# Veta 7.0 Release Notes

## Installation

- Windows 10 v1903 is the minimum supported operating system.
- Microsoft .NET Framework 4.8 is required (included with Windows 10 v1903 and later).
- Veta 7.0 can be installed on the same machine as previous versions.
- Veta 7.0 can open projects created in previous versions, but not vice-versa.

# 7.0.65

## Data Import

- Change: Better accomodate possible future changes to Trimble/CAT CSV files.
- Fix: Ungridded (raw) IC files without ICMV (static files) and files with ICMV could not be mixed in the same project.
- Fix: Canceling adding files to a new project could cause a crash.
- Fix: The MOBA PMTP downloader would sometimes return projects with dates outside the requested date range.
- Fix: When present, speed was not imported from IC TDS files. Instead, Veta calculated the speed.
- Fix: EVIB was not being read from TDS files.

# Filters

Fix: Data filters were missing for EDV and Leica CMV.

## Miscellaneous

- Change: Updated the EVIB default legend. If a new project uses the previous defaults, the defaults on the computer will need to be updated via the Project Legends window.
- Fix: Removing all files for a machine type could cause a crash.
- Fix: When customizing a legend, selecting to use a default could load the values with the wrong unit system.

# 7.0.61

# Data Import

- Fix: The Trimble/CAT downloader could timeout with large accounts.
- Fix: The Trimble/CAT downloader could crash if unexpected file names were present.
- Fix: Sometimes IC files could not be added to an existing project.
- Fix: Gridded (all passes) IC files without ICMV (static files) and files with ICMV could not be mixed in the same project.
- Fix: IC projects containing raw data did not always have Impacts per foot calculated. Existing projects will be automatically reprocessed.

- Fix: Some IC projects created before Veta 6 were not processed correctly. Existing projects will be automatically reprocessed.
- Change: Some fixes and changes were made to the heading and speed calculations for raw data. Files will not be processed due to this, but other changes in this update may cause the data to be recalculated. If the headings and speeds still appear wrong, remove the files and reimport the data. However, some vendors include this data in the file and thus it will not be calculated.

## Map

• Fix: Right-clicking to search did not always use the exact selected coordinates. This caused incorrect or no search results.

## Filters

- Change: Removed the change added in 7.0.48 that set the data filter for AASHTO filter groups.
- Change: AASHTO data filters are no longer locked for AASHTO filter groups.
- Fix: AASHTO lift and centerline offset groups did not have the data filter set unless a daily group was created at the same time.
- Fix: Changing the project information after new daily groups had been created caused the new daily groups to be removed.

## **Spot Tests**

• Fix: Moving the splitter under the table caused the chart and its toolbar to resize incorrectly.

# Reports

- Fix: Filter group report for the dielectric profiler was incomplete.
- Fix: The filter group report had blank items if a data filter did not exist.
- Fix: Excel report better respects the "Include sublot summary" and "Include sublot details" options.
- Change: Filters with no selections will now be reported as "All unselected" rather than "None".

#### Miscellaneous

- Fix: The Microsoft Visual C++ 2015-2022 Redestributable will be downloaded and installed if it is not present. The software will not start without this.
- Fix: Filtering or analyzing could fail or return the wrong results in rare scenarios.
- Fix: Select to use defaults for a legend did not always allow the OK button to be pressed.
- Fix: Some of the default colors for Dynapac and Volvo ICMV legends did match the list of colors recognized by Veta. These colors have been changed and will be similar to the previous values.
- Fix: Various crashes.

#### 7.0.51

#### Data Import

Fix: Importing some HAMM files could cause a crash.

## **Analysis**

• Fix: Further fixes to PMTP sublot coverage and data length when exclusions are present.

- Fix: The analysis setup showed machine types that no longer had data.
- Change: The precision for pass count coefficient of variation, standard deviation, and variance was changed to one decimal place.

## Miscellaneous

- Fix: The frequency units for SI and USCS were swapped.
- Flx: The legend for Sakai CMV was missing.
- Fix: For DPS, the Density % of Gmm and Air Voids were incorrect when multiple operation filters were present in a filter group.

## 7.0.48

## **Spot Tests**

• Fix: For some projects, spot tests did not automatically calculate their coordinates when using alignments.

#### Filters

• Fix: Fixed projects created in some old Veta 6 versions, where some filter groups created with the AASHTO template were not associated with the data filter.

## **Analysis**

- Fix: The previous exclusion filter changes caused the analysis of some filter groups to fail.
- Fix: Changes to location filter endpoints were not always immediately reflected in the analysis.
- Fix: Exclusions were not always handled correctly when calculating sublot coverage.

## 7.0.45

#### Data Import

- Fix: Various issues with Vögele files. The Machine ID was not being imported, using the coldedge filter caused a crash, and duplicate timestamps in files caused distance issues. Existing projects will be automatically reprocessed.
- Fix: Failed downloads from the Vögele server could cause a crash.
- Fix: Crash when importing some Dynapac files.
- Fix: Some TDS files could not be imported.

# **Analysis**

- Fix: An exclusion filter with a Source of "Not used" was still affecting coverage calculations.
- Fix: Rounding issue caused some paver stops less than the minimum duration to be detected.
- Fix: Various fixes to the cold-edge filter. These changes will likely be most evident with PMTP projects where only a portion of dozens of sensors are used. Changes to the calculated coverage area may be evident in all PMTP projects.

#### Reports

• Fix: ICMV percent change was missing from the search table and text report.

## Miscellaneous

- Fix: Importing filter defaults could crash if the file was corrupted.
- Fix: Compaction temperature change was showing the percent difference instead of just the difference.

## 7.0.38

# Data Import

• Fix: Sakai and Topcon files stored using MGA94 coordinates could not be opened.

# Analysis

• Change: Disabled the data copy feature for the sublot coverage chart. The data for the chart can be obtained by copying the associated table.

#### Miscellaneous

- Fix: A project that fails to load could cause the software to freeze or crash.
- Fix: Projects saved with invalid Analysis measurements due to a bug could not be analyzed.

## 7.0.36

## Filters

- Fix: Using the map to set the centerline start and stop required two attempts.
- Fix: Deleting the selected override filter could cause a crash.
- Fix: Density and Air Void calculation results for DPS were stored incorrectly, usually leading to incorrect maps and analyses.

#### Reports

• Fix: For the Excel "Data lot filter group settings" report: Compaction mode, Direction, and Imported Files did not report "All selected" when the "Use all" option was selected. Sensors may report "None" when the "Use all" option was selected.

## Miscellaneous

• Fix: Various map-related crashes due to rare scenarios.

#### 7.0.34

## Data Import

- Change: Status messages show more information.
- Change: TDS files with any timestamps of 0 will not be imported.
- Change: Files with any coordinates that could not be converted will not be imported. Previously, these files were imported and would cause a crash when attempting to view the data.
- Change: The default server for the MOBA MCA downloader has been changed.
- Fix: The Trimble/CAT downloader could timeout if the customer had a large number of machines and/or files.

- Fix: For Vögele data, the sensor location assigned by Veta was reversed. While existing data will be re-imported, Sensor location filters must be manually adjusted if necessary.
- Fix: Canceling the download of data could cause a crash.
- Fix: MOBA MCA data could not be downloaded.
- Fix: The MOBA MCA downloader did not always provide an error message if "Sign in" failed.

#### Filters

- Fix: The cold-edge filter did not work well when the sensors used were not centered.
- Fix: Copying an override filter caused a crash.
- Fix: Copying a data filter did not copy the filter settings.
- Change: The Imported file name filter created when using the AASHTO naming template now
  better respects the default setting. Previously the "Use all" would match, but individual files
  would also be selected. For instances when the default is to not "Use all", this can cause a
  serious performance issue when a large number of files is present. The filter defaults can be
  changed in the Options.

#### Analysis

- Fix: Changing the measurements to be analyzed did not update the navigation list.
- Fix: Changing the pass count specification values did not update the summary text.
- Fix: Crash when displaying sublot analysis results if a measurement analysis had no results.
- Fix: For the Thermal Profiler temperature analysis, the "Use quality thresholds" and "Use semivariogram" inputs did not work properly.

# Reports

• Change: For the Text report, if the number of data exceeds the limit (16,777,216), a report will be created that contains the data up to the limit, but no warning will be given. Previously the report creation would fail. A full report will be attempted in future version.

## Miscellaneous

- New: For search results and text file reports, the name of the file associated with each data is now listed.
- Fix: Opening Veta with a project file that could not be opened caused the software to be blank.
- Fix: Various crashes.

#### 7.0.27

#### Data Import

- New: Added support for dielectric profiling system data in TDS files.
- New: Added ability to select individual dates with the Topcon and Trimble/CAT data downloaders.
- Change: Import of Laser Test Roller data and compactor Final Coverage data is no longer supported. Existing projects with these files may not be usable in Veta 7.0.

#### Data Files

New: Added ability to cancel file exporting.

#### Filters

- New: Defaults for filters can set in the Options. Mulitple defaults can be created and they can be exported and imported.
- New: Multiple time filters can be used for each operation filter.
- New: Added time exclusion filters.
- New: Filters that are configured using selections (Compaction Mode, Imported file name, etc)
  now have a "Use all" option. This option will always use all of the available selections. Using this
  option instead of selecting each item individually will improve performance.
- Change: Filters are always sorted alphabetically.
- Change: Pasting coordinates into a location filter will replace the existing coordinates.

## **Spot Tests**

- New: Spot Tests are now divided into groups. Groups currently availble are:
  - o Thermal Profiler
  - o Compactor Trial Section
  - Compactor Individual Passes
  - Compactor Final Coverage

Tests in the Trial Section will be plotted on a chart but will not be used in the analysis.

## **Analysis**

- New: Acceptance targets can be specified for individual passes 1-10 for ICMV and Temperature.
- New: Compaction curves moved to under Overall analysis item, rather than under the ICMV-All Passes item. When the data is available, this screen will show compaction curves for both ICMV and Surface Temperature. These charts are also available for each sublot.
- New: Added ability to cancel analysis.
- Change: The compaction curve is no longer shown for the overall analysis.
- Change: Correlation is now analyzed for all compactor measurements.
- Change: Empty lots and sublots are now reported when possible.
- Change: Short sublots (less than half the requested distance) are merged with adjacent sublots when possible.

#### Reports

• Fixed: Report creation would sometimes fail.

#### Miscellaneous

- New: Change in temperature is now available as a map option for Individual Pass 2 and higher.
- New: Percent change for ICMV is now available as a map option for Individual Pass 2 and higher.
- Change: Impacts per foot will not be calculated if the speed is less than 0.5 mph. Existing data will not be recalculated.
- Change: A file will not be automatically selected in Data Files. This will cause projects to open faster and the Data Files screen will appear faster.
- Change: The third-party code for performing coordinate system conversions has been replaced by an improved one. Projects with source data stored in the State Plane coordinate system

should be the only ones with differences. To fully recognize the benefits of the improvements, these projects will need to be recreated in Veta 7.0.

- Change: Options and legends will now only be loaded from Veta 5.2 and greater.
- Change: Improved keyboard and mouse interactions with lists of checkboxes.
- Change: Performance improvements.

## Limitations

- Individual lifts in Trimble CSV files are not currently recognized. The pass counts shown are for all combined lifts.
- Datum conversions are not supported.
- Adding points manually to an exclusion filter may take multiple tries due to the exclusion filter restricted to the boundary of the associated location filter.
- Machine-specific exclusions require a machine-specific location filter for cropping to work.
- The text report will fail if the number of data is greater than 16,777,216.
- The analysis data length for thermal profiling does not take into account data gaps that are caused by missing data. It is currently only affected by data removed by filtering.