Release notes VelocityManager Release 8 .7.0 to 8.9.0

Summer 2016

Enhancements have been implemented in VelocityManager.

1. Deviated well handling within the 'grid area'.

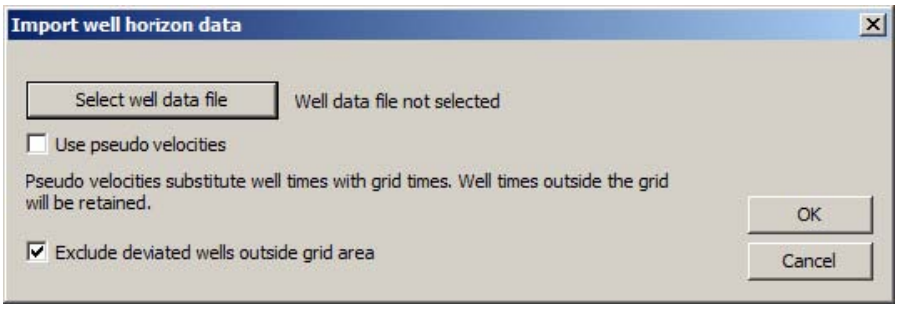
Deviated well handling within the grid area is highly accurate. This process is handled by the WorkFlowManager, but is now protected from incorrect data input. Where the well data is read from the seismic well data base, it is often unclear to the user if the times are true well times, or seismic times, or vertical well times, or estimated times; or a combination of all four! This kind of issue can lead to significant uncertainty. Now VelocityManager will manage the data in an intelligent manner to avoid this problem, without any interaction from the user. For deviated and horizontal wells the times will be read from the seismic time grids at the true subsurface positions. This approach has proven to be highly successful.

2. Deviated well handling outside the 'grid area'.

Outside the area of the interpretation, where interpretation grid times are unavailable, the well times

may still be required for velocity modelling, and VelocityManager will support the use of deviated wells times. By default it will allow all wells with a minor horizontal component of deviation to be utilised, with a maximum of 200m. By de-selecting the option 'Exclude deviated wells outside the grid area' the wells with a maximum horizontal component of deviation of up to 750m will be accepted. (refer to dialogue box below).

Please note that any wells falling outside the specified criteria will not be used for velocity modelling, and will be listed in the project report file



3. Ahead of bit, interactive depth update, for horizontal, deviated and vertical wells.

Now available is the feature which will allow real time update of well data whilst drilling, thus allowing real-time update of the depth model and well forecast for the well results ahead of drill bit, for horizontal, deviated and vertical wells.

4. Residuals application.

Optimised Residuals. This option is considered the most advanced of the three options available in VelocityManager for applying the residuals surface. In particular this option is highly advantageous for velocity layers which have a significant lateral variation in thickness, particularly noticeable in structurally complex areas, and in areas of areas of halokinesis.

5. IMR algorithm- IMR algorithm is further refined to accommodate a wider range of models.

6. Onscreen help - has been brought up to date to include all software changes to date**.**

7. Enhancements- to the menus and error checking have been enhanced**.**

8. Win 10 -VelocityManager is now completely verified to be Windows 10 compliant**.**

9. Project Menu - now supports a greater number of projects for 'fast start'**.**

10. RMS Progress bar - clarification of progress is now made in the text.

11. **RMS processing models**- Further refined to manage more complex structure.

12. **Refinement of RMS process manager -** Improved parameterisation.