



Noble Energy SHL-6G-HS Gyro+MWD 0' MD to Update Survey Report



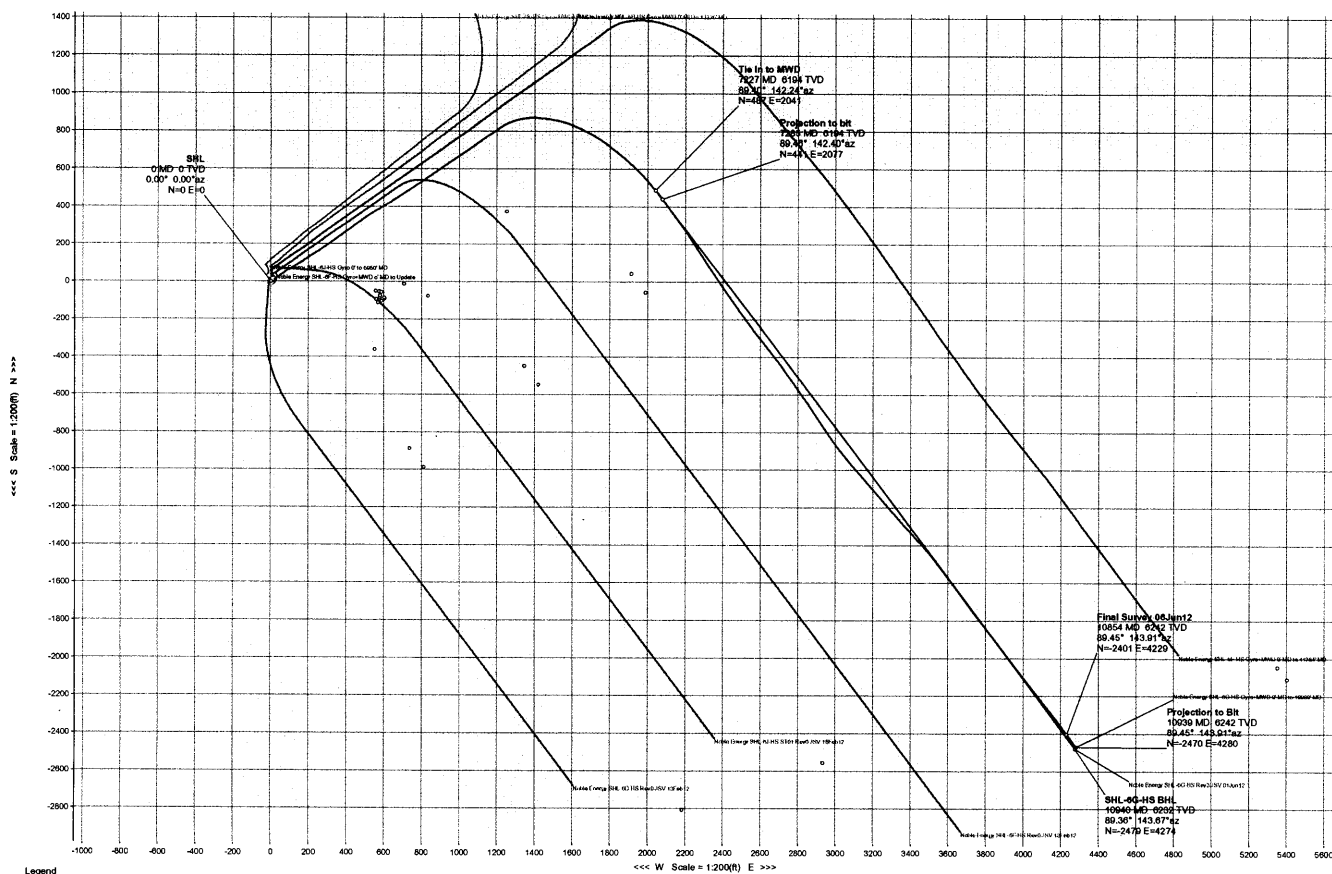
(Non-Def Survey)

Report Date: June 08, 2012 - 11:52 AM
Client: Noble Energy
Field: WV Marshall County (NAD 27)
Structure / Slot: CNX/Noble Energy SHL-6G Pad / SHL-6G-HS
Well: SHL-6G-HS
Original Borehole: Unknown / Unknown
UWI / API#:

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 120.115 ° (Grid North)
Vertical Section Origin: 0.000 0, 0.000 ft
KB
TVD Reference Datum: 853.750 ft above MSL
Seabed / Ground Elevation: 831.020 ft above MSL
Magnetic Declination: -8.738 °
Total Field Strength: 52962.189 nT
Magnetic Dip Angle: 87.533 °
Declination Date: February 15, 2012
Magnetic Declination Model: BGGM 2011
North Reference: Grid North
Grid Convergence Used: -0.066 °
Total Corr Mag North-Grid North: -8.052 °
Local Geoid Referenced To: Weak Head

Table with columns: Comments, MD (ft), Incl (°), Azim Grid (°), TVD (ft), TVDSS (ft), VSEC (ft), NS (ft), EW (ft), DLS (ft/100ft), BR (ft/100ft), TR (ft/100ft), Northing (NUS), Easting (EUS), Latitude (NUS/°), Longitude (EUS/°), Directional Difficulty Index. The table contains multiple rows of data for survey points, categorized by depth and type (SHL, Final Gyro).

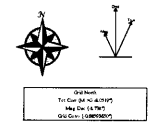
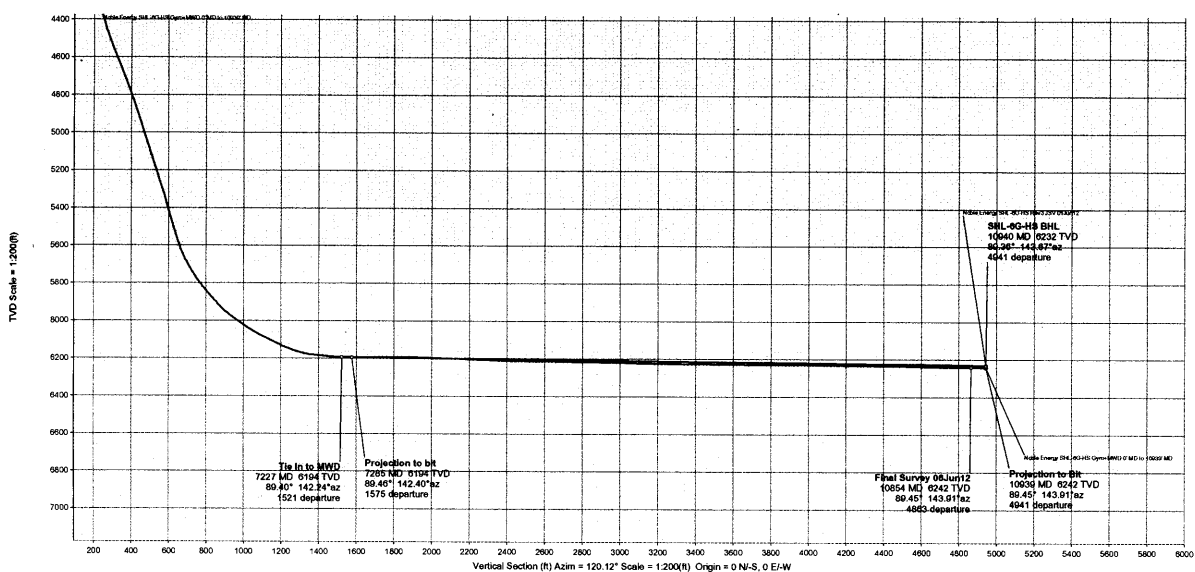
WELL SHL-6G-HS		FIELD WV Marshall County (NAD 27)		STRUCTURE Nabors M59	
Major Parameters Model: BOGIM2011 Dip: 67.53° Mag Dec: -8.78°	Date: February 15, 2012 FS: 528.02.207	Surface Location Lat: N 39 57 21.967 Lon: W 80 34 31.979	NAD27 West Virginia State Plane, Northern Zone, US Feet Northing: 5321572.6125 Easting: 1069490.07815	Well Name Well: SHL-6G-HS Plan: MWD Survey	TVD Ref: X8913.758 above MSL Survey Date: February 15, 2012



- Legend
- SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0
 - SHL-6G-HS OMD 0 TVD 0.00° 0.00'az N=40 E=0

North Location	
Northing	Easting
5321572.6125	1069490.07815

Curve Data	
Station	Depth
0	0.00
100	0.00
200	0.00
300	0.00
400	0.00
500	0.00
600	0.00
700	0.00
800	0.00
900	0.00
1000	0.00
1100	0.00
1200	0.00
1300	0.00
1400	0.00
1500	0.00
1600	0.00
1700	0.00
1800	0.00
1900	0.00
2000	0.00
2100	0.00
2200	0.00
2300	0.00
2400	0.00
2500	0.00
2600	0.00
2700	0.00
2800	0.00
2900	0.00
3000	0.00
3100	0.00
3200	0.00
3300	0.00
3400	0.00
3500	0.00
3600	0.00
3700	0.00
3800	0.00
3900	0.00
4000	0.00
4100	0.00
4200	0.00
4300	0.00
4400	0.00
4500	0.00
4600	0.00
4700	0.00
4800	0.00
4900	0.00
5000	0.00
5100	0.00
5200	0.00
5300	0.00
5400	0.00
5500	0.00
5600	0.00



Drawn By: J Verne
 Date Created: June 06, 2012 10:31:18 AM
 Checked By:
 Checked Date:
 Approved By: