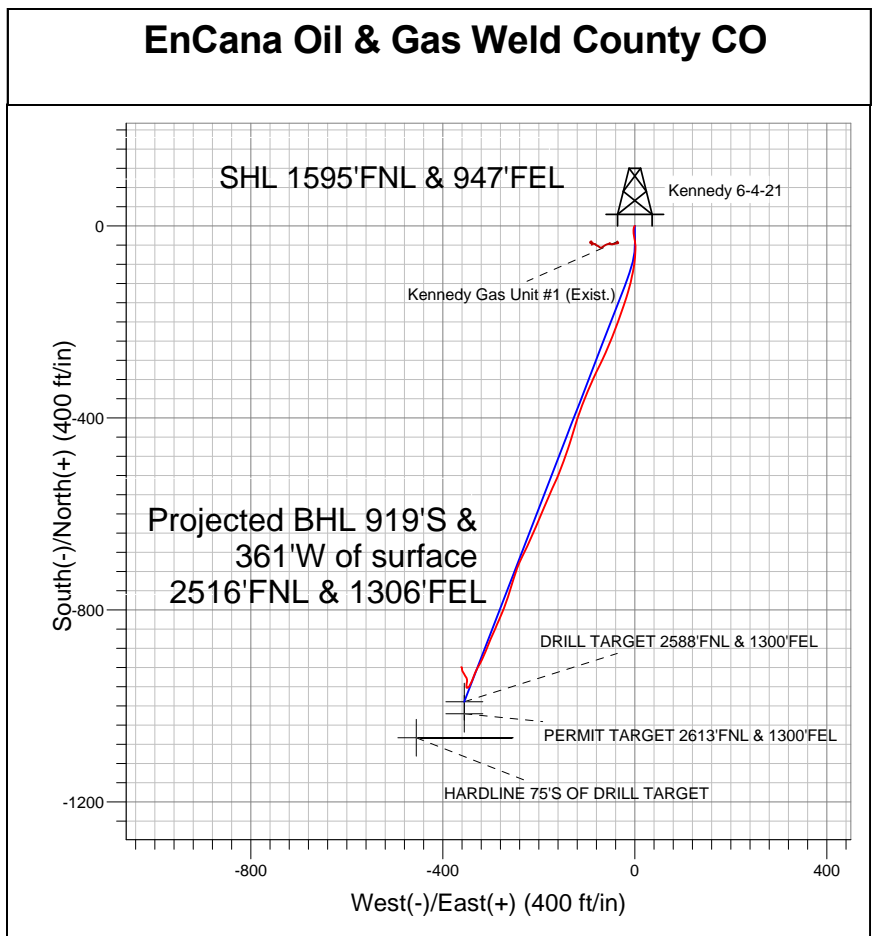
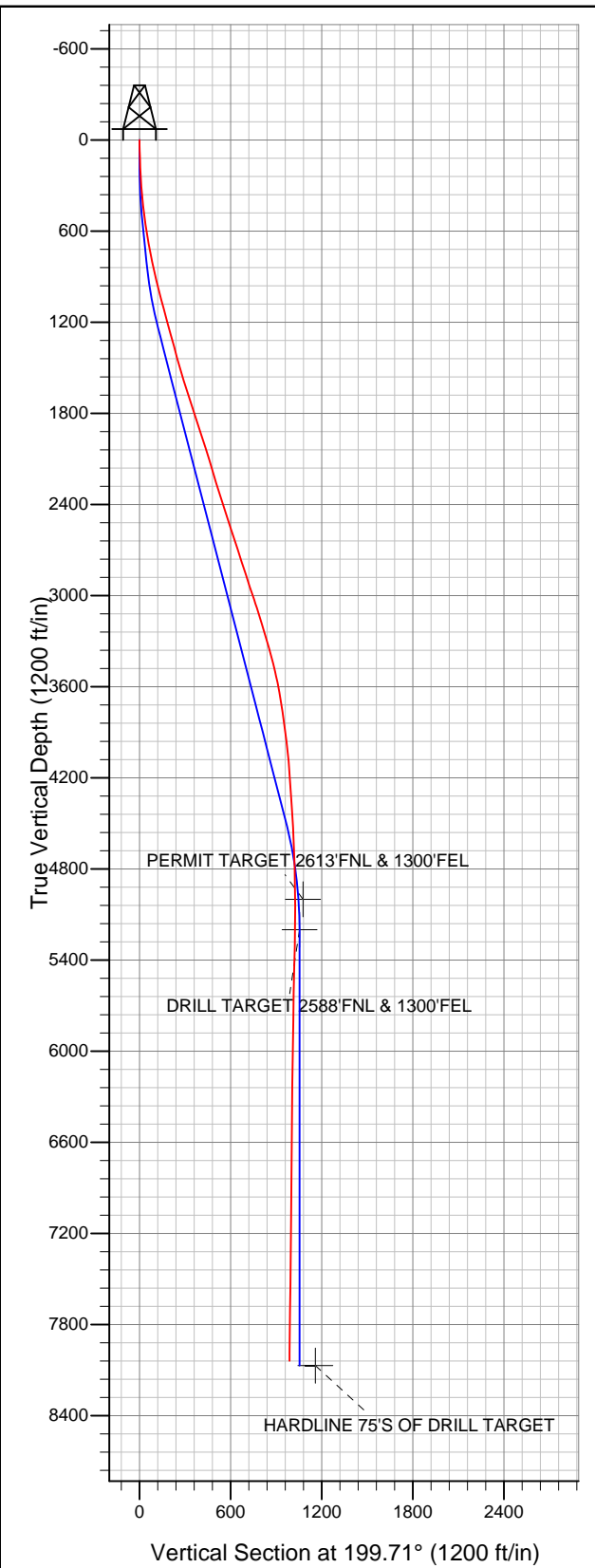




Well Name: Kennedy 6-4-21

Surface Location: Kennedy 6-4-21 Pad Sec.21-T2N-R68W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone
Ground Elevation: 4890.0
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1289544.45 3139216.55 40.127120 -105.002140
Original Well Elev WELL @ 4903.0ft (Original Well Elev)



LEGEND

- ✕ Kennedy Gas Unit #1 (Exist.), Wellbore #1, Wellbore #1 V0
- △ Kennedy 6-4-21, Wellbore #1, Plan #1 (1-3-12) R V0
- Wellbore #1

Final Survey Plot

Projected Final Survey -
8175'MD & 8039'TVD @ 987'VS
1.0 deg Inc 306.3 deg AZ

Project: SEC.21-T2N-R68W
Site: Kennedy 6-4-21 Pad Sec.21-T2N-R68W
Well: Kennedy 6-4-21
Plan: Wellbore #1



EnCana Oil & Gas Weld County CO

SEC.21-T2N-R68W

Kennedy 6-4-21 Pad Sec.21-T2N-R68W

Kennedy 6-4-21

Wellbore #1

Design: Wellbore #1

Standard Survey Report

11 January, 2012

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Kennedy 6-4-21
Project:	SEC.21-T2N-R68W	TVD Reference:	WELL @ 4903.0ft (Original Well Elev)
Site:	Kennedy 6-4-21 Pad Sec.21-T2N-R68W	MD Reference:	WELL @ 4903.0ft (Original Well Elev)
Well:	Kennedy 6-4-21	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.21-T2N-R68W, 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	Kennedy 6-4-21 Pad Sec.21-T2N-R68W		
Site Position:		Northing:	1,289,544.46ft
From:	Lat/Long	Easting:	3,139,216.55ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.127120
		Longitude:	-105.002140
		Grid Convergence:	0.32 °

Well	Kennedy 6-4-21		
Well Position	+N/-S	0.0 ft	Northing: 1,289,544.45 ft
	+E/-W	0.0 ft	Easting: 3,139,216.55 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.127120
		Longitude:	-105.002140
		Ground Level:	4,890.0 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	1/3/2012	8.89
			Dip Angle (°) 66.77
			Field Strength (nT) 52,903

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)
	0.0	0.0	0.0
			Direction (°) 199.71

Survey Program	Date	1/11/2012		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
71.0	8,175.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

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
71.0	1.30	217.20	71.0	-0.6	-0.5	0.8	1.83	1.83	0.00
163.0	2.50	199.80	162.9	-3.4	-1.8	3.8	1.43	1.30	-18.91
255.0	3.50	184.30	254.8	-8.0	-2.7	8.5	1.39	1.09	-16.85
346.0	5.10	174.00	345.6	-14.8	-2.5	14.8	1.95	1.76	-11.32
438.0	7.00	168.20	437.0	-24.4	-0.9	23.3	2.17	2.07	-6.30
530.0	8.90	174.00	528.2	-37.0	1.0	34.5	2.24	2.07	6.30
612.0	10.60	181.50	609.0	-50.8	1.5	47.3	2.58	2.07	9.15
688.0	11.60	185.10	683.6	-65.4	0.6	61.4	1.60	1.32	4.74
776.0	11.00	188.70	769.8	-82.5	-1.5	78.2	1.05	-0.68	4.09
863.0	11.50	191.70	855.2	-99.2	-4.5	94.9	0.88	0.57	3.45
950.0	13.50	194.50	940.1	-117.5	-8.8	113.6	2.40	2.30	3.22
1,038.0	14.90	194.90	1,025.4	-138.4	-14.3	135.1	1.59	1.59	0.45

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Kennedy 6-4-21
Project:	SEC.21-T2N-R68W	TVD Reference:	WELL @ 4903.0ft (Original Well Elev)
Site:	Kennedy 6-4-21 Pad Sec.21-T2N-R68W	MD Reference:	WELL @ 4903.0ft (Original Well Elev)
Well:	Kennedy 6-4-21	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)
1,125.0	15.40	198.60	1,109.4	-160.2	-20.8	157.8	1.25	0.57	4.25
1,212.0	15.50	200.30	1,193.3	-182.0	-28.5	181.0	0.53	0.11	1.95
1,299.0	15.40	199.60	1,277.1	-203.8	-36.4	204.2	0.24	-0.11	-0.80
1,387.0	15.20	201.80	1,362.0	-225.5	-44.6	227.4	0.70	-0.23	2.50
1,474.0	15.30	202.60	1,445.9	-246.7	-53.3	250.2	0.27	0.11	0.92
1,561.0	16.10	203.70	1,529.7	-268.4	-62.6	273.7	0.98	0.92	1.26
1,649.0	17.50	206.70	1,613.9	-291.4	-73.4	299.0	1.87	1.59	3.41
1,736.0	18.30	204.70	1,696.7	-315.5	-85.0	325.6	1.16	0.92	-2.30
1,823.0	18.60	202.60	1,779.2	-340.7	-96.0	353.1	0.84	0.34	-2.41
1,911.0	18.50	202.50	1,862.7	-366.5	-106.8	381.1	0.12	-0.11	-0.11
1,998.0	17.10	199.10	1,945.5	-391.4	-116.2	407.6	2.00	-1.61	-3.91
2,085.0	17.90	196.00	2,028.5	-416.3	-124.1	433.8	1.41	0.92	-3.56
2,172.0	17.80	197.70	2,111.3	-441.8	-131.8	460.4	0.61	-0.11	1.95
2,260.0	16.40	198.80	2,195.4	-466.4	-139.9	486.3	1.63	-1.59	1.25
2,347.0	16.90	199.10	2,278.8	-490.0	-148.0	511.2	0.58	0.57	0.34
2,434.0	17.10	201.90	2,362.0	-513.8	-156.9	536.6	0.97	0.23	3.22
2,522.0	18.60	205.10	2,445.7	-538.5	-167.7	563.5	2.04	1.70	3.64
2,609.0	18.20	204.20	2,528.3	-563.5	-179.2	590.9	0.56	-0.46	-1.03
2,696.0	17.60	201.60	2,611.1	-588.1	-189.6	617.6	1.15	-0.69	-2.99
2,784.0	18.50	202.80	2,694.7	-613.3	-199.9	644.8	1.11	1.02	1.36
2,871.0	18.50	204.20	2,777.2	-638.7	-210.9	672.4	0.51	0.00	1.61
2,958.0	18.10	205.60	2,859.8	-663.4	-222.4	699.6	0.68	-0.46	1.61
3,045.0	18.00	205.30	2,942.5	-687.8	-234.0	726.4	0.16	-0.11	-0.34
3,133.0	18.90	200.90	3,026.0	-713.4	-244.9	754.2	1.88	1.02	-5.00
3,220.0	17.30	195.80	3,108.7	-739.0	-253.4	781.2	2.59	-1.84	-5.86
3,307.0	16.30	197.70	3,192.0	-763.1	-260.7	806.3	1.31	-1.15	2.18
3,395.0	16.50	200.70	3,276.4	-786.5	-268.8	831.1	0.99	0.23	3.41
3,482.0	16.40	202.50	3,359.9	-809.4	-277.9	855.7	0.60	-0.11	2.07
3,569.0	14.50	204.20	3,443.7	-830.7	-287.1	878.9	2.24	-2.18	1.95
3,657.0	11.90	203.00	3,529.4	-849.1	-295.1	898.9	2.97	-2.95	-1.36
3,744.0	10.50	202.60	3,614.7	-864.7	-301.7	915.8	1.61	-1.61	-0.46
3,831.0	9.60	202.50	3,700.4	-878.7	-307.5	930.9	1.03	-1.03	-0.11
3,918.0	8.30	203.20	3,786.3	-891.2	-312.7	944.5	1.50	-1.49	0.80
4,006.0	7.10	205.30	3,873.5	-901.9	-317.6	956.2	1.40	-1.36	2.39
4,093.0	6.70	207.60	3,959.9	-911.3	-322.2	966.6	0.56	-0.46	2.64
4,180.0	6.30	208.80	4,046.4	-920.0	-326.9	976.3	0.49	-0.46	1.38
4,268.0	4.80	206.70	4,133.9	-927.5	-330.9	984.7	1.72	-1.70	-2.39
4,355.0	4.00	201.00	4,220.7	-933.6	-333.6	991.4	1.05	-0.92	-6.55
4,442.0	3.60	198.40	4,307.5	-939.0	-335.5	997.2	0.50	-0.46	-2.99
4,530.0	3.30	203.30	4,395.3	-944.0	-337.4	1,002.5	0.48	-0.34	5.57
4,617.0	3.30	203.30	4,482.2	-948.6	-339.4	1,007.4	0.00	0.00	0.00
4,704.0	3.00	206.70	4,569.1	-952.9	-341.4	1,012.2	0.41	-0.34	3.91
4,791.0	2.90	205.10	4,655.9	-956.9	-343.4	1,016.7	0.15	-0.11	-1.84
4,879.0	1.50	220.00	4,743.9	-959.8	-345.0	1,020.0	1.71	-1.59	16.93
5,053.0	1.00	246.60	4,917.8	-962.2	-347.9	1,023.1	0.43	-0.29	15.29
5,135.3	0.70	262.29	5,000.1	-962.5	-349.0	1,023.9	0.46	-0.37	19.06
PERMIT TARGET 2613°FNL & 1300°FEL									
5,228.0	0.50	299.80	5,092.8	-962.4	-350.0	1,024.0	0.46	-0.21	40.47
5,334.8	0.85	348.48	5,199.6	-961.4	-350.5	1,023.3	0.60	0.32	45.57
DRILL TARGET 2588°FNL & 1300°FEL									
5,403.0	1.20	0.00	5,267.8	-960.2	-350.6	1,022.2	0.60	0.52	16.90
5,577.0	1.30	2.90	5,441.8	-956.4	-350.5	1,018.6	0.07	0.06	1.67
5,752.0	1.00	8.00	5,616.7	-952.9	-350.2	1,015.2	0.18	-0.17	2.91
5,926.0	1.10	21.60	5,790.7	-949.8	-349.4	1,012.0	0.15	0.06	7.82

Company:	EnCana Oil & Gas Weld County CO	Local Co-ordinate Reference:	Well Kennedy 6-4-21
Project:	SEC.21-T2N-R68W	TVD Reference:	WELL @ 4903.0ft (Original Well Elev)
Site:	Kennedy 6-4-21 Pad Sec.21-T2N-R68W	MD Reference:	WELL @ 4903.0ft (Original Well Elev)
Well:	Kennedy 6-4-21	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)	
6,101.0	0.80	341.50	5,965.7	-947.1	-349.2	1,009.4	0.41	-0.17	-22.91	
6,276.0	1.00	344.80	6,140.7	-944.5	-349.9	1,007.2	0.12	0.11	1.89	
6,450.0	0.80	343.30	6,314.6	-941.9	-350.7	1,005.0	0.12	-0.11	-0.86	
6,625.0	0.80	323.90	6,489.6	-939.7	-351.8	1,003.3	0.15	0.00	-11.09	
6,799.0	0.80	332.20	6,663.6	-937.6	-353.0	1,001.8	0.07	0.00	4.77	
6,974.0	0.60	331.70	6,838.6	-935.8	-354.0	1,000.3	0.11	-0.11	-0.29	
7,149.0	1.10	328.70	7,013.6	-933.5	-355.4	998.7	0.29	0.29	-1.71	
7,323.0	1.00	322.50	7,187.5	-930.9	-357.1	996.8	0.09	-0.06	-3.56	
7,498.0	0.90	328.30	7,362.5	-928.5	-358.8	995.1	0.08	-0.06	3.31	
7,672.0	0.90	353.50	7,536.5	-926.0	-359.7	993.0	0.23	0.00	14.48	
7,847.0	0.80	0.50	7,711.5	-923.4	-359.8	990.6	0.08	-0.06	4.00	
8,022.0	0.80	353.00	7,886.5	-921.0	-360.0	988.4	0.06	0.00	-4.29	
8,125.0	1.00	306.30	7,989.4	-919.7	-360.8	987.5	0.72	0.19	-45.34	
8,175.0	1.00	306.30	8,039.4	-919.2	-361.5	987.3	0.00	0.00	0.00	
HARDLINE 75'S OF DRILL TARGET										

Checked By: _____ Approved By: _____ Date: _____