



Noble Energy Inc.

Weld County, CO
Sec 25, T4N, R66W
Irene G30-64-1HN

Wellbore #1

Survey: MWD **FINAL**

DDC Survey Report

09 July, 2012



Company:	Noble Energy Inc.	Local Co-ordinate Reference:	Well Irene G30-64-1HN
Project:	Weld County, CO	TVD Reference:	WELL @ 4825.0usft (H&P #323)
Site:	Sec 25, T4N, R66W	MD Reference:	WELL @ 4825.0usft (H&P #323)
Well:	Irene G30-64-1HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sec 25, T4N, R66W		
Site Position:		Northing:	1,345,628.21 usft
From:	Lat/Long	Easting:	3,218,519.76 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	40° 16' 46.200 N
		Longitude:	104° 43' 0.408 W
		Grid Convergence:	0.51 °

Well	Irene G30-64-1HN		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40° 16' 46.200 N
		Longitude:	104° 43' 0.408 W
		Ground Level:	4,801.0 usft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/25/2012	8.69	66.93	52,965

Design	Wellbore #1		
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Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	84.54

Survey Program	Date 7/9/2012		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
694.0	11,629.0	MWD (Wellbore #1)	MWD default
			Description
			MWD - Standard

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
TIE INTO CSG @ 623' MD / 623' TVD									
623.0	0.00	0.00	623.0	0.0	0.0	0.0	0.00	0.00	0.00
694.0	0.60	283.30	694.0	0.1	-0.4	-0.4	0.85	0.85	0.00
878.0	1.20	49.70	878.0	1.6	0.2	0.3	0.89	0.33	68.70
970.0	1.10	55.30	970.0	2.7	1.6	1.9	0.16	-0.11	6.09
1,062.0	1.00	47.90	1,062.0	3.7	3.0	3.3	0.18	-0.11	-8.04
1,154.0	2.60	39.80	1,153.9	5.9	4.9	5.4	1.76	1.74	-8.80
1,246.0	4.50	36.80	1,245.7	10.4	8.4	9.3	2.07	2.07	-3.26
1,336.0	6.80	30.50	1,335.3	17.8	13.2	14.8	2.64	2.56	-7.00
1,431.0	8.70	33.00	1,429.4	28.6	20.0	22.6	2.03	2.00	2.63
1,526.0	10.60	33.70	1,523.1	41.9	28.7	32.6	2.00	2.00	0.74

Company:	Noble Energy Inc.	Local Co-ordinate Reference:	Well Irene G30-64-1HN
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Site:	Sec 25, T4N, R66W	MD Reference:	WELL @ 4825.0usft (H&P #323)
Well:	Irene G30-64-1HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,621.0	11.50	28.20	1,616.3	57.6	38.1	43.4	1.46	0.95	-5.79
1,716.0	12.90	30.90	1,709.2	75.0	48.0	54.9	1.59	1.47	2.84
1,811.0	14.30	27.20	1,801.5	94.5	58.8	67.5	1.73	1.47	-3.89
1,906.0	14.40	26.50	1,893.5	115.5	69.4	80.1	0.21	0.11	-0.74
2,001.0	14.50	25.60	1,985.5	136.8	79.8	92.5	0.26	0.11	-0.95
2,096.0	15.00	25.20	2,077.4	158.7	90.2	104.9	0.54	0.53	-0.42
2,191.0	13.80	23.80	2,169.4	180.2	100.0	116.7	1.32	-1.26	-1.47
2,286.0	13.70	28.60	2,261.7	200.4	110.0	128.5	1.21	-0.11	5.05
2,381.0	13.50	28.90	2,354.0	220.0	120.7	141.1	0.22	-0.21	0.32
2,476.0	13.40	27.70	2,446.4	239.5	131.2	153.4	0.31	-0.11	-1.26
2,571.0	13.80	27.70	2,538.8	259.2	141.6	165.6	0.42	0.42	0.00
2,666.0	14.80	25.80	2,630.8	280.2	152.1	178.1	1.16	1.05	-2.00
2,761.0	16.10	27.90	2,722.4	302.8	163.6	191.6	1.49	1.37	2.21
2,856.0	16.70	25.00	2,813.5	326.8	175.5	205.8	1.07	0.63	-3.05
2,951.0	16.90	25.90	2,904.5	351.6	187.3	219.9	0.35	0.21	0.95
3,046.0	12.80	24.50	2,996.3	373.6	197.7	232.3	4.33	-4.32	-1.47
3,141.0	11.60	23.60	3,089.1	391.9	205.9	242.2	1.28	-1.26	-0.95
3,236.0	9.50	23.50	3,182.5	407.9	212.8	250.7	2.21	-2.21	-0.11
3,331.0	6.20	23.00	3,276.6	419.8	218.0	256.9	3.47	-3.47	-0.53
3,426.0	4.10	23.00	3,371.2	427.6	221.3	261.0	2.21	-2.21	0.00
3,521.0	2.60	31.60	3,466.0	432.6	223.8	263.9	1.66	-1.58	9.05
3,616.0	1.00	35.80	3,561.0	435.1	225.4	265.7	1.69	-1.68	4.42
3,711.0	0.30	348.80	3,656.0	436.0	225.8	266.3	0.87	-0.74	-49.47
3,806.0	0.90	243.40	3,751.0	435.9	225.1	265.5	1.08	0.63	-110.95
3,901.0	1.00	279.60	3,846.0	435.7	223.6	264.1	0.63	0.11	38.11
3,996.0	1.10	346.40	3,941.0	436.7	222.6	263.1	1.22	0.11	70.32
4,091.0	0.90	357.60	4,035.9	438.4	222.3	263.0	0.29	-0.21	11.79
4,186.0	0.60	346.70	4,130.9	439.6	222.2	263.0	0.35	-0.32	-11.47
4,281.0	0.40	322.50	4,225.9	440.4	221.9	262.8	0.30	-0.21	-25.47
4,376.0	1.20	50.40	4,320.9	441.3	222.4	263.4	1.32	0.84	92.53
4,471.0	1.00	73.40	4,415.9	442.1	224.0	265.0	0.51	-0.21	24.21
4,756.0	1.20	50.20	4,700.9	444.7	228.7	270.0	0.17	0.07	-8.14
5,041.0	2.80	23.00	4,985.7	453.1	233.7	275.7	0.64	0.56	-9.54
5,136.0	1.10	10.60	5,080.6	456.1	234.8	277.1	1.83	-1.79	-13.05
5,231.0	1.10	10.80	5,175.6	457.9	235.1	277.6	0.00	0.00	0.21
5,326.0	1.00	359.40	5,270.6	459.6	235.3	277.9	0.24	-0.11	-12.00
5,421.0	1.00	355.70	5,365.6	461.3	235.2	278.0	0.07	0.00	-3.89
5,516.0	0.90	12.10	5,460.6	462.8	235.3	278.3	0.30	-0.11	17.26
5,611.0	0.80	22.10	5,555.6	464.2	235.7	278.8	0.19	-0.11	10.53
5,706.0	1.00	65.00	5,650.5	465.1	236.7	279.9	0.72	0.21	45.16
5,802.0	1.10	164.40	5,746.5	464.6	237.7	280.8	1.67	0.10	103.54
5,897.0	1.20	167.40	5,841.5	462.7	238.2	281.1	0.12	0.11	3.16
5,992.0	0.50	163.20	5,936.5	461.4	238.5	281.3	0.74	-0.74	-4.42

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Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,087.0	0.60	207.70	6,031.5	460.5	238.4	281.1	0.45	0.11	46.84
6,182.0	0.60	246.00	6,126.5	459.9	237.7	280.4	0.41	0.00	40.32
6,307.0	1.40	228.60	6,251.5	458.6	236.0	278.5	0.68	0.64	-13.92
6,348.0	1.90	239.00	6,292.5	457.9	235.0	277.5	1.42	1.22	25.37
6,398.0	1.80	137.60	6,342.4	456.9	234.8	277.2	5.73	-0.20	-202.80
6,443.0	5.90	128.10	6,387.3	455.0	237.1	279.3	9.19	9.11	-21.11
6,493.0	7.40	88.30	6,437.0	453.5	242.4	284.4	9.47	3.00	-79.60
6,538.0	12.30	88.20	6,481.3	453.7	250.0	292.1	10.89	10.89	-0.22
6,588.0	18.50	87.10	6,529.5	454.3	263.3	305.3	12.41	12.40	-2.20
6,633.0	23.50	86.60	6,571.5	455.2	279.4	321.4	11.12	11.11	-1.11
6,683.0	27.90	88.90	6,616.6	456.0	301.1	343.1	9.02	8.80	4.60
6,728.0	32.50	90.80	6,655.4	456.0	323.7	365.6	10.44	10.22	4.22
CROSSED HARD LINE @ 6770' MD / 6690' TVD									
6,770.0	36.70	91.57	6,690.0	455.5	347.5	389.3	10.05	10.00	1.83
6,778.0	37.50	91.70	6,696.4	455.4	352.4	394.1	10.05	10.01	1.62
6,823.0	42.00	90.60	6,731.0	454.8	381.1	422.7	10.12	10.00	-2.44
6,873.0	44.80	88.30	6,767.3	455.2	415.5	456.9	6.43	5.60	-4.60
6,918.0	47.70	87.60	6,798.4	456.4	447.9	489.3	6.54	6.44	-1.56
6,968.0	50.60	87.10	6,831.1	458.1	485.7	527.1	5.85	5.80	-1.00
7,013.0	52.10	88.00	6,859.2	459.6	520.8	562.2	3.68	3.33	2.00
7,063.0	56.90	90.10	6,888.3	460.3	561.5	602.8	10.19	9.60	4.20
7,108.0	57.20	90.10	6,912.7	460.2	599.3	640.3	0.67	0.67	0.00
7,158.0	58.70	90.30	6,939.3	460.0	641.6	682.5	3.02	3.00	0.40
7,203.0	61.80	89.90	6,961.6	460.0	680.7	721.4	6.93	6.89	-0.89
7,254.0	67.00	90.10	6,983.6	460.0	726.7	767.2	10.20	10.20	0.39
7,299.0	67.70	90.80	7,001.0	459.7	768.2	808.5	2.12	1.56	1.56
CROSSED HARD LINE @ 7339' MD / 7015' TVD									
7,339.0	70.98	91.36	7,015.1	458.9	805.6	845.6	8.30	8.20	1.41
7,349.0	71.80	91.50	7,018.3	458.7	815.1	855.1	8.30	8.20	1.37
7,394.0	76.20	91.50	7,030.7	457.6	858.3	898.0	9.78	9.78	0.00
7,416.0	80.00	90.10	7,035.2	457.3	879.9	919.4	18.36	17.27	-6.36
7,486.0	84.70	90.10	7,044.5	457.2	949.2	988.4	6.71	6.71	0.00
7,518.0	85.50	89.90	7,047.2	457.2	981.1	1,020.1	2.58	2.50	-0.63
7,550.0	86.60	89.70	7,049.4	457.3	1,013.0	1,051.9	3.49	3.44	-0.63
7,581.0	87.00	90.10	7,051.2	457.3	1,044.0	1,082.8	1.82	1.29	1.29
7,615.0	88.30	90.30	7,052.6	457.2	1,077.9	1,116.6	3.87	3.82	0.59
7,644.0	88.90	91.20	7,053.3	456.8	1,106.9	1,145.4	3.73	2.07	3.10
7,676.0	89.50	90.60	7,053.7	456.3	1,138.9	1,177.2	2.65	1.88	-1.88
7,740.0	90.00	91.30	7,054.0	455.3	1,202.9	1,240.8	1.34	0.78	1.09
7,835.0	89.70	89.90	7,054.3	454.3	1,297.9	1,335.2	1.51	-0.32	-1.47
7,930.0	90.40	89.70	7,054.2	454.6	1,392.9	1,429.8	0.77	0.74	-0.21
8,025.0	89.70	88.00	7,054.1	456.5	1,487.9	1,524.6	1.94	-0.74	-1.79
8,120.0	90.60	87.60	7,053.8	460.1	1,582.8	1,619.4	1.04	0.95	-0.42
8,215.0	91.00	87.10	7,052.5	464.5	1,677.7	1,714.3	0.67	0.42	-0.53

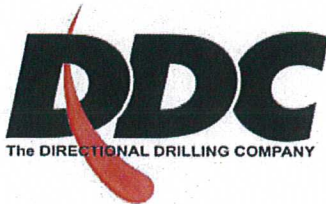
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Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,310.0	89.40	86.80	7,052.2	469.6	1,772.6	1,809.2	1.71	-1.68	-0.32
8,405.0	90.00	88.20	7,052.7	473.7	1,867.5	1,904.1	1.60	0.63	1.47
8,500.0	91.20	89.00	7,051.7	476.1	1,962.4	1,998.8	1.52	1.26	0.84
8,595.0	90.90	87.80	7,049.9	478.7	2,057.4	2,093.6	1.30	-0.32	-1.26
8,690.0	91.50	88.70	7,048.0	481.6	2,152.3	2,188.4	1.14	0.63	0.95
8,785.0	91.20	92.00	7,045.7	481.0	2,247.3	2,282.8	3.49	-0.32	3.47
8,880.0	91.40	90.80	7,043.6	478.7	2,342.2	2,377.1	1.28	0.21	-1.26
8,975.0	90.50	92.60	7,042.0	475.9	2,437.2	2,471.4	2.12	-0.95	1.89
9,070.0	90.70	91.20	7,041.0	472.7	2,532.1	2,565.6	1.49	0.21	-1.47
9,165.0	89.80	91.00	7,040.6	470.9	2,627.1	2,660.0	0.97	-0.95	-0.21
9,260.0	90.50	91.70	7,040.3	468.7	2,722.0	2,754.3	1.04	0.74	0.74
9,355.0	88.70	88.70	7,041.0	468.3	2,817.0	2,848.8	3.68	-1.89	-3.16
9,450.0	90.00	90.60	7,042.1	468.9	2,912.0	2,943.4	2.42	1.37	2.00
9,545.0	90.20	88.50	7,041.9	469.7	3,007.0	3,038.1	2.22	0.21	-2.21
9,640.0	90.30	89.20	7,041.5	471.6	3,102.0	3,132.8	0.74	0.11	0.74
9,735.0	90.80	88.30	7,040.6	473.7	3,197.0	3,227.5	1.08	0.53	-0.95
9,830.0	91.30	88.20	7,038.8	476.6	3,291.9	3,322.3	0.54	0.53	-0.11
9,925.0	90.30	89.40	7,037.5	478.5	3,386.9	3,417.0	1.64	-1.05	1.26
10,020.0	89.50	89.20	7,037.7	479.7	3,481.9	3,511.7	0.87	-0.84	-0.21
10,115.0	90.20	88.50	7,037.9	481.6	3,576.8	3,606.4	1.04	0.74	-0.74
10,210.0	88.90	89.20	7,038.7	483.5	3,671.8	3,701.2	1.55	-1.37	0.74
10,305.0	89.30	88.70	7,040.2	485.3	3,766.8	3,795.9	0.67	0.42	-0.53
10,400.0	89.30	88.50	7,041.3	487.6	3,861.7	3,890.6	0.21	0.00	-0.21
10,495.0	89.80	88.50	7,042.1	490.1	3,956.7	3,985.4	0.53	0.53	0.00
10,590.0	90.00	87.50	7,042.2	493.4	4,051.7	4,080.2	1.07	0.21	-1.05
10,684.0	90.50	87.30	7,041.8	497.6	4,145.6	4,174.1	0.57	0.53	-0.21
10,779.0	89.00	88.50	7,042.2	501.1	4,240.5	4,268.9	2.02	-1.58	1.26
10,874.0	89.70	89.40	7,043.3	502.9	4,335.5	4,363.6	1.20	0.74	0.95
10,969.0	90.00	88.00	7,043.6	505.0	4,430.4	4,458.4	1.51	0.32	-1.47
11,064.0	90.00	88.00	7,043.6	508.3	4,525.4	4,553.2	0.00	0.00	0.00
11,159.0	92.10	90.60	7,041.8	509.5	4,620.3	4,647.9	3.52	2.21	2.74
11,254.0	91.00	91.50	7,039.3	507.8	4,715.3	4,742.2	1.50	-1.16	0.95
11,349.0	91.40	90.40	7,037.3	506.2	4,810.3	4,836.6	1.23	0.42	-1.16
11,444.0	89.90	89.40	7,036.2	506.3	4,905.2	4,931.2	1.90	-1.58	-1.05
11,539.0	90.60	89.70	7,035.8	507.1	5,000.2	5,025.8	0.80	0.74	0.32
11,573.0	90.50	88.90	7,035.4	507.5	5,034.2	5,059.7	2.37	-0.29	-2.35
TD @ 11629' MD / 7035' TVD									
11,629.0	90.50	88.90	7,035.0	508.6	5,090.2	5,115.5	0.00	0.00	0.00

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Site:	Sec 25, T4N, R66W	MD Reference:	WELL @ 4825.0usft (H&P #323)
Well:	Irene G30-64-1HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
623.0	623.0	0.0	0.0	TIE INTO CSG @ 623' MD / 623' TVD
6,770.0	6,690.0	455.5	347.5	CROSSED HARD LINE @ 6770' MD / 6690' TVD
7,339.0	7,015.1	458.9	805.6	CROSSED HARD LINE @ 7339' MD / 7015' TVD
11,629.0	7,035.0	508.6	5,090.2	TD @ 11629' MD / 7035' TVD

Checked By: _____ Approved By: _____ Date: _____



Survey Certification Sheet

Noble Energy
Company

RM-12465
Job Number

7/9/2012
Date

Sec 25, T4N, R66W
Lease

Irene G30-64-1HN
Well Name

Weld, CO
County & State

Surveyed from a depth of: 623 feet to 11629 feet MD

Type of Survey: MWD

Directional Supervisor/Surveyor: Boyd Wolff

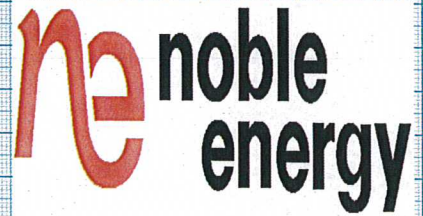
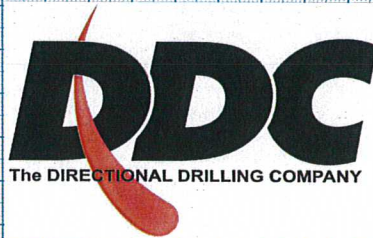
The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by **The Directional Drilling Company (DDC)**. This report represents a true and correct Directional survey of this well based on the original data obtained at the well site. Wellbore Coordinates are calculated using minimum curvature.

Digitally signed by Larry Wright
DN: cn=Larry Wright, o=The
Directional Drilling Company,
ou=GM of Guidance Services,
email=larryw@directionaldrillers.
com, c=US
Date: 2012.07.11 09:51:57 -05'00'

Larry Wright
MWD General Manager

Company Name: Noble Energy Inc.
Irene G30-64-1HN
Weld County, CO
Rig: H&P #323
Created By: DINA CHANCE
Date: 7/9/2012

Irene G30-64-1HN
Weld County, CO
Q120329 & RM-12465



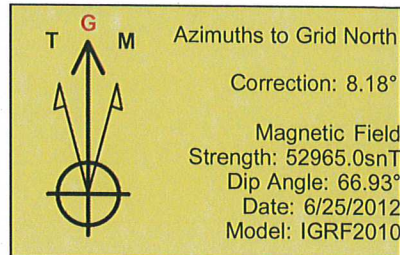
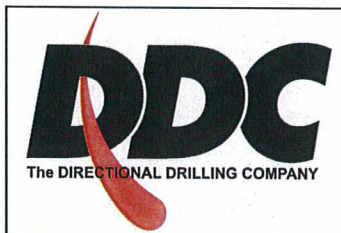
CROSSED HARD LINE @ 6770' MD / 6690' TVD

CROSSED HARD LINE @ 7339' MD / 7015' TVD

Vertical Section at 84.54° (25 uslt/in)

Company Name: Noble Energy Inc.
Irene G30-64-1HN
Weld County, CO
Rig: H&P #323
Created By: DINA CHANCE
Date:

Irene G30-64-1HN
Weld County, CO
Q120329 & RM-12465



PROJECT DETAILS: Weld County, CO

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

WELL DETAILS: Irene G30-64-1HN

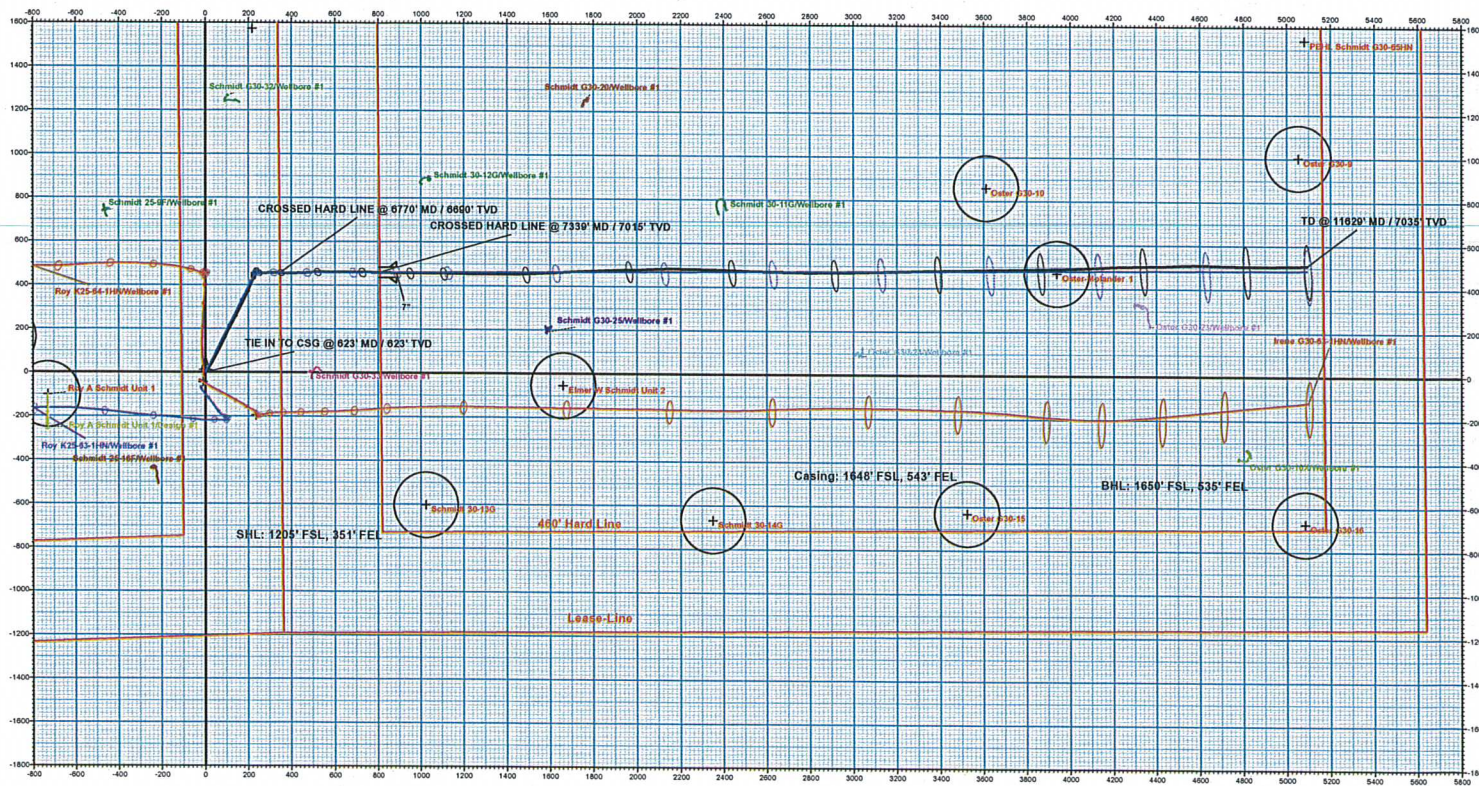
Ground Level: 4801.0
Northing: 1345628.20
Easting: 3218519.76 40° 16' 48.200 N
Longitude: 104° 43' 0.408 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
TIE IN TO CSG @ 623' MD / 623' TVD	623.0	0.0	0.0	1345628.21	3218519.76	40° 16' 48.200 N	104° 43' 0.408 W
plan hits target center							
VP Irene G30-64-1HN	3780.0	455.0	232.0	1346083.20	3218751.76	40° 16' 50.676 N	104° 42' 57.363 W
plan hits target center							
PBHL Irene G30-64-1HN	7040.0	486.3	5090.5	1346114.50	3222610.21	40° 16' 50.556 N	104° 41' 54.672 W
plan hits target center							

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
6770.0	36.70	81.57	6690.0	455.5	347.5	389.3	659.8	CROSSED HARD LINE @ 6770' MD / 6690' TVD
7339.0	70.98	91.36	7015.1	458.9	805.6	845.6	1117.9	CROSSED HARD LINE @ 7339' MD / 7015' TVD
11629.0	90.50	88.90	7035.0	508.6	5090.2	5115.5	5403.6	TD @ 11629' MD / 7035' TVD



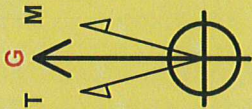
Company Name: Noble Energy Inc.
Irene G30-64-1HN
Well County, CO
Well ID: HEP 4323
Created By: DINA CHANCE
Date: 7/9/2012



Irene G30-64-1HN
Well County, CO
Q120329 & RM-12465



Azimuths to Grid North
Correction: 8.18°
Magnetic Field
Strength: 52965.0snT
Dip Angle: 66.93°
Date: 6/25/2012
Model: IGRF2010

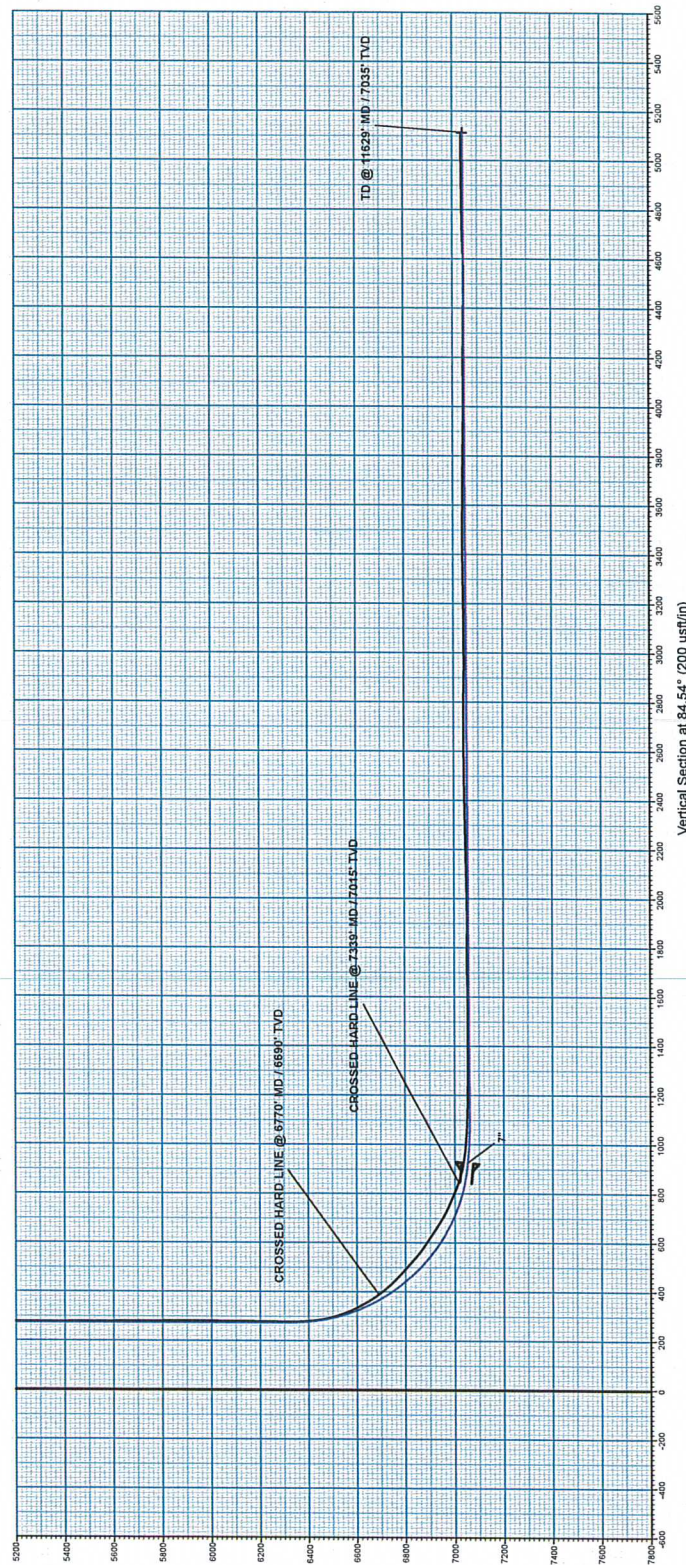


PROJECT DETAILS:	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Colorado Northern Zone
System Datum:	Mean Sea Level

WELL DETAILS:	
Well ID:	Irene G30-64-1HN
Ground Level:	4801.0
Northing:	3218519.76
Easting:	40° 16' 46.200 N
Longitude:	104° 43' 0.408 W
Latitude:	1345628.20
Altitude:	0.0

DESIGN TARGET DETAILS	
Name:	TVD
TIE IN TO CSG @ 623' MD / 623' TVD	455.0
- plan hits target center	3760.0
VP Irene G30-64-1HN center	7040.0
PBHL Irene G30-64-1HN	7040.0
- plan hits target center	

ANNOTATIONS	
MD	Inc
6770.0	35.70
7339.0	70.98
11629.0	90.50
	88.90
	81.36
	91.56
	7015.1
	7035.0
	508.6
	805.6
	845.6
	1117.9
	5115.5
	5990.2
	5403.8
	TD @ 11629' MD / 7035' TVD
	TD @ 11629' MD / 7035' TVD



Vertical Section at 84.54° (200 usf/in)