

Adatasheet **GVERSE[®] WebSteering 2017.3.1**

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WebSteering 2017.3.1 Stay ahead of the drill bit			S

GVERSE[®] WebSteering

Stay ahead of the drill bit

GVERSE® WebSteering is specifically designed to help geoscientists' geosteer horizontal wells in thin pay zones and to direct the drill bit in real time.

It is the only web browser based geosteering application in the industry that delivers optimal well placement with simple data loading and full integration with GeoGraphix. GVERSE® WebSteering installs in the web browser like a plugin and then it's simple to load curve and survey data from the rig, add type logs and subsurface grids from GeoGraphix®, and start steering within minutes. At any point, data can be sent back to GeoGraphix for further analysis using GeoGraphix's feature-rich suite of tools. GVERSE® WebSteering runs even when disconnected from your corporate network so whether you are in the office or working remotely, you can define your target surface and send updated drilling targets to the rig.

GVERSE® WebSteering is a complementary tool for GeoGraphix users who can sync their interpretations on-the-fly with their GeoGraphix projects and update their target surface in smartStrat®. This application lets you stay ahead of the drill bit with real-time information accessible from anywhere.

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New Features in WebSteering 2017.3.1

- Reverse logarithmic and linear scale for secondary curves
- Option to add additional survey point to project LWD beyond the bit
- New licensing options for network licensing and daily use through GVERSE Go

Key Benefits

Flexible: Geosteer wells in the office, at home, or in the field.

Simple: Load LWD and survey data by dragging and dropping or by connecting to a WITSML server. Data are saved into LMKR GeoGraphix projects with a single button click.

Integrated: Select type logs and gridded surfaces from GeoGraphix and send results back to GeoGraphix to model more accurate target surfaces.

Key Features

On the Go Horizontal Well Correlation and Geosteering

- Web-based software is designed to work when it is connected to a GeoGraphix server as well as when it is not.
- Simple and easy to use approach for horizontal well correlation and geosteering.
- View the geology of the target surface and the geometry of wellbore path.

Real time data Integration

- Utilize real time data for horizontal well correlation and geosteering from WITSML.
- Send drilling parameters to the rig on the fly.
- Share results by sending a saved interpretation to other geologists for viewing in their web browser.

Fast Data Loading and Striking Presentation

- Simple data loading by dragging and dropping LWD data from LAS files or MS Excel spreadsheets.
- Convert a LAS file into a type log.
- Graphical display with full zooming capabilities and on-the-fly update of graphs including LWD, wellbore directional survey data and type log.
- Customizable display.

Technical Geosteering

- Technical Geosteering based on Relative Stratigraphic Depth
- Automatic calculation of True Vertical Depth (TVD), Northing, Easting and Vertical Sections from MD, Inclination and Azimuth.
- Directional survey calculations and related minimum-curvature interpolations for geosteering and graphing.

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Integration with LMKR GeoGraphix

- Integrates with GeoGraphix.
- Real time data from WITSML data providers loaded into GeoGraphix
- Geosteered segments exported back into GeoGraphix.

Requirements

The following section lists system requirements for the WebSteering software.

Software

The software that must be installed on the machine running the WebSteering software is as follows:

- GeoGraphix Discovery 2017.3
- Microsoft .NET Framework 4.5 or greater
- LMKR License Management Tool 2016.1 for WebSteering license

The LMKR License Management Tool (LMT) must be installed to configure the WebSteering license.

Adobe Reader for selected help files (optional)

Note: It is recommended that you run WebSteering on Internet Explorer 11.x.x or later and Google Chrome 70.x.x.x or later.

Operating System

To run the WebSteering software, you need the Windows[®] 7 or Windows[®] 10 operating system installed on your system.

Note: It is recommended that the latest Microsoft® service packs and security patches be installed.

Hardware

The hardware requirements for the WebSteering software are as follows:

- Quad 2.4 GHx 64-bit Intel class[®] or better
- 8GB RAM or greater
- 1024x768 graphics resolution

Licenses

The following licenses are required to run the WebSteering software:

- GVERSE WebSteering 2017.1 license
- GeoGraphix Discovery 2017.1 license

Note: Refer to the LMKR Customer Support Portal (<u>http://support.lmkr.com/</u>) for up-to-date information on the requirements.

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