

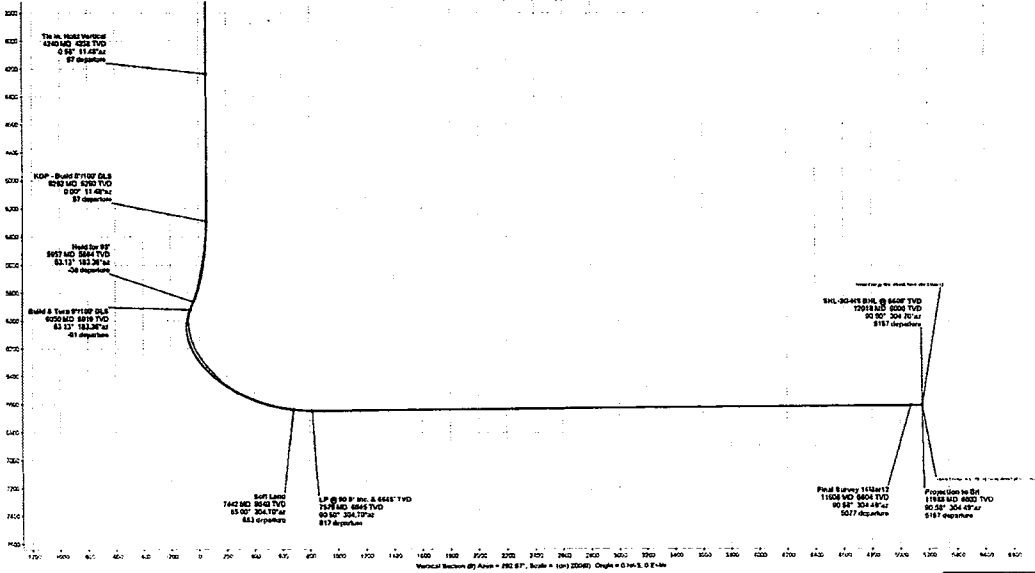
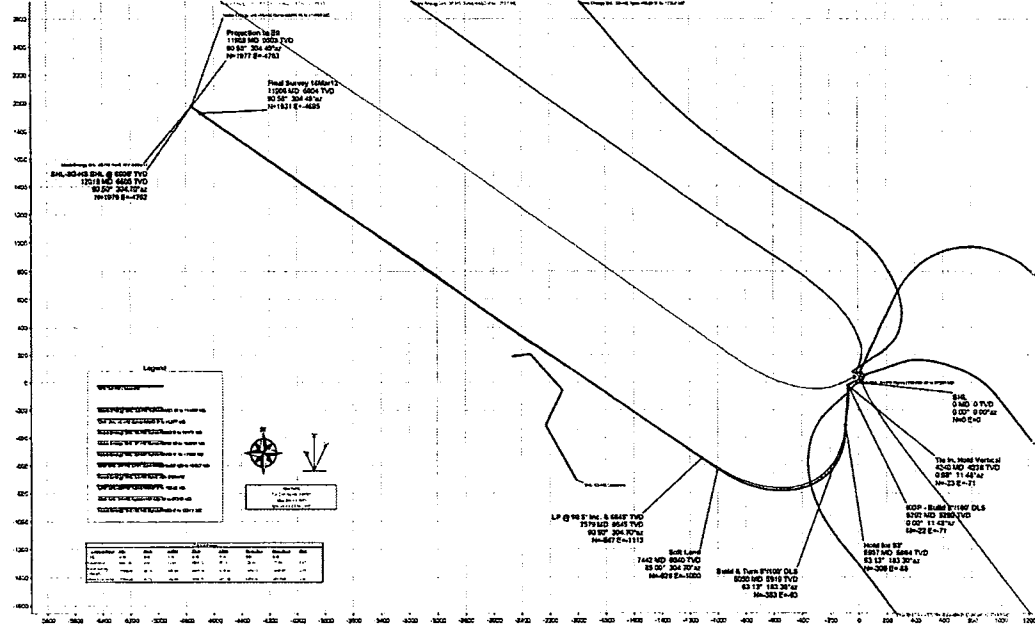
51-01367



Noble Energy



WELL: SHL-3G-H5		NEED ID: WW Marshal County (NAD 27)		WELL TYPE: Nebores M59	
Well Name	Well ID	County	State	Well Type	Operator
SHL-3G-H5	SHL-3G-H5	WW Marshal	CO	M59	Noble Energy
Well Status	Well Class	Well Depth	Well Depth	Well Depth	Well Depth
Active	Oil	10200'	10200'	10200'	10200'



04/04/2014

Noble Energy SHL-3G-HS Gyros+MWD Off to 11988ft MD Survey Report

(Def Survey)

Report Date: March 15, 2012 - 09:28 AM
Client: Noble Energy
Field: WV Marshall County (NAD 27)
Structure / Slot: CNX/Noble Energy SHL-3 Pad / Noble Energy SHL-3G-HS
Well: SHL-3G-HS
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Noble Energy SHL-3G-HS Gyros+MWD Off to 11988ft MD
Survey Date: November 07, 2011
Tort / AHD / DDI / ERD Ratio: 211.538 / 14113.219 ft / 8.373 / 0.029
Coordinate Reference System: NAD27 West Virginia State Plane, Northern Zone, US Feet
Location Lat / Long: N 39° 58' 15.75510", W 80° 33' 25.21610"
Location Grid N/E Y/X: N 537537.633 NUS, E 1703752.646 NUS
CRS Grid Convergence Angle: -0.67412889 °
Grid Scale Factor: 0.99995884

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 282.571 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB
TVD Reference Elevation: 1311.400 ft above MSL
Seabed / Ground Elevation: 1289.180 ft above MSL
Magnetic Declination: -8.748 °
Total Field Strength: 52697.678 nT
Magnetic Dip Angle: 67.569 °
Declination Date: November 07, 2011
Magnetic Declination Model: BGM2011
North Reference: Grid North
Grid Convergence Used: -0.874 °
Total Corr Mag North->Grid North: -0.874 °
Local Coord Referenced To: Well Head

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Table with columns: Comments, MD (ft), Incl (°), Azim Grid (°), TVD (ft), TVDSS (ft), VSEC (ft), HS (ft), EW (ft), DLS (ft/1000), Northing (ftUS), Easting (ftUS), Latitude (N/S °'"), Longitude (E/W °'"). Rows include SHL and Final Gyro data.

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Table with columns: Comments, MWD (ft), TDV (ft), TVDSS, VSEC (ft), NS, EW, DLS, Northing (ft), Easting (ft), Elevation (ft), and Del Survey. The table contains detailed survey data including coordinates and survey parameters for various boreholes.

Survey Error Model: ISCV9A Rev 0 ... 3-D 95.00% Confidence 2.755 sigma
Survey Type: Del Survey
Description: MWD From (ft), EOU Flag (ft), Survey Tool Type (ft)

Table with columns: Survey Error Model, Survey Type, Description, MWD From (ft), EOU Flag (ft), Survey Tool Type (ft), Act Stns, and Original Borohole / Noble Energy SHL-3G-HS Gyres+MWD On to. This section lists specific borehole identifiers and their associated survey data.

Final Survey Projection to BH 14MWT2

Table with columns: Final Survey, Projection to BH, 14MWT2, W, and various numerical values. This table appears to be a projection or conversion table for the survey data.

Original Borohole / Noble Energy SHL-3G-HS Gyres+MWD On to 119881 MD