

# G-Force™ Vertical Guidance Tool

The G-Force™ vertical guidance drilling system is a lower cost alternative to full-service directional drilling operations and rotary steerables.

Departure Energy Services' G-Force™ Vertical Guidance System consists of a uniquely stabilized High Performance PDM with Tilt Module, Departure's MWD Lite™ System and software, which, after initial system setup by a qualified Departure Energy Services technician, enables steering operation of the Directional BHA by the drilling foreman and rig crew.

Departure Energy personnel can monitor well bore position through remote EDR (Electronic Data Recorder) access. Support to rig site personnel is provided by Departure's on-call Senior Directional Drilling supervisors.

G-Force™ engineered stabilized performance directional drilling assemblies are configured according to hole size, geographic location, geology, bit selection, well objectives, and well design.

**deviation control | collision avoidance | vertical drills to KOP  
stay within hard boundaries | minimize well bore tortuosity  
remote or site supervised**

## Benefits

- Eliminates fanning often required to stay vertical, thus increasing ROP.
- Decrease in Torque and Drag.
- Reduction in daily DIRECTIONAL/MWD supervision and associated costs.
- System is compatible with any standard PDC or TRI-CONE drill bit.
- Significant cost savings compared to high end rotary vertical systems.
- Gamma Ray logging available independently, or as a system add-on.
- MWD (Inc, Az, TF) System can be configured to be fully retrievable.
- Additional Motor and String Stabilization can be provided.
- Torque and Drag and BHA Modeling Engineering services available.
- Final Borehole Survey computation provided.



## Departure Energy

We'll get you there.

PROVIDING DIRECTIONAL SERVICES TO OILFIELD PROFESSIONALS.

[www.departureenergy.ca](http://www.departureenergy.ca) | 1-877-233-3940