**PackPro 6.3.021**

### 1. NEW MODULES AND ADD-ONS

- We've introduced a number of new modules and add-ons which enhance the functionality of the software for specific applications. Get in touch if you're interested in licensing them!

- PackPro CH - Offers a limited set of simulation and evaluation features for cased hole applications at an affordable price

- Managed Pressure Gravel Packing (MPGP) - Enables the use of managed pressure drilling (MPD) technology in gravel pack simulation and evaluation, including both surface back pressure (SBP) and controlled mud level (CML)

- Network License Detaching - Allows you to temporarily move a network license to your computer so you can work offline

### 2. GENERAL

- New module selector with add-ons

- Notifications center to see the latest updates from DuneFront

- Licensing center to more easily manage all aspects of the software license

- Automatically run multiple simulations when comparing scenarios with a single click

- Define custom fluid colors in animations

- Many engine improvements, including MPGP, packing, dehydration and bridging

- Miscellaneous bug fixes and performance improvements

### 3. RESULTS AND REPORTING

- Labels can be added to ranges to define the operations included in the data and streamline the reporting workflow

- Templates now support labels so they can be assigned to one or more operations, which will display them in the relevant ranges for faster access

- Reports can be generated in PowerPoint format (in addition to Word), which also include some enhanced functionality such as videos/animations

- Reports can be generated for multiple ranges, making it even easier to create a single report that covers all operations

### 4. GRIDS

- Selection with SHIFT and CTRL buttons has been optimized to work in all common scenarios

- It is now possible to select data by columns or rows

- Cells can be highlighted without editing, making it easier to select and review data

- Data can be pasted into a single column

- Stability and performance improvements

### 5. CHARTS

- The following options can now be set separately for each chart:
    - Time/Volume axis selection
    - MD/TVD axis selection
    - Compare scenarios (simulate module only)
    - Optimize (evaluate module only)

- Margins for both X and Y axes can be customized in the user options

- Stability and performance improvements

**PackPro 6.2.017**

### 1. GENERAL

- A new option to work from a temporary folder has been added to improve stability and performance of files stored in a network/server location
- Ranges are now scenario independent to streamline working with data (all ranges are available in all scenarios)
- Notes can be added to scenarios and ranges to record important information for future reference
- Yellow warnings indicate input errors that don't impact the calculations
- Miscellaneous bug fixes and performance improvements

### 2. FLUIDS AND GRAVEL

- Several fluid properties have been moved from the Project Fluids and Advanced Options screens to a new Advanced Fluid Properties section for easier access
- Several gravel properties have been moved from the Project Gravels and Advanced Options screens to a new Advanced Gravel Properties section for easier access

### 3. RESULTS AND REPORTING

- PackPro now includes built-in functionality to replay and record videos of the animation, well visualization and depth-based charts

### 4. CHARTS

- Chart templates have been introduced which allow you to save chart configurations and easily generate charts across multiple files
- Reporting charts can also be copied from one scenario to another within the same file using the clone feature in the scenario manager
- You can now add slope lines to reporting charts to help you analyze data and trends
- More options have been added to customize how the crosshair is displayed on charts

### 5. DATA

- Multiple return rate and gravel concentration columns are supported in evaluate and trend analysis modules
- Equations can now be defined for a specific range for more flexibility and improved performance
- Equation constants have been added to more easily define fixed parameters

**PackPro 6.0.100**

### 1. GENERAL

- Streamlined the import data workflow
- Improved undo/redo functionality under specific situations
- Enabled pasting chart image in Paint and other apps
- Fixed crash when trying to open read only file
- Improved speed of simulation/evaluation with temperature modelling
- Other minor bug fixes and performance improvements

**PackPro 6.0.50**

### 1. GENERAL

- Fixed app freezing problem when generating report with well visualization

**PackPro 6.0**

PackPro 6.0 is a general release which updates PackPro 5.0 with the following changes and improvements:

### 1. GENERAL

- Revamped and user friendly PackPro interface
- Modularization of the software which allows selection of module at the home screen
- Auto saving capability in which the file auto saves every time a user makes any change in the software
- Ability to undo and redo changes that have been made in the software
- Improved chart features with ability to customize individual charts
- The axis can now be switched between linear chart and logarithmic chart
- Time axis format can be switched between delta time and Timestamp
- Miscellaneous bug fixes and minor improvements

### 2. PSD

- Ability to create report for PSD analysis

### 3. IMPORT DATA

- Revamped Import Data interface
- Ability to create template for gauge data which allows the remaining data to be easily imported
- Ability to define the data type in the import wizard screen
- Gauge data name and details will now be automatically taken from the gauge data file
- Imported data now available in all Scenarios in the file

### 4. DATA

- Gauge data and data chart has been moved from Pumping – Evaluate screen
- Ability to create user defined equation when user has access to DataPro
- Auto X-Axis shift feature which assists the user in quickly aligning the gauges for time synchronization differences
- Ability to save chart customizations on Data Chart

### 5. FLUIDS

- Ability to save Rheometer data in the database has been added

### 6. PUMPING - EVALUATE

- Gauge data and data chart has been moved to a separate screen (Data screen)

### 7. ADVANCED OPTIONS

- Additional chart customization are now allowed and can be done from the chart options

### 8. RESULTS AND REPORTING

- Ability to save results in multiple ranges at the same time in evaluation
- Ability to save chart customizations on Results Animation
- Perforation packing and pressure data are now shown side by side in the animation screen (applies for cased hole gravel pack and high rate water pack)
- Improved fluid animation with the ability to track the displacement in the open hole annulus and washpipe
- Improved well visualization which now shows the fluid tracking for the entire well, both above and below the packer
- For evaluation module, once the optimize feature is selected, simulation animation and well visualization will be available in the results screen