
Discovery
5000.0.0.1
Release Notes

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Discovery 5000.0.0.1 Release Notes

GeoGraphix is pleased to announce the release of the Discovery™ and Discovery™ on OpenWorks® 5000.0.0.1 software. This release is a scheduled update to the Discovery 5000.0.0.0 software, and will be installed over the existing Discovery installation

This release is focused on the continued integration with the OpenWorks 5000 software and contains many improvements to the performance and stability for Discovery on OpenWorks on this platform. In addition to the DOW focus there are many significant workflow improvements and enhancements to the core Discovery Products. This guide provides information on what to look for in this release and will help you get most out of Discovery 5000.0.0.1.

This release includes twenty new features and 25 key defect fixes.

NOTE: *If you are going to be using Discovery™ on OpenWorks® using Discovery™ 5000.0.0.1, you must have OpenWorks® version 5000.0.1.1 installed.*

NOTE: *GeoGraphix strongly recommends that customers upgrade their existing Discovery projects to Discovery release version 10.6 first before upgrading them to Discovery 5000.0.0.1.”*

NOTE: *If you have ArcObjects 9.2 Engine installed on your computer, you MUST have ArcObjects 9.2 Engine Service Pack 6 installed as well.*

What's New in Discovery 5000.0.0.1

LogM

Changes to Loading and Saving Parameter Files

The **Load and Save Parameter Files** dialog boxes have been updated to new Windows standards. Parameter files have been updated to Version 2, which can contain more information and are no longer restricted to an eight character file name. When you navigate to a directory that contains Version 1 parameter files, they will automatically be updated to Version 2 parameter files.

SeisVision

Improve Well Load Performance

Performance for loading formations from wells has been greatly increased in this release of SeisVision.

When an interpretation is initialized, well header and survey information are gathered and stored in memory. Only the formations that are needed for annotation or time/depth comparisons are accessed. When the velocity domain is selected, only the formations for those wells in the active survey are accessed for the time/depth pairs. The user interface is not changed.

Depth Registration

Access to Depth Registration

Previously, the Depth Registration application was accessed only through links in XSection and PRIZM. Starting with this release, the Depth Registration application can be accessed from the **GeoGraphix Toolbar** and **Tools >> GeoGraphix >> Depth Registration** menu command in most other Discovery applications.

ProjectExplorer

OpenWorks Well Export

The **File >> Exports >> Well >> OpenWorks Well Export** command opens the **Export OpenWorks Data** dialog box.

This feature will export Well Header (*.eow), Deviation Survey (*.dev or *.daz), and Velocity data (*.vel).

Each exported data file can be subsequently imported into OpenWorks using a single control file (either owGGXWell.wdl, owxGGXDirSurv.all, owxDirSurv.all

or owxTimeDepth.all respectively) that can be selected using the OpenWorks GeoData Loaders.

WellBase

OpenWorks Well Export

The **File >> Exports >> OpenWorks Well Export** command opens the **Export OpenWorks Data** dialog box.

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Improve Enerdeq Imports

The six degree Longitude limit on IHS Enerdeq imports has been extended to 10 degrees of Longitude. This improvement facilitates importing data for large projects.

Core Lithology on Cores page

Starting with Discovery 5000.0.0.1 the Lithology is recorded for Discovery on OpenWorks projects. The **Core Lithology** entry is read-only and is read from the WELL_CORE_SAMPLE_DESCRIPTION TABLES. The Lithology entry is read-only on the Core page of the WellBase Information Manager.

PRIZM

Save Null Values

An option has been added to the **Save Interval Changes** dialog box to **Save Null values for zones without Interval Data**. This option is an easy way to overwrite previously saved interval data with null values if it is determined that the interval does not exist within the defined zone.

General Dialog Box Changes

- Image Track Attributes (PRIZM) – larger panes
- Select Items for Filter Criteria (QueryBuilder) – Log Filter Default and Filtered Curve panes are larger.
- Single well UDE (PRIZM) – Curve set box extended
- Multi well UDE output (PRIZM) – Curve set name boxes extended
- Interval List box (PRIZM) –Toolbar box enlarged

- Image Name List (DepthRegistration) – List is alphabetized
- Zone Combo box (ZoneManager) –Toolbar combo box enlarged
- Map Tip Bin (WellBase Layer Create) – Enlarged

QueryBuilder

Full Filter Name on Title Bar

When a filter is selected from the **File >> Open Filter** menu or from the box in the top left corner of the QueryBuilder window, the filter name is displayed in the Title bar. After a new filter is created, the filter name will be displayed after the filter is saved using **File >> Save** or **File >> Save As**.

XSection

Save Null Values

An option has been added to the **Save Interval Changes** dialog box to **Save Null values for zones without Interval Data**. This option is an easy way to overwrite previously saved interval data with null values if it is determined that the interval does not exist within the defined zone.

smartSECTION

Hot Keys for View Wells Command

Multiple stroke hot keys have been added to the Main Map View and the Cross Section View context menus whereby you can view information for selected well or wells in other applications. The new hot keys include:

- **CTRL+Shift+W** - View selected well or wells in the WellBase Information Manager
- **CTRL+Shift+G** - View selected well or wells in Map View in GeoAtlas
- **CTRL+Shift+P** - View log data for the selected well or wells in PRIZM
- **CTRL+Shift+Z** - View zone data for the selected well or wells in ZoneManager
- **CTRL+Shift+D** - View raster log data for the selected well in DepthRegistration

Apply Button Added to Contour Options Dialog Box

The **Apply** button has been added to the **Contour Options** dialog box so you can now implement any changes made to display settings and leave the Contour Options dialog box open for further modifications.

Distance and Angle Tool

With this tool, you can measure distance and angle from the vertical of a line between two points in Cross Section View. The measurements are made by holding the left mouse button down at one point and dragging the cursor to another point on the Cross Section. The measurement values appear on the Status Bar while the mouse button is held down. Subsequent mouse clicks start the measurements on a new line.

Pan Map View with Arrow Keys

The keyboard arrow keys can be used to pan the Map View up, down, right or left. This feature facilitates the creation of Well to Well or Projected sections by viewing additional wells off the edge of a zoomed-in map.

Double-Click to end Cross Section Definition

You can end cross section definitions by double-clicking the left mouse button on the last well. This feature works for both Well to Well cross sections and Projected cross sections.

GeoAtlas Layer Select Command

Layers that are created in the GeoAtlas application can be shown on the smartSECTION Map View. The layers selected for display are listed on the Map Tree Pane of the Main Map View. In previous releases, GeoAtlas layers could be selected only by using the right-click menu on the Map Tree Pane. With this release of smartSECTION the selection of layers can be initiated in several different ways. A new menu command (**Select Layers**) has been added to the Layer menu. A **Select Layers button** has been added to the Main Toolbar, and the **Ctrl+L** combination hot key has been added. All of these methods will open the **GeoAtlas Layer Selection** dialog box, where you can select layers for display in Map View.

X/Y Display

The coordinate system can be displayed in smartSECTION in Map Coordinates, Database Coordinates, or Latitude/Longitude using controls on the **View >> Display X/Y in** menu in Map View. These settings control the X/Y coordinate system that is displayed in several places in Map View and Cross Section View.

The X/Y coordinate display has been standardized throughout the smartSECTION application. The X coordinate is consistently shown before the Y coordinate or above the Y coordinate depending upon the layout of the dialog box.

Edit X/Y Point on Projected Line of Section

You can now precisely locate a point on the Line of Section for a projected cross section using this feature. With a point on the projected line of section highlighted, right-click and select **Edit X/Y Point**.

The coordinates of the point appear in editable boxes on the **Edit X/Y Point** dialog box. The coordinates are displayed in either Map Coordinates, Database Coordinates, or Latitude/Longitude depending upon the setting on the **View >> View Display X/Y in** toggle.

Horizontal Scale and Reference Lines

You now have the option to post a horizontal scale showing distance from a well projection on Well to Well or Projected cross sections.

You also have the option to show reference lines (major and minor) for the horizontal and vertical scales.

The controls for this feature are located on the **Marginalia page** of the **Cross Section Display Preferences** dialog box.

The vertical and horizontal scales and associated reference lines can be customized using the controls on this page. The scales and reference lines can be turned on and off using the controls on this dialog box or by using toggle commands on the right-click shortcut menu in Cross Section View.

Display Vector Log Frame in Cross Section View

In addition to the ability to turn off the vector log grid, you can now toggle on or off the frame for the vector log display on Cross Section View. The frame consists of the outside edge and the lines dividing the tracks of the log display. The controls of this new feature are on the **Display Options page** of the **Cross Section Display Preferences** dialog box.

Key Defects Fixed for Discovery 5000.0.0.1

GeoAtlas

- **799060** – Coordinate system details change when you upgrade to Discovery 5000 in projects with certain map projections, and all layers are forced to convert. Projects with the following map projections saw this problem before the fix:
 - Lambert Conformal Conic – including several State Plane coordinate systems
 - Lambert conformal conic tangent
 - Oblique Mercator azimuth
 - Oblique Mercator Two Points
- **800009** – Slow Network layer rendering (defect 798172) cause posting and color issues.
- **795458** – Layer Update – Sharing violation error saving layers (.gly files) – message occurs frequently in Discovery versions 10.5 and 10.6.
- **801295** – Application crash if a user opens a saved map (*.gmp), which contains renamed or deleted layers.
- **798310, 801224**-View Well in WellBase command throws an error and locks WellBase; cannot create spatial filter. WellBase cannot subsequently be closed using Task Manager, must instead reboot PC.
- **801642** Contours are not selected after you draw them and therefore you cannot use the Right-click >> Set Entity Value >> Elevation command to add an elevation value to the contour with the pencil tool still active.
- **801086** – ESRI Shapefile import crashes GeoAtlas in projects where extents will not recreate (defect 801085 – Recreate Extents error due to large number of layers).
- **785655** (GeoAtlas and XSection) – Persistent Line of Section does not display if the saved map (*.gmp) coordinate system does not match project's current map coordinate system.
- **801289** – The Layers Combine/Subset option crashes in a project with a large number of layers.

IsoMap

- **762602** – Z-Map+ export causes GeoAtlas/ProjectExplorer to crash in client project due to large number of layers.

ProjectExplorer

- **801085** – Recreate Extents Log gives an error on projects with more than approximately 1500 layers in the Global project. Extents are not re-created.
- **793700** DOW Interpretation Projects – ProjectExplorer is not aware of changes made to Interpretation Projects extents made in OpenWorks
- **775557** When checking Discovery Properties on a remote project home that is on the remote project server's D: or E: drive an incorrect message is displayed when clicking OK to exit: - A project home may not be created on CD-ROM drives
- **784337** Clicking Help >> About in ProjectExplorer causes multiple entries in the Licensing: LAM_Debug.log file. The messages are regarding GGX_ANY_DEMO.

SeisVision

- **794399** – Annotation posting of a deviated well based on Formation is incorrect in Main Map View. Posting the formation intercept from two different annotations: 1) Annotation posting where the well name and number are posted using the Formation and 2) Downhole formation posting of the active horizon. It is the Annotation posting (Well Name, Number, Imported Horizon Depth, etc) at the formation intercept that is not posting in the correct position.
- **802503** – SeisVision interpretations do not post tops along a deviated wellbore.
- **786373** – Pick a horizon across a composite intersection line. The picks do not show on the second line on the right. If you open each of the lines independently you will see the picks, but the picks disappear on right composite line.
- **782689** – Timeslice volume is created in SeisVision, but when timeslices are opened they have to be gained by 600+db in order to see data
- **766585** – Control contours and points are not being recognized in a depth surface in a mapping grid when the mapping grid contains a 3D survey. If the mapping grid is created on 2D data only, then the depth surface honors control points and contours.
- **795058** – (Add Wells and Formations) - Out of Memory message in a project containing 40,000 plus wells.
- **767438** (Interpretation Manager) - Cannot add a version of a line with different end of time; svreport.txt log file reports a huge end of time. After the fix, it is now permissible to add a version of a 2D line with a different end time than the original. It is still not permissible to add a version with different locations.

XSection

- **800276** – Windows Vista operating system – The printer button is missing from the Page Setup dialog box.

Defect Fixes

- **795257** – Raster templates are being depth shifted when the view units for the cross section are not the same as the project depth units. Display a cross section in an English units project, then select View >> Depth in Meters. An error message displays.
- **795259** - TD and Datum depths in the XSection well list are being double converted when switching the cross section view units to units that are different from the project units. For example, in a project with English units a well has a TD of 10375. After switching the view units to metric (View >> Depth in Meters), the TD displays as 963.9m instead of the correct value of 3162.3m
- **795308** - Display Interval in conjunction with a TVD raster. XSection is shifting the image. The tops do not line up where they should on the image with a Display Interval set. Without the Display Interval, and still in TVD display, the tops are shifted slightly. In a Measured Depth cross section, everything displayed correctly with or without a Display Interval set.
- **794621** - Using “Any Image” or “<Any>” in the Raster template field on the Wells/Logs page of the Edit Cross Section dialog box can result in error messages.

PRIZM

- **756292** - Defaults.glp may become corrupt due to sharing violation, no way to easily recover data.

WellBase

- **724024** – Delete data does not delete bottom hole location. This defect was fixed without changing the user interface.
- **798642** – Delete Data – All curves are deleted in the Global project, not just the selected curves, when a filter is applied and curves are selected to delete.
- **793652** – Data Import – IHS 298 Import – Average Unitized Production divides by wrong number in some leases. The import was dividing by the number of +D records (the records that hold the API number), not by the number of unique API numbers. Duplicate API numbers were counted twice.
- **795149** – Enerdeq import – Activate an AOI, spatial query should only find wells in the AOI, however, it is finding wells within the whole project extents
- **799109** – Consolidate Monthly Production – The generated cumulative record is using both injection volumes and production volumes, whereas it should be calculated using only production volumes.
- **801645** Slow performance displaying scout ticket, while moving from well to well. Performance is slower the longer WellBase is open, and wells are scrolled.

Defect Fixes

- **799379** – Discovery on OpenWorks – Scrolling between wells causes Formation tab to lock up after scrolling approximately 25 to 35 wells.
- **799122** – Well Data Import –When importing an IHS 297 file, casing and tubing tables are not imported if the Build Completion History option is used. With the ASCII4 data format import all six tables fail to import.

ZoneManager

- **801567** (Discovery on OpenWorks) - Error on WellBase Layer Create. When creating a WellBase layer using a zone attribute, a message is returned from WBLyrCr with the selected source only. When you click OK on the message, the message closes and you are able to continue creating the layer. Once the layer is created it can be shown in GeoAtlas.