

Petra 2021

New features and updates added to the 2021 release of Petra

May 2021

Release Dates:

Petra 2020 (v. 3.14): October 14th 2020

Petra 2020 HF1: November 24th, 2020

Petra 2020 HF2: March 17th, 2021

Petra 2021 (v. 3.15): July 6th, 2021

Petra 2022 (v. 3.16): Q2, 2022

All versions available via download:

<http://onlinehelp.ihs.com/Energy/Petra/HelpCenter/Content/Downloads.htm>

Petra Roadmap

Oct
2020

v. 2020 (3.14)

- Database migration and upgrade
- Blue Marble Upgrade
- PRODfit: Custom built template in intervals and Direct Connect import
- DC Production import upgraded performance speed
- Dynamic well lists for Map tools
- North arrow map customization
- Landing location added to symbol plot marker
- Import batch overlay layer files
- Export batch shapefiles
- Multiple slip boxes in Cross Section module

June
2021

v. 2021 (3.15)

- Overlay Sub-Folders
- Map Quick list enhancements
- Transparency controls for contour color fill in Map
- New Computes:
 - Deviation Survey data extraction
 - Completions data extraction
- Date queries for Deviation Surveys
- Additional save/load templates for x-section settings dialogs
- Ascii export updates

Q2
2022

v. 2022 (3.16)

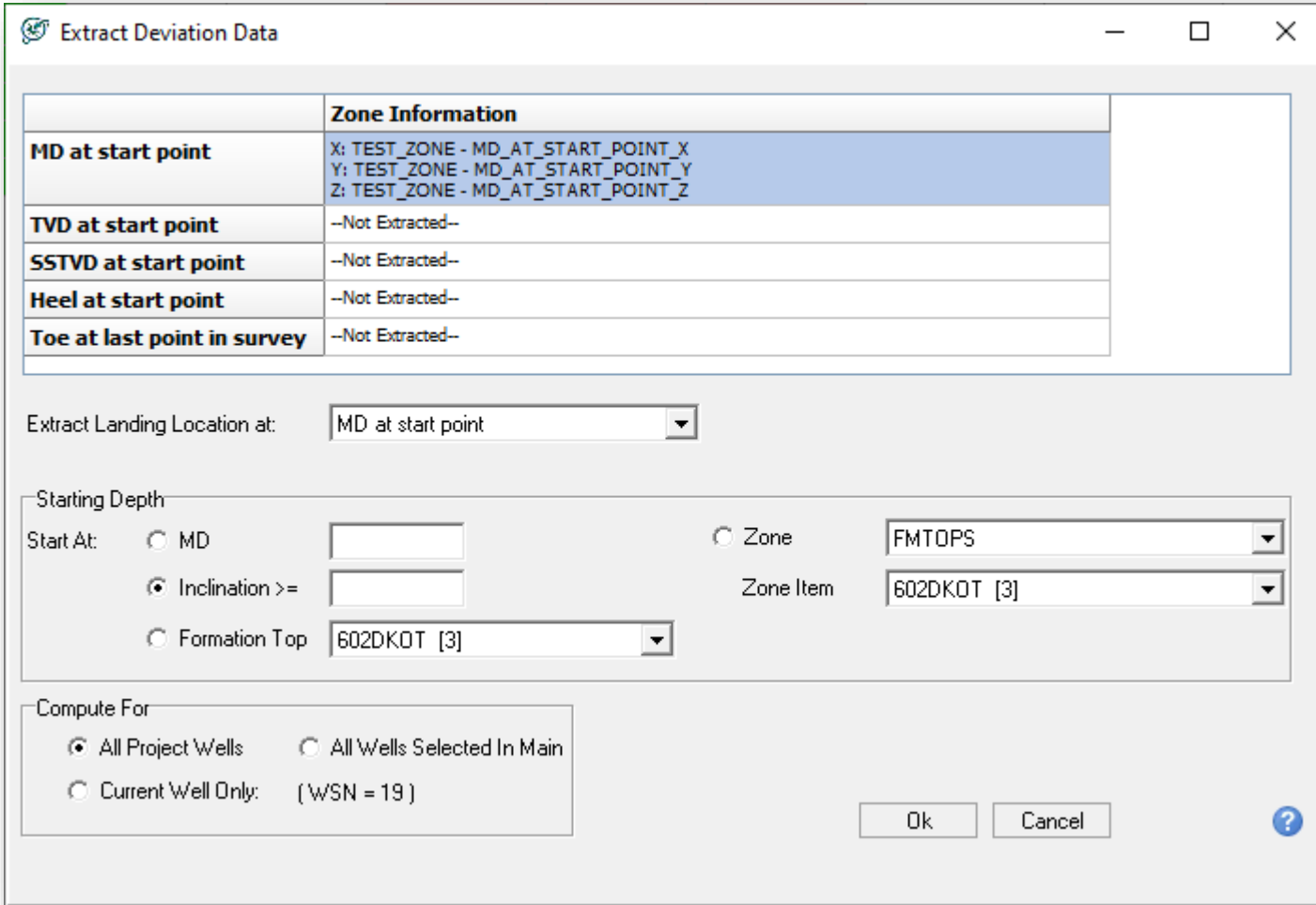
- New Direct Connections to updated IHSM data sources
- Updates to Blue Marble projection systems
- Zone order save/load template
- Raster and digital log query searches by dates created and modified
- Expanded data options for posting along worm-track
- Jump to map zoom option from main
- Overlay label modifications updates
- Multiple survey per well posted on map

Main Module Enhancements and New Features

New Computes

• New Computes!

- > Extract deviation survey data
 - Calculate X, Y, and Z values along deviation surveys from a user defined starting point
 - Zone attribute items or new formation tops created from extracted XYZ values
 - XY & Lat/Lon updates to Landing Location
- > All IP treatment children records extracted with zone item name automated
- > Completions “Others” details extracted to zones
 - Fault Gap
 - Cement
 - Casing
 - Liner



	Zone Information
MD at start point	X: TEST_ZONE - MD_AT_START_POINT_X Y: TEST_ZONE - MD_AT_START_POINT_Y Z: TEST_ZONE - MD_AT_START_POINT_Z
TVD at start point	--Not Extracted--
SSTVD at start point	--Not Extracted--
Heel at start point	--Not Extracted--
Toe at last point in survey	--Not Extracted--

Extract Landing Location at: MD at start point

Starting Depth

Start At: ☐ MD ☐ Zone ☐ Inclusion >= ☐ Formation Top

Zone Item: FMTOPS

602DKOT [3]

Compute For

☒ All Project Wells ☐ All Wells Selected In Main

☐ Current Well Only: (WSN = 19)

Ok Cancel ?

Benefits: New computes and enhancements that extract more well and production data to zones and ultimately map and cross-section modules

Queries and User-Interface Updates

- Deviation survey date modification search added to Well Query
- Well and Fm top counts for Source/Authorship
- UI column width preservation for interval tables
 - > Applicable well to well

Benefits:

- Enhanced and expanded quality analysis of Well and Production data
- Easier visual analysis of interval data well to well

Show Tops By Source

Sources

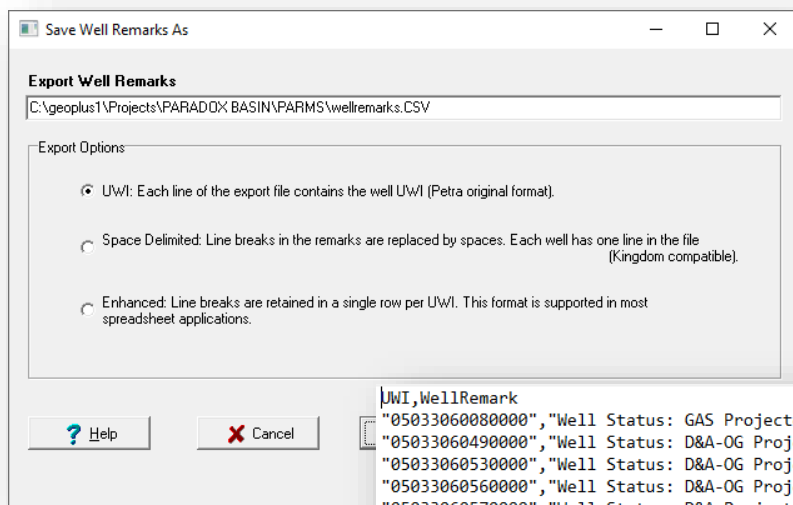
☒ Show All Sources
☐ Show Tops For Only The Selected Sources Below

Source	Wells	FM Tops
2	31	162
3	229	1944
4	2	44
CMF	232	2669
PDCUM	1	2

☒ Sort Tops By Name

Import/Export

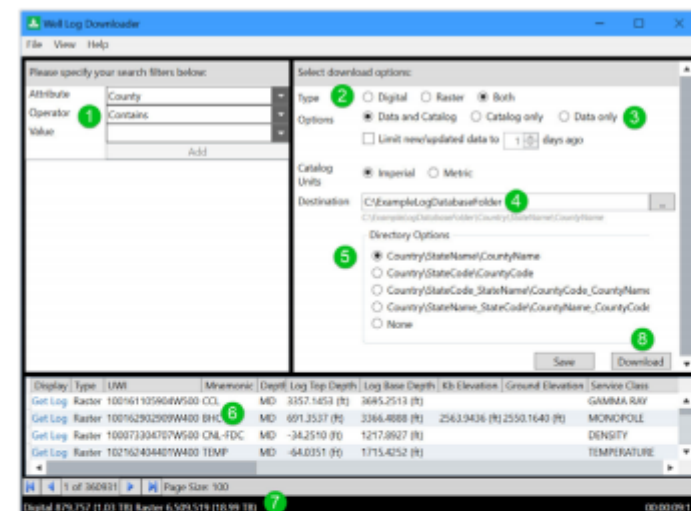
- ASCII Export updates:
 - > Well tab remarks new export format options
 - > Well header details included with deviation survey data
- PPF export windows reordered more intuitively
- Well Log Downloader workflow documentation in Direct Connect menu options



```
UWI,WellRemark
"05033060080000","Well Status: GAS Projected Formation: 409PSLV (PENNSYLVANIAN) Projected Depth: 6450 Act
"05033060490000","Well Status: D&A-OG Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6322
"05033060530000","Well Status: D&A-OG Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6400
"05033060560000","Well Status: D&A-OG Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6371
"05033060570000","Well Status: D&A Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6282 Act
"05033060580000","Well Status: D&A-OG Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6400
"05033060600000","Well Status: OIL Projected Depth: 6300 Activity Code: D IC Number: D Product Objective:
"05033060710000","Well Status: OIL Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6300 Act
"05033060750000","Well Status: D&A-G Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6300 A
"05033060910000","Well Status: ABD-OW Projected Formation: 404DRCK (DESERT CREEK) Projected Depth: 6280
```

Using Well Log Downloader with Petra Projects

Benefits of using Well Log Downloader (WLD) with Petra Projects



- ✓ Faster more efficient streaming option for subscription downloads.
- ✓ More condensed log group names and raster calibration files resulting in less group names in software projects.
- ✓ Connects to the same bulk log database as Kingdom Direct Connect Raster and Digital logs.

- 1) Multiple filter options to customize log download by Region, State/County, Depth, Log Update Date, UWI Lists plus more.
- 2) Choice of Raster Logs, Digital Logs or both on download.
- 3) Choice of detailed Log Catalog (in CSV format), Data (logs only), or both Catalog and Data.
- 4) User defined storage location - computer, server, or hard drive.
- 5) Log Data Management option - folder hierarchy structure separated by county or all logs in a single folder.
- 6) Detailed Log Catalog preview.
- 7) Visible log count, file size, and server/disk space needed before downloading. The count and size values change based on filter options.
- 8) Streaming download of bulk logs.

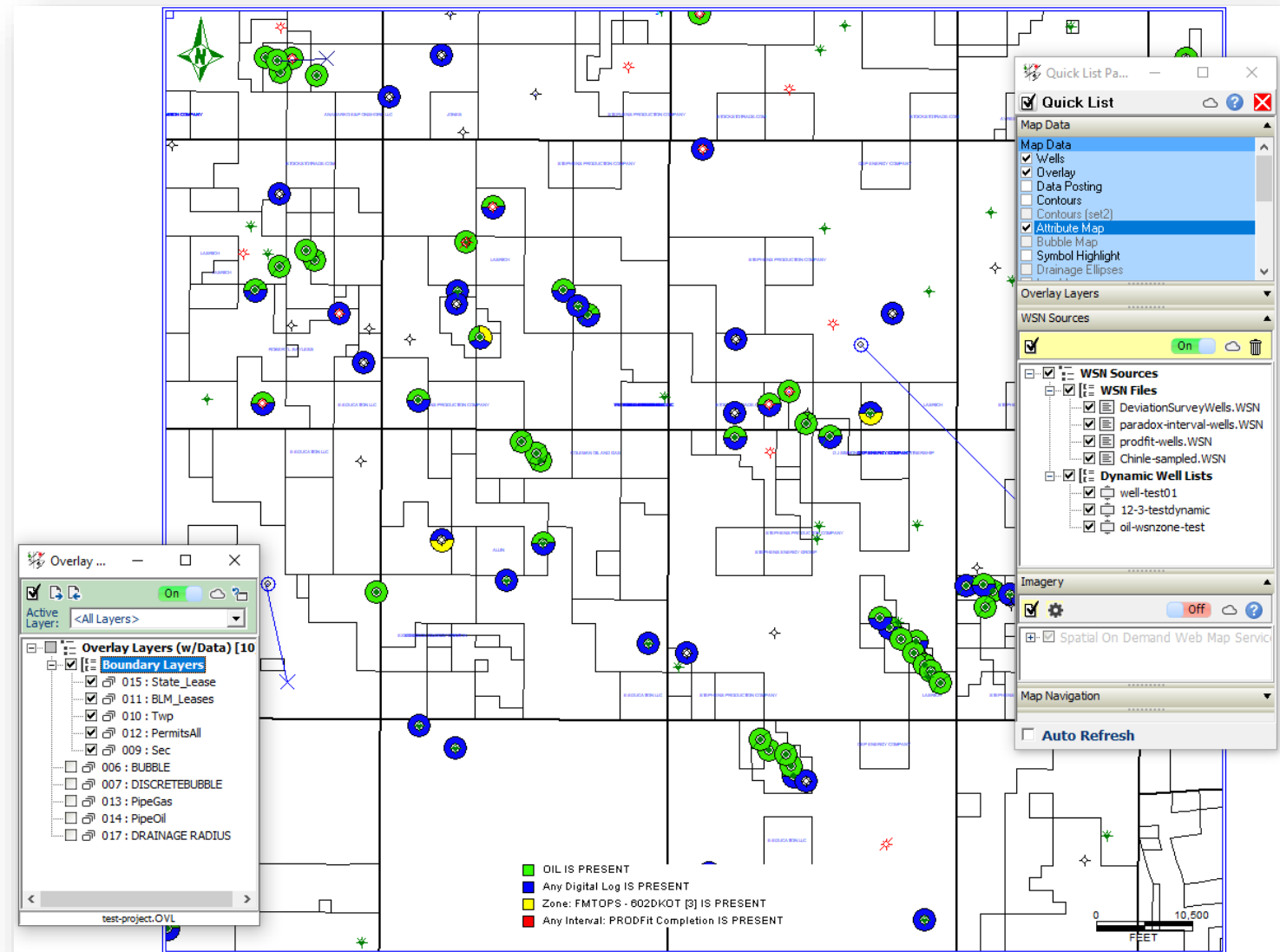
Map Module Enhancements and New Features

Map Module Enhancements

- Overlay Quick List new grouping organizational features
 - > Grouping folder with overlay layer drag and drop
 - > Group export in single or multi-layer option
 - > Floatable quick list menu's
- Dynamic Well Lists added to Quick List menu
- Browse button for Overlay Autosave path

Benefits:

- Ability to turn on/off multiple overlay layers in one click
- Float any Quick List menu for an optimized, custom map layout

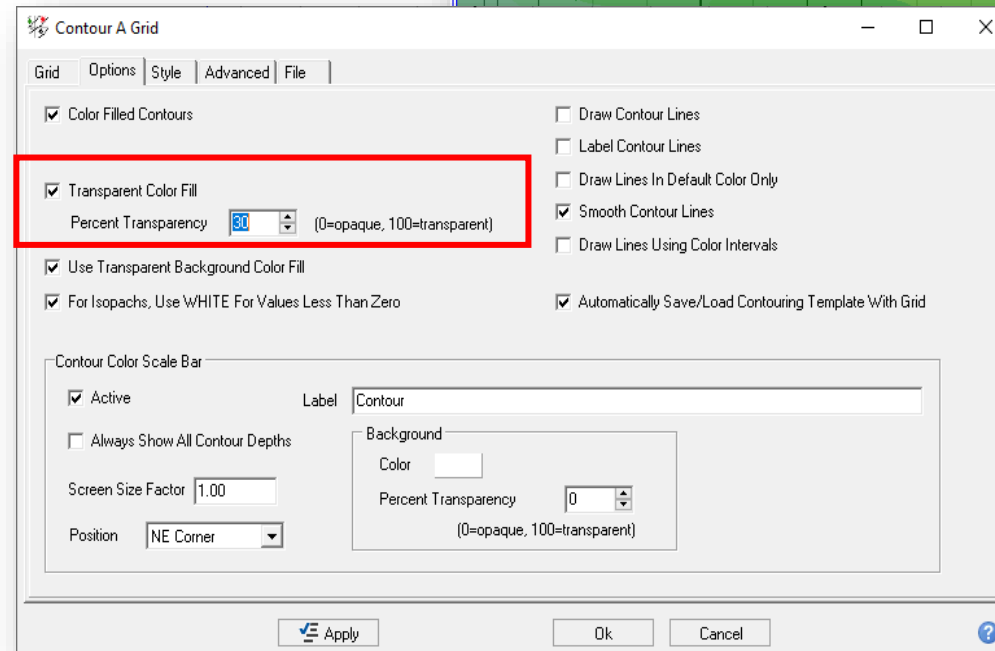


Map Module Enhancements

- Change the transparency level of contour color fill on a 0-100% scale
- RMB click to move the Attribute legend easily into a custom position anywhere on the map

Benefits:

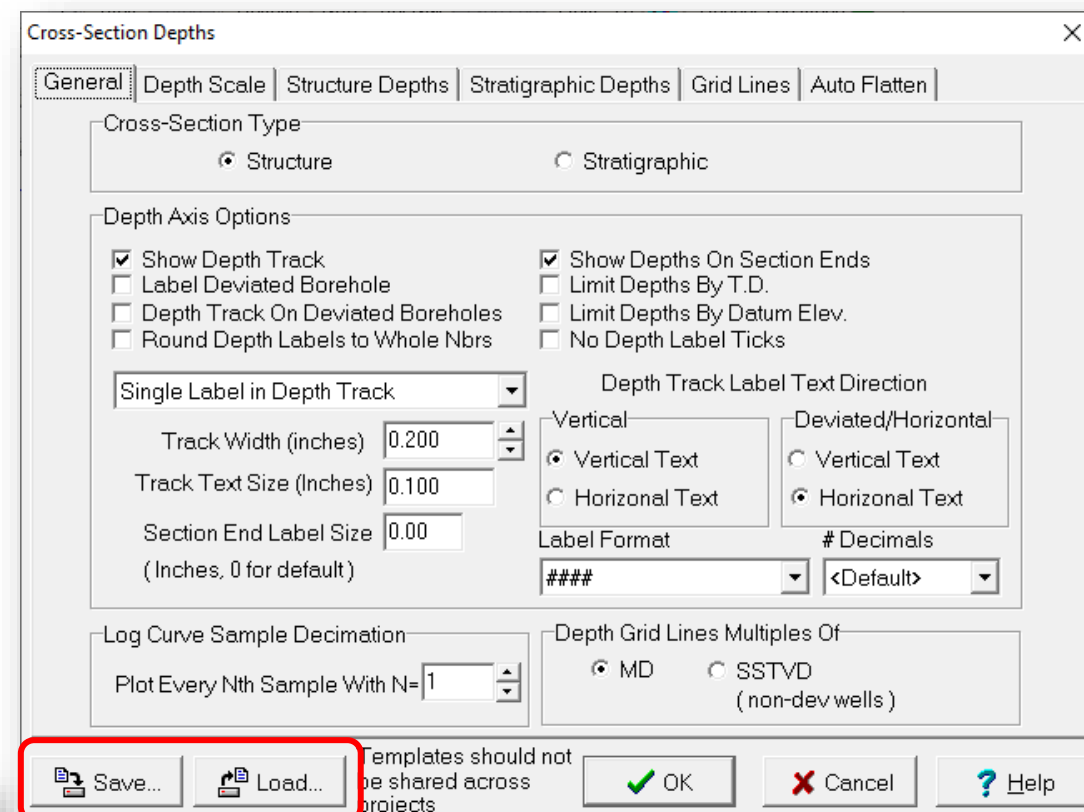
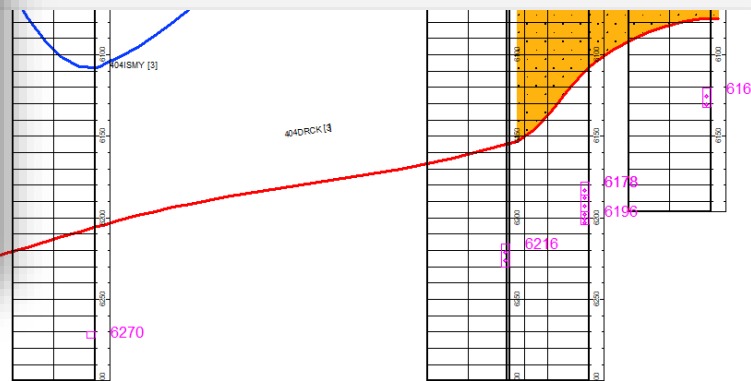
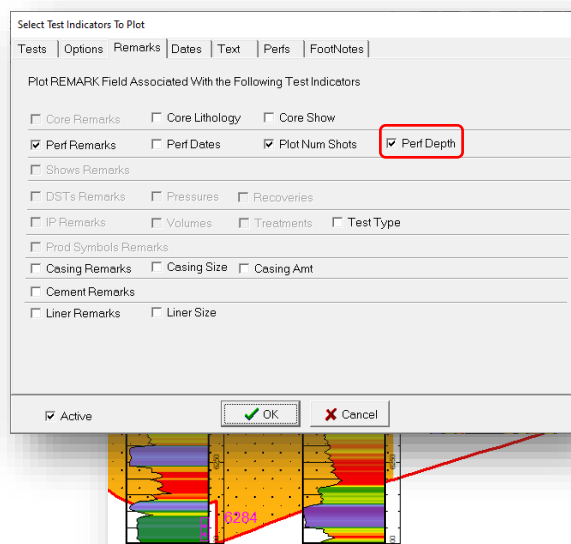
- Easier manipulation of map layers and tools



Cross-Section Enhancements and New Features

Cross-Section Enhancements

- Save/load template for Depth Settings
 - > CSDT template file
 - > Project must have same fm tops to transfer
- Plot test indicator updates:
 - > Perf top depth in remarks
 - > Perf type: Cement Plug added



Benefits:

- Creates new cross-sections faster by applying the settings templates
- More transparency and visibility of Perf data

Cross-Section Enhancements

- Color/style fm tops by source in Display settings
 - > Updates to color palette
- Repeat tops labeling for multi-well profile view

Benefits: Faster options to bulk change Fm tops attributes

Top Attribute Options

Currently Selected Top: 553ENRD [2]

Label/Miscellaneous

Label Attributes

☐ Not Labeled

☒ Label Btwn Wells (Above Line)

☐ Label Btwn Wells (Below Line)

☐ Label At Wells

☐ Edge Wells Only

☐ At Depth Track (Right Edge)

☐ At Depth Track (Left Edge)

Label Style: Name [Src]

☐ Draw As Unconformity

☐ Allow Top Aliases

☐ Treat Top As a Fluid Contact (draw last)

☐ Interpolate Missing Tops

☐ Include Quality Code in Top Label

☐ Do Not Connect

☐ Disable Top

Line/Fill

Line Color: [Blue]

Line Width: Extra Wide

Line Style: Solid

Fill Color: [Orange]

NO PATTERN FILL

☒ Fill Between Tops

Apply Color to All Tops

Apply Color to All Tops with the Same Source

Load Color Palettes

Save Color Palettes

Apply Style to All Tops

Apply Style to All Tops with the Same Source

Formation Tops For Cross-Section

Available Tops	Filter by Well																																																																																																																								
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Displayed Tops

Name	Src	Color	Unc	Alias	Attributes
RSN	3	[Red]	<input type="checkbox"/>		Options
RSN	2	[Blue]	<input type="checkbox"/>		Options
LFF	2	[Blue]	<input type="checkbox"/>		Options
NRD	2	[Blue]	<input type="checkbox"/>		Options
NRD	3	[Red]	<input type="checkbox"/>		Options
VJO	3	[Red]	<input type="checkbox"/>		Options
RCK	3	[Red]	<input type="checkbox"/>		Options
SMY	3	[Red]	<input type="checkbox"/>		Options
KOT	3	[Red]	<input type="checkbox"/>		Options
TLR	3	[Red]	<input type="checkbox"/>		Options
HNL	3	[Red]	<input type="checkbox"/>		Options
MVL	3	[Red]	<input type="checkbox"/>		Options
RML	3	[Red]	<input type="checkbox"/>		Options
LNC	3	[Red]	<input type="checkbox"/>		Options
VJO	2	[Blue]	<input type="checkbox"/>		Options
YNT	3	[Red]	<input type="checkbox"/>		Options
INGT_B	3	[Red]	<input type="checkbox"/>		Options
INGT	3	[Red]	<input type="checkbox"/>		Options
INGT	2	[Blue]	<input type="checkbox"/>		Options

General

Top Connection Method: Connect Tops to Borehole with Curved Line

Label Method: ☒ Label Tops

☐ Do Not Label Tops

☐ Opaque Label Box

Label Position (0 to Compute): 0

☐ Label with Actual Name of Alias

Repeat Tops: ☐ Ignore Repeat Tops

☐ Indicate Top with Marker

Petra 2022 Road Map

Petra 2022 Roadmap Overview (*tentative* list as May 2021)

- Main

- > Direct Connect migration to updated IHSM data sources for North American content
- > Updates to latest Blue Marble version
- > Zone order save/load template
- > Raster and digital log query searches by dates created and modified
- > Selective well application to Raster Maintenance
- > Client feedback enhancement requests

- Map:

- > Post data along worm-track
 - Fm tops, Perf value/remark, zone attribute items
- > Post data sans well spots
- > Jump to map zoom option from main
- > Bubble map legend customization

- > Posting planned vs actual surveys

- > Client feedback enhancement requests

- CROSS-SECTION:

- > Hide top from single well in x-section*

- > *Gun-barrel diagrams*

- > Client feedback enhancement requests

***Completed feature**

Tentative feature

Questions? Feedback?

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