



FieldPlanner

Optimize Your Production

RELEASE NOTES

GVERSE FieldPlanner* 2019.1

*Powered by
STI Technology



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Introduction

LMKR is pleased to announce the release of the GVERSE® FieldPlanner* 2019.1 application.

This document provides an introduction to GVERSE Field Planner features and benefits. It also lists the system requirements necessary to install and run the application.

What is GVERSE Field Planner?



GVERSE Field planner is a one of a kind, fully automated field planning solution for Oil and Gas exploration. It allows geoscientists to create plans, add (or create) well pads, determine the number of wells on each well pad along with their location and orientation. The wells are based on user-defined constraints (such as spacing between wells, height of toe above heel, kickoff depth, etc.) which can be edited to suit their preferences. The GVERSE Field Planner application is available within the existing Field Planner software. GVERSE Field Planner is a part of the GVERSE application suite by LMKR (<http://www.lmkr.com/gverse>).

LMKR GVERSE consists of geoscience and engineering solutions focused on workflow optimization and enhancing productivity of teams working on diverse geological and geophysical projects.

Main Features

- Avoid no-go zones – Existing wells, rivers, buildings, and environmentally sensitive areas
- Surface Hazards – Terrain slope (DEM) and custom shapefiles
- Subsurface Hazards – Avoid areas with existing wells
- Lease Areas – Add tracts

Benefits

- Plan hundreds of wells intelligently within minutes
- Flexible enough to take into account surface, lease, and subsurface hazards
- Quickly create, save, and analyze multiple field plan scenarios
- Generate Geoprognois reports
- Analyze field plan scenarios to determine optimal hydrocarbon production
- Assess field economics based on planned wells

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System Requirements

The following sections list the system requirements.

Software

- GeoGraphix Discovery 2019.1
- LMKR License Management Tool 2016.1 for GVERSE Field Planner license
The LMKR License Management Tool (LMT) must be installed to configure the GVERSE Field Planner license.
- MATLAB Runtime R2018a (9.4)
- Adobe Reader for selected help files (optional)

Operating System

- Windows® 7 Professional x64
- Windows® 7 Enterprise x64
- Windows® 7 Ultimate x64
- Windows® 10 Professional x64
- Windows® 10 Enterprise x64

Note: It is recommended to use the latest Microsoft® service packs and security patches.

Hardware

- System: 8 GB (16+ GB recommended)
- Graphics Card: 2 GB (4 GB recommended)

Licenses

The following licenses are required to run GVERSE Field Planner:

- GeoGraphix Discovery license version 2019.1
- GVERSE Field Planner license version 2019.1

Note: Refer to the LMKR Customer Support > Knowledge Center > [System Requirements](#) page for up-to-date information on the requirements.

Installing GVERSE Field Planner

GVERSE Field Planner is installed seamlessly as part of the GeoGraphix installation. For details, refer to the GeoGraphix Installation Guide on the LMKR Support Portal > Knowledge Center > [Release Notes and Installation Guides](#) page.

What's New in GVERSE Field Planner 2019.1



LMKR is pleased to announce the release of GVERSE NOW, a web-based launch platform for all GeoGraphix and GVERSE applications. GVERSE NOW provides instant access to GeoGraphix and GVERSE support, documentation, white papers, training schedules, webinars, software downloads, and release and user group announcements. The main purpose of GVERSE NOW is to put the entire range of LMKR resources at your fingertips - so you get the support and information you need - when you need it. We've also integrated iEnergy® Core into the launcher. iEnergy® Core gives you access to in-depth discussions of industry standards and trends.

To launch GVERSE NOW:

- From the **Start** menu, select **All Programs > GVERSE NOW > GVERSE NOW**.

Or

- Double-click **GVERSE NOW**  on your desktop.

In the GVERSE NOW window, the GeoGraphix applications display under the GeoGraphix menu and GVERSE applications display under the GVERSE menu.

Quick Links
Instant access to GeoGraphix and GVERSE support, documentation, white papers, training schedules, webinars, software downloads, and release and user group announcements.

GeoGraphix & GVERSE Menus
Single interface to launch GeoGraphix and GVERSE applications.

Useful Links
Access License Request, Purchase and Register.

iEnergy® Core
Provides access to in-depth discussions on industry standards and trends.

The screenshot shows the GVERSE NOW web application interface. At the top, there is a navigation bar with the iEnergy logo and menu items: LM KR, GVERSE NOW, SUPPORT, TRAININGS, WEBINARS, and ABOUT. Below this is a banner for LMKR Events. The main content area is divided into two columns: GeoGraphix and GVERSE. The GeoGraphix column contains icons for Project Explorer, WellBase, GeoAtlas, XSection, Prism, ZoneManager, SmartSECTION, Query Builder, Discovery 3D, Depth Registration, Derkon, LandNet, LeaseMap, Coord, and pStar. The GVERSE column contains icons for Geophysics, Geomodelling, Field Planner, Predict 3D, Attributes, and WebOwning. At the bottom of the interface, there are links for LICENSE REQUEST, PURCHASE, and REGISTER. On the right side, there is a 'What's New?' section with a list of recent updates and announcements, including eBooks, magazine issues, and learning courses.

Launching GVERSE Field Planner

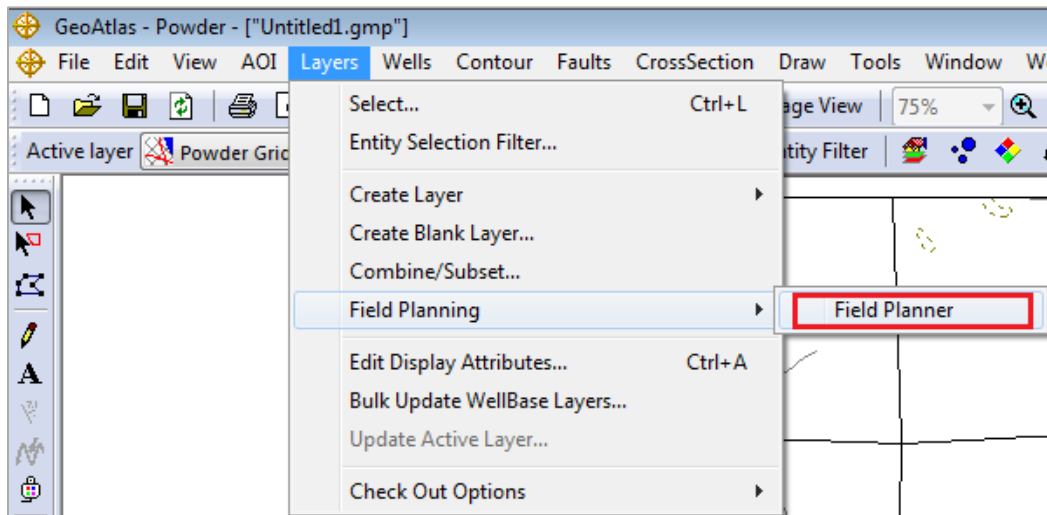
To launch GVERSE Field Planner:

1. Save a **WellBase** layer in **GeoAtlas**, and while **GeoAtlas** still is open, perform one of the following actions:

- Open **GVERSE NOW**, and then click **Field Planner**  available in the **GVERSE** menu.

Or

- Select **Layers > Field Planning > Field Planner** from the **GeoAtlas** menu bar.



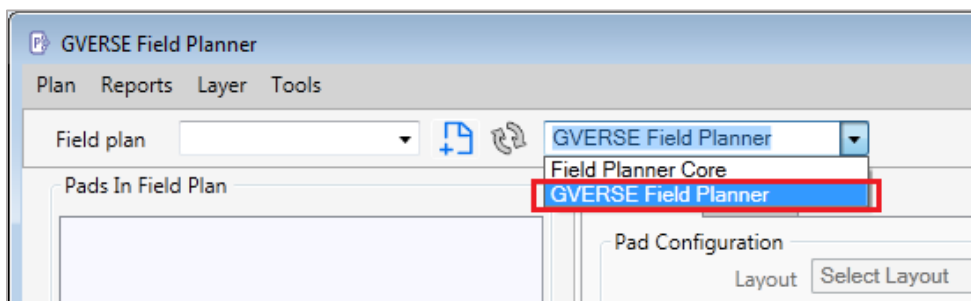
Or

- Click  on the **Pro** toolbar in **GeoAtlas**.



The Field Planner application window displays.


2. From the **Field Planning Type** drop-down list, select **GVERSE Field Planner**.



The GVERSE Field Planner features display in the window. You can use **GVERSE Field Planner** to optimize and configure automatic field plans, and manually plan fields using the **Field Planner Core** features.

The screenshot shows the GVERSE Field Planner interface with several callout boxes:


- Pad Configuration:** This option configures pad properties for a field plan by specifying the layout options for users.
- Economics:** Pad Placement Optimizer finds the optimal locations for pads and laterals by minimizing the Net Present Value of the well.
- Surface Constraints:** Surface hazard layer treats the surface locations of previously drilled wells as a hazard and creates a buffer around that surface location. The surface hazard layer is created in GeoAtlas and is active on all the data displayed in the map including the area constricted by the lease layer.
- Lateral Configuration:** This option configures lateral properties for a field plan by specifying the azimuth, kick-off depth, well spacing, lateral length and step out.
- Subsurface Constraints:** The subsurface hazard layer maps constraints below surface or in depth so that field planning calculations do not intrude the drill in the area at a depth that is already drilled by previous wells. The is layer is created in GeoAtlas.

Note: To access the online help, either press <F1> or click the **Help** button  located at the top right corner.

Third Party Applications

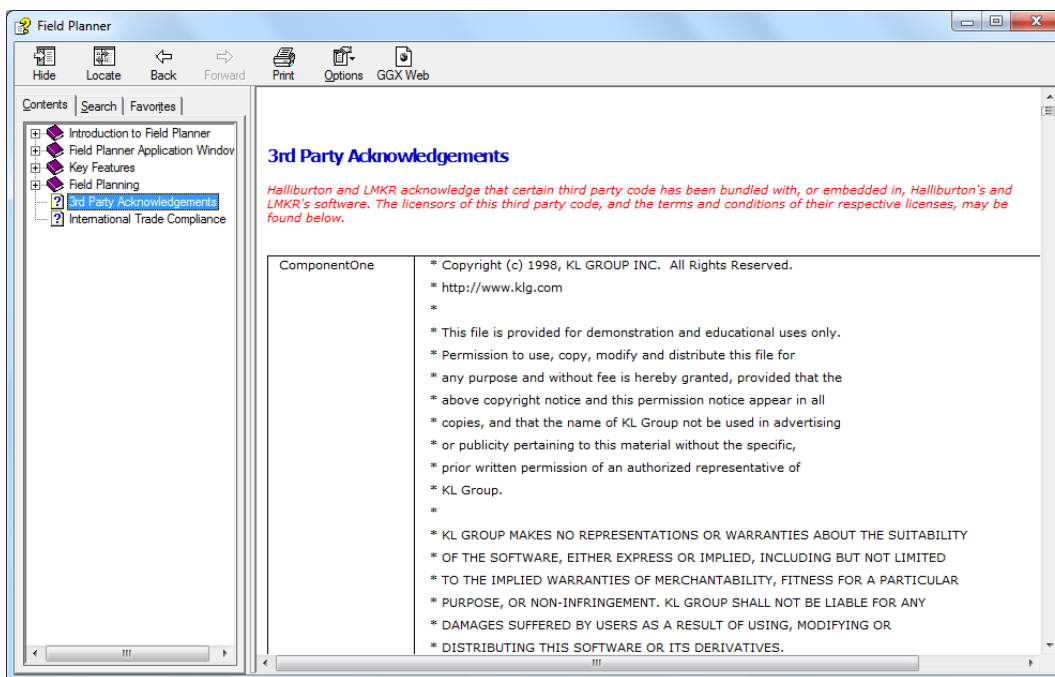
LMKR acknowledges that certain third party code has been bundled with, or embedded in, its software. The licensors of this third party code, and the terms and conditions of their respective licenses, may be found in the help file.

To access the 3rd party license agreements:

1. Either press **<F1>** or click the **Help** button  located at the top right corner.

The Help window displays.

2. In the **Contents** pane, locate the **3rd Party Acknowledgements** help topic as shown in the image below.



International Trade Compliance

This application is manufactured or designed using U.S. origin technology and is therefore subject to the export control laws of the United States. Any use or further disposition of such items is subject to U.S. law. Exports from the United States and any re-export thereafter may require a formal export license authorization from the government. If there are doubts about the requirements of the applicable law, it is recommended that the buyer obtain qualified legal advice. These items cannot be used in the design, production, use, or storage of chemical, biological, or nuclear weapons, or missiles of any kind.

The ECCNs provided here (if available) represent LMKR's opinion of the correct classification for the product today (based on the original software and/or original hardware). Classifications are subject to change. If you have any questions or need assistance please contact us at support@lmkr.com.

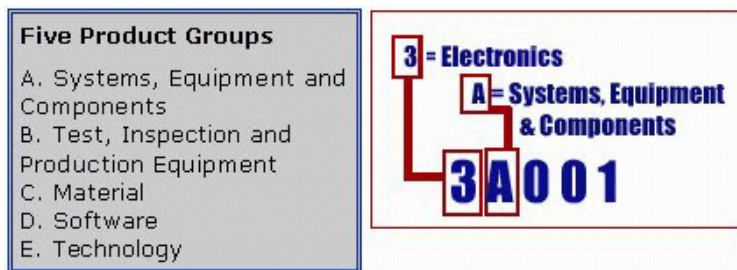
Under the U.S. Export Administration Regulations (EAR), the U.S. Government assigns your organization or client, as exporter/importer of record, responsibility for determining the correct authorization for the item at the time of export/import. Restrictions may apply to shipments based on the products, the customer, or the country of destination, and an export license may be required by the Department of Commerce prior to shipment. The U.S. Bureau of Industry and Security provides a website to assist you with determining the need for a license and with information regarding where to obtain help.

The URL is: <http://www.bis.doc.gov>.

Definitions

ECCN - Export Control Classification Number - The ECCN is an alpha-numeric code, e.g., 3A001, that describes a particular item or type of item, and shows the controls placed on that item. The CCL (Commerce Control List) is divided into ten broad categories, and each category is further subdivided into five product groups. The CCL is available on the EAR Website.

The following illustration is a sample:



The ECCN number (if available) and License Type for this product are included in the table below. Also included is the date the table was last updated.

Product/Component/R5000	EAR Number	License	Last Updated On
GVERSE Field Planner	EAR99	EAR	19/09/2018

Contacting LMKR Support

LMKR is committed to providing the highest level of technical customer support in the industry. With an average tenure of more than thirteen years, our highly trained and experienced staff of technical analysts is comprised of geoscientists, engineers, land professionals, petrophysicists, and system specialists.

Please refer to our Customer Support timings mentioned below to ensure that you have access to our support analysts assigned to your region. When getting in touch with LMKR support, please remember that real-time support will not be available during bank holidays or after office hours. If you do get in touch with LMKR Support outside of work hours, please leave a voice message with a brief description of the issue that you are facing. Your voice message will be used to automatically create a support case for you. This will enable our analysts to attend to your issue and provide you with a resolution as soon as possible

North and South America	Europe, Middle East & Africa
<p>Monday – Friday 8 am-6 pm CST* Toll Free (US/Canada) : +1 855 GGX LMKR (449 5657)</p> <p>Colombia: +57 1381 4908</p> <p>United States: +1 303 295 0020</p> <p>Canada: +1 587 233 4004</p> <p><i>*Excluding bank holidays</i></p>	<p>UK: Monday - Friday 8 am – 5 pm* +44 20 3608 8042</p> <p>UAE: Sunday - Thursday (Dubai GMT+4) 8 am – 5 pm* +971 4 3727 999</p> <p><i>*Excluding bank holidays</i></p>
Asia Pacific & Australian Continent	Southwest Asian countries
<p>Malaysia: Monday - Friday (Kuala Lumpur GMT+8) 9 am – 6 pm* +60 32 300 8777</p> <p><i>*Excluding bank holidays</i></p>	<p>Pakistan: Monday - Friday (Islamabad GMT+5) 9 am – 6 pm* +92 51 209 7400</p> <p><i>*Excluding bank holidays</i></p>

Helpful Links

Name	Website Address
LMKR Homepage	http://www.lmkr.com
LMKR GVERSE	http://www.lmkr.com/gverse
LMKR Support Portal	http://support.lmkr.com