



Noble Energy, Inc

Weld County, CO (NAD 83)

Sec 10, T02N-R64W (Oscar Y10 Pad)

Oscar Y10-79HN

ST01

Design: ST01

Standard Survey Report

23 April, 2014





IDS Survey Report



Company: Noble Energy, Inc
Project: Weld County, CO (NAD 83)
Site: Sec 10, T02N-R64W (Oscar Y10 Pad)
Well: Oscar Y10-79HN
Wellbore: ST01
Design: ST01

Local Co-ordinate Reference: Well Oscar Y10-79HN
TVD Reference: Well @ 4973.0usft (HP 330)
MD Reference: Well @ 4973.0usft (HP 330)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Project Weld County, CO (NAD 83)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: Colorado Northern Zone
System Datum: Mean Sea Level

Site Sec 10, T02N-R64W (Oscar Y10 Pad)

Site Position:
From: Lat/Long
Position Uncertainty: 0.0 usft
Northing: 1,299,747.15 usft
Easting: 3,267,100.75 usft
Slot Radius: 13-3/16 "
Latitude: 40° 9' 8.100 N
Longitude: 104° 32' 39.984 W
Grid Convergence: 0.62 °

Well Oscar Y10-79HN

Well Position +N/-S 0.0 usft
Well Position +E/-W 0.0 usft
Position Uncertainty 0.0 usft
Northing: 1,299,745.13 usft
Easting: 3,266,913.48 usft
Wellhead Elevation: 0.0 usft
Latitude: 40° 9' 8.100 N
Longitude: 104° 32' 42.396 W
Ground Level: 4,943.0 usft

Wellbore ST01

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/4/2014	8.35	66.79	52,728

Design ST01

Audit Notes:

Version: 1.0
Phase: ACTUAL
Tie On Depth: 7,439.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	356.21

Survey Program Date 4/23/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
387.0	1,144.0	ESS Surface (Wellbore #1)	EMS	EMS - Standard
1,197.0	7,309.0	MWD Intermediate (Wellbore #1)	MWD	MWD - Standard
7,344.0	7,439.0	MWD Lateral (Wellbore #1)	MWD	MWD - Standard
7,535.0	14,611.0	MWD Intermediate ST1 (ST01)	MWD	MWD - Standard

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
387.0	0.30	286.10	387.0	0.3	-1.0	0.3	0.08	0.08	0.00
766.0	0.80	316.80	766.0	2.5	-3.7	2.7	0.15	0.13	8.10
1,144.0	0.80	253.60	1,144.0	3.7	-8.1	4.2	0.22	0.00	-16.72
1,197.0	0.40	276.60	1,196.9	3.6	-8.6	4.1	0.87	-0.75	43.40
1,291.0	2.70	293.70	1,290.9	4.5	-11.0	5.2	2.47	2.45	18.19
1,385.0	5.50	303.40	1,384.7	7.9	-16.8	9.0	3.06	2.98	10.32
1,477.0	7.70	296.70	1,476.0	13.1	-25.9	14.8	2.53	2.39	-7.28



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1,570.0	9.80	289.00	1,568.0	18.5	-39.0	21.0	2.58	2.26	-8.28
1,665.0	11.80	282.70	1,661.3	23.2	-56.1	26.9	2.44	2.11	-6.63
1,758.0	13.80	281.70	1,752.0	27.6	-76.3	32.5	2.16	2.15	-1.08
1,850.0	15.50	283.10	1,841.0	32.6	-99.0	39.0	1.89	1.85	1.52
1,943.0	16.60	283.10	1,930.3	38.4	-124.0	46.5	1.18	1.18	0.00
2,036.0	18.00	284.40	2,019.1	45.0	-150.9	54.9	1.56	1.51	1.40
2,131.0	16.70	282.00	2,109.8	51.5	-178.4	63.2	1.56	-1.37	-2.53
2,226.0	16.40	282.70	2,200.9	57.3	-204.9	70.7	0.38	-0.32	0.74
2,321.0	16.30	288.90	2,292.0	64.5	-230.6	79.6	1.84	-0.11	6.53
2,416.0	13.90	285.90	2,383.8	72.0	-254.2	88.6	2.66	-2.53	-3.16
2,512.0	14.80	290.10	2,476.8	79.3	-276.8	97.5	1.43	0.94	4.38
2,607.0	15.30	291.70	2,568.5	88.2	-299.8	107.8	0.68	0.53	1.68
2,702.0	15.70	294.50	2,660.0	98.1	-323.2	119.3	0.89	0.42	2.95
2,797.0	14.10	289.60	2,751.9	107.3	-345.8	130.0	2.14	-1.68	-5.16
2,892.0	14.20	296.20	2,844.0	116.4	-367.1	140.4	1.70	0.11	6.95
2,987.0	14.00	295.20	2,936.1	126.4	-388.0	151.8	0.33	-0.21	-1.05
3,082.0	13.40	295.10	3,028.4	136.0	-408.3	162.7	0.63	-0.63	-0.11
3,177.0	12.00	285.50	3,121.1	143.3	-427.8	171.2	2.66	-1.47	-10.11
3,273.0	10.40	283.10	3,215.3	147.9	-445.9	177.1	1.74	-1.67	-2.50
3,368.0	9.30	279.40	3,308.9	151.1	-461.8	181.3	1.34	-1.16	-3.89
3,463.0	8.40	276.30	3,402.7	153.1	-476.3	184.3	1.07	-0.95	-3.26
3,558.0	6.30	260.70	3,497.0	153.0	-488.3	185.0	3.03	-2.21	-16.42
3,653.0	4.50	248.60	3,591.5	150.8	-496.9	183.4	2.23	-1.89	-12.74
3,748.0	2.60	227.70	3,686.3	148.0	-502.0	180.9	2.39	-2.00	-22.00
3,843.0	2.70	192.90	3,781.3	144.4	-504.1	177.4	1.67	0.11	-36.63
3,938.0	1.90	157.30	3,876.2	140.7	-504.0	173.8	1.68	-0.84	-37.47
4,033.0	1.10	134.60	3,971.1	138.7	-502.7	171.6	1.03	-0.84	-23.89
4,129.0	1.00	134.40	4,067.1	137.4	-501.5	170.3	0.10	-0.10	-0.21
4,224.0	1.10	116.60	4,162.1	136.4	-500.1	169.2	0.36	0.11	-18.74
4,319.0	1.10	118.00	4,257.1	135.6	-498.4	168.3	0.03	0.00	1.47
4,414.0	1.30	93.70	4,352.1	135.1	-496.6	167.6	0.57	0.21	-25.58
4,509.0	1.10	127.10	4,447.1	134.5	-494.8	166.9	0.75	-0.21	35.16
4,604.0	1.00	83.30	4,542.0	134.0	-493.2	166.3	0.83	-0.11	-46.11
4,699.0	1.70	52.00	4,637.0	135.0	-491.3	167.2	1.04	0.74	-32.95
4,794.0	1.10	41.40	4,732.0	136.5	-489.6	168.6	0.69	-0.63	-11.16
4,889.0	0.60	34.90	4,827.0	137.6	-488.7	169.6	0.54	-0.53	-6.84
4,984.0	1.00	95.90	4,922.0	138.0	-487.6	169.9	0.93	0.42	64.21
5,079.0	1.20	63.40	5,017.0	138.3	-485.9	170.1	0.68	0.21	-34.21
5,174.0	1.50	13.80	5,111.9	140.0	-484.7	171.7	1.23	0.32	-52.21
5,270.0	1.60	5.00	5,207.9	142.5	-484.3	174.2	0.27	0.10	-9.17
5,365.0	1.10	11.10	5,302.9	144.7	-484.0	176.4	0.55	-0.53	6.42
5,460.0	1.60	5.90	5,397.8	147.0	-483.6	178.6	0.54	0.53	-5.47
5,555.0	1.80	12.20	5,492.8	149.7	-483.2	181.4	0.29	0.21	6.63



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5,650.0	2.60	3.60	5,587.7	153.3	-482.7	184.9	0.91	0.84	-9.05
5,745.0	1.60	1.90	5,682.7	156.8	-482.6	188.4	1.05	-1.05	-1.79
5,840.0	1.10	22.40	5,777.6	159.0	-482.2	190.5	0.72	-0.53	21.58
5,935.0	1.80	1.40	5,872.6	161.3	-481.8	192.8	0.91	0.74	-22.11
6,030.0	2.00	1.30	5,967.6	164.5	-481.7	196.0	0.21	0.21	-0.11
6,125.0	2.50	354.50	6,062.5	168.2	-481.9	199.7	0.60	0.53	-7.16
6,220.0	2.80	352.00	6,157.4	172.6	-482.4	204.1	0.34	0.32	-2.63
6,309.0	2.60	351.30	6,246.3	176.7	-483.0	208.3	0.23	-0.22	-0.79
6,356.0	2.80	355.70	6,293.2	178.9	-483.3	210.5	0.61	0.43	9.36
6,404.0	8.10	356.30	6,341.0	183.4	-483.6	215.0	11.04	11.04	1.25
6,452.0	14.80	355.70	6,388.0	192.9	-484.2	224.5	13.96	13.96	-1.25
6,500.0	19.00	355.30	6,433.9	206.9	-485.3	238.5	8.75	8.75	-0.83
6,547.0	21.50	355.10	6,478.0	223.1	-486.7	254.8	5.32	5.32	-0.43
6,595.0	23.70	354.90	6,522.3	241.4	-488.3	273.2	4.59	4.58	-0.42
6,642.0	27.20	354.90	6,564.8	261.5	-490.1	293.4	7.45	7.45	0.00
6,690.0	30.20	356.40	6,606.9	284.5	-491.8	316.4	6.43	6.25	3.13
6,737.0	34.70	356.30	6,646.5	309.7	-493.4	341.6	9.58	9.57	-0.21
6,785.0	39.40	356.70	6,684.8	338.5	-495.2	370.6	9.80	9.79	0.83
6,832.0	43.00	358.40	6,720.2	369.5	-496.5	401.5	8.02	7.66	3.62
6,880.0	43.60	0.80	6,755.1	402.4	-496.7	434.4	3.65	1.25	5.00
6,927.0	44.10	2.20	6,789.0	434.9	-495.9	466.8	2.32	1.06	2.98
6,975.0	49.60	2.00	6,821.8	469.9	-494.6	501.6	11.46	11.46	-0.42
7,022.0	58.60	358.70	6,849.4	507.9	-494.4	539.5	19.97	19.15	-7.02
7,070.0	64.70	356.50	6,872.1	550.1	-496.2	581.7	13.33	12.71	-4.58
7,117.0	68.60	356.30	6,890.8	593.2	-498.9	624.9	8.31	8.30	-0.43
7,165.0	71.90	358.10	6,907.0	638.3	-501.1	670.0	7.73	6.88	3.75
7,212.0	75.20	359.80	6,920.3	683.4	-502.0	715.0	7.83	7.02	3.62
7,260.0	78.20	358.80	6,931.3	730.1	-502.5	761.7	6.57	6.25	-2.08
7,309.0	82.00	0.00	6,939.8	778.3	-503.0	809.9	8.12	7.76	2.45
7,344.0	85.60	359.70	6,943.5	813.1	-503.1	844.6	10.32	10.29	-0.86
7,439.0	86.60	359.80	6,950.0	907.9	-503.5	939.2	1.06	1.05	0.11
7,535.0	84.20	355.90	6,957.7	1,003.5	-507.1	1,034.8	4.76	-2.50	-4.06
First ST1 MWD									
7,630.0	87.40	357.10	6,964.7	1,098.0	-512.9	1,129.5	3.60	3.37	1.26
7,725.0	88.20	356.20	6,968.3	1,192.8	-518.5	1,224.5	1.27	0.84	-0.95
7,820.0	89.10	356.40	6,970.5	1,287.6	-524.6	1,319.4	0.97	0.95	0.21
7,915.0	89.90	355.00	6,971.4	1,382.3	-531.7	1,414.4	1.70	0.84	-1.47
8,010.0	88.80	355.50	6,972.4	1,477.0	-539.6	1,509.4	1.27	-1.16	0.53
8,105.0	88.40	354.10	6,974.8	1,571.5	-548.2	1,604.4	1.53	-0.42	-1.47
8,201.0	91.20	354.00	6,975.1	1,667.0	-558.1	1,700.3	2.92	2.92	-0.10
8,296.0	91.50	358.60	6,972.9	1,761.8	-564.3	1,795.2	4.85	0.32	4.84
8,391.0	92.90	3.60	6,969.2	1,856.6	-562.4	1,889.8	5.46	1.47	5.26
8,486.0	91.30	5.00	6,965.7	1,951.3	-555.3	1,983.8	2.24	-1.68	1.47
8,579.0	88.70	2.60	6,965.7	2,044.1	-549.2	2,075.9	3.80	-2.80	-2.58



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8,670.0	88.50	2.60	6,968.0	2,135.0	-545.0	2,166.3	0.22	-0.22	0.00
8,762.0	90.50	1.40	6,968.8	2,226.9	-541.8	2,257.9	2.54	2.17	-1.30
8,857.0	91.60	0.70	6,967.0	2,321.9	-540.1	2,352.5	1.37	1.16	-0.74
8,951.0	90.70	1.60	6,965.1	2,415.8	-538.2	2,446.1	1.35	-0.96	0.96
9,045.0	91.50	1.80	6,963.3	2,509.8	-535.4	2,539.7	0.88	0.85	0.21
9,138.0	88.60	0.10	6,963.2	2,602.7	-533.9	2,632.3	3.61	-3.12	-1.83
9,230.0	89.10	1.40	6,965.1	2,694.7	-532.7	2,724.0	1.51	0.54	1.41
9,325.0	89.50	359.60	6,966.3	2,789.7	-531.8	2,818.8	1.94	0.42	-1.89
9,419.0	89.40	359.60	6,967.2	2,883.7	-532.5	2,912.6	0.11	-0.11	0.00
9,513.0	89.60	357.90	6,968.0	2,977.7	-534.5	3,006.5	1.82	0.21	-1.81
9,606.0	89.30	357.40	6,968.9	3,070.6	-538.3	3,099.5	0.63	-0.32	-0.54
9,699.0	90.10	359.70	6,969.4	3,163.5	-540.7	3,192.4	2.62	0.86	2.47
9,793.0	90.40	358.90	6,968.9	3,257.5	-541.8	3,286.2	0.91	0.32	-0.85
9,886.0	89.40	0.00	6,969.1	3,350.5	-542.7	3,379.1	1.60	-1.08	1.18
9,979.0	88.90	357.70	6,970.5	3,443.5	-544.6	3,472.0	2.53	-0.54	-2.47
10,072.0	89.80	0.80	6,971.5	3,536.5	-545.8	3,564.8	3.47	0.97	3.33
10,165.0	89.40	1.00	6,972.2	3,629.5	-544.4	3,657.5	0.48	-0.43	0.22
10,260.0	90.10	3.80	6,972.6	3,724.4	-540.4	3,751.9	3.04	0.74	2.95
10,353.0	89.70	1.80	6,972.8	3,817.2	-535.8	3,844.3	2.19	-0.43	-2.15
10,447.0	88.40	359.40	6,974.3	3,911.2	-534.9	3,938.0	2.90	-1.38	-2.55
10,540.0	88.30	357.70	6,977.0	4,004.1	-537.2	4,030.9	1.83	-0.11	-1.83
10,631.0	88.10	357.60	6,979.9	4,095.0	-540.9	4,121.8	0.25	-0.22	-0.11
10,723.0	89.20	358.60	6,982.0	4,186.9	-544.0	4,213.7	1.62	1.20	1.09
10,816.0	90.90	0.80	6,982.0	4,279.9	-544.5	4,306.6	2.99	1.83	2.37
10,909.0	90.40	0.90	6,980.9	4,372.9	-543.1	4,399.3	0.55	-0.54	0.11
11,001.0	90.00	0.80	6,980.6	4,464.9	-541.7	4,491.0	0.45	-0.43	-0.11
11,094.0	89.90	358.70	6,980.7	4,557.9	-542.1	4,583.8	2.26	-0.11	-2.26
11,188.0	90.40	1.40	6,980.4	4,651.9	-542.1	4,677.6	2.92	0.53	2.87
11,282.0	90.70	359.20	6,979.5	4,745.9	-541.6	4,771.3	2.36	0.32	-2.34
11,374.0	90.50	1.40	6,978.5	4,837.9	-541.1	4,863.1	2.40	-0.22	2.39
11,466.0	90.70	0.70	6,977.6	4,929.8	-539.4	4,954.7	0.79	0.22	-0.76
11,561.0	90.80	358.60	6,976.3	5,024.8	-540.0	5,049.5	2.21	0.11	-2.21
11,657.0	90.30	1.00	6,975.4	5,120.8	-540.3	5,145.3	2.55	-0.52	2.50
11,750.0	89.90	0.80	6,975.3	5,213.8	-538.8	5,238.0	0.48	-0.43	-0.22
11,847.0	89.60	0.70	6,975.7	5,310.8	-537.6	5,334.7	0.33	-0.31	-0.10
11,942.0	89.80	0.60	6,976.2	5,405.8	-536.5	5,429.4	0.24	0.21	-0.11
12,037.0	89.70	359.40	6,976.6	5,500.8	-536.5	5,524.2	1.27	-0.11	-1.26
12,132.0	90.40	0.80	6,976.5	5,595.8	-536.3	5,619.0	1.65	0.74	1.47
12,227.0	88.50	1.20	6,977.4	5,690.8	-534.7	5,713.7	2.04	-2.00	0.42
12,322.0	89.30	1.10	6,979.2	5,785.7	-532.8	5,808.3	0.85	0.84	-0.11
12,417.0	90.10	0.80	6,979.7	5,880.7	-531.2	5,903.0	0.90	0.84	-0.32
12,512.0	88.90	357.10	6,980.6	5,975.7	-532.9	5,997.8	4.09	-1.26	-3.89
12,608.0	88.70	358.10	6,982.6	6,071.6	-537.0	6,093.8	1.06	-0.21	1.04



IDS
Survey Report



Company: Noble Energy, Inc
Project: Weld County, CO (NAD 83)
Site: Sec 10, T02N-R64W (Oscar Y10 Pad)
Well: Oscar Y10-79HN
Wellbore: ST01
Design: ST01

Local Co-ordinate Reference: Well Oscar Y10-79HN
TVD Reference: Well @ 4973.0usft (HP 330)
MD Reference: Well @ 4973.0usft (HP 330)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
12,703.0	91.60	1.80	6,982.3	6,166.5	-537.0	6,188.6	4.95	3.05	3.89
12,798.0	89.10	359.50	6,981.7	6,261.5	-536.0	6,283.2	3.58	-2.63	-2.42
12,893.0	89.20	359.10	6,983.2	6,356.5	-537.1	6,378.1	0.43	0.11	-0.42
12,988.0	89.60	357.90	6,984.2	6,451.5	-539.6	6,473.0	1.33	0.42	-1.26
13,083.0	90.30	359.50	6,984.2	6,546.4	-541.8	6,567.9	1.84	0.74	1.68
13,179.0	88.20	1.40	6,985.5	6,642.4	-541.0	6,663.6	2.95	-2.19	1.98
13,274.0	87.80	1.60	6,988.8	6,737.3	-538.5	6,758.2	0.47	-0.42	0.21
13,369.0	87.40	0.00	6,992.8	6,832.2	-537.2	6,852.8	1.73	-0.42	-1.68
13,464.0	90.00	1.40	6,994.9	6,927.2	-536.0	6,947.5	3.11	2.74	1.47
13,559.0	89.60	358.60	6,995.3	7,022.2	-536.0	7,042.2	2.98	-0.42	-2.95
13,655.0	90.20	1.80	6,995.4	7,118.2	-535.7	7,138.0	3.39	0.63	3.33
13,750.0	89.80	1.20	6,995.4	7,213.1	-533.2	7,232.6	0.76	-0.42	-0.63
13,845.0	88.90	0.60	6,996.5	7,308.1	-531.7	7,327.3	1.14	-0.95	-0.63
13,940.0	90.30	0.40	6,997.2	7,403.1	-530.9	7,422.0	1.49	1.47	-0.21
14,035.0	89.50	359.90	6,997.3	7,498.1	-530.6	7,516.8	0.99	-0.84	-0.53
14,130.0	89.10	0.00	6,998.5	7,593.1	-530.7	7,611.6	0.43	-0.42	0.11
14,226.0	89.20	359.60	6,999.9	7,689.1	-531.1	7,707.4	0.43	0.10	-0.42
14,321.0	89.30	359.80	7,001.2	7,784.1	-531.6	7,802.2	0.24	0.11	0.21
14,416.0	89.10	359.40	7,002.5	7,879.1	-532.2	7,897.0	0.47	-0.21	-0.42
14,511.0	89.40	359.10	7,003.7	7,974.0	-533.5	7,991.9	0.45	0.32	-0.32
Last ST1 MWD @ 14511' MD / 7004' TVD									
14,611.0	89.40	359.10	7,004.8	8,074.0	-535.0	8,091.7	0.00	0.00	0.00

PTD @ 14611' MD / 7005' TVD / 78' FNL & 64' FWL Sec 3

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
7,352.0	6,944.1	Actual 7"	7	8-3/4

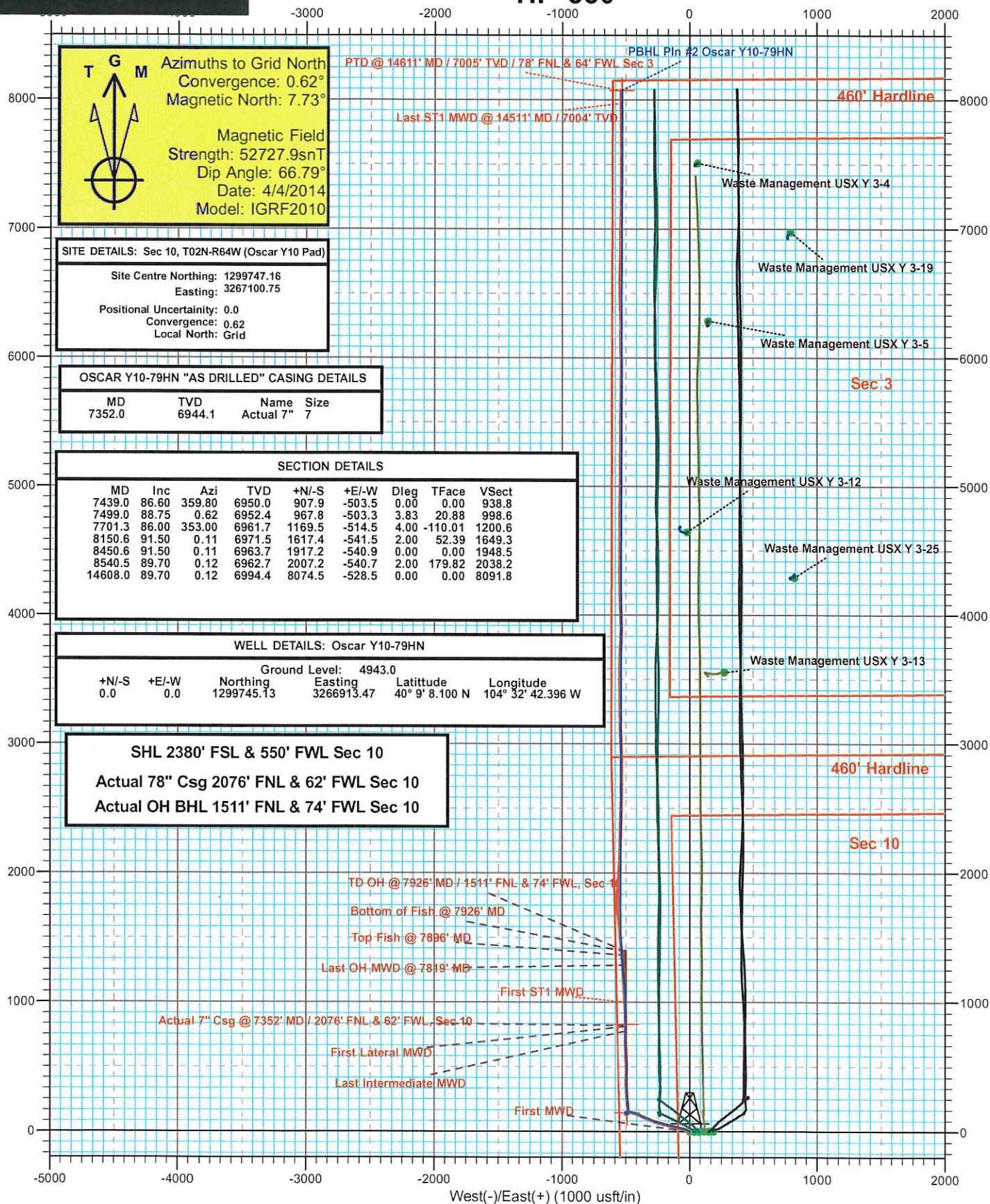
Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,535.0	6,957.7	1,003.5	-507.1	First ST1 MWD
14,511.0	7,003.7	7,974.0	-533.5	Last ST1 MWD @ 14511' MD / 7004' TVD
14,611.0	7,004.8	8,074.0	-535.0	PTD @ 14611' MD / 7005' TVD / 78' FNL & 64' FWL Sec 3

Checked By: _____ Approved By: _____ Date: _____



Weld County, CO (NAD 83)
Sec 10, T02N-R64W (Oscar Y10 Pad)
Oscar Y10-79HN
ST01Plan #1
HP 330





Weld County, CO (NAD 83)
Sec 10, T02N-R64W (Oscar Y10 Pad)
Oscar Y10-79HN
ST01 HP 330
Plan #1



WELL DETAILS: Oscar Y10-79HN

Ground Level: 4943.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1299745.13	3266913.47	40° 9' 8.100 N	104° 32' 42.396 W

SECTION DETAILS

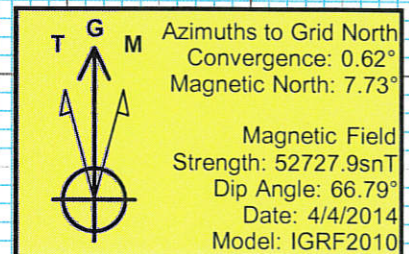
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
7439.0	86.60	359.80	6950.0	907.9	-503.5	0.00	0.00	938.8	
7499.0	88.75	0.62	6952.4	967.8	-503.3	3.83	20.88	998.6	
7701.3	86.00	353.00	6961.7	1169.5	-514.5	4.00	-110.01	1200.6	
8150.6	91.50	0.11	6971.5	1617.4	-541.5	2.00	52.39	1649.3	
8450.6	91.50	0.11	6963.7	1917.2	-540.9	0.00	0.00	1948.5	
8540.5	89.70	0.12	6962.7	2007.2	-540.7	2.00	179.82	2038.2	
14608.0	89.70	0.12	6994.4	8074.5	-528.5	0.00	0.00	8091.8	PBHL Pln #2 Oscar Y10-79HN

SITE DETAILS: Sec 10, T02N-R64W (Oscar Y10 Pad)

Site Centre Northing: 1299747.16
 Easting: 3267100.75
 Positional Uncertainty: 0.0
 Convergence: 0.62
 Local North: Grid

OSCAR Y10-79HN "AS DRILLED" CASING DETAILS

MD	TVD	Name	Size
7352.0	6944.1	Actual 7"	7



SHL 2380' FSL & 550' FWL SEC 10
Actual 7" Csg 2076' FNL & 62' FWL Sec 10
Actual ST1 BHL 78' FNL & 64' FWL Sec 3

