11.70	118.70	2,094.3	-106.5	189.6	217.4	0.87	-0.47	3.53	
2,199.0	11.00	116.30	2,178.6	-114.3	204.6	234.3	0.98	-0.81	-2.79	
2,285.0	12.00	120.60	2,262.9	-122.5	219.7	251.5	1.53	1.16	5.00	
2,370.0	12.00	121.00	2,346.0	-131.5	234.9	269.1	0.10	0.00	0.47	
2,456.0	12.00	116.30	2,430.1	-140.1	250.5	287.0	1.14	0.00	-5.47	
2,541.0	12.10	118.00	2,513.3	-148.2	266.3	304.7	0.43	0.12	2.00	
2,627.0	11.90	114.00	2,597.4	-156.0	282.4	322.6	0.99	-0.23	-4.65	
2,713.0	11.70	115.90	2,681.6	-163.5	298.3	340.1	0.51	-0.23	2.21	
2,798.0	12.00	115.40	2,764.8	-171.0	314.1	357.6	0.37	0.35	-0.59	
2,884.0	11.90	118.70	2,848.9	-179.1	329.9	375.4	0.80	-0.12	3.84	
2,969.0	10.80	124.70	2,932.2	-187.9	344.2	392.1	1.90	-1.29	7.06	
3,055.0	11.20	122.60	3,016.6	-196.9	357.8	408.4	0.66	0.47	-2.44	
3,141.0	12.10	119.60	3,100.9	-205.9	372.7	425.7	1.26	1.05	-3.49	
3,226.0	12.40	118.70	3,183.9	-214.7	388.4	443.7	0.42	0.35	-1.06	
3,312.0	12.10	121.20	3,268.0	-223.8	404.3	462.0	0.71	-0.35	2.91	
3,397.0	12.80	116.10	3,351.0	-232.5	420.3	480.3	1.53	0.82	-6.00	
3,483.0	13.00	111.30	3,434.8	-240.2	437.9	499.4	1.27	0.23	-5.58	
3,569.0	12.30	119.90	3,518.7	-248.3	454.9	518.2	2.33	-0.81	10.00	
3,654.0	12.00	121.00	3,601.8	-257.4	470.3	536.1	0.45	-0.35	1.29	
3,740.0	12.10	121.00	3,685.9	-266.6	485.7	554.0	0.12	0.12	0.00	
3,825.0	11.90	120.50	3,769.1	-275.7	500.9	571.6	0.27	-0.24	-0.59	
3,911.0	12.30	121.30	3,853.2	-284.9	516.3	589.6	0.50	0.47	0.93	
3,997.0	13.70	117.50	3,937.0	-294.4	533.2	609.0	1.91	1.63	-4.42	
4,082.0	13.70	117.50	4,019.5	-303.7	551.0	629.1	0.00	0.00	0.00	
4,168.0	12.00	114.50	4,103.4	-312.1	568.2	648.2	2.12	-1.98	-3.49	
4,253.0	11.40	116.60	4,186.6	-319.5	583.8	665.4	0.87	-0.71	2.47	
4,339.0	12.00	116.80	4,270.8	-327.4	599.3	682.9	0.70	0.70	0.23	
4,425.0	11.10	118.70	4,355.1	-335.4	614.6	700.1	1.14	-1.05	2.21	
4,510.0	10.90	121.50	4,438.5	-343.5	628.6	716.3	0.67	-0.24	3.29	
4,596.0	9.70	125.00	4,523.2	-351.9	641.5	731.6	1.57	-1.40	4.07	
4,681.0	8.20	126.30	4,607.1	-359.6	652.2	744.7	1.78	-1.76	1.53	
4,767.0	6.70	126.80	4,692.4	-366.2	661.2	755.7	1.75	-1.74	0.58	
4,853.0	6.00	125.00	4,777.9	-371.8	668.9	765.1	0.85	-0.81	-2.09	
4,938.0	5.40	127.50	4,862.4	-376.8	675.7	773.5	0.76	-0.71	2.94	
5,024.0	5.10	118.90	4,948.1	-381.1	682.3	781.3	0.98	-0.35	-10.00	
5,109.0	2.60	95.50	5,032.9	-383.1	687.5	786.8	3.42	-2.94	-27.53	
5,281.0	0.70	74.60	5,204.8	-383.2	692.4	791.2	1.14	-1.10	-12.15	
5,452.0	0.40	20.00	5,375.8	-382.4	693.6	791.9	0.33	-0.18	-31.93	
5,623.0	0.50	329.70	5,546.8	-381.2	693.4	791.2	0.23	0.06	-29.42	
5,676.4	0.56	323.15	5,600.2	-380.8	693.1	790.8	0.15	0.11	-12.28	
TARGET BHL 1300'FNL, 2615'FWL										

<b>Company:</b>	EnCana Oil & Gas Boulder County, CO	<b>Local Co-ordinate Reference:</b>	Well Deason 4-2-36
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<b>Site:</b>	Deason 2-36 Pad Sec.36-T2N-R69W	<b>MD Reference:</b>	WELL @ 5029.0ft (Original Well Elev)
<b>Well:</b>	Deason 4-2-36	<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)
5,794.0	0.70	312.80	5,717.8	-379.8	692.3	789.5	0.15	0.12	-8.80
5,965.0	0.70	279.20	5,888.8	-378.9	690.5	787.5	0.24	0.00	-19.65
6,137.0	0.60	305.60	6,060.8	-378.2	688.7	785.7	0.18	-0.06	15.35
6,308.0	0.70	346.40	6,231.8	-376.7	687.7	784.1	0.27	0.06	23.86
6,479.0	0.80	22.90	6,402.7	-374.6	688.0	783.3	0.28	0.06	21.35
6,650.0	0.80	44.90	6,573.7	-372.7	689.3	783.5	0.18	0.00	12.87
6,821.0	0.70	28.20	6,744.7	-370.9	690.6	783.9	0.14	-0.06	-9.77
6,993.0	1.70	92.30	6,916.7	-370.1	693.6	786.2	0.89	0.58	37.27
7,164.0	1.80	109.70	7,087.6	-371.1	698.7	791.1	0.31	0.06	10.18
7,335.0	1.60	134.00	7,258.5	-373.6	703.0	796.1	0.43	-0.12	14.21
7,377.0	1.50	132.94	7,300.6	-374.4	703.8	797.2	0.25	-0.24	-2.52
TARGET CIRCLE 1300'FNL & 2615'FWL									
7,506.0	1.20	128.60	7,429.5	-376.4	706.1	800.1	0.25	-0.23	-3.37
7,677.0	0.80	104.20	7,600.4	-377.8	708.6	803.1	0.34	-0.23	-14.27
7,833.0	0.90	67.20	7,756.4	-377.6	710.8	804.9	0.35	0.06	-23.72
7,878.0	0.90	67.20	7,801.4	-377.3	711.5	805.3	0.00	0.00	0.00

Checked By: _____	Approved By: _____	Date: _____
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