

Chesapeake Operating Inc.

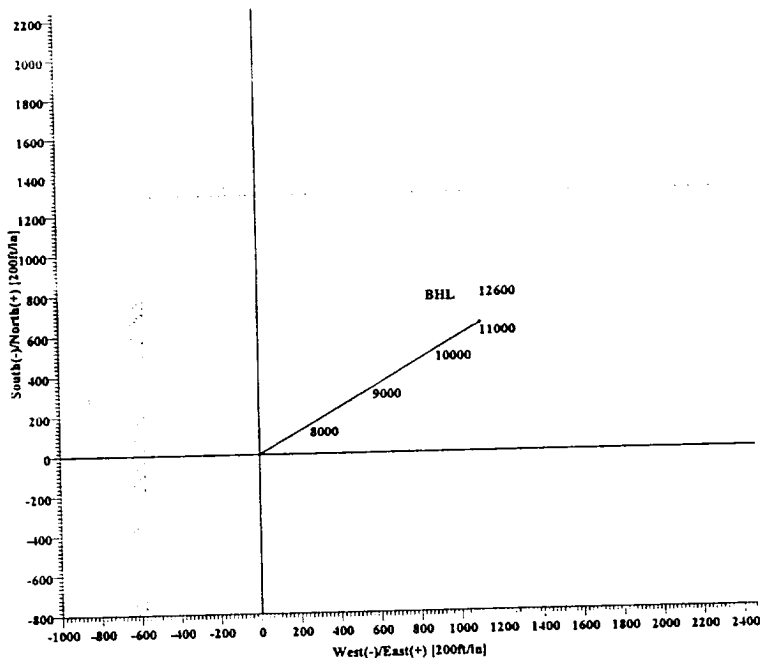
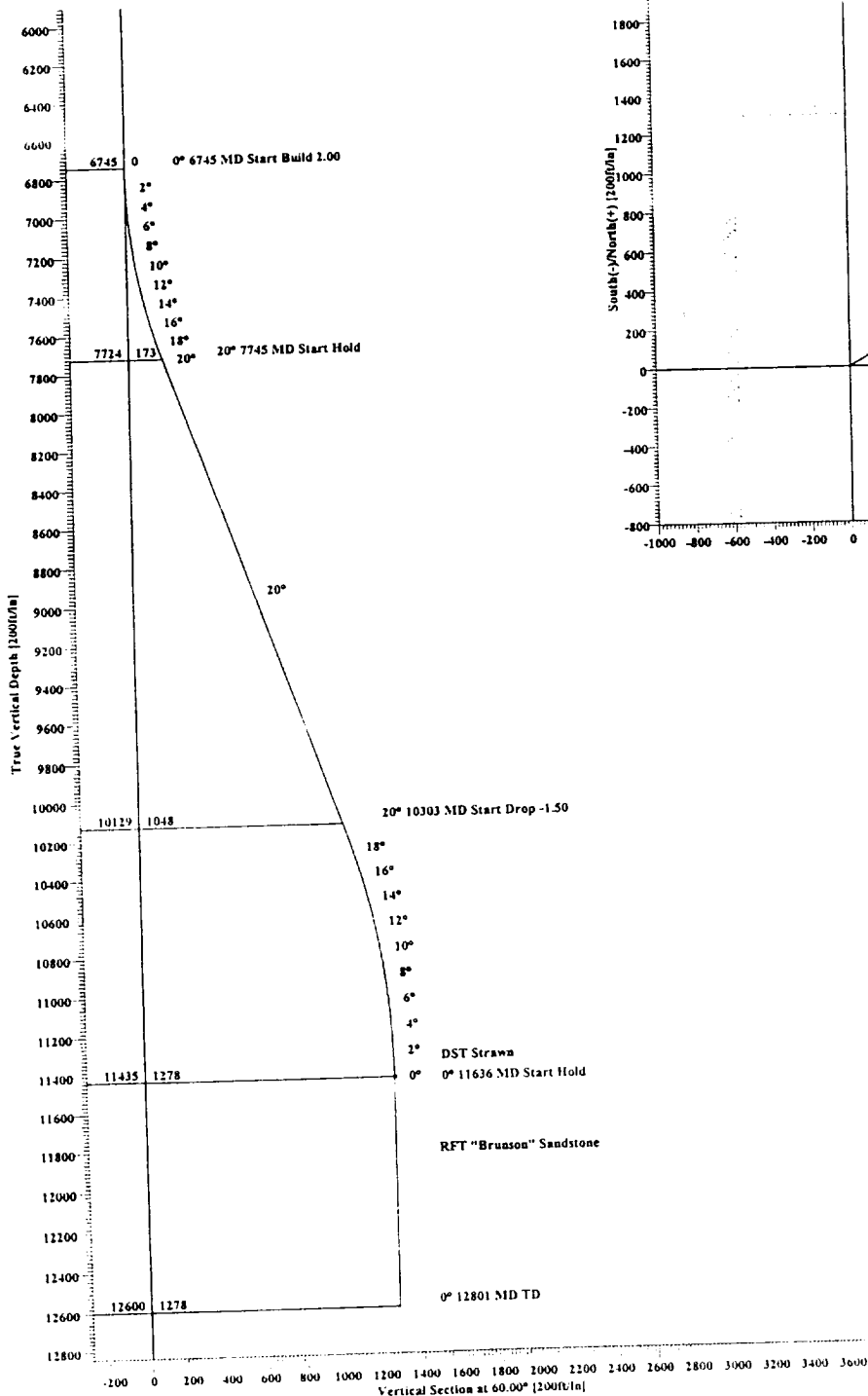
Shelby 1-14



All Angles Relative
To Grid North
Grid North: 0.00
True North: -0.55
Magnetic North: 8.25



Ryan Energy Technologies USA Inc.



FORMATION TOP DETAILS

No. TVDPath MDPath Formation
No formation top details fall on the wellpath.

FIELD DETAILS

Lea County
New Mexico
USA
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: Clarke - 1866
Zone: New Mexico, Eastern Zone
Magnetic Model: igr0000
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Shelby 1-14
Lea County, New Mexico
W/2 Section 14-16S-36E
Water Depth: 0.00
Positional Uncertainty: 0.00
Magnetic Declination: 8.79
Convergence: 0.55

WELLPATH DETAILS

OII
Original hole
Vertical Section Origin: Slot - (0.00,0.00)
Vertical Section Angle: 60.00°
Rig:
Depth Reference: SITE KB 3895.00ft
Plan: Plan #1 (Shelby 1-14/OH)

Created By: RyanUSA

Date: 9.6.2000