

Noble Energy

CO, Weld County (NAD 83 NZ)
Sec 14 Twn 6 N Rng 65 W
Eagle E14-64-1HN Original Hole
05-123-38097
H&P 330



A Schlumberger Company

Final Survey Report

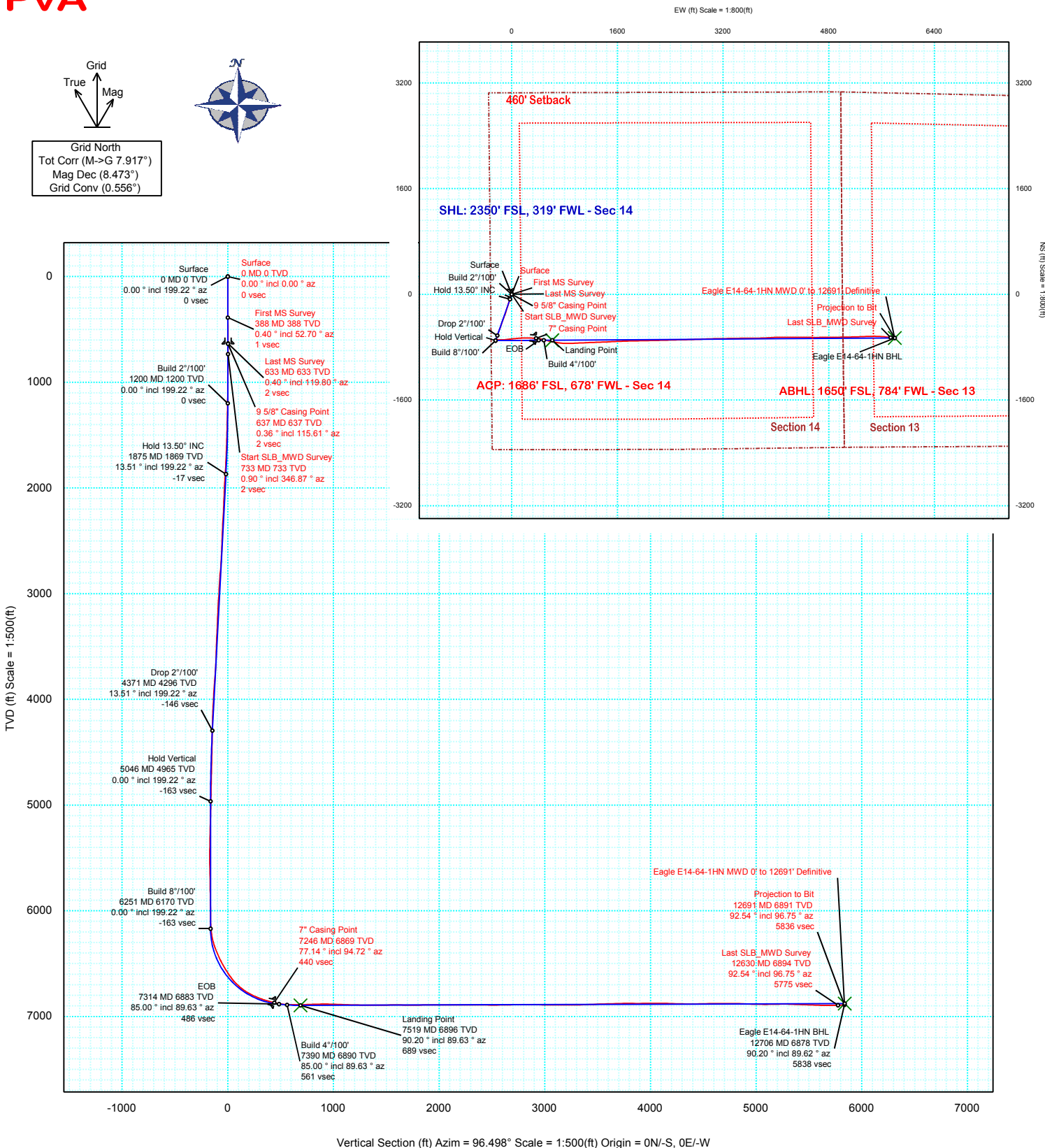
29-Oct-2014

Well Coordinates:	NAD83 CO State Plane, N Zone, US Feet
	N 40° 29' 6.93600" W 104° 38' 20.14800"
	1420783.53 usFt 3239511.54 usFt
Ground Level:	4718.00 ft MSL
TVD Reference:	le: RKB @ 4748.00 ft MSL
Local Coordinate Origin:	Eagle E14-64-1HN well head
Vertical Section Azimuth:	96.498 ° (Grid North)
North Reference:	Grid North

DOX Version: 2.8

Borehole: Original Hole	Well: Eagle E14-64-1HN	Field: CO, Weld County (NAD 83 NZ)	Structure: Sec 14-06N-65W (Eagle E14 Pad) - H&P 330
Gravity & Magnetic Parameters Model: BGGM 2014 Dip: 67.028° Date: 02-Jul-2014 MagDec: 8.473° FS: 52771.794nT Gravity FS: 999.048mgn (9.80665 Based)		Surface Location NAD83 Colorado State Plane, Northern Zone, US Feet Lat: N 40 29 6.94 Northing: 1420783.532ft Grid Conv: 0.5564° Lon: W 104 38 20.15 Easting: 3239511.54ft Scale Fact: 0.9999652	
		Miscellaneous Slot: Eagle E14-64-1HN TVD Ref: RKB(4748ft above MSL) Plan: Eagle E14-64-1HN MWD 0' to 12691' Definitive	

PvA





Eagle E14-64-1HN MWD 0' to 12691' Definitive Survey Geodetic Report

(Def Survey)

Report Date: August 05, 2014 - 03:09 PM
Client: Noble Energy
Field: CO, Weld County (NAD 83 NZ)
Structure / Slot: Noble 14-06N-65W (Eagle E14 Pad) - H&P 330 / Eagle E14-64-1HN
Well: Eagle E14-64-1HN
Borehole: Original Hole
UWI / API#: Unknown / Unknown
Survey Name: Eagle E14-64-1HN MWD 0' to 12691' Definitive
Survey Date: July 02, 2014
Tort / AHD / DDI / ERD Ratio: 251.911 ° / 6838.755 ft / 6.501 / 0.992
Coordinate Reference System: NAD83 Colorado State Plane, Northern Zone, US Feet
Location Lat / Long: N 40° 29' 6.93600", W 104° 38' 20.14800"
Location Grid N/E Y/X: N 1420783.532 ftUS, E 3239511.540 ftUS
CRS Grid Convergence Angle: 0.5564 °
Grid Scale Factor: 0.9999652
Version / Patch: 2.7.1043.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 96.498 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 4748.000 ft above MSL
Seabed / Ground Elevation: 4718.000 ft above MSL
Magnetic Declination: 8.473 °
Total Gravity Field Strength: 999.0483mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 52771.794 nT
Magnetic Dip Angle: 67.028 °
Declination Date: July 02, 2014
Magnetic Declination Model: BGGM 2014
North Reference: Grid North
Grid Convergence Used: 0.5564 °
Total Corr Mag North->Grid North: 7.9171 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	1420783.53	3239511.54	N 40 29 6.94 W 104 38 20.15	
First MS Survey	388.00	0.40	52.70	388.00	0.98	0.82	1.08	0.10	1420784.35	3239512.62	N 40 29 6.94 W 104 38 20.13	
Last MS Survey	633.00	0.40	119.80	632.99	2.38	0.91	2.50	0.18	1420784.45	3239514.04	N 40 29 6.94 W 104 38 20.12	
9 5/8" Casing Point	637.00	0.36	115.61	636.99	2.41	0.90	2.52	1.21	1420784.43	3239514.06	N 40 29 6.94 W 104 38 20.12	
Start SLB_MWD Survey	733.00	0.90	346.87	732.99	2.44	1.51	2.62	1.21	1420785.04	3239514.16	N 40 29 6.95 W 104 38 20.11	
	794.00	0.85	353.04	793.98	2.17	2.42	2.46	0.17	1420785.95	3239514.00	N 40 29 6.96 W 104 38 20.12	
	888.00	0.48	225.34	887.98	1.76	2.84	2.10	1.28	1420786.37	3239513.64	N 40 29 6.96 W 104 38 20.12	
	982.00	0.63	256.46	981.97	1.03	2.44	1.31	0.35	1420785.97	3239512.85	N 40 29 6.96 W 104 38 20.13	
	1074.00	0.63	263.08	1073.97	0.06	2.26	0.32	0.08	1420785.79	3239511.86	N 40 29 6.96 W 104 38 20.14	
	1168.00	1.02	233.72	1167.96	-1.06	1.70	-0.87	0.59	1420785.24	3239510.67	N 40 29 6.95 W 104 38 20.16	
	1262.00	4.00	202.83	1261.86	-2.59	-1.81	-2.82	3.37	1420781.72	3239508.72	N 40 29 6.92 W 104 38 20.18	
	1356.00	6.40	199.10	1355.47	-4.66	-9.78	-5.80	2.58	1420773.76	3239505.74	N 40 29 6.84 W 104 38 20.22	
	1450.00	8.11	197.83	1448.71	-7.10	-21.03	-9.54	1.83	1420762.50	3239502.00	N 40 29 6.73 W 104 38 20.27	
	1545.00	10.23	196.24	1542.49	-9.85	-35.52	-13.95	2.25	1420748.02	3239497.59	N 40 29 6.59 W 104 38 20.33	
	1640.00	12.16	196.00	1635.68	-12.92	-53.23	-19.07	2.03	1420730.30	3239492.47	N 40 29 6.41 W 104 38 20.40	
	1735.00	12.60	198.23	1728.47	-16.68	-72.69	-25.07	0.68	1420710.85	3239486.47	N 40 29 6.22 W 104 38 20.48	
	1830.00	13.09	201.12	1821.10	-21.50	-92.56	-32.18	0.85	1420690.98	3239479.36	N 40 29 6.02 W 104 38 20.58	
	1925.00	14.52	199.02	1913.35	-26.80	-113.85	-39.94	1.60	1420669.69	3239471.60	N 40 29 5.81 W 104 38 20.68	
	2020.00	12.85	199.11	2005.65	-31.69	-135.10	-47.28	1.76	1420648.44	3239464.26	N 40 29 5.61 W 104 38 20.78	
	2115.00	13.03	195.96	2098.24	-35.76	-155.38	-53.69	0.77	1420628.16	3239457.85	N 40 29 5.41 W 104 38 20.86	
	2210.00	13.50	196.49	2190.70	-39.44	-176.32	-59.78	0.51	1420607.22	3239451.76	N 40 29 5.20 W 104 38 20.94	
	2305.00	13.50	200.26	2283.08	-44.01	-197.35	-66.77	0.93	1420586.18	3239444.77	N 40 29 4.99 W 104 38 21.04	
	2400.00	13.73	198.47	2375.41	-48.98	-218.45	-74.18	0.51	1420565.09	3239437.36	N 40 29 4.78 W 104 38 21.14	
	2495.00	14.63	196.18	2467.52	-53.34	-240.67	-81.10	1.12	1420542.87	3239430.45	N 40 29 4.57 W 104 38 21.23	
	2590.00	14.07	193.45	2559.55	-56.75	-263.42	-87.12	0.93	1420520.12	3239424.42	N 40 29 4.34 W 104 38 21.31	
	2685.00	14.40	197.89	2651.64	-60.48	-285.89	-93.44	1.20	1420497.65	3239418.10	N 40 29 4.12 W 104 38 21.39	
	2780.00	14.17	203.35	2743.70	-66.19	-307.82	-101.68	1.44	1420475.73	3239409.87	N 40 29 3.90 W 104 38 21.50	
	2875.00	14.81	202.77	2835.68	-72.96	-329.68	-110.99	0.68	1420453.86	3239400.56	N 40 29 3.69 W 104 38 21.63	
	2971.00	13.61	201.89	2928.74	-79.40	-351.48	-119.95	1.26	1420432.07	3239391.60	N 40 29 3.47 W 104 38 21.74	
	3066.00	13.22	200.27	3021.15	-84.95	-372.04	-127.88	0.57	1420411.50	3239383.67	N 40 29 3.27 W 104 38 21.85	
	3161.00	13.12	200.46	3113.65	-90.14	-392.34	-135.41	0.12	1420391.21	3239376.13	N 40 29 3.07 W 104 38 21.95	
	3255.00	12.06	197.99	3205.39	-94.67	-411.67	-142.17	1.27	1420371.88	3239369.37	N 40 29 2.88 W 104 38 22.04	
	3350.00	12.29	199.52	3298.26	-98.93	-430.64	-148.62	0.42	1420352.91	3239362.93	N 40 29 2.70 W 104 38 22.13	
	3446.00	10.75	199.69	3392.32	-103.28	-448.70	-155.05	1.60	1420334.85	3239356.50	N 40 29 2.52 W 104 38 22.21	
	3541.00	10.98	196.28	3485.62	-106.83	-465.73	-160.57	0.72	1420317.82	3239350.97	N 40 29 2.35 W 104 38 22.28	
	3636.00	10.63	196.50	3578.93	-109.89	-482.81	-165.59	0.37	1420300.74	3239345.95	N 40 29 2.18 W 104 38 22.35	
	3731.00	12.08	200.36	3672.07	-113.79	-500.53	-171.54	1.72	1420283.02	3239340.00	N 40 29 2.01 W 104 38 22.43	
	3826.00	13.74	202.18	3764.67	-119.23	-520.30	-179.26	1.80	1420263.25	3239332.29	N 40 29 1.81 W 104 38 22.53	
	3922.00	15.16	202.18	3857.63	-125.70	-542.48	-188.30	1.47	1420241.07	3239323.25	N 40 29 1.59 W 104 38 22.65	
	4017.00	14.69	200.64	3949.42	-132.00	-565.26	-197.24	0.64	1420218.30	3239314.31	N 40 29 1.37 W 104 38 22.77	
	4112.00	13.20	199.76	4041.62	-137.43	-586.74	-205.15	1.58	1420196.81	3239306.40	N 40 29 1.16 W 104 38 22.88	
	4207.00	11.59	197.38	4134.40	-141.72	-606.06	-211.67	1.78	1420177.49	3239299.88	N 40 29 0.97 W 104 38 22.96	
	4302.00	10.71	194.05	4227.61	-144.68	-623.73	-216.66	1.15	1420159.82	3239294.89	N 40 29 0.79 W 104 38 23.03	
	4397.00	9.71	194.20	4321.11	-146.92	-640.06	-220.77	1.05	1420143.50	3239290.78	N 40 29 0.63 W 104 38 23.09	
	4492.00	8.74	193.29	4414.88	-148.84	-654.85	-224.39	1.03	1420128.71	3239287.16	N 40 29 0.49 W 104 38 23.13	
	4587.00	7.98	197.44	4508.87	-150.95	-668.16	-228.03	1.02	1420115.39	3239283.52	N 40 29 0.36 W 104 38 23.18	
	4682.00	6.84	194.67	4603.07	-153.00	-679.94	-231.44	1.26	1420103.62	3239280.11	N 40 29 0.24 W 104 38 23.23	
	4777.00	5.83	200.91	4697.49	-155.01	-689.92	-234.59	1.29	1420093.64	3239276.95	N 40 29 0.14 W 104 38 23.27	
	4873.00	3.96	205.08	4793.14	-157.28	-697.48	-237.74	1.99	1420086.08	3239273.81	N 40 29 0.07 W 104 38 23.31	
	4968.00	3.31	201.95	4887.95	-159.05	-702.99	-240.15	0.71	1420080.57	3239271.40	N 40 29 0.01 W 104 38 23.34	
	5063.00	1.51	213.67	4982.86	-160.36	-706.57	-241.87	1.95	1420076.99	3239269.68	N 40 28 59.98 W 104 38 23.37	
	5158.00	1.74	297.65	5077.83	-162.27	-706.94	-243.84	2.29	1420076.62	3239267.71	N 40 28 59.97 W 104 38 23.39	
	5253.00	1.81	313.39	5172.79	-164.81	-705.24	-246.21	0.52	1420078.32	3239265.34	N 40 28 59.99 W 104 38 23.42	
	5348.00	1.57	313.44	5267.74	-167.05	-703.32	-248.24	0.25	1420080.24	3239263.31	N 40 29 0.01 W 104 38 23.45	
	5443.00	1.37	303.93	5362.71	-169.10	-701.79	-250.13	0.33	1420081.77	3239261.42	N 40 29 0.03 W 104 38 23.47	
	5539.00	1.12	322.02	5458.69	-170.77	-700.41	-251.66	0.48	1420083.15	3239259.89	N 40 29 0.04 W 104 38 23.49	
	5634.00	1.84	40.66	5553.67	-170.57	-698.52	-251.23	2.06	1420085.04	3239260.32	N 40 29 0.06 W 104 38 23.49	
	5729.00	1.85	42.78	5648.62	-168.80	-696.23	-249.19	0.07	1420087.33	3239262.36	N 40 29 0.08 W 104 38 23.46	
	5824.00	1.74	37.30	5743.57	-167.15	-693.96	-247.27	0.21	1420089.60	3239264.28	N 40 29 0.10 W 104 38 23.44	
	5919.00	1.41	43.34	5838.53	-165.71	-691.95	-245.59	0.39	1420091.60	3239265.96	N 40 29 0.12 W 104 38 23.41	
	6015.00	1.11	57.35	5934.51	-164.28	-690.59	-244.00	0.45	1420092.96	3239267.55	N 40 29 0.14 W 104 38 23.39	
	6110.00	1.02	43.59	6029.50	-163.05	-689.48	-242.64	0.28	1420094.07	3239268.91	N 40 29 0.15 W 104 38 23.37	
	6151.00	0.88	60.85	6070.49	-162.58	-689.07	-242.11	0.78	1420094.48	3239269.43	N 40 29 0.15 W 104 38 23.37	
	6198.00	1.75	63.73	6117.48	-161.68	-688.57	-241.16	1.87	1420094.98	3239270.39	N 40 29 0.16 W 104 38 23.36	
	6229.00	3.58	78.40	6148.44	-160.36	-688.17	-239.78	6.26	1420095.39	3239271.77	N 40 29 0.16 W 104 38 23.34	
	6261.00	5.47	91.64	6180.34	-157.89	-688.01	-237.28	6.70	1420095.55	3239274.27	N 40 29 0.16 W 104 38 23.30	
	6293.00	7.85	93.87	6212.12	-154.19	-688.20	-233.57	7.48	1420095.36	3239277.98	N 40 29 0.16 W 104 38 23.26	
	6325.00	10.21	92.09	6243.73	-149.18	-688.45	-228.56	7.43	1420095.10	3239282.99	N 40 29 0.16 W 104 38 23.19	
	6356.00	13.08	91.46	6274.08	-142.94	-688.64	-222.30	9.27	1420094.91	3239289.25	N 40 29 0.15 W 104 38 23.11	
	6388.00	16.19	90.26	6305.04	-134.90	-688.75	-214.22	9.76	1420094.80	3239297.33	N 40 29 0.15 W 104 38 23.01	
	6420.00	18.95	89.95	6335.55	-125.30	-688.77	-204.56	8.63	1420094.79	3239306.99	N 40 29 0.15 W 104 38 22.88	
	6451.00	21.03	92.44	6364.68	-114.75	-689.00	-193.97	7.25	14			

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6547.00	25.77	90.51	6452.72	-76.73	-689.52	-155.76	5.85	1420094.04	3239355.79	N 40 29 0.14 W	104 38 22.25
	6578.00	27.39	90.67	6480.44	-62.93	-689.66	-141.89	5.23	1420093.89	3239369.66	N 40 29 0.14 W	104 38 22.07
	6610.00	29.24	87.58	6508.61	-47.88	-689.42	-126.72	7.37	1420094.14	3239384.83	N 40 29 0.14 W	104 38 21.87
	6642.00	31.13	84.64	6536.28	-32.07	-688.32	-110.67	7.50	1420095.24	3239400.87	N 40 29 0.15 W	104 38 21.67
	6674.00	32.16	82.44	6563.52	-15.71	-686.42	-93.99	4.83	1420097.13	3239417.55	N 40 29 0.16 W	104 38 21.45
	6769.00	38.27	83.31	6641.10	37.51	-679.66	-39.66	6.45	1420103.89	3239471.88	N 40 29 0.22 W	104 38 20.75
	6864.00	48.54	84.65	6710.02	101.17	-672.90	25.18	10.85	1420110.66	3239536.72	N 40 29 0.28 W	104 38 19.91
	6959.00	58.16	84.55	6766.67	175.66	-665.73	100.97	10.13	1420117.83	3239612.51	N 40 29 0.35 W	104 38 18.93
	7054.00	66.44	88.58	6810.80	258.43	-660.81	184.84	9.49	1420122.75	3239696.37	N 40 29 0.39 W	104 38 17.84
	7086.00	69.18	88.97	6822.89	287.79	-660.18	214.46	8.64	1420123.38	3239725.99	N 40 29 0.39 W	104 38 17.46
	7118.00	70.14	91.80	6834.01	317.62	-660.38	244.46	8.82	1420123.18	3239755.99	N 40 29 0.39 W	104 38 17.07
	7150.00	72.53	92.18	6844.25	347.84	-661.43	274.76	7.55	1420122.12	3239786.29	N 40 29 0.37 W	104 38 16.68
	7181.00	73.99	92.47	6853.18	377.45	-662.64	304.42	4.79	1420120.92	3239815.95	N 40 29 0.36 W	104 38 16.29
	7194.00	74.80	91.74	6856.68	389.93	-663.10	316.93	8.25	1420120.46	3239828.46	N 40 29 0.35 W	104 38 16.13
7" Casing Point	7246.00	77.14	94.72	6869.28	440.29	-665.95	367.29	7.15	1420117.61	3239878.81	N 40 29 0.32 W	104 38 15.48
	7289.00	79.10	97.14	6878.14	482.36	-670.29	409.14	7.15	1420113.26	3239920.66	N 40 29 0.27 W	104 38 14.94
	7320.00	81.79	100.28	6883.28	512.90	-674.92	439.35	13.20	1420108.63	3239950.87	N 40 29 0.22 W	104 38 14.55
	7351.00	85.70	103.72	6886.66	543.57	-681.33	469.48	16.77	1420102.23	3239981.00	N 40 29 0.16 W	104 38 14.16
	7383.00	88.18	106.03	6888.37	575.18	-689.53	500.36	10.58	1420094.02	3240011.88	N 40 29 0.07 W	104 38 13.76
	7414.00	88.76	105.87	6889.20	605.74	-698.05	530.15	1.96	1420085.51	3240041.67	N 40 28 59.99 W	104 38 13.38
	7506.00	91.24	101.52	6889.20	696.99	-719.82	619.51	5.44	1420063.74	3240131.03	N 40 28 59.76 W	104 38 12.22
	7599.00	92.41	97.21	6886.24	789.80	-734.94	711.20	4.80	1420048.62	3240222.01	N 40 28 59.61 W	104 38 11.04
	7694.00	91.10	91.92	6883.33	884.67	-742.49	805.82	5.74	1420041.07	3240317.33	N 40 28 59.52 W	104 38 9.81
	7788.00	87.70	87.90	6884.26	978.01	-742.34	899.78	5.55	1420041.22	3240411.29	N 40 28 59.51 W	104 38 8.60
	7882.00	88.18	87.42	6887.59	1070.84	-738.51	993.64	0.67	1420045.05	3240505.15	N 40 28 59.54 W	104 38 7.38
	7976.00	88.52	87.43	6889.29	1163.62	-734.29	1087.51	0.37	1420049.27	3240599.01	N 40 28 59.58 W	104 38 6.17
	8072.00	89.35	87.64	6892.08	1258.43	-730.16	1183.40	0.89	1420053.40	3240694.90	N 40 28 59.61 W	104 38 4.93
	8167.00	89.97	88.19	6892.65	1352.37	-726.70	1278.34	0.87	1420056.86	3240789.83	N 40 28 59.63 W	104 38 3.70
	8262.00	90.10	87.70	6892.59	1446.31	-723.30	1373.28	0.54	1420060.26	3240884.77	N 40 28 59.66 W	104 38 2.47
	8357.00	91.00	86.94	6891.68	1540.09	-718.86	1468.17	1.23	1420064.70	3240979.65	N 40 28 59.69 W	104 38 1.24
	8452.00	88.97	87.97	6891.71	1633.90	-714.65	1563.07	2.39	1420068.91	3241074.55	N 40 28 59.72 W	104 38 0.01
	8547.00	89.97	87.91	6892.59	1727.84	-711.23	1658.00	1.05	1420072.32	3241169.48	N 40 28 59.75 W	104 37 58.78
	8642.00	90.79	87.69	6891.97	1821.74	-707.59	1752.93	0.90	1420075.97	3241264.40	N 40 28 59.78 W	104 37 57.55
	8737.00	90.14	89.12	6891.20	1915.79	-704.95	1847.89	1.66	1420078.61	3241359.36	N 40 28 59.79 W	104 37 56.32
	8832.00	90.76	88.32	6890.46	2009.91	-702.83	1942.86	1.07	1420080.73	3241454.33	N 40 28 59.80 W	104 37 55.09
	8928.00	89.17	89.12	6890.51	2105.03	-700.69	2038.83	1.85	1420082.86	3241550.29	N 40 28 59.82 W	104 37 53.85
	9023.00	89.55	88.76	6891.57	2199.20	-698.94	2133.81	0.56	1420084.62	3241645.27	N 40 28 59.82 W	104 37 52.62
	9118.00	90.93	88.61	6891.17	2293.31	-696.75	2228.78	1.46	1420086.81	3241740.24	N 40 28 59.84 W	104 37 51.39
	9213.00	89.17	88.70	6891.08	2387.42	-694.52	2323.75	1.85	1420089.04	3241835.20	N 40 28 59.85 W	104 37 50.16
	9308.00	89.72	88.49	6892.00	2481.51	-692.19	2418.72	0.62	1420091.37	3241930.17	N 40 28 59.86 W	104 37 48.94
	9403.00	90.41	88.59	6891.88	2575.60	-689.77	2513.68	0.73	1420093.79	3242025.13	N 40 28 59.88 W	104 37 47.71
	9498.00	91.45	88.57	6890.34	2669.68	-687.42	2608.64	1.09	1420096.14	3242120.09	N 40 28 59.89 W	104 37 46.48
	9593.00	90.89	88.27	6888.40	2763.71	-684.80	2703.58	0.66	1420098.76	3242215.03	N 40 28 59.91 W	104 37 45.25
	9688.00	89.04	88.22	6888.46	2857.33	-681.89	2798.54	1.96	1420101.66	3242309.97	N 40 28 59.93 W	104 37 44.02
	9783.00	89.38	87.93	6889.77	2951.69	-678.70	2893.47	0.47	1420104.85	3242404.91	N 40 28 59.95 W	104 37 42.79
	9878.00	90.34	87.57	6890.00	3045.59	-674.98	2988.40	1.08	1420108.58	3242499.83	N 40 28 59.98 W	104 37 41.56
	9973.00	89.24	88.94	6890.34	3139.60	-672.08	3083.35	1.85	1420111.48	3242594.78	N 40 29 0.00 W	104 37 40.33
	10068.00	89.97	89.25	6891.00	3233.80	-670.57	3178.34	0.83	1420112.98	3242689.76	N 40 29 0.00 W	104 37 39.10
	10164.00	91.20	89.14	6890.02	3329.02	-669.22	3274.32	1.29	1420114.33	3242785.74	N 40 29 0.01 W	104 37 37.86
	10259.00	92.20	89.07	6887.20	3423.19	-667.74	3369.26	1.06	1420115.82	3242880.68	N 40 29 0.01 W	104 37 36.63
	10354.00	92.48	88.80	6883.32	3517.28	-665.97	3464.17	0.40	1420117.58	3242975.58	N 40 29 0.02 W	104 37 35.40
	10449.00	91.10	90.19	6880.35	3611.52	-665.14	3559.11	2.06	1420118.42	3243070.52	N 40 29 0.02 W	104 37 34.17
	10544.00	92.00	90.06	6877.78	3705.90	-665.35	3654.08	0.95	1420118.21	3243165.48	N 40 29 0.01 W	104 37 32.95
	10640.00	89.21	87.99	6876.77	3801.06	-663.71	3750.04	3.62	1420119.84	3243261.45	N 40 29 0.02 W	104 37 31.70
	10735.00	90.21	87.46	6877.26	3894.95	-659.94	3844.97	1.19	1420123.61	3243356.36	N 40 29 0.04 W	104 37 30.47
	10830.00	90.72	86.40	6876.49	3988.62	-654.85	3939.83	1.24	1420128.70	3243451.22	N 40 29 0.08 W	104 37 29.25
	10925.00	90.00	88.49	6875.89	4082.43	-650.62	4034.72	2.33	1420132.94	3243546.11	N 40 29 0.12 W	104 37 28.02
	11020.00	88.01	90.54	6877.54	4176.70	-649.81	4129.70	3.01	1420133.75	3243641.08	N 40 29 0.12 W	104 37 26.79
	11116.00	88.66	90.58	6880.34	4272.15	-650.75	4225.65	0.68	1420132.81	3243737.03	N 40 29 0.10 W	104 37 25.55
	11211.00	89.59	90.67	6881.79	4366.64	-651.79	4320.63	0.98	1420131.77	3243832.01	N 40 29 0.08 W	104 37 24.32
	11306.00	91.10	89.80	6881.22	4461.06	-652.18	4415.63	1.84	1420131.38	3243927.00	N 40 29 0.06 W	104 37 23.09
	11401.00	91.38	90.59	6879.17	4555.47	-652.50	4510.60	0.89	1420131.05	3244021.98	N 40 29 0.05 W	104 37 21.86
	11496.00	89.97	89.81	6878.06	4649.88	-652.84	4605.59	1.70	1420130.72	3244116.96	N 40 29 0.04 W	104 37 20.63
	11592.00	90.72	89.85	6877.48	4745.23	-652.55	4701.59	0.79	1420131.01	3244212.96	N 40 29 0.03 W	104 37 19.39
	11687.00	87.52	89.24	6878.94	4839.51	-651.79	4796.56	3.43	1420131.77	3244307.93	N 40 29 0.03 W	104 37 18.16
	11782.00	88.04	89.11	6882.61	4933.66	-650.42	4891.48	0.56	1420133.14	3244402.84	N 40 29 0.04 W	104 37 16.93
	11877.00	88.97	89.22	6885.09	5027.85	-649.04	4986.44	0.98	1420134.51	3244497.79	N 40 29 0.04 W	104 37 15.70
	11972.00	90.45	88.80	6885.58	5122.04	-647.41	5081.42	1.62	1420136.15	3244592.77	N 40 29 0.05 W	104 37 14.47
	12067.00	91.72	88.77	6883.78	5216.16	-645.39	5176.38	1.34	1420138.16	3244687.73	N 40 29 0.06 W	104 37 13.24
	12163.00	88.01	87.77	6884.01	5311.16	-642.50	5272.32	4.01	1420141.06	3244783.66	N 40 29 0.08 W	104 37 12.00
	12258.00	88.39	87.81	6887.00	5405.01	-638.83	5367.20	0.40	1420144.73	3244878.54	N 40 29 0.10 W	104 37 10.77
	12353.00	87.90	88.75	6890.08	5498.99	-635.98	5462.10	1.12	1420147.58	3244973.44	N 40 29 0.12 W	104 37 9.54
	12448.00	87.35	92.62	6894.01	5593.40	-637.11	5557.00	4.11	1420146.45	3245068.33	N 40 29 0.10 W	104 37 8.32
	12544.00	90.14	95.63	6896.12	5689.27	-644.01	5652.71	4.27	1420139.55	3245164.04	N 40 29 0.02 W	104 37 7.08
Last SLB_MWD Survey	12630.00	92.54	96.75	6894.10	5775.24	-653.28	5738.17	3.09	1420130.28	3245249.50	N 40 28 59.92 W	104 37 5.97
Projection to Bit	12691.00	92.54	96.75	6891.40	5836.18	-660.44	5798.69	0.01	1420123.11	3245310.0		