

Well Name: **Ione 8-2-8**

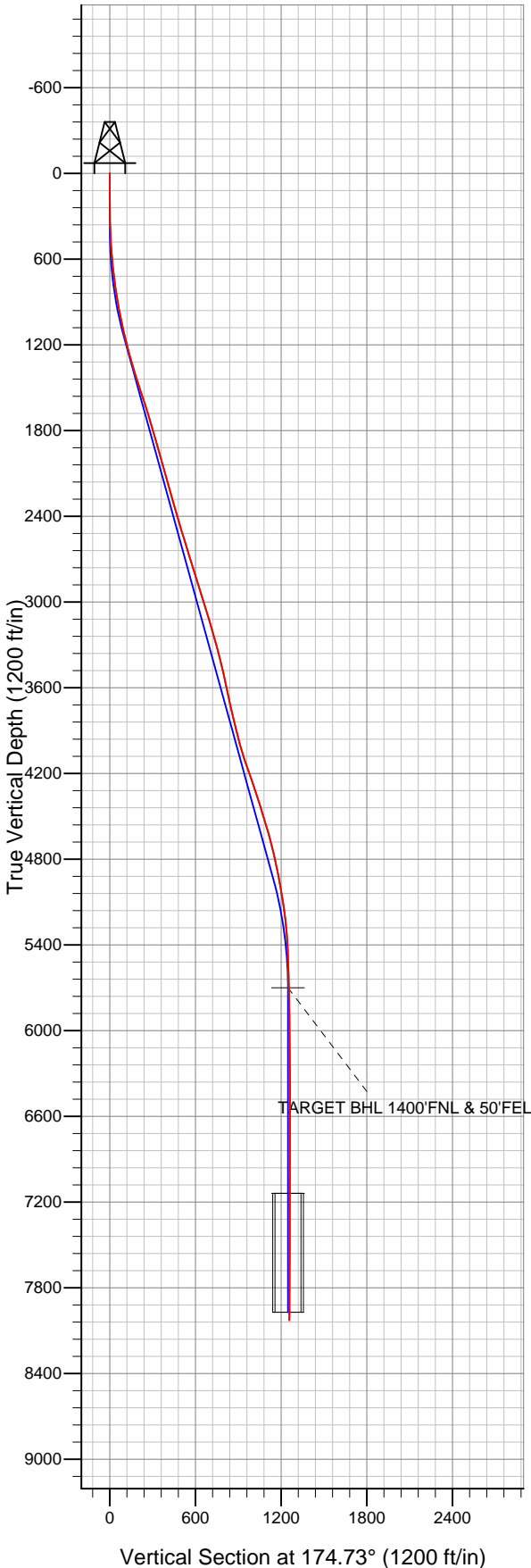
Surface Location: Ione 6-0-8 Pad Sec.8-T2N-R66W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4905.0

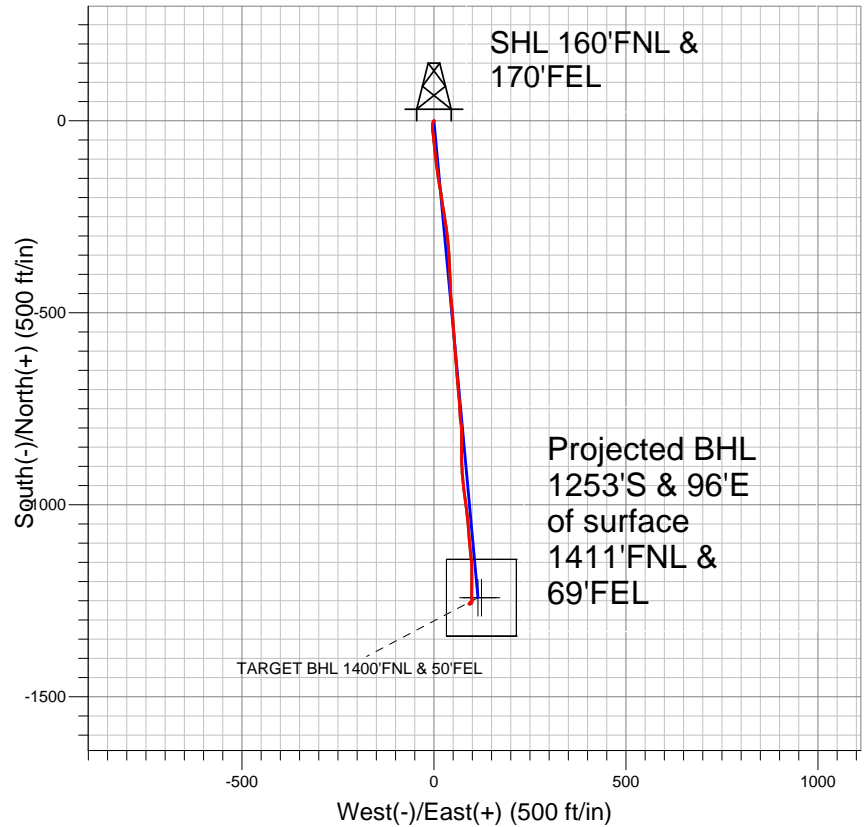
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1301705.62	3197807.54	40.159410	-104.792270

Original Well Elev WELL @ 4918.0ft (Original Well Elev)

Slot



EnCana Oil & Gas Weld County CO



LEGEND

- ◆ Ione 8-2-8, Wellbore #1, Plan #2 (12-04-12) R V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 8192'MD & 8026'TVD @ 1257'VS
 0.5 deg Inc 40.0 deg AZ

Project: SEC.8-T2N-R66W
 Site: Ione 6-0-8 Pad Sec.8-T2N-R66W
 Well: Ione 8-2-8
 Plan: Wellbore #1



Directional

EnCana Oil & Gas Weld County CO

SEC.8-T2N-R66W

lone 6-0-8 Pad Sec.8-T2N-R66W

lone 8-2-8

Wellbore #1

Survey: Survey #1

Standard Survey Report

11 December, 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 Wellbore	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	78.0	0.10	189.20	78.0	-0.1	0.0	0.1	0.13	0.13	0.00
	168.0	0.30	107.10	168.0	-0.2	0.2	0.2	0.34	0.22	-91.22
	258.0	0.90	229.10	258.0	-0.7	-0.1	0.7	1.21	0.67	135.56
	348.0	1.80	216.80	348.0	-2.3	-1.5	2.2	1.04	1.00	-13.67
	439.0	2.50	202.20	438.9	-5.3	-3.1	5.0	0.97	0.77	-16.04
	531.0	4.00	184.60	530.8	-10.4	-4.1	10.0	1.94	1.63	-19.13
	621.0	5.50	178.80	620.4	-17.8	-4.3	17.4	1.75	1.67	-6.44
	712.0	7.10	173.00	710.9	-27.8	-3.5	27.3	1.89	1.76	-6.37
	793.0	8.40	173.70	791.2	-38.6	-2.2	38.2	1.61	1.60	0.86
	848.0	9.00	173.50	845.5	-46.9	-1.3	46.6	1.09	1.09	-0.36
	864.0	8.80	172.80	861.3	-49.3	-1.0	49.0	1.42	-1.25	-4.38
	950.0	9.90	173.90	946.2	-63.2	0.6	63.0	1.30	1.28	1.28

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well lone 8-2-8
Project:	SEC.8-T2N-R66W	TVD Reference:	WELL @ 4918.0ft (Original Well Elev)
Site:	lone 6-0-8 Pad Sec.8-T2N-R66W	MD Reference:	WELL @ 4918.0ft (Original Well Elev)
Well:	lone 8-2-8	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)
1,035.0	11.60	173.50	1,029.7	-79.0	2.3	78.9	2.00	2.00	-0.47
1,121.0	13.30	174.80	1,113.7	-97.4	4.2	97.4	2.00	1.98	1.51
1,206.0	14.30	173.20	1,196.2	-117.6	6.3	117.7	1.26	1.18	-1.88
1,292.0	16.00	170.40	1,279.2	-139.8	9.6	140.1	2.15	1.98	-3.26
1,378.0	17.50	170.40	1,361.6	-164.3	13.7	164.8	1.74	1.74	0.00
1,463.0	17.10	171.40	1,442.7	-189.2	17.7	190.0	0.59	-0.47	1.18
1,549.0	18.40	171.30	1,524.6	-215.1	21.7	216.2	1.51	1.51	-0.12
1,634.0	17.90	170.70	1,605.4	-241.3	25.8	242.6	0.63	-0.59	-0.71
1,720.0	17.50	171.10	1,687.3	-267.1	29.9	268.7	0.49	-0.47	0.47
1,806.0	15.90	174.60	1,769.7	-291.6	33.0	293.4	2.20	-1.86	4.07
1,891.0	15.70	173.70	1,851.5	-314.6	35.4	316.5	0.37	-0.24	-1.06
1,977.0	15.70	173.90	1,934.3	-337.8	37.9	339.8	0.06	0.00	0.23
2,062.0	15.60	175.80	2,016.1	-360.6	40.0	362.7	0.61	-0.12	2.24
2,148.0	16.40	179.90	2,098.8	-384.3	40.8	386.4	1.61	0.93	4.77
2,234.0	15.70	178.80	2,181.4	-408.0	41.1	410.1	0.89	-0.81	-1.28
2,319.0	16.20	176.00	2,263.2	-431.4	42.2	433.4	1.08	0.59	-3.29
2,405.0	16.20	177.20	2,345.8	-455.3	43.6	457.4	0.39	0.00	1.40
2,490.0	16.40	174.40	2,427.3	-479.1	45.3	481.2	0.95	0.24	-3.29
2,576.0	16.20	174.20	2,509.9	-503.1	47.7	505.4	0.24	-0.23	-0.23
2,662.0	16.60	176.50	2,592.4	-527.3	49.7	529.7	0.89	0.47	2.67
2,747.0	17.00	175.10	2,673.8	-551.8	51.5	554.2	0.67	0.47	-1.65
2,833.0	17.30	176.50	2,755.9	-577.1	53.4	579.6	0.59	0.35	1.63
2,918.0	18.00	176.20	2,836.9	-602.8	55.0	605.3	0.83	0.82	-0.35
3,004.0	17.90	174.60	2,918.8	-629.2	57.1	631.8	0.59	-0.12	-1.86
3,090.0	17.00	175.70	3,000.8	-654.9	59.3	657.6	1.11	-1.05	1.28
3,175.0	16.70	175.50	3,082.1	-679.5	61.2	682.3	0.36	-0.35	-0.24
3,261.0	16.10	173.50	3,164.6	-703.7	63.5	706.5	0.96	-0.70	-2.33
3,346.0	16.10	177.60	3,246.3	-727.2	65.4	730.1	1.34	0.00	4.82
3,432.0	15.60	175.80	3,329.0	-750.6	66.7	753.6	0.82	-0.58	-2.09
3,518.0	13.10	176.80	3,412.4	-771.9	68.1	774.9	2.92	-2.91	1.16
3,603.0	12.80	170.60	3,495.2	-790.8	70.2	793.9	1.67	-0.35	-7.29
3,689.0	12.50	177.90	3,579.1	-809.5	72.1	812.7	1.89	-0.35	8.49
3,774.0	11.40	183.40	3,662.3	-827.1	71.9	830.2	1.86	-1.29	6.47
3,860.0	13.90	178.10	3,746.2	-845.9	71.7	848.9	3.20	2.91	-6.16
3,946.0	13.40	181.30	3,829.8	-866.2	71.9	869.1	1.05	-0.58	3.72
4,031.0	14.00	178.00	3,912.3	-886.3	72.0	889.1	1.16	0.71	-3.88
4,117.0	15.20	177.90	3,995.6	-907.9	72.8	910.8	1.40	1.40	-0.12
4,202.0	17.50	174.60	4,077.1	-931.8	74.4	934.7	2.92	2.71	-3.88
4,288.0	19.80	172.70	4,158.6	-959.1	77.4	962.2	2.77	2.67	-2.21
4,374.0	19.20	171.40	4,239.7	-987.6	81.4	990.9	0.86	-0.70	-1.51
4,459.0	18.00	173.70	4,320.2	-1,014.4	84.9	1,018.0	1.65	-1.41	2.71
4,545.0	17.30	174.60	4,402.2	-1,040.4	87.6	1,044.0	0.87	-0.81	1.05
4,630.0	18.10	175.30	4,483.2	-1,066.1	89.9	1,069.9	0.97	0.94	0.82
4,716.0	16.40	174.90	4,565.3	-1,091.5	92.1	1,095.4	1.98	-1.98	-0.47
4,802.0	14.90	174.90	4,648.1	-1,114.6	94.1	1,118.6	1.74	-1.74	0.00
4,887.0	14.00	174.60	4,730.4	-1,135.8	96.1	1,139.8	1.06	-1.06	-0.35
4,973.0	12.50	175.50	4,814.1	-1,155.4	97.8	1,159.5	1.76	-1.74	1.05
5,058.0	10.60	180.20	4,897.4	-1,172.4	98.5	1,176.5	2.49	-2.24	5.53
5,144.0	10.50	182.30	4,981.9	-1,188.1	98.1	1,192.1	0.46	-0.12	2.44
5,230.0	9.60	180.60	5,066.6	-1,203.1	97.7	1,207.0	1.10	-1.05	-1.98
5,315.0	7.70	178.60	5,150.6	-1,215.9	97.8	1,219.7	2.26	-2.24	-2.35
5,401.0	6.60	179.00	5,236.0	-1,226.6	98.0	1,230.4	1.28	-1.28	0.47
5,485.0	4.40	182.90	5,319.6	-1,234.7	97.9	1,238.4	2.66	-2.62	4.64
5,572.0	3.10	175.30	5,406.4	-1,240.3	98.0	1,244.1	1.60	-1.49	-8.74

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5,658.0	2.10	173.20	5,492.3	-1,244.2	98.3	1,248.0	1.17	-1.16	-2.44
5,743.0	1.70	185.00	5,577.3	-1,247.0	98.4	1,250.8	0.66	-0.47	13.88
5,829.0	1.40	175.50	5,663.2	-1,249.3	98.4	1,253.1	0.46	-0.35	-11.05
5,865.6	1.33	177.71	5,699.8	-1,250.2	98.4	1,254.0	0.24	-0.19	6.04
TARGET BHL 1400'FNL & 50'FEL									
6,000.0	1.10	188.10	5,834.2	-1,253.0	98.3	1,256.8	0.24	-0.17	7.73
6,171.0	0.80	188.10	6,005.2	-1,255.8	97.9	1,259.5	0.18	-0.18	0.00
6,342.0	0.90	250.50	6,176.1	-1,257.5	96.5	1,261.0	0.52	0.06	36.49
6,514.0	0.80	259.30	6,348.1	-1,258.1	94.0	1,261.5	0.10	-0.06	5.12
6,685.0	0.40	267.60	6,519.1	-1,258.4	92.3	1,261.6	0.24	-0.23	4.85
6,856.0	0.10	337.00	6,690.1	-1,258.3	91.6	1,261.4	0.22	-0.18	40.58
7,027.0	0.10	236.30	6,861.1	-1,258.2	91.4	1,261.3	0.09	0.00	-58.89
7,198.0	0.20	313.80	7,032.1	-1,258.1	91.1	1,261.2	0.12	0.06	45.32
7,304.0	0.16	48.54	7,138.1	-1,257.9	91.1	1,260.9	0.25	-0.04	89.41
TARGET BOX 200' X 182' 9'E OF PERMIT TARGET BHL									
7,370.0	0.30	73.00	7,204.1	-1,257.8	91.3	1,260.8	0.25	0.21	37.04
7,541.0	0.30	49.40	7,375.1	-1,257.3	92.1	1,260.5	0.07	0.00	-13.80
7,712.0	0.50	40.00	7,546.1	-1,256.5	92.9	1,259.7	0.12	0.12	-5.50
7,884.0	0.50	40.00	7,718.1	-1,255.3	93.9	1,258.6	0.00	0.00	0.00
8,059.0	0.50	40.00	7,893.1	-1,254.2	94.8	1,257.6	0.00	0.00	0.00
8,147.0	0.50	40.00	7,981.1	-1,253.6	95.3	1,257.0	0.00	0.00	0.00
8,192.0	0.50	40.00	8,026.1	-1,253.3	95.6	1,256.8	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____