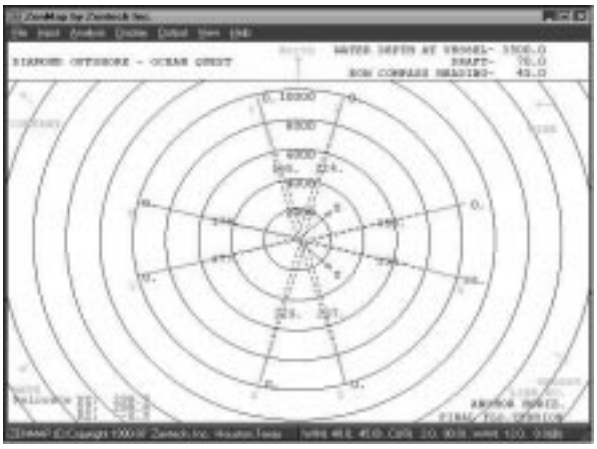
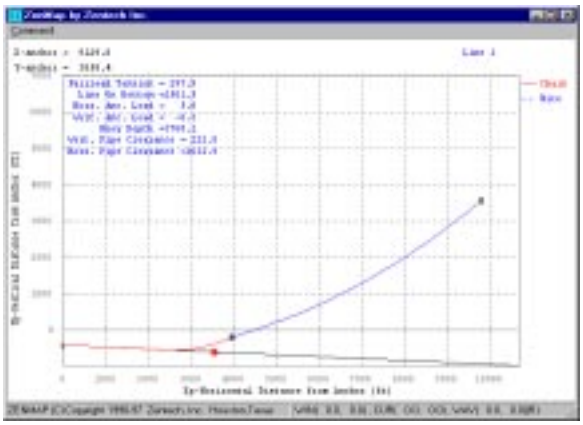
ZenMAP by Zentech

Vessel Positioning and Mooring Advisory Software



ZenMAP is a Powerful State-of-the-art, Rig-Specific Mooring Advisory Program, for use on Offshore Drilling Vessels, Floating Production Systems and other Moored Vessels.

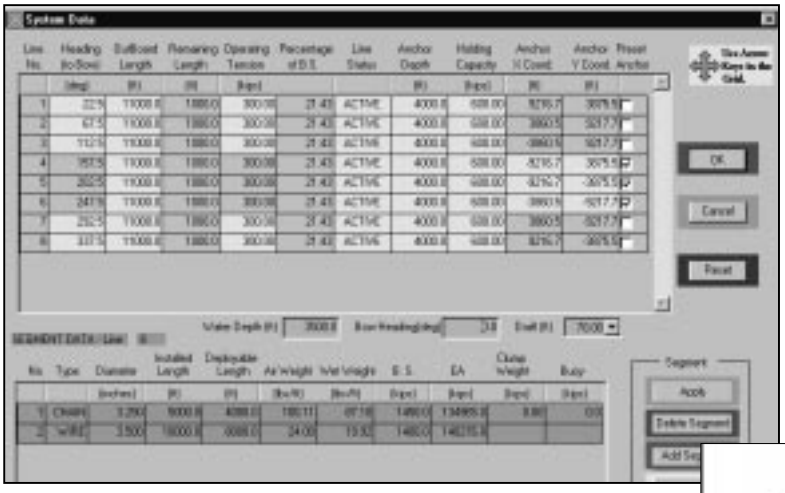


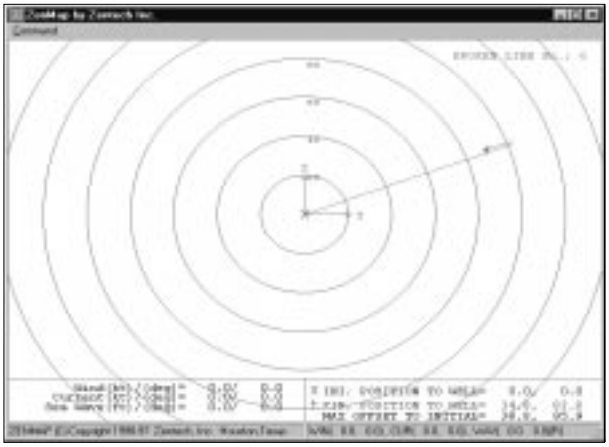
Features

- **Static and Quasi-Static Analysis**
- **Option for Pre-Set Mooring Lines**
- **Weather Heading Relative to Bow or Compass**
- **Influence of Thrusters**
- **Adding and Deleting Line Segments**
- **Usage of Buoys and Clump Weights**
- **Effect of Bottom Slope**
- **Automatic and Manual Relocation**

Graphic Displays

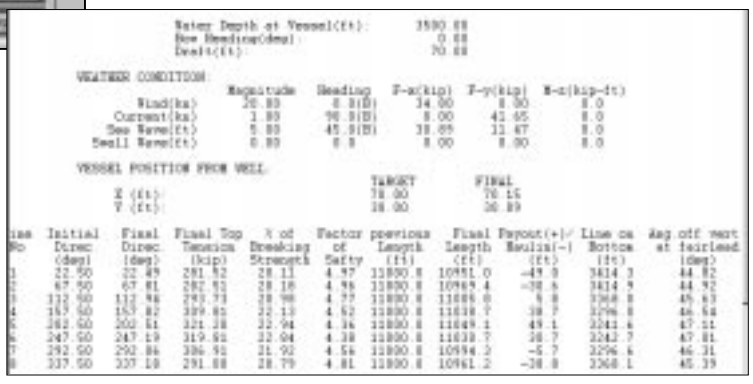
- **Line Spread with Line Tensions and Anchor Forces**
- **Initial and Relocated Positions of the Vessel**
- **Catenary Profile of Individual Lines**
- **Display of Pipeline in Line Spread and Line Profile**
- **Vessel Motion History after Line Breakage**





Calculations Performed

- **Computes Environmental Forces from Weather Data**
- **Calculated Vessel offsets and Line Tensions**
- **Determines Anchor Position and Anchor Loads**
- **Estimates Payouts and Haul-in Required for Auto Relocation**
- **Estimates Distance Relocated for Given Payout**
- **Single Line Analysis**
- **Line Break Transient Analysis**
- **Calculates Pipeline and Buoy Clearances**



Invest in the Best

14800 St. Mary's Lane, Suite 270, Houston, TX 77079 Tel: (281) 558-0290, E-mail : marketing@zentech-usa.com, Web-site : www.zentech-usa.com