

## QESTLab Release Notes

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### Overview

From time to time Spectra QEST releases service packs for the QESTLab. These are required for the inclusion of new features and the resolution of software defects. It is always only necessary to install the most recent service pack as it will include all previous changes.

While every effort is made to ensure service packs are free from error Spectra QEST can not guarantee this to be the case. If possible it is recommended that the service pack be implemented in a test environment before being installed on the production system

Some features described in the release notes may be available subject to licensing arrangements and therefore not accessible to all users.

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### Release Notes for QESTLab Version 3.3.1500

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#### **CR#970 Nuclear Field Density [NZS 4407:1991 Test 4.2.1]**

*Fulton Hogan:QL-2806*

- "Moisture Entry" has been renamed to "Moisture Entry (%)" to make it clearer what data is entered.
  - "Probe Depth (mm)" has been added to the bulk entry "Nuclear Density Test Group" view.
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### Release Notes for QESTLab Version 3.3.100

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#### **Bug#107 Unified Soil Classification System [ASTM D 2487 - 06]**

*PSI National USA:PSI\_598*

The test now imports sieve results from all gradation tests (including ASTM D 422).

#### **Bug#108 Los Angeles Abrasion [NZS 4407:1991 Test 3.12]**

*Fulton Hogan:QL-753*

The result, "Los Angeles Value", now includes the units (%) when the result is reported.

#### **Bug#109 Equipments: Out of Calibration**

*Coffey Information:Cof10.015*

When an equipment had a calibration without a Last Calibrated date, the calibration would not flag as Out of Calibration. The calibration will now correctly flag as Out of Calibration to avoid them as appearing to be within calibration.

**Bug#110 Reports & Charts: Drawing of lines between each row on Management Reports**

Internal (Spectra QEST):n/a

Grid lines will now line up correctly and any change to the option, "Draw a line between each row", will be applied to the report immediately without needing to step on and off the report.

**Bug#111 Concrete Delivery Screen: Temperature Units**

Internal (Spectra QEST):HDK\_025

The Concrete Delivery screen now display temperatures in Fahrenheit rather than Celcius, when tests are not Metric.

**Bug#113 E-mail Address Extensions**

PSI National USA:PSI\_553

Certain e-mail address extensions were not recognized by QESTLab. A system level option, accessible via, QLA -> Configuration -> Options -> Publishing -> Email -> "Additional Valid Email Extensions" now exists. Additional valid email extensions can be listed here. E.g. ".MIL.TV.ORG.NET"

**Bug#114 Specific Gravity of Fine Aggregate [ASTM C 128 - 07, AASHTO T 84 - 08, MnDOT 1205 - 02]**

Braun Intertec USA:n/a

The screen layout has been modified to better accommodate work flow.

An additional field, "Density Determined Without First Drying", has been added to the screen and report.

**Bug#115 Particle Density and Water Absorption [BS 812-2: 1995]**

Exova:n/a

- The screen now includes the Conical Mould and Tamper equipment items as necessary.
- The field "Test Water Temperature" can now be changed. In addition, a field "Sample + Water Temperature" has been included for each fraction.
- The density units on the screen have been corrected.
- Both the individual fraction and average particle densities are now shown to three decimal places on the screen such that the rounded result on the test report is made clear.
- The repeatability warnings have been corrected in accordance with Annex A - Table A.1.
- The "Particle Density Saturated & Surface Dried Basis" is now reported as "Particle Density SSD".
- An additional check-box labelled "Artificially pre-heated" has been added to the screen to account for samples that have been artificially heated before the start of the test.
- Licensing for the equipment, Tamper [30031], will be required. Kindly contact SpectraQEST Help Desk to be licensed for this equipment item.

**Bug#116 Los Angeles Abrasion Value [ASTM C 131 - 06]**

Exova:n/a

The screen now warns the user when the "Mass after 500 revolutions" is greater than the "Mass after 100 revolutions".

**Bug#118 Atterberg Limits [Results Only] \***

HOLCIM AU:Ho\_185 (902599)

The fields "Liquid Limit Text", "Plastic Limit Text" and "Plasticity Index Text" now permit text values to be entered.

**Bug#119 Cement Content [AS 5101.3.3]\***

Boral National:BOR\_44

The "Sampling Method" field has been added to the reduced test.

**Bug#120 Particle Size Distribution - Graph**

Internal (Spectra QEST):HDK030

The graph now correctly aligns the y-axis according to the smallest sieve.

**Bug#122 Counters - Counter field**

PSI National USA:PSI\_541

When setting up a counter, QESTLab will now flag when a "Counter Field" has not been selected. This will stop unexpected errors occurring while running QESTLab. In addition a live check on the validity of the entered "Format String" will aid in creating correct counters.

NOTE: Existing counters missing a Counter Field will have to be manually corrected before using QESTLab.

**Bug#123 Project Principal for External Documents**

Coffey Information:n/a

The "Project Principal" is now available for inclusion in external document mappings.

**Bug#125 Test Reports - Pictures**

PSI National USA:PSI\_606

The ability to append images to a test report (via the Options tab) has now been extended to all test reports.

**Bug#129 Speed improvement of People lists**

PSI National USA:PSI\_589

Configuration of Available Laboratories for people will reduce the number of people in each lists as global people should no longer be required.

**Bug#133 Dimension, Strength & Water Absorption of Kerbs [BS 7263-3: 2001]\***

Exova:QL018

The test, Dimension, Strength & Water Absorption of Kerbs [BS 7263-3: 2001] \*, is now correctly a concrete sample test.

**Bug#136 Counters for List Codes**

Internal (Spectra QEST):n/a

Counters can now be created for lists such that the code can be automatically generated on addition of a new list item. The counters will have to be setup for each list independently.

NOTE: Lists will continue to work with or without the aid of a counter.

**Bug#179 Read Only Billing Documents Data**

Fulton Hogan:QL-647

Data on a read only Billing Document (due to charges on it being "Exported" or due to the associated Invoice being "Printed"), specifically Client and Project details, will no longer change when related changes are made on the Work Order or the Sample screens.

**Bug#194 Report Comments List**

PSI National USA:PSI\_542

The Report Comments list has been corrected such that it accurately restricts based on Client and/or Project and/or Test Report.

NOTE: Any custom database triggers on this list must be disabled in order for proper functioning.

**Bug#221 Sulfate Soundness [ASTM C 88 - 05, AASHTO T 104 - 99, NDOT T 470 - 99]**

Internal (Spectra QEST):n/a

Sodium/Magnesium Sulfate Soundness screens can now import from any sieve within a given range. The particular sieves used are no longer locked.

**Bug#224 Documents not added when Work Orders created**

Fulton Hogan:FH\_QL-689

Work Templates has undergone relatively large changes in QESTLab 3.3. The error when additionally added documents (after an External document was added) would not be immediately visible in the QESTLab tree should now be resolved.

**Bug#240 Moisture Vapor Emission Rate [ASTM F 1869 - 04]**

PSI National USA:PSI\_511.1

The "Exposure Times" are now calculated in hours to the nearest 0.1. In addition, a warning has been added when the Exposure Time is out of the acceptable range.

Comments on the report will need to be entered via User Comments located on the Options tab of the Vapour Emissions report.

Kindly contact SpectraQEST HelpDesk for assistance with User Comments.

NOTE: Licensing of Report Comments may be required.

**Bug#241 Equipment Calibration**

Fulton Hogan:QL-441

The Calibration Frequency Interval is now set to null when the frequency value is either zero or null.

**Bug#242 Clay Index [NZS 4407:1991 Test 3.5]**

Fulton Hogan:QL-440

The screen now accommodates and reports "Clay Index" results of 0.0

**Bug#243 Aggregate Grading [AS 2891.3.3, AS 1141.11.1]**

Fulton Hogan:QL-433

The Aggregate Grading screen now uses the "Mass of Dry Washed Aggregate (No Fines)" from the Bitumen Content screen as the Total Mass.

**Bug#263 Parentheses in Contact Name Generates an Error**

PSI National USA:PSI\_637

If parentheses were included in the first name or last name of a contact, QESTLab would perceive this as a separate e-mail address and would generate an error message when the report was published. This has been rectified such that any parentheses in the Contact Name (or Surname) will now be ignored, when generated the list of email addresses.

**Bug#279 Erroneous Billing of deleted Concrete Specimens**

PSI National USA:PSI\_640

When concrete specimens were deleted then the billing that had been (previously) generated from those deleted specimens were not being removed. This has now been fixed.

**Bug#297 Flakiness Index Test Methods**

Internal (Spectra QEST):n/a

Errors that prevented gradings from being imported have been fixed.

**Bug#313 Work Templates - Extraneous External Document added**

Fulton Hogan:QL-1340

Work Templates created from an existing Work Order (that contain External documents) are created correctly with no extraneous External documents.

**Bug#327 Laboratory Document Permissions - User Documents**

Internal (Spectra QEST):n/a

User Documents which have their parent as another test are now shown under the parent test's sample in the tree. This will stop any errors where the parent test has not yet been added to the tree.

**Bug#388 Specific Gravity of Soil [ASTM D 854 - 06]**

PSI National USA:PSI\_666

The Specific Gravity (at 20°C) will now display the correct result on the test report.

**Bug#409 California Bearing Ratio [RTA T117]**

Coffey Information:Cof10.056\_2

The "Oversize Material (%)" is now reported to the nearest whole number.

**Bug#468 Non Conformance Report**

Alex Fraser Asphalt Production:n/a

The Non Conformance Report name has been changed from NCR to "Non Conformance Report". The report prefix "NCR:" has also been added.

**Bug#529 Billing Documents - Scrollbar**

Fulton Hogan:QL-503

The scroll bar is now enabled at all times.

**Bug#630 Maximum Dry Density - Issues when drawing the graph**

Internal (Spectra QEST):

The graph now plots the Moisture Content against the Maximum Dry Density correctly

**Bug#752 Laboratory Selection Lockup**

PSI National USA:PSI\_544

Previously, when the laboratory context was changed and the user clicked on an area of the tree before the tree was able to update itself with the selected laboratory's details, an Automation Error was returned to the user. QESTLab would freeze and could only be unlocked by exiting manually.

Modifications have been made to the tree in QESTLab 3.3 such that when the laboratory context is changed then all user input on the tree is disregarded until the tree has finished refreshing.

In addition to the above, default filters that cause the tree to refresh (or update with additional items) will do so in parallel - hence any additional user input in the tree during that period will not be disregarded and will not result in errors.

Kindly contact the SpectraQEST HelpDesk with any additional queries.

**Bug#759 Nuclear Field Density and Sand Replacement Field Density Reporting**

PSI National USA:PSI\_437

Laboratory samples are now reported on the Field Density report only when there is a Moisture Content value to report as well.

**CR#198 Reportable Custom Fields**

*PSI National USA:PSI\_571*

Custom Fields now have the property "Report" which is defaulted to "No". When the property is "Yes" the custom field will now be reported on the applicable Material Test Report, e.g., for aggregate samples, the Aggregate/Soil Test Report. This will occur for all the documents selected in the custom field set.

Field names can now be reused across multiple field sets, provided that the data type and length (where applicable) matches all other uses of the field.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Custom\\_Fields#Report](http://online.spectraquest.com/index.php?title=QESTLab:Custom_Fields#Report)

**CR#199 Determining Chloride and Sulfate Content in Soils [Tex-620-J]**

*PSI National USA:n/a*

A full test screen has been added to QESTLab for Determining Chloride and Sulfate Content in Soils [Tex-620-J] (110750). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#200 Effect of Water on Bituminous Paving Mixtures [Tex-530-C]**

*PSI National USA:n/a*

The screen "Effect of Water on Bituminous Paving Mixtures [Tex-530-C] (117301)" is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

**CR#201 Coarse Aggregate Angularity by Fractured Faces Count [Tex-460-A]**

*PSI National USA:n/a*

A full test screen has been added for Coarse Aggregate Angularity by Fractured Faces Count [Tex-460-A] (110756). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#203 Drilled Concrete Cores [Tex-424-A]**

*PSI National USA:n/a*

The test method, Drilled Concrete Cores [Tex-424-A], is now available in Qestlab. It comes built in the concrete sample, but has it's own test report. Kindly contact SpectraQEST to be licenced for this report.

**CR#204 Determining Pavement Thickness by Direct Measurement [Tex-423-A]**

*PSI National USA:n/a*

A new screen "Determining Pavement Thickness by Direct Measurement [Tex-423-A]" (110759) is now available in QESTLab. Kindly contact Spectra QEST to be licensed for this screen.

**CR#206 Deleterious Materials [Tex-413-A]**

*PSI National USA:n/a*

A full test screen is now available for Deleterious Materials [Tex-413-A] (110747). Kindly contact Spectra QEST Help Desk for licensing.

**CR#207 Sulfate Soundness [Tex-411-A]**

*PSI National USA:n/a*

Test for Magnesium Sulfate Soundness [Tex-411-A] (110118) and Sodium Sulfate Soundness [Tex-411-A] (110119) are now available in QESTLab. Additionally a screen for recording Sulfate Immersion Cycles [Tex-411-A] (110120) is available. Kindly contact Spectra QEST to be licensed for these screens.

**CR#208 Resistance to Degradation by Abrasion & Impact in Los Angeles Machine [Tex-410-A]**

*PSI National USA:n/a*

The test method "Resistance to Degradation by Abrasion & Impact in Los Angeles Machine [Tex-410-A]" (110751) is now available in QESTLab. Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#209 Organic Impurities in Fine Aggregate for Concrete [Tex-408-A]**

*PSI National USA:n/a*

A full test screen has been added for Organic Impurities in Fine Aggregate for Concrete [Tex-408-A] (110757), as part of this standard a full test screen has also been added for Organic Impurities in Fine Aggregate on Strength of Mortar [AASHTO T 71] (110758). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#210 Decantation Test for Concrete Aggregates [Tex-406-A]**

*PSI National USA:n/a*

A new test screen has been created for this test (110754). Kindly contact the Spectra QEST Help Desk to be licensed for this test.

**CR#211 Sieve Analysis for Fine and Coarse Aggregate [Tex-401-2]**

*PSI National USA:n/a*

The method "Tex-401-2 Sieve Analysis for Fine and Coarse Aggregate" (110741) is now available in QESTLab. Kindly contact Spectra QEST to be licensed for this screen.

**CR#212 Determining Draindown Characteristics in Bituminous Materials [Tex-235-F]**

*PSI National USA:n/a*

A new test screen has been created for this test (110749). Kindly contact Spectra QEST Help Desk to be licensed for this test.

**CR#213 Determining Flakiness Index [Tex-224-F]**

*PSI National USA:n/a*

A new screen "Determining Flakiness Index [Tex-224-F]" (110742) is now available in QESTLab. Kindly contact Spectra QEST to be licensed for this screen.

**CR#214 Deleterious Materials & Decantation Test for Coarse Aggregate [Tex-217-F]**

*PSI National USA:n/a*

A full test screen has been added for Deleterious Materials & Decantation Test for Coarse Aggregate [Tex-217-F] (110762). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#215 Density of Compacted Bituminous Mixtures [Tex-207-F]**

*PSI National USA:n/a*

Full test screens have been added for the following asphalt test methods:-

- Density of Compacted Bituminous Mixtures (Laboratory) [Tex-207-F] (110765)
- Density of Compacted Bituminous Mixtures (Roadway) [Tex-207-F] (110766)
- Determination of Rice Specific Gravity [Tex-227-F] (110767)
- Sieve Analysis of Fine and Coarse Aggregates [Tex-229-F] (110768)
- Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method [Tex-236-F] (110769)

Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#216 Sand Equivalent [Tex-203-F]**

*PSI National USA:n/a*

A full test screen has been added for Sand Equivalent [Tex-203-F] (110753). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#217 Sieve Analysis of Surface Treatment Aggregates [Tex-200-ST]**

*PSI National USA:n/a*

The screen Sieve Analysis of Surface Treatment Aggregates [Tex-200-ST] (110760) is now available in QESTLab. Kindly contact Spectra QEST to be licensed for this screen.

**CR#218 Sieve Analysis of Non-Surface Treatment Aggregates [Tex-200-F, Tex-229-F]**

*PSI National USA:n/a*

The screens "Sieve Analysis of Non Surface Treatment Aggregates [Tex-200-F] (110761)" and "Sieve Analysis of Fine and Coarse Aggregates [Tex-229-F] (110768)" are now available in QESTLab. Kindly contact the HelpDesk to be licensed for these screens.

**CR#219 Measuring Thickness of Pavement Layer [Tex-140-E]**

*PSI National USA:n/a*

A full test screen has been added for Measuring Thickness of Pavement Layer [Tex-140-E] (110763). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#220 Measuring the Resistivity of Soil Materials [Tex-129-E]**

*PSI National USA:n/a*

A new screen now exists for Tex-129-E (110746). Kindly contact the Spectra QEST Help Desk to be licensed for this test.

**CR#221 Determining Soil pH [Tex-128-E]**

*PSI National USA:n/a*

The screen "Determining Soil pH [Tex-128-E]" (110777) is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

**CR#222 Density of Asphalt Stabilized Base [Tex-126-E]**

*PSI National USA:n/a*

The test method, Density of Asphalt Stabilized Base [Tex-126-E] (117310), is now available in QESTLab. Kindly contact SpectraQEST to be licensed for this test

**CR#223 Soil Lime Testing [Tex-121-E Part 2]**

*PSI National USA:n/a*

A new test screen has been created for Tex-121-2 (110771). Kindly contact Spectra QEST Help Desk to be licensed for this test.

**CR#224 Soil-Cement, Soil-Lime [Tex-120-E]**

*PSI National USA:n/a*

The screen "Soil-Cement, Soil-Lime [Tex-120-E] (110772)" is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen, as well as the associated test report (18994).

**CR#225 Triaxial Compression for Disturbed Soils and Base Materials [Tex-117-E]**

*PSI National USA:n/a*

The test method, Triaxial Compression for Disturbed Soils and Base Materials [Tex-117-E] (110810), is now available in QESTLab. Kindly contact SpectraQEST Helpdesk to be licensed for this test.

**CR#226 Resistance to Degradation by Wet Ball Mill Method [Tex-116-E]**

*PSI National USA:n/a*

A full test screen has been added for Resistance to Degradation by Wet Ball Mill Method [Tex-116-E] (110755). Kindly contact Spectra QEST Help Desk for licensing and any other queries.

**CR#227 Nuclear Density and Moisture Determination [Tex-115-E Part 1]**

*PSI National USA:n/a*

A new full test screen for Nuclear Density and Moisture Determination [Tex-115-E Part 1] (110800) has been implemented. Kindly contact Spectra QEST Help Desk for licensing and a script that updates your d/b.

**CR#228 Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E]**

*PSI National USA:*

The screen "Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E] (110776)" is now available. Please kindly contact the Spectra QEST Help Desk to be licensed for this screen.

**CR#229 Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E]**

*PSI National USA:n/a*

The screen "Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E] (110775)" is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

**CR#230 Particle Size Analysis - Hydrometer [Tex-110-E]**

*PSI National USA:n/a*

A new screen for "Particle Size Analysis - Hydrometer [Tex-110-E]" (110740) is now available. Kindly contact Spectra QEST to be licensed for this screen.

Additional Information:[http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/Soil\\_Test\\_Documents\\_-\\_Particle\\_Size\\_Distribution#Minimum\\_Data\\_Requirements\\_4](http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/Soil_Test_Documents_-_Particle_Size_Distribution#Minimum_Data_Requirements_4)

**CR#231 Bar Linear Shrinkage [Tex-107-E]**

*PSI National USA:n/a*

A new screen now exists for Tex-107-E [110748]. Kindly contact the Spectra QEST Help Desk to be licensed for this test.

**CR#232 Atterberg Limits [Tex-104-6]**

*PSI National USA:n/a*

A full test screen is now available for Atterberg Limits [Tex-104-6] (110764). Kindly contact Spectra QEST Help Desk for licensing and any further queries.

**CR#233 Moisture Content of Aggregates [Tex-103-E]**

*PSI National USA:n/a*

A new test screen has been created for this test [110752]. Kindly contact Spectra QEST Help Desk to be licensed for this test.

**CR#234 Addition of the supplier field to the Aggregate-Soil Sample screen.**

*PSI National USA:PSI\_567*

The Supplier field is now present on the Aggregate-Soil Sample screen and on the Bulk Entry grid respectively.

**CR#241 Amount of Material in Soils Finer than the 75µm Sieve [ASTM D 1140 - 00]**

*Braun Intertec USA:CR076*

The test "Amount of Material in Soils Finer than the 75µm Sieve [ASTM D 1140 - 00]" (110017) is now available in imperial measurements. Kindly contact Spectra QEST to be licensed for this screen.

**CR#242 Standard Proctor [MnDOT 1305]**

*Braun Intertec USA:CR075*

The MnDOT Standard Proctor test has been created (ID 110039). Please contact SpectraQEST Help Desk to be licensed for this test, as well as the relative Proctor test report (ID 110031).

**CR#243 Roadway Offset**

*Braun Intertec USA:CR072*

A new QEST Administrator Console option, "Do not format Location field Offset", has been added to QESTLab. Setting this option to TRUE will allow the user to enter data for the Offset field on the Sample to whatever precision desired.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:System\\_Options\\_-\\_General](http://online.spectraquest.com/index.php?title=QESTLab:System_Options_-_General)

**CR#246 Field Density reports - select samples reported**

*Coffey Information:Cof10.025*

Work order level reports will now have the samples also displayed in the Tests section of the Options tab of a report. Samples can be (de)selected to be displayed on the report, by default all the samples are reported.

All samples will be reported when a Lot Conformity test is present on the work order and the samples will not be available for deselection on Options tab.

The Multi Sample Agg/Soil and Asphalt reports do not currently support the Tests section functionality and so will also not support this new functionality.

**CR#249 Client list item information**

*Coffey Information:Cof08v3.120*

When selecting a Client from the dropdown list, highlighting a client will now cause an information window below the item to be displayed. This window will display the Address for the highlighted client.

Additional information: [http://online.spectraquest.com/index.php?title=QESTLab:Version\\_3.3#Client\\_List\\_Dropdowns](http://online.spectraquest.com/index.php?title=QESTLab:Version_3.3#Client_List_Dropdowns).

**CR#250 Concrete Standard All-Purpose Test Reports**

*Braun Intertec USA:CR079*

New concrete test reports for US customers are available that will report data from any test, built-in or user document attached to the concrete sample. Two reports are available; the Generic Concrete Test Report which contains a basic set of sample fields and the Generic Concrete Test Report (Extended) containing a full set of sample fields and specimen test results. Both sample details sections are customisable and use the new Result Fields Builder, which is especially friendly with respect to custom fields.

Kindly contact SpectraQEST to be licenced for these reports.

**CR#251 Compaction of Asphalt Specimens [AS2891.2.2]**

*Fulton Hogan:QL-425*

The screen has been adjusted to accommodate the recording of up to four specimens, which can be reported using the Standard Asphalt Test Report (18987).

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Asphalt\\_Test\\_Documents\\_-\\_Prep\\_Compaction#Compaction\\_of\\_Aspphalt\\_Specimens\\_.5BAS\\_2891.2.2:1995.5D](http://online.spectraquest.com/index.php?title=QESTLab:Asphalt_Test_Documents_-_Prep_Compaction#Compaction_of_Aspphalt_Specimens_.5BAS_2891.2.2:1995.5D)

**CR#255 Concrete Plant List**

*Braun Intertec USA:CR068*

Concrete plants now correctly link to the concrete supplier. When a plant is associated with a concrete supplier, the corresponding supplier is automatically selected. When a supplier is selected on a concrete sample, the list of available plants is reduced to those only available to the selected supplier.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Concrete\\_testing\\_-\\_Work\\_Order\\_Masonry\\_Sample\\_US#Supplier.2FPlant.2FMix](http://online.spectraquest.com/index.php?title=QESTLab:Concrete_testing_-_Work_Order_Masonry_Sample_US#Supplier.2FPlant.2FMix)

**CR#257 Raise Invoices Client/Project Selection**

*Coffey Information:Cof08v3.111*

Users can now set the project name or code before the client, and the client will be auto-selected on the Raise Invoices window.

**CR#277 Concrete Test Groups**

*Coffey Information:Cof09v3.105*

Context Sensitive Help now exists for the Concrete Test Groups list. When creating new Test Groups, the Help information can be used to explain the purpose(s) of the abbreviated headings.

**CR#279 Proctor [ASTM D 1557 - 07, ASTM D 698 - 07]**

*PSI National USA:PSI\_421.1b*

The following changes have been made to the Proctor [ASTM D 1557 - 07, ASTM D 698 - 07] screens:

- The zero air voids curve will now always appear on the plot irrespective of how far it is from the proctor curve.
- Raw values are always reported for MDD and OMC, corrected values are reported where present.
- Full prompts are used for reporting, e.g., Maximum Dry Density not MDD, Optimum Moisture Content not OMC.
- Visual Description has been removed.
- Y-axis units on the graph are now reported to 0.0.
- Material can now display 100 characters.

**CR#280 External Nuclear Gauges**

*PSI National USA:PSI\_481*

An equipment item can now be configured to be available at multiple laboratories.

**CR#281 Concrete Field Report (ASTM/AASHTO)**

*PSI National USA:PSI\_492*

Location and remarks columns now expand to print all the remarks and locations text.

**CR#282 Reporting Marks on US Concrete Reports**

*PSI National USA:PSI\_503*

The standard US concrete break report will not show marks by default or add marks remarks to the report.

A document level option, Show Marks, now exists for the US concrete break report that allows marks to be reported. Marks are reported in the Fracture Type column with a space separating the fracture type and Mark. The remarks contains a legend to describe a mark code to it's description. The report refers to Marks as Fracture Notes. Also, the report now refers to the Fracture Type legend as Fracture Types instead of Failure Modes.

**CR#283 ASTM C 579 - Standard Test Methods for Compressive Strength of Chemical-Resistant Mortars, Grouts. Monolithic Surfacing, and Polymer Concretes**

*PSI National USA:PSI\_515*

ASTM C 579 is now available for the concrete and masonry samples. Only Test Method B, Chemical-Resistant Mortar Cube specimens are available, CRM50SQ.

**CR#284 Billing: Externally Sampled Concrete**

*PSI National USA:PSI\_531*

It is now possible to charge those concrete specimens that have been sampled externally at a different rate. The Billable Items list now contains an additional field called "Externally Sampled". When this field is set to TRUE and the concrete specimen has been marked as being sampled externally then the Fee Schedules associated with this Billable Item (normal billing rules still apply) will be added to the Billing Document.

Additional information: [http://online.spectraquest.com/index.php?title=QESTLab:Billing\\_and\\_invoicing\\_-\\_billable\\_items](http://online.spectraquest.com/index.php?title=QESTLab:Billing_and_invoicing_-_billable_items)

**CR#285 Concrete Field Report (ASTM/AASHTO)**

*PSI National USA:PSI\_550*

When a new group for "General Location" is placed within the "Locations and Remarks" section on the concrete field report, the column headings are printed after "General Location" is printed.

**CR#286 Inactive Proctor Tests**

*PSI National USA:PSI\_555*

A new field, "Inactive", has been added to Proctor tests. This field can be viewed and edited through the Grid Entry view in Tests/Documents. Kindly contact Spectra QEST Help Desk if you would like help setting up an appropriate filter to be used for this.

**CR#287 Unified Soil Classification System [AASHTO M 145 - 91]**

*PSI National USA:PSI\_565*

The screen "Unified Soil Classification System [AASHTO M 145 - 91]" (110252) is now available. Kindly contact Spectra QEST to be licensed for this screen.

**CR#288 Concrete Field Report**

*PSI National USA:PSI\_494*

The column "Slump w/ plasticizer" is now reported when a value is present.

**CR#303 PDF Report Security**

*Coffey Information:Cof09.143*

Security permissions can now be set for PDF reports exported from QESTLab. The permission settings can be found in the QEST Administrator Console under "Configuration > Options > Permissions > PDF Test Reports" and "Configuration > Options > Permissions > PDF Reports & Charts". By default reports are exported as "Printable Only".

Additional information: [http://online.spectraquest.com/index.php?title=QESTLab:System\\_Options\\_-\\_Permissions#PDF\\_Test\\_Report](http://online.spectraquest.com/index.php?title=QESTLab:System_Options_-_Permissions#PDF_Test_Report)

Additional information: [http://online.spectraquest.com/index.php?title=QESTLab:System\\_Options\\_-\\_Permissions#PDF\\_Reports\\_.26\\_Charts](http://online.spectraquest.com/index.php?title=QESTLab:System_Options_-_Permissions#PDF_Reports_.26_Charts)

**CR#304 ListProject - LumpSum**

*PSI National USA:PSI\_569*

A field LumpSum of type BIT has been added to the ListProject table.

**CR#307 Reporting of "Coefficient of Curvature (Cc)" and "Coefficient of Uniformity (Cu)"**

*Fulton Hogan:QL-516*

The "Coefficient of Curvature (Cc)" and "Coefficient of Uniformity (Cu)" can now be calculated and reported from the test screen as standard results. This allows any report view to display these values.

**CR#308 Equipment Item - Nuclear Density Gauge**

*PSI National USA:PSI\_524*

The 'Calibration Date' and 'Calibration Source' can now be entered in the 'Calibration Values' tab. These values also populate the corresponding fields on the data entry screen.

**CR#309 Equipment Items: Date In-Service**

*PSI National USA:PSI\_517*

All equipment items now allow users to enter the "Date In-Service" for that equipment.

**CR#310 Converted Wet Density - Rapid [Q110C - 08]**

*Coffey Information:Cof09v3.073*

The standard "Density-Moisture Relationship - Rapid [Q110C - 08]" (10279) is now available in QESTLab. Kindly contact Spectra QEST to be licensed for this screen.

**CR#311 Atterberg Limits [AS 1289.3.1.1/2.1/3.1/4.1]**

*Fulton Hogan:QL-431*

A "Drying Record" can now be added for all moisture results to indicate that they have been dried to a constant mass.

**CR#312 PSD Predominant Non Classified report - AS 1289.3.6.1 Chart**

*Coffey Information:Cof09v3.016*

A document level option "PSD Non Classified AS 1289.3.6.1 Chart" has been added, when set to TRUE the AS 1289.3.6.1 Chart is used for the PSD Predominant Non Classified view's particle size distribution.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/soil\\_%26\\_asphalt\\_testing\\_-\\_the\\_test\\_report#PSD\\_Non\\_Classified\\_AS\\_1289.3.6.1\\_Chart](http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/soil_%26_asphalt_testing_-_the_test_report#PSD_Non_Classified_AS_1289.3.6.1_Chart)

**CR#313 Grading [AS 1289.3.6.1]**

*Coffey Information:Cof08v3.135*

The option "Ignore Sibling Moisture Content" has been added to the screen.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/Soil\\_Test\\_Documents\\_-\\_Particle\\_Size\\_Distribution](http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/Soil_Test_Documents_-_Particle_Size_Distribution)

**CR#314 Los Angeles Abrasion [NZA 4407:1991 Test 3.12]**

*Fulton Hogan:CR023*

The screen has been modified to accommodate the entry of individual masses (per sieve) for each grading type.

**CR#315 Maximum Dry Density - Successive Drying Masses [AS, NZS, TSA]**

*Fulton Hogan:BUG-408*

The entry of successive drying masses to demonstrate drying to constant mass is now available.

**CR#316 Benkelman Beam Deflection [RTA T160, T199]**

*Coffey Information:Cof08v3.115*

The screen "Benkelman Beam Deflection [RTA T160, T199]" (11455) and its report (18951) are now available. Kindly contact Spectra QEST to be licensed for these.

**CR#317 Aggregate/Soil and Asphalt Field Density Reports, and Concrete Field Report**

*PSI National USA:PSI\_533/PSI\_437*

The Aggregate/Soil, Asphalt, and Concrete Field Reports now allow a user to select how many results should be displayed on a single page. This is found under the certificate "Options" tab, under "Samples/Specimens per Table > Number per Table".

Also fixed when lab samples are shown on the Aggregate/Soil and Asphalt Field Density Reports.

**CR#318 Asphalt Density by Nuclear Method [ASTM D 2950 - 05]**

*PSI National USA:PSI\_522*

The Maximum Lab Density can now be entered manually when the "MLD Sample ID" dropdown is set to "External".

**CR#319 Sample By people - Available Laboratories**

*PSI National USA:PSI\_520*

People can now be configured to be available at multiple laboratories without being available at all laboratories.

Additional Information: <http://online.spectraquest.com/index.php?title=QESTLab:People>

**CR#320 Field Density Testing [ASTM, TxDOT]**

*PSI National USA:PSI\_420/420.1/420.1b*

A large number of enhancements have been made to Field Density testing for ASTM and TxDOT standards. These enhancements are designed to improve quality of testing and reporting.

**CR#426 CBR Reports Show Moisture Content Results**

*Coffey Information:Cof08v3.102*

Moisture Contents can now be reported on CBR or Multi-CBR Test Reports.

**CR#440 Compressive Strength of Concrete Cylinders Cast in Place in Cylindrical Molds [ASTM C 873]**

*Braun Intertec USA:CR082*

Test method ASTM C 873, for Compressive Strength of Concrete Cylinders Cast In Place in Cylindrical Molds is now available for the concrete sample.

**CR#441 Concrete [TxDOT]**

*PSI National USA:n/a*

Concrete via TxDOT standards is now available in QESTLab. A new report for all specimen types is now available (18953). Kindly contact Spectra QEST to be licenced for this report and for any further enquiries.

NOTE: If required, the old TxDoT concrete reports can be replaced via a dynamic script.

**CR#443 Concrete [TxDOT]**

*PSI National USA:*

Concrete via TxDOT standards is now available in QESTLab. A new report is available, kindly contact Spectra QEST to be licenced for this report and for any further inquiries.

**CR#444 Absorption of Water by Concrete by Immersion under Vacuum [RILEM CPC11.3-84]**

*Exova:n/a*

"Absorption of Water by Concrete by Immersion under Vacuum (RILEM CPC11.3-84)" is now available for the metric ASTM concrete sample.

**CR#447 Mortar Cylinders - MOR50, MOR75**

*PSI National USA:PSI\_574*

The default select method for mortar cylinders (MOR50, MOR75) can now be changed via a document level option, Mortar Cylinders Default Method, on the Masonry Sample.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:System\\_administration\\_-\\_document\\_level\\_options](http://online.spectraquest.com/index.php?title=QESTLab:System_administration_-_document_level_options)

**CR#448 Grout Cylinder Testing on the Masonry Sample**

*PSI National USA:PSI\_573*

Grout Cylinders, 50mm (2in), 75mm (3in) and 100mm (4in) diameter can now be tested on the Masonry Sample according to ASTM C 39.

**CR#290 Alternative Invoice Clients**

*Coffey Information:n/a*

A global option, "Allow Alternative Billing Clients on Invoices", now exists. This option is accessible via Configuration->Options->Billing/Invoicing in the QEST Administrator Console. When the option is enabled then users are allowed to associate a different client with a Project. The Invoice then displays corresponding details of that selected Billing Client.

NOTE: Should you require use of this functionality then you will require new custom headers developed. The existing custom headers (if any) is not compatible with this functionality (when enabled).

Additional information: [http://online.spectraquest.com/index.php?title=QESTLab:Billing\\_and\\_invoicing\\_-\\_invoicing#Alternative\\_Billing\\_Clients](http://online.spectraquest.com/index.php?title=QESTLab:Billing_and_invoicing_-_invoicing#Alternative_Billing_Clients)

**CR#455 ASTM C 1019 - Additional specimen type.**

*PSI National USA:PSI\_584*

Another specimen type exists for ASTM C 1019, the GROSQ100, representing Grout 100mm (4in) Square Cross Section. It operates and reports the same as GROCUBE.

Additional Information for ASTM C 1019 Masonry GROSQ100 specimens:

[http://online.spectraquest.com/index.php?title=QESTLab:Concrete\\_testing\\_-\\_the\\_masonry\\_specimen\\_types\\_US#GROSQ100](http://online.spectraquest.com/index.php?title=QESTLab:Concrete_testing_-_the_masonry_specimen_types_US#GROSQ100)

[http://online.spectraquest.com/index.php?title=QESTLab:Concrete\\_testing\\_-\\_the\\_masonry\\_specimen\\_types\\_US#ASTM\\_C\\_1019](http://online.spectraquest.com/index.php?title=QESTLab:Concrete_testing_-_the_masonry_specimen_types_US#ASTM_C_1019)

Additional Information for ASTM C 1019 Concrete GROSQ100 specimens:

[http://online.spectraquest.com/index.php?title=QESTLab:Concrete\\_testing\\_-\\_the\\_concrete\\_specimen\\_types\\_US#GROSQ100](http://online.spectraquest.com/index.php?title=QESTLab:Concrete_testing_-_the_concrete_specimen_types_US#GROSQ100)

[http://online.spectraquest.com/index.php?title=QESTLab:Concrete\\_testing\\_-\\_the\\_concrete\\_specimen\\_types\\_US#ASTM\\_C\\_1019](http://online.spectraquest.com/index.php?title=QESTLab:Concrete_testing_-_the_concrete_specimen_types_US#ASTM_C_1019)

**CR#460 Auto-fill for Custom Fields**

*PSI National USA:PSI\_582*

Custom fields that are configured to appear in the Work Order bulk entry mode can now be configured to allow auto-filling of values, just as normal QESTLab fields are.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Custom\\_Fields#Auto-fill](http://online.spectraquest.com/index.php?title=QESTLab:Custom_Fields#Auto-fill)

**CR#461 Asphaltic Concrete Core Report**

*City Of Las Vegas:n/a*

New test methods Bulk Specific Gravity [AASHTO T 275, ASTM D 1188] (117201) and Thickness of Paving Mixing [ASTM D 3549] (117200) have been added to QESTLab. A new report Asphaltic Concrete Core Report (117202) has been added to QESTLab for the reporting of these tests. Kindly contact the SpectraQEST HelpDesk to be licensed for these test methods and the report.

**CR#463 Project/Client List Selection**

*HOLCIM AU:HOL\_12*

Selecting projects or clients in the Project/Client List now displays white text on the blue highlighting for better readability.

**CR#466 Brookfield Viscosity of Asphalt (& Torque) [ASTM D 4402 - 06] & Brookfield Viscosity of Emulsion (Method A & Torque) [ASTM D 2196 - 05]**

*Fulton Hogan:QL-581*

The Brookfield Viscosity screens now allow for the addition of results at different RPMs by using a specification. In addition, a child report has been added to the screens (18987). Kindly contact the SpectraQEST HelpDesk in order to be licensed for this report, if you aren't already are.

In order for this report to work with tests performed prior to QESTLab 3.3, please select the test node in the tree and select the "New Document" button. From there, select the "Standard Asphalt Test Report (with records)" and hit "OK" which will add a report to the test.

Additional information: [http://online.spectraquest.com/index.php?title=QESTLab:Asphalt\\_Test\\_Documents\\_-\\_Brookfield\\_Viscosity](http://online.spectraquest.com/index.php?title=QESTLab:Asphalt_Test_Documents_-_Brookfield_Viscosity).

**CR#469 Solid Density on Nuclear Density Tests**

*Fulton Hogan:QL-488*

The "Solid Density" is now imported to the Relative Compaction screen if it is available, otherwise the "Assumed Solid Density" will be imported.

**CR#484 Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration (metric) [ASTM C 1202]**

*Exova:*

Two reduced tests, Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration (metric) [ASTM C 1202] (116140) and (116141), have been added to QESTLab. One for cast cylinders and the other for drilled cores.

No data is entered on the reduced screen, but the tests can be charged. The reduced tests reconfigure the OTHER type specimen on the concrete sample. It is on these specimens that data should be entered.

Reporting is as per normal on the standard concrete test report.

**CR#508 Concrete Electronic Worksheet - Measured and Tested By**

PSI National USA:PSI\_629

New buttons on the Electronic Worksheet, like the Checked By button, allow for bulk entry of specimen Measured By and Tested By.

**CR#511 Concrete Correction Factor**

PSI National USA:PSI\_633

The concrete correction factor can now be defaulted as 'used'. To do this, set the following option to 'True' :

QEST Administrator Console -> Configuration -> Options -> Concrete/QCS/QWS -> Apply Correction Factor to new specimens.

**CR#525 Limerock Bearing Ratio [FM 5-515]**

PSI National USA:PSI\_648

The test screen for Limerock Bearing Ratio [FM 5-515] has been revamped. All specimen data is now entered on the main screen instead of individual specimen screens.

**CR#527 Data Filters Upgrade**

Internal (Spectra QEST):n/a

Some types of Samples or Documents can have multiple "Views" when the Tests/Documents filters are used. These "Views" are interchangeable by using the "View" dropdown on the toolbar which is visible when there are more than one available View.

A filter can have a default View associated with it which will be used each time the filter runs. Concrete Samples currently have three Views available - "Default", "Data Entry" and "Work Sheet". The "Work Sheet" View (also known as Concrete Delivery Screen) is the only View that was available in QESTLab 3.2.

Please consider changing any Concrete Delivery filters to set the default view to "Work Sheet". The Bulk Edit View usually listed as "Data Entry", a type of View similar in appearance and operation to that of the Bulk Entry, is now fully functional.

Kindly contact the SpectraQEST HelpDesk with any additional queries.

**CR#532 Concrete Materials - Fine Aggregate**

PSI National USA:PSI\_631

Concrete and Masonry Mix lists now cater for three possible sources and amounts of fine aggregate. These new mix constituents can be entered on the sample screens and the concrete bulk entry. In addition to this, they can also be imported from the mix lists.

The standard concrete report can print the new mix constituents with the other constituents. Furthermore, the constituents (Cement 2, Coarse Aggregate 2, Fine Aggregate 2 and 3, Admixture 2 and 3) will not be printed if no data exists for them.

**CR#533 Custom Fields - Link To property**

PSI National USA:PSI\_628

A new property, "Link To", has been added for Custom Fields. This allows the ability for two custom fields (in the same Custom Field Set) which have values which come from the same QESTLab list to be linked.

These custom fields are linked such that when a value is chosen by the user for one field, QESTLab automatically chooses the corresponding value for the second field.

Additional Information: [http://online.spectraquest.com/index.php?title=QESTLab:Custom\\_Fields#Link\\_To](http://online.spectraquest.com/index.php?title=QESTLab:Custom_Fields#Link_To)

Customers using custom StampCode fields may require a database script to be run to upgrade the code from an integer to a string type. Kindly contact the Spectra QEST HelpDesk for the script.

**CR#534 Material Finer than 75µm in Aggregate [ASTM C 117 - 04]**

PSI National USA:PSI\_593

As per the standard, the "Finer than 75µm" is now displayed to 1 decimal place if the value is less than 10. It is shown to a whole number otherwise. This applies to the screen and reports. To override this behaviour a specification can be set using the "Format" field.

**CR#536 Density by Drive-Cylinder [ASTM D 2937 - 04] Review**

PSI National USA:PSI\_654

The test screen Density by Drive-Cylinder [ASTM D 2937 - 04] has been updated to better match PSI's testing process. To complement this a new test screen, Determination of Moisture Content by Means of a Calcium Carbide Gas Pressure Moisture Tester [FM 5-507], has also been added to QESTLab.

**CR#537 Measure of Texture by the Sand Circle Method [TNZ T/3 1981]**

Fulton Hogan:n/a

The screen "Measure of Texture by the Sand Circle Method [TNZ T/3 1981] (17065)", and its report "Texture by Sand Circle Method Report (17017)", are now available. Kindly contact Spectra QEST to be licensed for these screens.

**CR#541 Proctor Oversize and SG Calculation**

*PSI National USA:PSI\_657*

The following changes have been made to the Proctor:

- The grading tab now calculates "on the fly" as values are entered.
- Grading information can now be imported from a sibling grading / particle size distribution test.
- The oversize can now be entered using saturated surface dry values. Set the document option under the QLA in "Configuration > Documents > System > (Proctor Document) > Use SSD Method for Oversize". This also handles the case where the oversize is split before testing.
- The recommended method can be overwritten.
- Oversize and grading rounding has been corrected.

**CR#546 Sample Details: Results**

*Internal (Spectra QEST):*

QESTLab now has a new user interface to allow users to enter sample details results via document level options such as 'Sample Fields' in a much more user friendly way.

**CR#547 Determination of Amount of Material in Soils Finer than the 75um (No. 200) Sieve [Tex-111-E]**

*PSI National USA:PSI\_661*

The method "Amount of Material in Soils Finer than the 75um (No. 200) Sieve [Tex-111-E]" (110770) is now available in QESTLab. Kindly contact Spectra QEST to be licensed for this screen.

**CR#548 Admixing Lime to reduce Plasticity Index of Soils [Tex-112-E]**

*PSI National USA:PSI\_661*

The screen "Admixing Lime to reduce Plasticity Index of Soils [Tex-112-E]" (110778) is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

**CR#549 Specific Gravity and Absorption of Aggregates [Tex-403-A]**

*PSI National USA:PSI\_661*

The screen "Specific Gravity and Absorption of Aggregates [Tex-403-A]" (110745) is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

In addition, for further information with regards to data entry and calculations, please refer to the online help page below:

[http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/Soil\\_Test\\_Documents\\_-\\_Specific\\_Gravity#Specific\\_Gravity\\_and\\_Absorption\\_of\\_Aggregates\\_.5BTex-403-A.5D](http://online.spectraquest.com/index.php?title=QESTLab:Aggregate/Soil_Test_Documents_-_Specific_Gravity#Specific_Gravity_and_Absorption_of_Aggregates_.5BTex-403-A.5D)

**CR#550 Determining Unit Mass (Weight) of Aggregates [Tex-404-A]**

*PSI National USA:PSI\_661*

The screen "Determining Unit Mass (Weight) of Aggregates [Tex-404-A]" (110744) is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

**CR#551 Free Moisture Content and Water Absorption of Aggregate for Concrete [Tex-409-A]**

*PSI National USA:PSI\_661*

A new test, Free Moisture Content and Water Absorption of Aggregate for Concrete [Tex-409-A] (110170) is available in QESTLab. Kindly contact SpectraQEST to be licensed for this test.

**CR#552 Lightweight Pieces in Aggregate [Tex-412-A]**

*PSI National USA:PSI\_661*

A complete test has been created for Tex-412-A (110743). Kindly contact the SpectraQEST help desk to be licensed for this test.

**CR#553 Stabilometer Value of Bituminous Mixtures [Tex-208-F] (110774)**

*PSI National USA:PSI\_661*

The screen "Stabilometer Value of Bituminous Mixtures [Tex-208-F]" (110774) is now available. Kindly contact Spectra QEST to be licensed for this screen.

**CR#554 Asphalt Content [Tex-210-F]**

*PSI National USA:PSI\_661*

The test screen for Asphalt Content (Tex-200-F) [117300] has been added to QESTLab. Kindly contact Spectra QEST Help Desk for licensing or any further queries.

**CR#555 Lime Slurry [Tex-600-J Part III]**

*PSI National USA:PSI\_661*

Test method for Lime Slurry [Tex-600-J Part III] (114010) has been added to QESTLab and numerous changes to the Other type sample to support lime testing.

**CR#559 Concrete Dressing of Voids [RTA T368]**

*Coffey Information:Cof08v3.1.137*

The test, Concrete Dressing of Voids [RTA T368], has been implemented in QESTLab. It is reported on the appropriate Concrete Test Reports for Q, RTA and AS methods. Kindly contact the SpectraQEST HelpDesk if you're not licensed for the appropriate report(s).

**CR#564 Maximum Dry Compressive Strength [RTA T114]**

*Coffey Information:Cof10.067*

The screen "Maximum Dry Compressive Strength [RTA T114] (10564)" is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen. In addition, please ensure you are also licensed for the Maximum Dry Density Test Report [18995].

**CR#600 Moisture Completion**

*Coffey Information:Cof10.078*

A new moisture completion filter now exists in Qestlab under the Test/Documents node. This filter shows a complete list of 'ready for dry mass entry' moisture contents for Australian moisture content screens. there is no grouping, all moisture contents exist in the one grid regardless of method. The list is ordered by Tray Number. Bulk checking of the Moisture Content tests is now enabled.

**CR#609 Particle Size Analysis [Tex-101-3]**

*PSI National USA:n/a*

The screen "Particle Size Analysis [Tex-101-3]" (110773) is now available. Kindly contact Spectra QEST to be licensed for this screen.

**CR#614 Compression Machine equipment driver - ADMET**

*PSI National USA:PSI\_692*

A new equipment driver for the ADMET Gauge Buster compression machine equipment has been added.

**CR#618 Removal of revision year from ASTM test methods**

*Kleinfelder Nevada USA:n/a*

For customers that need the revision year removed from all ASTM test methods, a dynamic script has been made available to them. This script will have to be run after any QESTLab installation as part of the post-installation tasks. Kindly contact SpectraQEST HelpDesk with any further queries.

**CR#566 Concrete [Q Methods]**

*Coffey Information:Cof10.069*

Concrete test methods for AS equivalent Q standards are now available in QESTLab. There is a new Concrete Field Report (18946) and Concrete Test Report (18945) available specifically to report the Q methods. Kindly contact the SpectraQEST HelpDesk to be licensed for these two reports.

**CR#577 Particle Size Analysis of Soils [ASTM D 422 - 07]**

*PSI National USA:PSI\_662*

The following changes have been made to the hydrometer screen:-

- A warning is displayed if results cannot be calculated, to prompt the user to check the summary help.
- A warning is displayed if temperatures entered are outside of the correction equation range.
- An equation is used for calculating alpha now, rather than a lookup table.

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## Release Notes for QESTLab Version 3.3.200

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**CR#655 Weak Particles [Q217 - 10] \***

*Internal (Spectra QEST):n/a*

A reduced test has been created for this test method (ID 10151). Please contact the Spectra QEST Help Desk to be licensed for this test.

**CR#682 Additional columns for calibration reminder form**

*Internal (Spectra QEST):n/A*

The equipment calibration reminder form now displays the following columns:

- Laboratory
- Type (equipment type - new column)
- Code (equipment code)
- Make/Model (previously was appended to the Code)
- Task
- Due Date
- Performed By (new column)

**CR#519 Change in the display for Specification Limits**

*Exova:n/a*

Specification Limits that used to be displayed as "= value" will now just be displayed as "value". Kindly contact the Spectra HelpDesk with any additional queries.

**Bug#794 Calibration values use captions**

*Internal (Spectra QEST):*

The calibration values listed in both the generic calibration worksheet and on the calibration history report have been corrected to use the appropriate caption, instead of the underlying database field name.

**Bug#797 Toolbars not refreshed correctly when leaving a screen**

*Internal (Spectra QEST):n/a*

A bug where the toolbars used for specific types of items (such as reports, charts, and billing documents) were not hidden when stepping away from the item has been fixed.

**Bug#812 External Test Report visibility**

*Internal (Spectra QEST):n/a*

It was noted that in some cases the External Test Report control would not display correctly when first opened. This has been rectified - the External Test Report should now load correctly when first opened.

**Bug#840 Work Templates do not run on existing Work Orders that have no template data**

*PSI National USA:712*

When using Work templates with existing Work Orders that have no template data:

- The laboratory will be set correctly on the 'Edit Work Order' window to the lab of the work order being edited and the drop-down will be disabled so it cannot be changed.
- Global work templates will run successfully on these work orders.

**Bug#856 Error 457 when viewing equipment items**

*PSI National USA:717*

A bug in the patch that builds the calibration history for existing equipment items has been fixed. The bug occurred for specific types of equipment with multiple fields using the same caption in the calibration history. The result was an Error 457 when attempting to view the equipment item.

**Bug#857 Dynamic Script "Separate Edit Data Rights" to create an "Edit Data" role to maintain previous "Read Only" role setups**

*Internal (Spectra QEST):n/a*

A dynamic script called "Separate Edit Data Rights" has been added to create an "Edit Data" role to maintain previous "Read Only" role setups.

This should be used for configurations where a role with the old "Read Only" setting was being used in conjunction with other "normal" roles that were used by not-read-only users. After running this script an "Edit Data" role will have been created and the "Read Only" users will be all the people that do not have that role.

Note: This script should be run straight after updating the database to QESTLab 3.3, before any manual changes to people are roles are made.

**Bug#669 Improvements to Work Template usability**

*Internal (Spectra QEST):*

Some of the improvements that have been made are as follows:-

- A default, read-only Work Template called "\* Blank Work Order" is now shown at the top of the template list when adding a Work Order. It is not shown when editing Work Templates. Sample(s) and Test(s) should be selected when using this template as otherwise no sample tabs will be shown.
- Fixed samples now show (fixed) next to their name like (repeating) ones and the highlighting has been reversed so that fixed ones are coloured blue. This is to make it clear that "repeating" samples are actually the normal ones from before.
- Work Order screen now shows a button 'Add Batch' button when the template has 2 or more repeating samples. Pressing the button will add that number of samples. The button is not visible when there are one or no repeating samples in the template.

**Bug#506 Archived External Test Reports**

*PSI National USA:691*

Both the generic External Test Report and custom external test reports now display an appropriate message if the report data has been archived.

**Bug#460 Concrete Incomplete Initialising**

*Internal (Spectra QEST):*

The number of cylinders and flexural specimens on a concrete sample is calculated (as zero) when a concrete sample is created (defaults without specimens).

The flagging of non-standard curing for a sample is now correctly set (set as a standard test) when a sample is created.

**Bug#391 Maximum Dry Density & Converted Wet Density tests**

*PSI National USA:PSI\_663*

The Mold Type now accepts values greater than one character, and the data on the screen is saved as expected.

**Bug#865 Reports and Charts in local laboratories**

*PSI National USA:728*

The Reports & Charts nodes are now available for local laboratories as well i.e. when the laboratory context is not "(all)" or "(global)".

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## Release Notes for QESTLab Version 3.3.300

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**Bug#866 Work Order reports using Sample ID counters no longer fail**

*PSI National USA:732*

Reports at the work order level that relied upon SampleID to generate counter values for the report number now function correctly again. This issue was most evident in, but not exclusive to, external test reports added as children of a work order.

**Bug#867 Error in Regions -> Laboratory Documents tree**

*PSI National USA:733*

An error which occurs when a region/laboratory has access to a document but not the parent document, e.g., a concrete test but not the concrete sample, is now handled.

**Bug#862 Error 372: Failed to load control.**

*Internal (Spectra QEST):n/a*

The error, typically, occurred when trying to add/edit a Work Order after having viewed a Person screen and/or a Role screen. Steps have been taken to address this issue. Kindly contact the Spectra QEST HelpDesk should it persist.

**Bug#863 Custom field set to region mappings**

*PSI National USA:730*

Custom field set to region mappings are correctly displayed in the QEST Administrator Console. These mappings are correctly applied in QESTLab.

Note that environments which installed any release prior to QESTLab 3.3.300 may have lost or misconfigured custom field mappings. Unfortunately these have to be manually reconfigured via the QEST Administrator Console > Configuration > Regions and Laboratories > Custom Field Sets tab. Environments which have not installed either QESTLab 3.3.100 or 3.3.200 should not require this.

**Bug#877 Data values not captured when creating Work Templates from existing Work Orders.**

*Internal (Spectra QEST):n/a*

This has been corrected so that all non-system values will be now be correctly captured.

**Bug#884 QEST Administrator Console Tree customisation errors**

*PSI National USA:740*

When entering "Code" values for custom tree nodes in the QEST Administrator Console ("QEST Administrator Console > Configuration > Tree > Code") the cursor is no longer placed at the start of the text every time a key is pressed.

**Bug#885 Filter and group nodes locked in the QESTLab tree**

*PSI National USA:741*

The filter and group nodes have been corrected so that they cannot become locked.

**Bug#881 Work Orders with unlicensed optional tests aren't opening**

*Internal (Spectra QEST):n/a*

Any errors when trying to view unlicensed documents should now be handled.

**Bug#901 Error 91 when adding Concrete Samples**

*Internal (Spectra QEST):n/a*

When a counter is setup on the SampleID field of the Concrete Sample then an Error 91 would be returned to the user. This has now been fixed.

**Bug#902 Converted Wet Density [RTA T 162] - Error 5**

*Internal (Spectra QEST):n/a*

When viewing the Converted Wet Density [RTA T 162] screen an Error 5 would be returned. This should now be fixed.

**Bug#916 Report Comments: dropdown length restriction**

*PSI National USA:748*

Selecting Report Comments on a report from the dropdown on the Options tab will no longer have a dropdown box that extends outside the range of QESTLab, which would otherwise make it difficult to scroll the list to select an item.

NOTE: The above problem also manifested by restricting the number of items that would be displayed in the dropdown. This has also been fixed.

**Bug#925 Invalid tree filter items removed**

*Coffey Information:*

Some customers may have received error messages immediately after logging in when their environment was upgraded from QESTLab 3.2 to 3.3. This was due to a problem in the QESTLab tree configuration and has now been resolved.

**Bug#933 Equipment Group Items are from the Wrong Lab**

*Fulton Hogan:n/a*

Problems with equipment group item behaviour have been fixed. Additionally the list of group items now refreshes as soon as the lab is changed.

**Bug#331 Particle Size Analysis of Soils [ASTM D 422 - 07]**

*PSI National USA:PSI\_662*

- The "Time" and "Temperature" fields now save and load correctly to 1 decimal place.
- The correction equation data is now recorded to 2 decimal places.
- The "Soil Particle Diameter" now calculates from the equation if the reading is outside the range of the tables in the standard.
- The behaviour of the "Dry Mass Before Split" field has been improved.

**Bug#200 Proctor Mould Values**

*PSI National USA:PSI\_518*

The Mould Mass can now be recorded to 3 decimal places, and the Mould Volume to 4 decimal places. This applies to the "Details" mould data as well as the data in the grid.

**Bug#189 Icons in the tree under the Work Orders section not updating correctly.**

*PSI National USA:PSI\_551*

Icons in the tree under the Work Orders section were not updating correctly (except for being bold when incomplete). This has been corrected.

NOTE: This issue also addresses the display of the status of the tree nodes.

e.g. A ready to sign report is shown in blue text. When the test report is signed then it is shown in black text immediately.

**Bug#127 Maximum Dry density [AS 1289.5.2.1]**

*Boral National:BOR\_50*

There is now an option to determine how the mould mass is acquired. The mould mass can be acquired exclusively from the equipment calibration, exclusively by measuring (ignoring any equipment calibration) or, can allow both measuring or calibration where measuring can overwrite the calibration. Allowing both measuring and calibration is the default and users will not see any difference in normal functionality when using this option.

To access this option via the QEST Admin console select - Lab -> Configuration -> System -> Documents -> 10033 [AS 1289.5.2.1] -> "Mould Mass"

The AS 1289.5.2.1 standard says that the mould mass must always be measured, thus the option, "Mould Mass", should be set to "Measured".

**Bug#128 Concrete Caps**

*PSI National USA:PSI\_597*

Concrete Caps are now restricted to a single character length in all situations.

**Bug#471 Atterberg Limits [Q104A/Q105/Q106 - MRS 11.05]**

*Boral National:1315399*

The chart now clearly shows all moisture value points.

**Bug#454 Compactability Index**

*Internal (Spectra QEST):*

Compactability Index is now an optional field for data entry on the concrete sample (Australian Production view). To enable this option select the document level option "Use Compactability Index" on the concrete sample document (1602).

**Bug#675 Custom Field lists**

*PSI National USA:PSI\_703*

It is now possible to add custom field lists using a non case specific string, e.g., either "LIST:" or "List:".

**Bug#555 Concrete Sample [ASTM] Screen Locking**

*PSI National USA:PSI\_696*

- The Concrete Sample [ASTM] now greys out locked fields. This should help distinguish locked fields from fields that are not, when a sample is locked via a Field Report.

- The Concrete Sample can now lock only the fields reported on the Field Report, when it is signed. A document level option, "Field Report Locking Style", is available on the Concrete Sample (1602) and allows QESTLab to lock on Field Reported values when "Only Field Report Values" is set, or conventional locking when "All Excluding Laboratory Fields" is set.

**Bug#843 Concrete Sample Screens**

*Internal (Spectra QEST):n/a*

Concrete Sample Screens have been updated to correctly use the "Edit Data" right instead of the old "Read Only" right.

**Bug#850 The "Show Document" option not working for Billing Document**

*PSI National USA:713*

The billing document will now be hidden as per the option settings under all circumstances.

**Bug#814 Tested By / Checked By on external documents**

*Internal (Spectra QEST):n/a*

Some external document fields, most notably Tested By and Checked By, again successfully integrate with external documents.

**Bug#805 Publish queue single row deletion**

*Internal (Spectra QEST):n/a*

Selecting and deleting a single item in the Construction Hive Publish Queue in the QEST Administrator Console now works correctly.

**CR#470 Absorption of Water by Immersion [RILEM CPC 11.1: 1984]**

*Exova:n/a*

The test method "Absorption of Water by Immersion [RILEM CPC 11.1: 1984] (16021)" is now available in QESTLab. The test method can be selected on the concrete sample rather than through Work Templates and uses the AWC100 type specimens.

**CR#454 Tool for managing competency levels added.**

*Exova:n/a*

A tool for managing competency levels has been added under the "Tools" menu.

A user must have the "Manage Competency Levels" right in order to be able to run the tool.

The tool allows levels to be created and ordered. Each level can have a name, code and description specified as well as some associated permissions and a number of months before expiry.

When that level is selected on the Competency tab for a given person, that person will be granted the associated rights to the test or report in question and an expiry date will be set next to the competency based on the number of months until expiry for the selected level. That date can then be manually modified and will appear in red when it has passed.

NOTE: Further development in this area is likely. Please review this functionality and forward any feedback to the Spectra QEST HelpDesk.

**CR#289 Counter Management in the QESTLab Client**

*Braun Intertec USA:CR074*

Counters can now be managed via the QESTLab Client (Tools -> Administration -> Manage Counters) in the same way as in the Admin Console. This menu option is only enabled for users with System Administration access. Counter management is still available in the Admin Console.

In addition, a new menu option (Tools -> Edit Counter Values) has been added which allows users to edit only the next value for the counters. If the counter is grouped by Laboratory, the values shown are restricted to the Laboratories the user has access to. A new general permission has been added called 'Edit Counter Values' which is required to access this tool. The idea of this is to allow selected users the ability to correct or control counter values for their laboratory in situations where pure counters are not sophisticated enough to meet business operating requirements.

**CR#690 Bulk Entry modifications**

*Internal (Spectra QEST):*

In-house modifications have been made to the way the bulk entry views are chosen and displayed. It should have little effect for most customers however minor differences between your existing bulk entry views and the current one may exist. Please bring any such differences to the attention of the HelpDesk.

**CR#691 Role screen - grid updates**

*Internal (Spectra QEST):n/a*

A number of errors which occurred when selecting a permission group at the top of the screen from the grid have been fixed. This should stop the wrong permissions being shown for a permission group.

The 'All' row now has a green down arrow icon.

If searching the grid retrieves no results, the grid will now display "No search results found." instead of a blank grid.

The View Role button and View People button icons have been updated to better reflect the purpose of the button.

**CR#695 Construction Hive publish queue in QEST Admin Console**

*PSI National USA:714*

Several enhancements have been made to allow for better publish queue management in the QEST Admin Console. These changes are detailed at [http://online.spectraqest.com/index.php?title=QESTPortal:Publish\\_Queue\\_Admin](http://online.spectraqest.com/index.php?title=QESTPortal:Publish_Queue_Admin).

Note that the enhancements made to record the report no, work order ID and laboratory against queue items will not apply to items already in the queue, only those that are newly published.

**CR#696 Construction Hive empty distribution options**

*PSI National USA:n/a*

QESTLab now includes two options for publishing to Construction Hive. Both are located via the QEST Admin Console, Configuration > Options > Publishing:

"Allow empty distributions (historical)": when set to False (default), historical report publishing will not queue items where no distributions or recipients can be found (same behaviour as QESTLab 3.2). When true, it will publish them regardless.

"Allow empty distributions (real-time)": when set to False (default), an error will be raised on the report distribution window if a user attempts to publish a report without specifying any recipients with email addresses. When true, it will publish them regardless (same behaviour as QESTLab 3.2).

Note that Construction Hive itself does not currently support publishing without recipients, so both of these options should remain at the default of False until further advised.

**CR#700 Addition of Omani Rial currency**

*Exova:n/a*

The Omani Rial currency is now available for use in QESTLab.

**CR#677 Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E]**

*PSI National USA:n/a*

The screen "Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E] (110775)" is now available. A metric alternative to this screen has been created as well (110779). Kindly contact the Spectra QEST Help Desk to be licensed for either of these screens.

**CR#679 Limerock Bearing Ratio [FM 5-515]**

*PSI National USA:PSI\_648*

The test screen for Limerock Bearing Ratio [FM 5-515] has been revamped. All specimen data is now entered on the main screen instead of individual specimen screens.

**CR#680 Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E]**

*PSI National USA:n/a*

The screen "Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E] (110776)" is now available. Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

In addition, the units of compaction can be switched between metric and imperial by setting the document level option "Compaction IP" to True (Imperial) or False/Blank (Metric).

(Found under QEST Administrator Console -> Configuration -> Documents -> System -> 110776 - Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E] -> Compaction IP)

**CR#681 Concrete Materials - Fine Aggregate**

*PSI National USA:PSI\_631*

Concrete and Masonry Mix lists now cater for three possible sources and amounts of fine aggregate. These new mix constituents can be entered on the sample screens and the concrete bulk entry. In addition to this, they can also be imported from the mix lists.

The standard concrete report can print the new mix constituents with the other constituents. Furthermore, the constituents (Cement 2, Coarse Aggregate 2, Fine Aggregate 2 and 3, Admixture 2 and 3) will not be printed if no data exists for them.

Refer to [http://online.spectraquest.com/index.php?title=QESTLab:Concrete\\_testing\\_-\\_test\\_report\\_single](http://online.spectraquest.com/index.php?title=QESTLab:Concrete_testing_-_test_report_single) for more information.

**CR#666 Proctor Oversize and SG Calculation**

*PSI National USA:PSI\_421.1b*

The oversize material is now reported along with the material passing ("undersize") as well. In addition, the "Oversize Sieve" is now automatically set when the "Method" is selected.

**CR#718 Calibration Reminders can be exported**

*Internal (Spectra QEST):n/a*

The Calibration reminders that are displayed when the user logs in can now be exported to csv.

In addition, the form allows users to restrict the displayed reminders by laboratory as well. This is made possible through a laboratory dropdown on that form.

The reminders can be brought up anytime via the Tools > Equipment > Equipment Calibration Due menu item in QESTLab. Only those who have the "Calibrate Equipment" right have access to that menu item.

**CR#578 Nuclear Density 4407 4.2.1**

*Fulton Hogan:QL-1388*

A new Work Order View is available for New Zealand licenced versions of QESTLab that allows a simpler and faster bulk entry of Site and Nuclear Density data. Please contact the Spectra QEST HelpDesk for additional details.

**CR#650 Maximum Dry Density [Q142A]**

*Internal (Spectra QEST):n/a*

New test added for test method, Maximum Dry Density [Q142A], 10600. The test has no functional differences from the predecessor Q110A. The Assigned MDD [Q110F] and [Q144A] now search on Q142A when licensed for that test.

**CR#651 Laboratory Compaction of Nominated Levels of Dry Density and Moisture Content [Q145A - 10] \***

*Internal (Spectra QEST):n/a*

A new reduced screen has been created for this test (ID 10549). Please contact the Spectra QEST Help Desk to be licensed for this test.

**CR#652 Assigned Maximum Dry Density [Q144A - 10]**

*Internal (Spectra QEST):n/a*

The screen "Assigned Maximum Dry Density [Q144A - 10]" (11251) is now available. Kindly contact Spectra QEST to be licensed for this screen.

**Bug#674 Specification limits displaying in work order bulk entry**

*Internal (Spectra QEST):n/a*

Specification limits now correctly display in the work order bulk entry. The specifications field, which is the grey box adjacent to the field name, shows the specific specification limits for that field.

In addition, changing the specification on a sample in the work order bulk entry will now correctly update the specification and out-of-specification highlighting across all tests.

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## Release Notes for QESTLab Version 3.3.400

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**CR#730 Admet Gauge Buster 2 Equipment Driver**

*PSI National USA:n/a*

A driver for the "Admet Gauge Buster 2" equipment item is available. Kindly contact SpectraQEST to be licensed for this driver.

**Bug#121 Company Logo Scale Mode**

*PSI National USA:PSI\_540*

The scaling mode of the company logo is now inherited from parent locations when a value is not set for the specified location.

**Bug#998 Concrete Specimens Electronic Worksheet**

*PSI National USA:758*

An error has been fixed such that concrete specimens will correctly load in the electronic worksheet.

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## Release Notes for QESTLab Version 3.3.500

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**Bug#971 Work order sample groups in the tree not loading appropriate bulk entry**

*Fulton Hogan:QL-1954*

Clicking on the sample groups under a work order in the tree now correctly loads the bulk entry for the corresponding sample type.

**Bug#980 Nuclear Density [NZS]**

*Fulton Hogan:QL-1975*

The Nuclear Density [NZS] bulk entry view has been updated.

1. Columns have been added to the view as per requested with exception to (Roller) passes as that field does not currently exist, moisture correction (see below) and density section implemented in a slightly different way (see below).

2. The Material can be entered absent the Sourc. The source will be set in the background.

3. Northing, Easting and Relative Level (Elevation) have new formats to allow up to 12 decimal places, but zero padding discontinues after the 6th.

4. Density tests now have a two column for Moisture, Wet Density and Dry Density. The locked columns are the average results. The entry columns allow comma delimited results eg "4.5,5,6.5,7" = 5.75

5. Moisture corrections are handle 'on the fly'. Results are hidden. Users can see the moisture correction calculated on the fly as part to the moist correction test caption in the QESTLab tree, there is no reason to visit the moisture correction test screen now.

NB Nuclear density columns cannot be split like the example.

**Bug#983 QEST Administrator Laboratory Documents**

*Fulton Hogan:QL-1976*

QEST Administrator laboratory and regions accreditation documents now correctly contain many reports and user documents that were mistakenly excluded.

**Bug#1012 Equipment - order of calibration records**

*Coffey Information:Cof11.038\_1*

Equipment documents are now sorted before being listed in the QESTLab tree. Incomplete documents are listed first, and after that, they are listed by Date Performed (most recent at the top).

**Bug#1013 Performance: Edit filter dialog slow to open**

*Internal (Spectra QEST):n/a*

The database queries used to determine the list of documents/tables available in the edit filter dialog have been modified to improve performance.

**Bug#1022 Performance: changes to QESTLab Locking**

*Internal (Spectra QEST):n/a*

In order to make performance gains in QESTLab, the Locking functionality in QESTLab has been reviewed and altered.

When a user has a lock on a Work Order (i.e. is editing/viewing the Work Order) then all samples and documents below the Work Order are unavailable to other users for editing (i.e. they are locked).

If a user has a lock on a Sample then the corresponding Work Order and all documents below that Sample are also locked. Other Samples on that Work Order are not locked though.

If a user has a lock on a test document then any documents below that test (including test reports) are locked, the corresponding Sample and Work Order is also locked. However other test documents on that Sample are not locked.

Kindly contact the Spectra QEST HelpDesk with any queries.

**Bug#935 Not in Service equipment items**

*Fulton Hogan:n/a*

Equipment items that have been marked as being "Not in Service" will now not be available for selection in the various equipment dropdowns. Any existing selections will not be lost i.e. items that were marked as "Not in Service" after being used for a test will not be cleared from the dropdown.

Kindly contact the Spectra QEST HelpDesk with any additional queries.

**Bug#917 Concrete Generic Test Report(s)**

*Braun Intertec USA:BUG 215*

Concrete Test Reports Notes now correctly report the notes from the testing and sampling note dropdowns on the concrete sample.

Generic Concrete Report (18948) now correctly has footer sections for Notes and Remarks instead of comments. Also, the large gap between the results and the header has been reduced.

- NB Custom reports must be reloaded for these change to take effect.

The limit column for the test result on Generic Concrete Test Reports has move a little to the right to allow more space between the results and the limits (specifications).

An error has been fixed on options tab of reports where entering an End Page value without a Start Page value would cause the error.

**Bug#937 Concrete Shrinkage Screens**

*Internal (Spectra QEST):n/a*

The error messages that prevented the screen from saving data have been fixed.

**Bug#941 Fields being restricted to 255 characters**

*PSI National USA:752*

Due to an inherent bug within Visual Basic, some fields would be restricted to 255 characters when being displayed in QESTLab.

This bug occurred in User Documents and reduced tests, when more than 255 characters was being saved in a field.

NOTE: The underlying data does not seem to be truncated and the restriction to 255 characters is only visual.

This has been fixed such that the data that is displayed is as per the allocated size of the field to which the data is being saved. Kindly contact the Spectra QEST HelpDesk with any additional queries.

**Bug#957 Performance: Material drop down list, Edit Specification**

*Fulton Hogan:QL-1942*

The performance of the Specification dropdown on the sample screens has been improved. Once a material has been selected then the specification dropdown populates much faster now.

NOTE: There was a significant improvement for this in 3.3.300 (when compared to 3.3.100). This release makes further improvements on speeds noticed in 3.3.300.

In addition, when editing Specifications, the specification screen is displayed much faster too.

NOTE: The speed of editing a specification for the first time will be slightly slower than subsequent editing but a significant difference in the initial editing speed when compared to the previous QESTLab release should be noticed.

**Bug#960 Height, Marshall Stability and Flow of Compacted Asphalt [ASTM D 6927, D 6926, D 3549, D 2726] errors**

*Fulton Hogan:QL-1950*

The Error 91 and Error 5 that were returned when opening this screen have now been fixed. The screen should now load without any errors.

**Bug#962 Work Template functionality and usability improvements**

*PSI National USA:750*

Functional Changes:-

- Only one repeating sample definition is allowed in the template per sample type. Samples also no longer have a "number" associated with them.
- Multiple templates can now be selected when adding or editing a work order, providing users the power and flexibility to combine work templates on the fly or switch out the template being used on a work order for another. When multiple templates are selected they will be merged. Merged templates will combine the repeating samples of the same type and their tests, reports and predefined values into one template. Fixed samples will not be merged and the fixed samples from both templates will exist in the combined template. See the documentation for more information.
- When editing a work order then it will appear at the top of the list of templates with its checkbox selected. That item will contain the work template structure that the work order is currently using. It can be combined with more templates or deselected to replace it with a new template.
- Fixed samples are no longer remembered for a given work order. They are added as samples to the work order when the template is run after "adding" or "editing" a work order and will thereafter not be visible in the template when editing the work order.
- A text-entry field called "View Name" has been added to the "Predefined Values" tab for the work order only. This value determines the default "view" selected on the work order screen. This field will only be needed when custom views are provided by Spectra QEST for particular templates.

Usability Changes:-

- A help button has been added the top right of the Work Template window which opens the QESTOnline documentation page.
- The sections of the Work Templates window can now be resized by moving the vertical dividers.
- The "Add Child Documents" tab has been renamed "Add Samples/Tests/Reports" and the tab "Predefined Field Values" has been renamed "Predefined Values".
- Tests can now be added to the current template from the "Add Samples/Tests/Reports" tab by double-clicking on a document or by drag-and-drop of that item onto the template. The addition of documents by the previous 'checkbox' methods still applies. These methods are independent of the checkboxes and only operate on a single item.
- Text in the "Predefined Values" list is now light gray when read-only (when adding or editing a work order) to make it clear that it is only for display purposes.

Fixes:-

- Corrected a problem where a work order created with a fixed sample would not acquire the Technician or Due Date values from the work order.
- The patch to convert document groups has been updated to fix problems with samples being incorrectly set as "fixed" instead of "repeating" and documents at the work order level will no longer be set as "optional".
- A patch has been added to convert Work Templates to the new format required to support the functional changes.

Kindly contact the Spectra QEST HelpDesk with any additional queries.

**Bug#883 Concrete Field Report (US) - Slump with Plasticiser**

*PSI National USA:494*

Slump w/ Plasticiser now is only reported when recorded on the Concrete Field Report.

**Bug#895 Concrete/Masonry Mixes**

*PSI National USA:746*

- Concrete mix materials Fine2 Source and Amount now correctly import via the bulk entry of concrete.
- Masonry sample, grout and mortar mixes now correctly import via the bulk entry and sample screen.
- Admixes have been removed from the Grout/Mortar mix list as they were never imported.
- Group relations from the Masonry Suppliers, Plants and Grout/Mortar Mixes has been enhanced such that dropdowns from code and names are present in the lists for created items, and when creating new item for these lists.

**Bug#897 Vapor Emissions Report - Pictures**

*PSI National USA:UAT606*

New pages will be added for pictures instead of pictures overlaying the results.

**Bug#1021 .NET component checks over Citrix environment**

*PSI National USA:n/a*

When interoperability with Construction Hive is in place (for example for archived reports), the preliminary check for .NET components is now performed correctly when accessed over a Citrix environment.

**Bug#126 Empty External Test Reports in Bulk Functions**

*PSI National USA:605*

External test reports that don't have a document associated with them will be ignored when they are included in bulk functions (printing, exporting, signing, etc.).

**Bug#387 Maximum Dry Density - Standard [NZS 4402:1986 Test 4.1.1], Maximum Dry Density - Heavy [NZS 4402:1986 Test 4.1.2]**

*Coffey Information:Cof10.076*

The screen(s) now accomodates zero air voids functionality.

**Bug#329 Maximum Dry Density - Standard [RTA T111, Q110A, WA132.1, WA132.2], Maximum Dry Density - Modified [AS 1289.5.2.1, RTA T112, Q110B - 96, WA133.1, WA133.2]**

*Internal (Spectra QEST):HDK\_033*

These screens now have the ability to plot the zero air voids on the chart

**Bug#413 Masonry Report [ASTM C 140] (Concrete Sample)**

*PSI National USA:PSI\_670*

The Masonry Report [ASTM C 140] for the Concrete Sample Only, now correctly reports average net area.

A multi-paging issue has also been fixed and only absorption calculated and strength calculated specimens are printed in their respective sections.

**Bug#232 Concrete Field Reports [AS, RTA, Q]**

*Coffey Information:Cof09.140*

- Concrete Field Reports (AS, RTA, Q) can now report the second slump.
- The second slump and super-plastised slumps can now be recorded as visual slumps.
- Also, several font-related issues have been fixed on the Concrete field report.

**Bug#249 Counters resetting at new year**

*Coffey Information:Cof08.001*

Counters that have Auto-Reset enabled (and have the date as part of the Format String) will now auto reset to 1 instead of 0.

**Bug#770 Maximum Dry Density - Standard [WA132.2], Maximum Dry Density - Modified [WA133.1]**

*Coffey Information:Cof11.011*

The screens now report the Standard Maximum Dry Density and Moisture Content, and the Modified Maximum Dry Density and Moisture Content accordingly.

**Bug#810 Performance: changes to Work Order/Bulk Entry**

*Internal (Spectra QEST):*

A number of core changes have been made across QESTLab, in addition to the Work Order and Bulk Entry controls, that allow for significant performance gains when loading and unloading a Work Order. These changes are aimed at improving the speed of data entry for tests that require the use of a large number of samples.

When adding multiple samples to a Work Order then a noticeable change will be that the Bulk Entry will only display once all the samples have been added. Previously the addition of each sample was reflected in the bulk entry. The progress bar will continue to indicate the progress of sample addition.

NOTE: Only minor speed gains will be noticeable when adding new samples to a Work Order. The performance gains are noticeable when unloading a Work Order (when data entry is done) and when returning to a Work Order (to continue data entry).

**Bug#838 Contact List**

*Coffey Information:Cof11.019*

The Contacts, Report Comments and Fee Schedule lists now have columns for client and project dropdowns so that the list's client and/or project details can be edited.

**Bug#711 Performance: Document Information form improvements**

*PSI National USA:PSI\_704*

The time taken to load the document information form (when compared to 3.2) has been further improved with this release. If the loading time of the form is still slow then please bring it to the attention of the Spectra QEST HelpDesk.

**Bug#461 Moisture Content [NZS 4407:1991 Test 2.1, NZS 4407:1991 Test 3.1, NZS 3111:1986 Test 7]**

*Coffey Information:Cof10.090Z*

- Tray Numbers are now available for both moisture content tests, and can be entered on either the screen or bulk entry.
- Separators have been added to bulk entry to clearly separate the 2 tests.

**CR#738 Display equipment information on calibration worksheets**

*Coffey Information:Cof11.038\_2*

Additional equipment and task fields have been added to the header control used for all equipment calibration worksheets. These values should allow users to be able to associate any on-going (or completed) task/calibration to the equipment. These values are read-only.

The fields included are:-

- Equipment Code
- Equipment Make/Model
- Task Name
- Task Description

The "Calibration is Complete" checkbox on equipment calibration screens has been replaced with a "Finish Calibration" button. This button is listed below any data entry fields for the calibration worksheet.

When a user presses the "Finish Calibration" button, the worksheet will become locked. Then, when the user leaves the screen, or saves his/her changes, the business rules associated with completing the calibration will be triggered. This normally means that results fields will be copied up to the equipment's calibration values, and the next due date for the calibration task will be calculated.

**CR#739 Use of "Task" on equipment screens**

*Coffey Information:Cof11.038\_3*

Where appropriate the word "Task", on equipment screens, has been replaced with the word "Calibration". This ensures that industry specific terminology is used to avoid end-user confusion.

**CR#741 Calibration worksheets - jump to equipment button**

*Internal (Spectra QEST):n/a*

A 'jump to equipment' button has been added to all calibration worksheets. Clicking this button transfers the user to the associated equipment screen with the corresponding "Calibration/Check" task displayed.

NOTE: Clicking on one of the equipment calibration/check group nodes also loads the associated equipment screen with the corresponding "Calibration/Check" task displayed.

**CR#562 Moisture Content Correlation (AS 1289.2.3.1, RTA T2105, Q010 - 96)**

*Coffey Information:Cof10.066\_1*

These Moisture Content Correlation screens are now available in QESTLab. Please contact the Spectra QEST Helpdesk to be licensed for these tests.

In addition, please ensure you are licensed for the Moisture Content Correlation Report (11347).

**CR#291 Nuclear Gauge Consistency Check [WA135.2, WA2040.2]**

*Coffey Information:Cof10.064*

The screen "Nuclear Gauge Consistency Check [WA135.2, WA2040.2]" (31004) is now available. Kindly contact Spectra QEST to be licensed for this screen.

NOTE: At this time the "Datum Value Calculations" have not been implemented. The moisture/density count calculations and consistency checks have been however.

**CR#292 Nuclear Gauge Consistency Check [WA135.2, WA2040.2]**

*Coffey Information:Cof10.064*

The screen "Nuclear Gauge Consistency Check [WA135.2, WA2040.2]" (31004) is now available. Kindly contact Spectra QEST to be licensed for this screen.

NOTE: At this time the "Datum Value Calculations" have not been implemented. The moisture/density count calculations and consistency checks have been however.

**CR#295 Random Site Location [Q050]**

*Coffey Information:Cof10.065*

It is now possible to generate Random Lots as specified by the Q050-2002 standard. Kindly contact Spectra QEST for licensing.

In addition the Random Site Location screen has been modified such that:-

- Switching between General, Roadwork and Sitework copies the General Location across properly
- The test method is now reported
- The Offset From now appears as a drop-down list on the screen

**CR#296 Random Site Locations [RTA Q6]**

*Coffey Information:Cof10.065*

It is now possible to generate Random Lots as specified by the RTA Q6. Kindly contact Spectra QEST for licensing.

In addition the Random Site Location screen has been modified such that:-

- Switching between General, Roadwork and Sitework copies the General Location across properly
- The test method is now reported
- The Offset From now appears as a drop-down list on the screen

**CR#297 Random Site Location [AS 1289.1.4.2]**

*Coffey Information:Cof10.065*

The Random Site Location screen has been modified such that:-

- Switching between General, Roadwork and Sitework copies the General Location across properly
- The test method is now reported
- The Offset From now appears as a drop-down list on the screen

**CR#298 Random Site Location [AS 1289.1.4.1]**

*Coffey Information:Cof10.065*

The Random Site Location screen has been modified such that:-

- Switching between General, Roadwork and Sitework copies the General Location across properly
- The test method is now reported
- The Offset From now appears as a drop-down list on the screen

**CR#299 Random Site Location [WA 0.1]**

*Coffey Information:Cof10.065*

It is now possible to generate Random Lots as specified by the WA 0.1 standard. Kindly contact Spectra QEST for licensing.

In addition, the Random Site Location screen has been modified such that:-

- Switching between General, Roadwork and Sitework copies the General Location across properly
- The test method is now reported
- The Offset From now appears as a drop-down list on the screen

### **CR#300 Random Site Locations [RC 316.10]**

*Coffey Information:Cof10.065*

It is now possible to generate Random Lots as specified by the RC 316.10. Kindly contact Spectra QEST for licensing.

In addition, the Random Site Location screen has been modified such that:-

- Switching between General, Roadwork and Sitework copies the General Location across properly
- The test method is now reported
- The Offset From now appears as a drop-down list on the screen

### **CR#744 Performance: changes to QESTLab Options**

*Internal (Spectra QEST):n/a*

In order to make performance gains in QESTLab (most noticeable on the Work Order and Bulk Entry screens) the options have now been cached. This implies that any changes made to options (via the QEST Administrator Console) won't be applied until QESTLab has been restarted.

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## **Release Notes for QESTLab Version 3.3.600**

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### **CR#754 Allow editing of completed calibrations**

*PSI National USA:PSI\_753*

To allow calibration results to be corrected, Laboratory Supervisors can now unlock the most recent calibration worksheet for a piece of equipment for editing (via the "Enable Editing" button on the document). This allows the calibration values for an equipment item to be corrected if they were saved incorrectly when the calibration was entered.

NOTE: If the task associated with the most recent calibration worksheet is already in progress then editing of completed calibrations will not be allowed. Kindly contact the Spectra QEST HelpDesk with any specific queries.

### **CR#761 Display a flag for calibration worksheets that do not update calibration values**

*Internal (Spectra QEST):n/a*

Calibration worksheets that did not write their results back to the equipment item will now display this information on the calibration report. They also display this information clearly in the header section of the worksheet.

### **CR#654 Average Least Dimension [Q202-10]**

*Internal (Spectra QEST):n/a*

Average Least Dimension [Q202-10] has been updated to use only the indirect method to cater for the newer standard, as per Amendment 31.

### **CR#565 Balance Calibration Screens**

*Coffey Information:Cof10.068*

Calibration screens are now available for performing and recording balance calibrations. Kindly contact Spectra QEST to be licensed for the following screens:

- Balance Calibration Data Entry [NATA Technical Note 13] (31010) (For entering data from the full 3-yearly calibration)
- Balance Single-Point Check [NATA Technical Note 13] (31005)
- Balance Single-Point Check when Moving [NATA Technical Note 13] (31008)
- Balance Repeatability Check [NATA Technical Note 13] (31007)
- Balance Limit of Performance [NATA Technical Note 13] (31009)

### **CR#743 Concrete Specimens - Work Order Identification**

*Braun Intertec USA:SAMPLEID*

Concrete specimens can now be identified to their work order in the concrete specimens electronic worksheet (concrete multiple) via a new column for Work Order ID. By default the Work Order Column is hidden, to turn on this feature, select the global option in the QEST Admin Console under concrete "ShowConcreteSpecimenWorkOrder".

### **CR#736 Concrete Sample [ASTM]**

*PSI National USA:631.1*

The Concrete Sample [ASTM] now has fields to enter Fine Aggregate 2 and 3 moisture contents on the bulk entry. N/A will now show in the Material Moisture column for Water and Admixtures.

**CR#719 Calibration History Report Exporting**

Fulton Hogan:n/a

The Calibration History Report can now be exported as either a text file (TXT) or a Portable Document Format file (PDF) by using the corresponding icons in the toolbar. The report can also be printed.

**CR#667 Sieve Analysis for Fine and Coarse Aggregate [Tex-401-2]**

PSI National USA:n/a

Maximum mass checks now work when masses entered are cumulative (rather than individual).

**CR#676 Density by Drive-Cylinder [ASTM D 2937 - 04] Review**

PSI National USA:PSI 654

The test screen Density by Drive-Cylinder [ASTM D 2937 - 04] has been updated. To complement this a new test screen, Determination of Moisture Content by Means of a Calcium Carbide Gas Pressure Moisture Tester [FM 5-507], has also been added to QESTLab.

**CR#705 Asphalt Sieve Analysis [Tex-229-F]**

PSI National USA:710

- The Tex-229-F worksheet has been modified to allow exporting of passing details back to the reduced screen.

- The Density Compacted Bituminous Mixtures Report now reports the passing details.

**CR#708 Grout Cylinders 3 inch diameter (75mm)**

PSI National USA:PSI\_573

GRO75 specimens, Grout Cylinders of 3 inch diameter (75mm), are now available equally for concrete and masonry samples, and subsidiaries (Test Group, Billable Items lists etc).

**CR#701 External calibration worksheets**

PSI National USA:720

A variation of the external document screen has been added for the purpose of recording equipment calibrations. This uses the same underlying implementation as a regular external document, and adds the additional fields that are used when calibrating equipment, allowing it to be associated with a calibration task.

If you are licensed for this document, it will appear in the Calibration Worksheet dropdown on the equipment screen. You can also use external document mappings to specify template documents that will be added. These can be selected in the calibration worksheet dropdown in the same way.

To be licensed for this document, please contact Spectra QEST.

**Bug#489 Proctor - Modified [ASTM D 1557 - 07]**

Kleinfelder Nevada USA:N/A

The grading on the proctor screen is now in grams rather than kilograms. This affects ASTM D 698 - 07 and ASTM D 1557 - 07.

**Bug#557 Reports & Charts - Export to CSV**

Cardno Bowler:n/a

If the first column of a row was blank then when exporting to CSV the values were displayed against the incorrect columns. This has been fixed.

The column headings (as specified by the user) is now exported instead of the field names. However, if no column headings are specified at all then the field names will be exported instead of a blank value. Kindly contact the Spectra QEST HelpDesk with any additional queries.

**Bug#587 Concrete Moisture Condition (Australia)**

Coffey Information:Cof10.052

The moisture conditions "Oven Dried" and "Air Dried" now have accompanying notes printed per sample in the Location and Remarks on Concrete Test Reports (18969, 18965, 18945). The note, "Moisture Condition SSD in accordance with AS 1012.12.1, unless otherwise stated", will not be displayed if the report only contains sample that are air dried, oven dried, that only contain cores or any combination thereof.

**Bug#588 Concrete Moisture Condition (Australia)**

Coffey Information:Cof10.053

The concrete report (AS) moisture condition note will now reference AS 1012.12.2 when all samples are density tested by water displacement instead of direct measurement. When both density methods are represented on the report, the moisture condition will only reference AS 1012.12.1. Likewise, the concrete report for Q methods will reference the moisture condition to Q473A when all samples are density tested by water displacement.

**Bug#574 Lightweight Particles [MnDOT 1207, ASTM C 123, AASHTO T 113]**

Braun Intertec USA:BUG204

When the mass of each particle is entered as zero grams, the corresponding percentage of that particle in relation to the mass of the test portion is now set to zero, indicating that no particles of that type are present in the test portion. This is now reported accordingly as well.

**Bug#519 Atterberg Limits [NZS 4402 Test 2.2, 2.3, 2.4, 2.6]**

Coffey Information:Cof10.102Z

The report now reports if the test used the whole sample or just material passing the 425um sieve. Additionally the plastic limit is reported as "Not Tested" if there are no plastic points entered.

**Bug#852 Calibration due date calculations**

PSI National USA:PSI\_719

When configuring the cycle for a recurring calibration, users can now choose between two options for the calibration cycle. The effect on due date calculations is that the next due date will either be determined based on an initial starting date, or will be determined based on the last calibration date.

When the calibration cycle is based on an initial starting date (e.g. "Rekurs every [2] [Years] starting [1 Jan 2009]"), it will always fall on an exact number of cycles added to the starting date. To allow for cases where the calibration is performed a few days before or after the current due date, the next due date will be between 0.5 and 1.5 calibration cycles after the last calibration. Normally this means that it will be exactly one cycle after the previous due date.

When the calibration cycle is based on the last calibration date (e.g. "Rekurs [2] [Years] after last calibration, starting [1 Jan 2009]"), it will always fall exactly one cycle after the last calibration. The start date is used to specify a due date for the first calibration.

The due dates are a bit easier to understand with a couple of examples.

Example 1: Suppose I have a calibration with the schedule set to "Rekurs every [2] [Years] starting [1 Jan 2009]", and lets say that it is currently due on 1 Jan 2011.

- If I perform the calibration a few days early, on 25 Dec 2010, the new due date will be 1 Jan 2013.
- If I perform the calibration a few days late, on 3 Jan 2011, the new due date will be 1 Jan 2013.

Example 2: Suppose I have a calibration with the schedule set to "Rekurs [2] [Years] after last calibration.", and again, lets say that it is currently due on 1 Jan 2011.

- If I perform the calibration a few days early, on 25 Dec 2010, the new due date will be 25 Dec 2012.
- If I perform the calibration a few days late, on 3 Jan 2011, the new due date will be 3 Jan 2013.

**Bug#853 Equipment screen - resizing can trigger an error message**

PSI National USA:721

Resizing of a number of standard QESTLab controls has been revised to ensure that error messages are avoided or suppressed. Previously they would sometimes display error messages (when reduced in size). This was particularly noticeable on the Equipment screen, however the changes made apply throughout QESTLab.

**Bug#792 Permission checks for equipment calibration**

Internal (Spectra QEST):n/a

A number of changes to the permission checks around equipment calibration worksheets have been made:-

1. If a user does not have the 'Calibrate Equipment' permission, he/she will not be able to add or modify any calibration tasks on the equipment screen.
2. The list of calibration worksheets will always include all licensed calibration worksheets, allowing users that are not approved for a specific worksheet to configure the equipment calibrations.
3. Users can only record calibration data if they have both the calibrate equipment permission, and are approved for the calibration worksheet.
4. Calibration documents cannot be deleted once they have been completed (normally via the "Finish Calibration" button on the calibration worksheet). This is to help maintain integrity in the equipment history report, and these worksheets will exhibit similar behaviour to samples/tests that have appeared on a signed test report.

**Bug#227 Hydrometer Screen - Stability Improvements**

PSI National USA:PSI\_560

A number of changes have been made for the error handling for the particle size distribution / hydrometer screens to make them significantly more robust if an error occurs (for any reason). Some fixes were also put in place to prevent specific errors completely, however, in most cases where an error previously would have resulted in QESTLab crashing, users will still receive an error message (without crashing QESTLab).

**Bug#294 Rice Specific Gravity [AASHTO T 209 - 05]**

PSI National USA:PSI\_647

The saturated surface-dry weight can now be entered. This should now replace the sample weight in the denominator of each individual calculation.

**Bug#330 Handling of specifications with identical names**

*PSI National USA:PSI\_660*

When looking up a specification by name, QESTLab will only return specifications defined at the appropriate lab (this is either the current lab context, or the owner lab for the specific sample/test), or defined globally. The local specification will always take precedence over a global specification, and any specifications defined at other laboratories will not be returned.

This resolves a bug where two laboratories could define specifications with the same name, and when selecting the specification at one of those laboratories, the incorrect specification would be returned. This only caused a problem if the specifications at each lab were different (e.g. covered different test methods).

**Bug#183 Custom Header - Preliminary Report Text**

*Fulton Hogan:FH\_QL-622*

The reporting of the preliminary report text along with the previously issued preliminary report numbers, when the report is re-issued as an endorsed report, has been removed from this custom header. Kindly contact the Spectra QEST HelpDesk for the updated headers.

**Bug#163 Page number incorrectly displayed when viewing reports with multiple pages**

*PSI National USA:PSI\_579*

When viewing multiple pages of a report at one time (normally by double-clicking on a page in a multi-page report), the page number displayed in the toolbar will now line up with the selected page when you click on a page to select it, or double-click it to view that page.

This fix applies to:-

- Invoices
- Equipment Reports
- Management Reports
- Test Reports

**Bug#201 Maximum Dry Density Cohesionless [RTA T164]**

*Coffey Information:Cof08v3.070b*

The Minimum Dry Density fields on the bulk entry have been removed. The drying method (moisture content method) is now available in the bulk entry.

**Bug#216 Unconfined Compressive Strength [ASTM D 2166]**

*Braun Intertec USA:BUG 187*

The following changes have been made to the screen:

- All standard reporting fields are now reported.
- To report the Stress vs Strain chart please use the "Unconfined Compressive Strength Test Report" (110299). Kindly contact Spectra QEST to be licensed for this report.
- The "Zoom to fit" checkbox now saves its value so it remains zoomed out when leaving and re-opening the screen.
- Importing the specific gravity from "Specific Gravity of Soil [ASTM D 854]" now works correctly.
- The "Degree of Saturation" calculation now works correctly.

Note that specimen types (intact, remolded, reconstituted) are reported via the "Visual Description" field.

**Bug#886 Cannot assign list criteria to data filters when editing**

*PSI National USA:739*

An error in the SQL query used when linking a filter criteria to a QESTLab list (when editing filters) has been corrected.

**Bug#893 Enter key doesn't run some filters**

*PSI National USA:727*

Areas using the new filter control (e.g. Equipment, Specifications, etc) can now be run by pressing the enter key after filling in criteria.

In addition, they now support the following shortcuts:

- Enter - Run the filter with the current criteria (does nothing if the filter is already being run)
- Esc - Abort the filter (does nothing if the filter is not running)
- Ctrl+S - Save the current filter criteria as a named criteria set
- Ctrl+D - Prompts the user to delete the current named criteria set (does nothing if a named criteria set is not selected)

**Bug#969 Proctor [MnDOT 1305] - Mould Volume**

Braun Intertec USA:BUG217

The Wet Density is now correctly calculated from the Mould Volume. Please use the metric version of the screen to produce densities in kg/m<sup>3</sup>.

**Bug#934 Removal of unnecessary equipment calibration buttons**

Fulton Hogan:n/a

The 'Cancel' and 'Finish' buttons for equipment calibrations have been removed from the Equipment screen. Users can perform these actions from the calibration worksheet itself (which can be accessed using the 'Open Calibration' button).

- To 'cancel' a calibration, simply delete the calibration worksheet in the same way as you would delete an unwanted test worksheet.
- To 'finish' a calibration, click the 'Finish Calibration' button at the bottom of the worksheet.

**Bug#1023 Empty External Test Reports in Bulk Functions**

PSI National USA:605

External test reports that don't have a document associated with them will be ignored when they are included in bulk functions (printing, exporting, signing, etc). This was previously noted in the 3.3.500 release in error.

**Bug#1026 Moisture Content Correlation [AS 1289.2.3.1, RTA T2105, Q010 - 96]**

Internal (Spectra QEST):n/a

The linear equation has been corrected, and the values of A and B are now correct. In addition, the bulk entry can now be used to calculate the corrected moisture content on subsidiary moisture content tests.

**Bug#1028 Random Site Location [RTA Q6]**

Coffey Information:Cof11.044

A number of issues have been resolved for this screen:-

- The sequence of random numbers will continue through the set for each individual test performed on a particular day.
- The calculation of the "Number of Tests" required for this standard is now performed in accordance with the Minimum Testing Frequency table.
- The "Control Line" label should no longer overlap with the offset labels.
- The edge boundaries have been applied to all screens. Offset calculations should not occur outside these boundaries.
- The "Offset From" should be reported, based upon the values present in the bulk entry.

**Bug#1014 Concrete Test Report [Q]**

Coffey Information:Cof11.039\_1

The test method for density by displacement is now correctly reported as Q473 (previously Q473A).

**Bug#1015 Concrete Test Report [Q]**

Coffey Information:Cof11.039\_2

The Concrete Test Report [Q] now correctly reports the sampling method Q455A (previously AS 1012.1).

**Bug#1017 QEST Administrator Console - Tree Customisations**

Internal (Spectra QEST):n/a

The Errors that would result from the editing of the Tree Customisations module in the QEST Administrator Console have now be addressed.

**Bug#1020 QLC crashes when adding large numbers of samples to a work order**

Internal (Spectra QEST):INTERNAL

Two bugs that could cause QESTLab to crash when adding a large number of samples (usually 100+) to a work order have been fixed.

The first affected both adding samples, and loading an existing work order with a large number of samples, and resulted in the user interface becoming unstable, and failing to redraw correctly.

The second only affected adding samples, and occurred while adding sample nodes to the tree after the samples had been successfully created.

**Bug#1031 Concrete Test Report [Q]**

Coffey Information:N/A

The Concrete Test Report [Q] now correctly groups slump only samples with COMPxxx groups.

**Bug#1032 Random Site Location [RC 316.10]**

*Coffey Information:Cof11.047\_1*

Edge boundaries can now be applied to the site graph.

**Bug#1033 Random Site Location [Q050]**

*Coffey Information:Cof11.048\_1*

The number set for a given day should now continue to the next number in the set for each test performed on the same day. It should also rollover to the previous day when more than 30 samples have been used.

**Bug#1034 Random Site Location [WA 0.1]**

*Coffey Information:Cof11.049\_1*

The "Control Line" should no longer be obscured by the offset labels.

**Bug#1037 Nuclear Gauge Daily Count Check [AS 1289.5.8.1 Appendix A-A1] import for new calibrations**

*Coffey Information:Cof11.050\_2*

When a new calibration is started using the Nuclear Gauge Daily Count Check [AS 1289.5.8.1 Appendix A-A1] worksheet, the import of previous calibration values is now limited to those recorded for that specific equipment item.

**Bug#1038 Equipment - Error 91 when accessing equipment when "safe pointers" are enabled**

*Internal (Spectra QEST):INTERNAL*

A bug that resulted in a runtime error (Error 91, Object of with block variable not set) when accessing an equipment item has been fixed. This bug was triggered when QESTLab's "safe pointers" option was enabled for equipment items that had at least one calibration worksheet attached.

**Bug#1040 Nuclear Density [NZS]**

*Fulton Hogan:QL-2048*

Several changes have been made to the Nuclear Density Group view;

- 1) Material Source can now be selected.
- 2) The copy across functionality has been enabled.
- 3) The GPS co-ordinates default to 3 decimal places (Nuclear Density View only)
- 4) Pass No. column added.
- 5) The location data entry changed to match the usual sample bulk entry.
- 6) Std counts columns replace test counts columns.

**Bug#1042 Calibration history not immediately displayed after completing a calibration**

*Internal (Spectra QEST):n/a*

An issue where the data used to populate the calibration history (both on the equipment screen and in the equipment report) could go out of synch with the underlying calibration worksheet has been resolved.

**Bug#955 Sample Fields Editor**

*Fulton Hogan:QL-1935*

The Sample Fields Editor, for QEST Admin Console document level options, can now handle list type value formats which use a semi-colon ; as a delimiter, and there is no longer a need to use backslashes (\) as the editor now knows when to use them behind the scenes.

There are 3 possible ways to configure a list format. To use a list format the fieldname, where the value comes from, must be an integer or true/false type. NB False is equivalent to 0. True is equivalent to -1. Null is the absence of any value (has not been entered or calculated).

1. Option1;Option2;

If the value is Null, no result is printed.

Else if the value is 0, the result Option1 is printed

Else the result Option2 is printed

2. Option1;Option2;Option3

If the value is Null, no result is printed.

Else if the value is 0, the result Option3 is printed

Else if the value is less than 0, the result Option2 is printed

Else the result Option1 is printed (when the value is greater than 0)

3. Option1;Option2;Option3;Option4

If the value is Null, the result Option4 is printed.

Else if the value is 0, the result Option3 is printed

Else if the value is less than 0, the result Option2 is printed

Else the result Option1 is printed (when the value is greater than 0)

Examples.

Field (True/False) = SampleNotSuitable

Format = Yes;No;

When SampleNotSuitable is False, the result "Yes" is printed.

When SampleNotSuitable is True, the result "No" is printed.

Field (integer) = SampleMoistureCondition

Format = Wet;Dry;As-Received

When SampleMoistureCondition is less than 0, the result "Dry" is printed.

When SampleMoistureCondition is greater than 0, the result "Wet" is printed.

When SampleMoistureCondition is less than 0, the result "As-Received" is printed.

**Bug#977 Blank Work Order template not first in the list**

*Fulton Hogan:QL-1957*

The "Blank Work Order" template will now be the first template in the list.

NOTE: This is achieved by prefixing the "Blank Work Order" template name with a space.

**Bug#1005 Grout/Mortar Mixes**

*Twin Ports Testing Inc.:1*

Admixtures have been removed from Grout/Mortar mixes. The amount of water can now be entered correctly.

**Bug#1006 Atterberg Limits [NZS 4402: 1986 Tests 2.2, 2.3, 2.4]**

*Coffey Information:Cof11.035*

The standard states that the reporting of Liquid Limit and Plastic Limit needs to be "to the nearest whole number, written without a percentage symbol". The percentage symbol has hence been removed from the reporting of these items.

The Plasticity Index is "the numerical difference between the Liquid Limit and the Plastic Limit" and hence the percentage symbol has been removed from reporting here too.

**Bug#1049 Default Equipment**

*PSI National USA:753*

Default equipment are now set on the first instance test/sample on a work order for all tests and documents in the bulk entry. Copy across will handle the remainder documents.

**Bug#1059 Notation of Simple Specifications**

City Of Las Vegas:n/a

The '+' symbol is no longer displayed in specification limits when the "Simple Specification" QEST Administrator Console option is enabled.

If you wish to display the '+' symbol, you may explicitly specify it when configuring the specification values, e.g. instead of entering '3.4', enter '+3.4'.

**Bug#1074 Reports And Charts**

Internal (Spectra QEST):INTERNAL

The "Reports & Charts" node now shows in the tree for customers that have no Reports or Charts in their database - assuming, of course, the user has the "Reports" permission assigned to him.

**Bug#1078 Work order document permissions**

Internal (Spectra QEST):INTERNAL

A bug on the work order screen where users were able to edit data in, and even delete, tests that they were not approved to perform has been resolved. In addition, a related bug where users were unable to add tests to work orders unless they were approved to perform the test has been resolved.

**Bug#1087 Equipment Calibration Due form restricting global laboratory context**

Internal (Spectra QEST):INTERNAL

If laboratory was selected on the Equipment Calibration Due form then the global lab context would indirectly be restricted to the selected laboratory. Which meant that running any filters would only return data for that laboratory. This has now been fixed.

**Bug#1089 Specification Bugs**

Internal (Spectra QEST):INTERNAL

Several bugs relating to specifications have been resolved.

1. You can no longer enter a non-numeric value when setting up a spec limit. Leading +/- symbols are permitted, as are thousand separators, and zeroes after the decimal place. Most other symbols and letters are not permitted. Existing non-numeric values (entered in QESTLab 3.3.100 to 3.3.500) will be ignored.
2. For all particle size distribution tests, a bug where the lower limit was not being pulled in correctly from the specification has been fixed.
3. A bug in the "Insitu Air Voids [RTA R116]" test method, where the minimum and maximum limits on bitumen content were not being pulled in correctly from the specification has been fixed. This bug also affected the "Relative Compaction [Part 228]" test method.
4. A bug where specification limits were not being applied in reports and charts has been corrected.  
This affected:-
  - Display of spec limits in management reports and charts
  - Displaying of 'difference to target' values in management reports and charts
  - Highlighting of out of spec values in management reports
5. A memory leak in reports and charts, resulting from specification data not being unloaded correctly has been resolved.
6. A bug where "bulk apply specifications" would not use the correct values from the specification, and hence would mark all non-zero values as being out of specification, has been corrected.

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## Release Notes for QESTLab Version 3.3.700

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**Bug#1051 Custom Test Reports.**

Coffey Information:Cof11.043

1. The number of specimens/samples per page option, on the options tab of a report, is now working as intended.
2. When the number of specimens/samples per page is not a common multiple of the number of specimens/samples of being printed, the report now correctly reports all specimens/samples.  
NOTE: When setting up the "Number of Samples per Table for Sample Types" option in the QEST Administrator Console it needs to be entered without the single quotes. This has now also been clarified in the Details of the option as well.
3. The footer note now correctly only shows one set of notes/comments on consecutive pages.

**Bug#1109 Word/Excel 2007 external document memory leaks and external test report signing speed**

*PSI National USA:773*

All external documents using Word or Excel 2007 (or higher) no longer cause a memory leak when loading.

In addition, the speed of signing external test reports has been further improved, up to a 55% reduction in signing times for some reports.

**Bug#1110 Softening Point of Bitumen [ASTM D 36 - 06]**

*Fulton Hogan:QL-2123*

If the corrected average is larger than 80 degrees and the uncorrected average is not, then the uncorrected average is used to determine the softening point.

**Bug#1111 Sieve Analysis with Wash - Finer No. 200 [AASHTO T 27 - 06 / T 11 - 05]**

*City Of Las Vegas:n/a*

The "Washing" drop down is now unlocked. In order to use the washing on the first split, please select "First Split" in the dropdown. The "After Wash Mass" can then be entered at the split.

Note: For the "Finer No.200 (75um)" sieve to appear on the report, please ensure it is used in the relevant specification.

**Bug#1112 Undo button does display changes on calibration screens**

*Internal (Spectra QEST):INTERNAL*

A bug where the user interface would not reflect changes made by clicking the undo button on equipment calibration screens has been resolved. Previously, while the underlying data was returned to its previous state, you needed to reload the screen to see it.

This bug affected all equipment calibration worksheets.

**Bug#1116 Concrete Specimens (AU)**

*Internal (Spectra QEST):INTERNAL*

A bug has been fixed such that concrete specimens now correctly save diameter and height dimensions of COMP100 specimens, the dimensions that are entered as low numbers and then automatically adjusted to near 100 (e.g. enter 0.1 for diameter, get 100.1 back). This issue only occurs when using the concrete multiple specimens electronic worksheet.

**Bug#1117 New equipment items missing Type**

*PSI National USA:771*

Newly created equipment items were found to be created without the Type field automatically completed. This has now been rectified.

**Bug#1118 Particle Shape (2:1) [AS 1141.14], Particle Shape (3:1) [AS 1141.14]**

*Boral National:1381092*

These screens will no longer import data from the Finer than 75um screen, but will import from the Grading screens as required.

**Bug#1099 Equipment Calibration Screens**

*Internal (Spectra QEST):INTERNAL*

Equipment calibration screens are now locked if the user doesn't have permissions for the screen or the "Calibrate Equipment" General Right. Calibrations with tab controls no longer lock the tabs after the calibration is finished.

**Bug#1101 Equipment Calibrations**

*Internal (Spectra QEST):INTERNAL*

Equipment calibration values are now only accessible from other screens when they have been finished. This applies to balance and nuclear density gauge calibrations.

**Bug#1106 Deleting does not unload calibration screen**

*Internal (Spectra QEST):INTERNAL*

A bug when deleting a calibration worksheet (to cancel a calibration that is 'in progress'), where the screen was not being unloaded, has been fixed.

**Bug#1131 Concrete Specimens - Script to populate WorkOrderID**

*Internal (Spectra QEST):INTERNAL*

A dynamic script, "QESTLab 3.3 - Concrete Specimen Work Order ID", has been added to populate the WorkOrderID field for existing concrete specimens, from the corresponding work order record. This script can be run via the tools menu in the QESTLab Administrator (QLA). It is recommended that this script is run on any systems where the "Show Work Order ID column for concrete specimens" option is used.

**Bug#1139 Moisture Completion Data Entry View**

Coffey Information:Cof11.025

The Moisture Completion - "Data Entry" view now correctly loads without error.

**Bug#1148 Result Fields Editor**

Internal (Spectra QEST):INTERNAL

A bug in the Result Fields Editor, the screen used to configure Sample Fields document level options, has been fixed. This bug would cause an error when processing certain list type formats under specific conditions.

**Bug#1149 Printable worksheets fail with Error 91 when "Use Default Printer" option set**

Exova:n/a

When the "Use Default Printer" option is set to True, printable worksheets will now print successfully.

**Bug#1152 Magnesium and Sodium Soundness Tests [Tex-411-A]**

PSI National USA:783

The following changes have been made to the Magnesium and Sodium Soundness Tests [Tex-411-A]:-

- The Sulfate Immersion Cycles [110120] test is no longer an auto-child of either of the tests. It can be added to either of the Tex-411-A Soundness tests if required.
- Both the tests [110118, 110119] now report on the Soundness Test Report [18963]. This report is also an auto-child for the Tex-411-A tests.

**Bug#1128 Patch to populate new fields in field density tests**

PSI National USA:723

A patch has been added to populate two new fields used for reporting for field density tests, ReportedProbeDepth and TestModes. This patch may take several minutes to run.

**Bug#1007 California Bearing Ratio [NZZ 4402:1986 Part 6.1.1]**

Coffey Information:Cof11.036

The Dry Density After Compaction result should now round to the nearest 0.02 t/m<sup>3</sup>

**Bug#1011 Asphalt Aggregate Grading [AS 2891.3.3]**

Fulton Hogan: QL-433

Asphalt Aggregate Grading [AS 2891.3.3] correctly imports the bitumen content mass, dry total mass and total wash mass.

The particle size distribution now defaults and is locked as a "Total Washing" particle size distribution.

**Bug#975 Proctor - Reporting of Visual Description**

Braun Intertec USA:BUG220

Reporting of "Visual Description" is now a document-level option for all proctor test methods. This can be found under: "QLA > Configuration > Documents > System > Proctor [...] > Hide Visual Description on Reports".

By default, the visual description will be reported (if it has been entered).

**Bug#1043 Interpolated calibrations not working**

Fulton Hogan:QL-2010

Where interpolated calibration data is used (thermometers, CBR proving rings, etc), QESTLab was displaying an error message indicating that a field (such as "Temperature6") doesn't exist, and would not perform calculations using that data. This was a side-effect of the changes to the way that calibration data is stored in QESTLab 3.3, and has now been resolved.

**Bug#946 Grading Tests**

Coffey Information:Cof11.026

The "Moisture Content" input is more clearly identified as separate from the "Import from Sibling Moisture Content" checkbox.

**Bug#871 Nuclear Field Density Screens**

PSI National USA:723

The Mode dropdown is now restricted to either "Backscatter" or "Direct Transmission", respective of the test being used. When the test has been completed, the Mode should now appear correctly on the Field Density Report (110244).

**Bug#204 Angularity Number [AS 1141.16]**

Coffey Information:Cof09v3.076a

The units for density and mass are now recorded in kilograms rather than grams. In addition, the calculation of the angularity number has been corrected.

**Bug#424 Concrete Specimens Electronic Worksheet**

PSI National USA:PSI\_672

Concrete samples are now correctly flagged as being Out Of Specification when results are calculated on the Concrete Specimens Electronic Worksheet.

**Bug#452 Printable worksheet misses some documents when printing large batches**

Braun Intertec USA:BUG212

Sometimes when a large batch of printable worksheets or printable tags is printed all at once by selecting "All Printable Worksheets", some documents are not printed, seemingly at random.

Though we have not been able to recreate this issue, we suspect it may be caused by all of the immediate stress placed upon the operating system and printing subsystem by the large number of documents to print. We have therefore introduced an option, "Printer Yield Delay (secs)", available in the QEST Administrator Console via Lab > Configuration > Options > External Documents.

Customers who are experiencing the described issue should experiment with increasing the value of this option to 2 seconds and upwards (the default is 1, but this should not be lowered to 0). This will increase the delay between each document print by that number of seconds.

Should this be successful, and the cause therefore be proven, future enhancements can be made to QESTLab which will allow monitoring of the print queue and maximum throughput of printing documents without needing to rely on this option.

**Bug#223 Tests order by method on material reports**

Coffey Information:Cof10.012

On the Aggregate/Soil Test Report, the Asphalt Test Report, the Multiple Sample Agg/Soil Test Report and the Multiple Sample Asphalt Test Report, the tests listed in the Other Results / Other Tests sections are now ordered consistently. The order is nominally by test method in alphabetic ascending order, but the significance is mainly in the fact that it will now be ordered consistently across samples and reports.

**Bug#655 Long project names now size to fit on all Coffey report headers**

Coffey Information:Cof11.002

Project names that are too long to fit in the report header are now reduced in font in order to fully display on the report. Additional changes can be made for other fields if necessary.

**Bug#714 Ordering of List items on the Sample screens and the Bulk Entry**

PSI National USA:PSI\_636

The ordering for many lists is now according to the "Name" field instead of the "Code". Some of the lists to which this modification has been made are as follows:-

- AggSoil Supplier List
- Asphalt Supplier List
- Bitumen Supplier List
- Concrete Supplier List
- Masonry Units Supplier List
- Other Supplier List
- Asphalt Plant List
- Concrete Plant List
- Masonry Units Plant List
- Concrete Test Groups List
- Masonry Test Groups List
- Material Type List
- Billable Items List

**Bug#697 Deleting a specification results in Error 438 on some screens**

Braun Intertec USA:n/a

On some screens using a specification dropdown, after a specification that was in use by the specific test or sample was deleted, users would no longer be able to open the screen to correct the data. They would receive a runtime error "438" (Object Doesn't Support this Property or Method), and the screen would not load.

The specification dropdown has been modified such that the error no longer occurs, and the text "[DELETED]" will be appended to the specification name displayed when the sample screen is first loaded. Due to technical limitations this additional text will not be displayed on bulk entry screens, or any other screens where the specification name is listed within a grid.

Users can either reinstate the specification by creating a new specification with the same name, or can select a different specification.

**Bug#701 Rock Strength - Point Load**

*Coffey Information:Cof11.004*

1. Point Load Strength Index now calculates correctly.
2. Precision of data entry and results has been increased and, where applicable, match the standard.
3. Length/Diameter and Width/Diameter ratios are now displayed on screen and are printed in red when outside the standard specifications.
4. A warning label is now displayed on the screen when the Anistropy Index cannot be calculated.
5. The sections for each test are now clearer in their own boxes on the screen and the report.
6. Specimens which failed as a 'bad break' now report their Point load result with a '>' sign. This functionality can be turned on via the document level option (Configuration > Documents > System) "Bad Break Flagging" for tests 11303 and 11304 respectively.

**Bug#719 External test report import security removed**

*PSI National USA:PSI\_626*

Unsigned external test reports no longer perform checks on the data that they are sourcing; it will always be refreshed showing the latest data. This specifically solves the problem on unsigned external test reports in which, when other test reports are signed and the work order is made read-only, work order data was not being imported.

**Bug#583 California Bearing Ratio [Q113A, Q113B, Q113C]**

*Coffey Information:Cof10.020*

Compactive Effort and Sample Preparation for the Multi-California Bearing Ratio tests now reports on the Standard Materials Test Report.

**Bug#590 Concrete [RTA] Moisture Condition**

*Coffey Information:Cof10.054*

The concrete moisture condition note on the RTA report is now printed for COMPxxx and COMPCORE type specimens.

**Bug#591 Concrete Test Report [RTA] Densit Note**

*Coffey Information:Cof10.055*

The Concrete Test Report [RTA] now shows a reference to the density method RTA T317 in the footer notes when density is tested by the water displacement method.

**Bug#559 Bulk Specific Gravity of Asphalt [ASTM D 2726 - 05a]**

*Braun Intertec USA:BUG192*

The Average Thickness should now calculate and display correctly on the screen.

**Bug#560 Bulk Specific Gravity of Asphalt [AASHTO T 166 - 07]**

*Braun Intertec USA:BUG193*

The Average Thickness should now calculate and display correctly on the screen.

**Bug#561 Bulk Specific Gravity of Asphalt [ASTM D 2726]**

*Braun Intertec USA:BUG194*

The check as to whether the screen meets the layer thickness requirements should now function correctly.

**Bug#562 Bulk Specific Gravity of Asphalt [AASHTO T 166 - 07]**

*Braun Intertec USA:BUG195*

The check as to whether the screen meets the layer thickness requirements should now function correctly.

**Bug#571 Organic Impurities [AASHTO T 21, ASTM C 40, MnDOT 1212]**

*Braun Intertec USA:BUG201*

A specification can now be applied to the Organic Plate No. field.

**CR#778 TxDoT Reduced Tests**

*PSI National USA:775*

The reporting of Stamp Code has been removed from all of the reduced TxDoT test methods. The Stamp Code can now be reported via the use of Custom Field Sets.

**CR#653 Compacted Density of Soils and Crushed Rock (Sand Replacement) [Q141B - 10]**

*Internal (Spectra QEST):n/a*

The Compacted Density of Soils and Crushed Rock (Sand Replacement) [Q141B - 10] standard has now been implemented (10337). In addition, the Dry Density Ratio [Q143, Q140A] has also been implemented (10348).

Please contact SpectraQEST to be licensed for these tests.

**CR#764 Nuclear Gauge Daily Check [AS 1289.5.8.1 Appendix A-A1], Balance Single-Point Check [NATA Technical Note 13]**

*Internal (Spectra QEST):INTERNAL*

An "Unlock Calibration" button has been added to the screen's footers. This allows a user to undo "finishing" the calibration until they leave the screen, in case of accidental finishing. This only applies to ongoing calibration screens.

**CR#757 Equipment history reports - filtering**

*Internal (Spectra QEST):INTERNAL*

Equipment history reports support filtering to control which calibrations and checks will be included on the report.

**CR#748 Nuclear Gauge Daily Count Check [AS 1289.5.8.1 Appendix A-A1]**

*Coffey Information:Cof11.050\_3*

The screen now has a "Start New Month" button in the footer. This will automatically finish the current "Daily Count Check" calibration for this month, and start a new calibration for the next month. It will also move the user to the new calibration and copy the "Prescale Factor" across. This speeds up the data entry process.

An initial four points can be added by using the "Add New Entry" button as many times as needed. As explained in the help documentation, the first four points are considered initial points. Count calculations are not performed on them.

See the help here: [http://online.spectraquest.com/index.php?title=QESTLab:Equipment\\_Documents#Performing\\_the\\_Daily\\_Count\\_Check\\_Task](http://online.spectraquest.com/index.php?title=QESTLab:Equipment_Documents#Performing_the_Daily_Count_Check_Task).

Please also note that initial points will not be copied from one month to the next. Only points added after the first four points will be copied. If this test is performed more than four times a month, it will never be noticed.

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## Release Notes for QESTLab Version 3.3.800

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**CR#773 Atterberg Limits [Q104A/Q104D//Q105/Q106 - 2010]**

*Internal (Spectra QEST):INTERNAL*

Two new tests are available in QESTLab.

11042 Atterberg Limits [Q104A/Q105/Q106 - 2010]

11043 Atterberg Limits (One Point Liquid Limit) [Q104D/Q105/Q106 - 2010]

These tests are updated versions of the 2008 methods including the slight variations in procedure and results. Kindly contact SpectraQest HelpDesk to be licensed for these tests.

**CR#782 Flakiness Index [Q201 - 10]**

*Internal (Spectra QEST):INTERNAL*

The screen "Flakiness Index [Q201 - 10]" (10179) is now available. Kindly contact Spectra QEST to be licensed for this screen.

**CR#783 Sodium Sulphate Soundness [Q209 - 10]**

*Internal (Spectra QEST):INTERNAL*

The method "Sodium Sulphate Soundness [Q209 - 10]" is now available. Kindly contact Spectra QEST to be licensed for these screens:

- Sodium Sulphate Soundness [Q209 - 10] (10113)

- Sodium Sulphate Soundness [Q209 - 10] \* (10551)

**CR#784 Particle Shape [Q213 - 10]**

*Internal (Spectra QEST):INTERNAL*

The method "Particle Shape [Q213 - 10]" is now available. Kindly contact Spectra QEST to be licensed for the following screens:

- Particle Shape (2:1) [Q213 - 10] (10175)
- Particle Shape (3:1) [Q213 - 10] (10176)
- Particle Shape [Q213 - 10] \* (10550)

**CR#787 Balance Single-Point Check, Balance Single-Point Check when Moving [NATA Technical Note 13]**

*Coffey Information:Cof11.066\_2 & Cof11.066\_3*

The "Check Mass Number" now accepts letters as well as numbers.

**CR#788 Shrink Swell Index Report [AS 1289.7.1.1] reporting order**

*Coffey Information:Cof11.067\_2*

"Shrink on drying (%)" is now reported before the "Shrinkage Moisture Content (%)".

**CR#790 Asphalt Multi Sample Test Report enhancements.**

*Boral Asphalt:*

The Asphalt Multi Sample Test Report has been enhanced:

- Pictures can be added to the end of the test report as with other test reports
- Test results that overflow the page are continued on the following page(s).
- Six samples are shown per page with additional samples shown in the following page(s), after any overflowing test results.
- Sample fields are now able to be configured in the Administrator Console. Sample ID and Date Sampled are shown by default, plus up to seven custom fields as configured.
- User documents that include a field with the name "PSD\_Dummy\_Flag" will be treated as Particle Size Distribution tests and shown in that section of the Test Report.
- Particle Size Distribution additional details (method, washing etc.) now match the Aggsoil Multi Sample Test Report.

**CR#791 Measurement of Concrete [Tex-423-A, B]**

*PSI National USA:784*

Measurement of Concrete Thickness [Tex-423-A] (116130) has been reverted back to a reduced test.

Measurement of Concrete Thickness [Tex-423-A] (116132) is a new test added as the full screen version of this test method.

Measurement of Concrete Thickness [Tex-423-B] (116133) is a new test added as the full screen version of this test method.

Both the full screen and reduced test bulk entries for Measurement of Concrete Thickness [Tex-423-B] have been updated to group Concrete Depths and Steel Depths separately and divider bars were added to help navigate the bulk entry.

NB Custom reports need to be cleared and reloaded for these changes to have effect.

**CR#792 Resizing support for context sensitive help**

*Internal (Spectra QEST):INTERNAL*

The context sensitive help window can now be resized.

**CR#793 Option to automatically select the Work Order when a Work Template is selected.**

*PSI National USA:793*

A new option has been added in the Administrator Console:-

Configuration -> Options -> General -> "Auto-Select Work Order in Template"

When enabled this will cause the Work Order to be selected whenever a Work Template is selected. This means the tree of "Samples & Tests" that can be added to the Work Order will be populated immediately. This may cause a small delay (depending on system speed), which is why it is OFF by default. Note that each time a template is "checked" in the list on the left-hand side and combined into the active template, the tree will be refreshed, incurring this potential delay.

**CR#799 Nuclear Density Gauge**

*PSI National USA:481*

A document level option has been added that enables borrowing of nuclear density gauges. When borrowing is enabled, users can enter the code of any nuclear gauge in equipment dropdowns, rather than being restricted by laboratory.

1. Borrowing is disabled by default, and can be enabled via the "Allow borrowing" options under "Configuration -> Documents -> System -> 30011 - Nuclear Density Gauge" in the admin console.
2. If you attempt to "borrow" an equipment item that doesn't have a unique code, the field will be cleared to prevent ambiguity. We strongly recommend that all equipment items of the same type have unique codes.
3. On screens where a standard 'equipment dropdown' is used, the tooltip text will list the laboratory name when the equipment item is borrowed from another laboratory.
4. On screens where a standard 'equipment dropdown' is used, if you load a screen where the (previously selected) equipment item is now flagged as 'not in service' that item will remain selected rather than being cleared.

**Bug#1210 Drilled Core Concrete Report [ASTM]**

*Twining Labs:CORE*

The Drilled Core Concrete Report [ASTM] (18961) notes, "Sampling in accordance with ASTM C 172" and "Specimen(s) Prepared in accordance with ASTM C 31" have been removed. Both standards are for sampling and preparing 'fresh' concrete whereas the Drilled Core Concrete Report [ASTM] is designed for sampling hardened concrete.

**Bug#1211 AS2891.9.2 Bulk Density (Lab) - Bulk Density value not appearing on generic test reports**

*Boral Asphalt:NA*

AS2891.9.2 Bulk Density (Lab) - Bulk Density value now appears on the Asphalt Sample Test Report and Asphalt Multi Sample Test Report as "Bulk (Lab) Density (t/m<sup>3</sup>)" rounded to three decimal places.

**Bug#1214 Regions share options and currency settings**

*Internal (Spectra QEST):INTERNAL*

A bug where all regions shared the same option and currency settings has been resolved. They are now linked to using the location's unique id rather than the value in the LabNo column, which is no longer used for regions.

**Bug#1190 Relative Compaction [ASTM, TxDoT]**

*PSI National USA:800*

The bulk entry and test report-related issues have been amended. Test Mode should be available on the Bulk Entry, the Standard Counts now use the correct fields, reported fields should now fit their contents without chopping/wrapping data and the Lift No. should now copy down from the Aggregate/Soil Sample Screen field.

**Bug#1240 QESTLab Roles**

*Internal (Spectra QEST):INTERNAL*

When adding a new role, an error no longer appears when closing the "New User" input box.

**Bug#681 Data filters - handling of lists**

*Boral National:n/a*

A bug when using the "..." button, to select items from a list for filtering, where the selection was cleared when using the next/previous page arrows has been fixed.

**Bug#457 Weathering Quality Index [NZS 4407:1991 Test 3.11]**

*Coffey Information:Cof10.089Z*

The "Date Tested" and "Condition of Sample" are now reported for the full screen and reduced version of the Weathering Quality [NZS 4407:1991 Test 3.11] test.

**Bug#717 Batch Printing and Emailing of Test Reports**

*PSI National USA:632*

When test reports are batch printed or emailed the "PrintedOrEmailed" flag will now be correctly updated.

**Bug#694 A3 page size support for Reports and Charts**

*Boral Asphalt:n/a*

A bug in the reporting engine, where the paper size settings were not correctly applied to management reports has been fixed. Reports configured to use A3 or custom paper sizes will now display and export to pdf using the appropriate paper size.

**Bug#432 Print button on external documents**

Fulton Hogan:QL-1434

The button labelled "Print the document with the default printer" on the standard external document form now functions again.

**Bug#401 Hydraulic Conductivity, Undisturbed (Method C only) [ASTM D 5084 - 03]**

NTH Consultants USA:n/a

The Temperature field is now spelled correctly on the test report.

**Bug#1044 Specific Gravity and Absorption of Fine Aggregate [ASTM C 128 - 07]**

Fulton Hogan:QL-2009

The Thermometer equipment item should no longer throw an error regardless of whether it has been calibrated or not. When the Thermometer has been calibrated, the Corrected Temperatures should now calculate correctly, and in-turn the "Mass of Pycnometer Filled with Water" should now be determined in accordance with the Pycnometer calibration values.

**Bug#1046 Concrete Specimen Density (Australian)**

Boral National:1444612

Australian concrete specimens now record density to the nearest 10 kg/m<sup>3</sup>. Reporting still remains to the nearest 20 kg/m<sup>3</sup>, for density calculated from dimensions.

**Bug#1029 Atterberg Limits (One Point Liquid Limit) [Q104D/Q105/Q106]**

Boral National:1402510

The calculation of the Plasticity Index now uses the rounded Liquid Limit and Plastic Limit to generate a result.

**Bug#976 Specific Gravity and Absorption of Coarse Aggregate [ASTM C 127 - 07, AASHTO T 85 - 08, NDOT T 111]**

Braun Intertec USA:BUG221

The "Density Determined without First Drying" can now be entered and reported (it is a reporting requirement) for these tests.

**Bug#1004 Unconfined Compressive Strength [RTA T 116] and [RTA T 131] - Moisture Content calculation**

Coffey Information:Cof11.037

The RTA T116 and RTA T 131 screens would calculate the "Moisture Content at Compacting" and display it rounded to the nearest 0.5% (as mentioned in the reporting requirements). Changes have been made to display the Moisture Contents to the nearest 0.1% on the screen. The reporting will continue to be to the nearest 0.5%, as per the standard.

**Bug#1129 Tree customisation - nodes using system-defined filters**

PSI National USA:778

A bug where tree nodes would lose their links to system-defined filters has been resolved.

The process that maintains system-defined data filters when QESTLab is updated has been changed - rather than deleting, and then re-instating system data filters the existing record in the database will be updated. This ensures that the identifier value, generated when a filter is created, remains unchanged for existing filters.

**Bug#1157 Concrete Supplier on Australian Concrete Reports**

Internal (Spectra QEST):INTERNAL

The Document Level Option "Show Concrete Supplier" now includes the option "True When Varies". Previous functionality in QESTLab would report Concrete Supplier in the Location & Remarks on the concrete test report when the supplier differs from the supplier, if one is reported, in the header.

How to use this Document Level Option:

1. If you desire to never report the concrete supplier in the Location & Remarks; set this option to "False".
2. If you desire to always report the concrete supplier in the Location & Remarks; set this option to "True".
3. If the concrete supplier is reported in the header and you desire suppliers that are different to that supplier to be reported in the Location & Remarks; set this option to "True When Varies".

The Document Level Option is available for the following reports:-

- 18945 - Concrete Test Report [Q]
- 18965 - Concrete Test Report [RTA]
- 18967 - Concrete Test Report [NZ]
- 18969 - Concrete Test Report [AS]

**Bug#1153 Moisture Content Correlation Screens**

*Coffey Information:Cof11.051\_2*

A warning will now appear when the Aggregate/Soil Sample has not been selected on the Work Template.

**Bug#1154 Concrete Sample [ASTM] and Grout Cylinders**

*PSI National USA:PSI 785*

A bug has been fixed on the Concrete Sample [ASTM] screen that caused automatic selecting of the Test Method when selecting a test group to fail.

Grout cylinders now report with the note "Sampling, Molding & Testing to ASTM C 1019 as approved by local building official." on the Standard Concrete Test Report.

**Bug#1155 Drilled Core Concrete Report [TxDOT]**

*PSI National USA:787*

The Drilled Core Concrete Report [TxDOT] (18949) now reports the following results:-

- Average Compressive Strength
- Height/Diameter Ratio (per specimen)
- Strength Correction Factor (per specimen)
- Corrected Compressive Strength (per specimen)
- Uncorrected Compressive Strength (per specimen)
- Comments (per specimen)
- Sample Location

Comments can now be entered in a new column in the specimens grid. The Column is labelled 'Note' and appears between 'Fracture Type' and 'Print'. It is only available for US Concrete COMPCOR specimens.

A bypass hotkey has been implemented in the specimens grid. By default, when the results and test data columns of the specimens grid are shown, if you move right from the Applied Correction column towards the Strength column using the Right Arrow key, the focus cell will jump to the first dimension of the specimen below. Now, from a number of cells to the left of the Strength column, the user may press Ctrl + Right Arrow to jump to the Marks column.

**Bug#1142 Random Site Location [RTA Q6]**

*Coffey Information:Cof11.044\_7*

The Number of Tests is now determined correctly when Specified Relative Compaction is used.

**Bug#1144 Balance Single-Point Check [NATA Technical Note 13]**

*Coffey Information:Cof11.066\_2 & Cof11.066\_3*

The "Standard Deviation" prompt now refers to the "Last External Calibration" rather than the "Repeatability Test".

**Bug#1145 Balance Calibrations - Decimal Places**

*Coffey Information:Cof11.066\_1*

All decimal places for corrections, uncertainties, and standard deviations can now be entered to 4 decimal places.

**Bug#1146 Shrink/Swell Index [AS 1289.7.1.1]**

*Coffey Information:Cof11.067\_1*

The X-axis label on the chart now reports the symbols representing Shrink and Swell respectively.

**Bug#1135 Billing screen revised to improve performance**

*Internal (Spectra QEST):INTERNAL*

The billing document has been revised. It now makes use of standard QESTLab drop-down lists which allow searching and improve the billing document load time significantly. This is especially true for databases with very large fee schedule lists.

All existing functionality of the billing document has been preserved, but there may be some subtle differences in behaviour due to the enhanced screen elements now used.

Please review your business processes that involve the billing document to ensure there are no issues with the revised screen. Kindly contact the Spectra QEST HelpDesk with any queries.

**Bug#1136 Field Density Tests and Report**

*PSI National USA:PSI 782*

The following changes have been made to the field density testing:-

- The Moisture Variation calculation order has been corrected. From "OMC Var = OMC - MC" to "OMC Var = MC - OMC".
- Moisture Variation has been added to the report (as "OMC Var").
- The Field Density Report (110244) has been modified to display failure notes as "out of specification". This will display an asterisk next to the result, or will display the result in red if the document option "Show Out Of Spec Values In Red (Y/N)" is set to "Yes".
- The alignment of columns in Work Orders has been corrected so they all line up.
- The retest calculations and warning messages now correctly function on Work Orders.
- The Moisture Variation's specification limits are now hidden if they're unused. Similarly the Relative Compaction's limits are also hidden when unused.
- All location fields are now locked if a sample is a retest, independent of the sample type (General, Roadwork, or Sitework).

Rounding of the MDD and OMC results has been corrected for the following screens:-

- Proctor - Standard [AASHTO T 99 - 01] (110034)
- Proctor - Modified [AASHTO T 180 - 01] (110035)
- Proctor - Standard (Metric) [AASHTO T 99 - 01] (110408)
- Proctor - Modified (Metric) [AASHTO T 180 - 01] (110409)

**Bug#1138 Dropdown lists sometimes allow invalid entries**

*Internal (Spectra QEST):INTERNAL*

A bug in some dropdown lists, that allowed users to enter values not present in the list has been fixed. This bug only affected certain types of dropdown, and only those that prevent entry of values not in the list.

For these dropdowns, it is still possible to place invalid text into the dropdown (by using Ctrl+V to paste a value that is not in the list) however the value will be cleared when you leave the dropdown, and will not be saved to the database.

**Bug#1160 Filters - laboratory context not immediately applied to some filters**

*PSI National USA:788*

A bug where a change to the laboratory context was not immediately applied to the selected filter has been fixed. This applies to all areas of QESTLab using the new filters introduced in QESTLab 3.3, but was most noticeable under Equipment and Specifications.

**Bug#1161 Work Order collapsed and expanded states**

*PSI National USA:PSI\_789*

The collapsed/expanded state of a Work Order now refreshes when moving between different work orders.

Work Orders that don't have a Sample in the template will show as expanded. If there is more than one Sample on the Work Order then it will show as collapsed.

**Bug#1163 "Tested By" reporting on the Field Density Report**

*PSI National USA:794*

The Field Density Report [110244] "Tested By" field is now reported from Field Technician rather than the Laboratory Technician.

**Bug#1169 Proctor - Standard [MnDOT 1305]**

*Braun Intertec USA:BUG 225*

The Visual Description on the MnDOT 1305 Proctor test report should no longer display in bold font.

**Bug#1171 Deleting a specification causes errors in field density test reports**

*PSI National USA:796*

A bug where attempting to load field density test reports, after deleting the specification linked to the samples on that report, would result in runtime error 91 has been resolved.

**Bug#1172 Relative Compaction [ASTM]**

*PSI National USA:790*

The Moisture Variation (% from Optimum) field is now present on the bulk entry screen, such that when a specification is applied to the field, the limits are shown and it is flagged in red when it is out of the specification ranges.

**Bug#1177 Relative Compaction [ASTM]**

PSI National USA:791

Compaction results no longer change value when clicking on / off the MDD controls on the Relative Compaction screen.

**Bug#1185 Nuclear Field Density [ASTM D 6938]**

PSI National USA:797

- The "mode" field is no longer locked on the bulk entry.
- The "mode" field will now save and load correctly on the nuclear density test screen.
- The width of the OMC Var result has been increased on test reports to allow specification ranges to be displayed correctly.

**Bug#1186 Field Density Test Report (US)**

PSI National USA:798

1. The expandable/contractable page footer (Comments & Legend) will now fit better with the tables of data, preventing unnecessary printing of data on the following page(s) or overlapping.
2. Most of the columns in the tables on the report will now show by default even when there is no data entered.
3. An issue has been fixed where many unwanted rows of data were printed in the Proctor Information table.
4. The Location table has been revamped such that the columns header is printed after the general location, as seen with the concrete field report.

**Bug#1165 Field Density Report [TxDoT]**

PSI National USA:786

Field density tests that use Tex-115-E (reduced screen) now report all values correctly, for older versions of the screens. Additionally all Tex-115-E reported fields are now available for input on the reduced screen.

**Bug#1188 Laboratory Document Restrictions not being applied to Work Templates**

Internal (Spectra QEST):INTERNAL

This has been fixed such that Laboratory-level document restrictions set up in the Administrator Console will be applied to the Work Templates form.

This means that when the document is not checked for a given Laboratory, it will not appear in the list of available child documents for a Work Template.

This brings Work Templates in line with the behaviour of Document Groups in previous versions of QESTLab.

**Bug#1108 Particle Density - Fine [RTA T210]**

Boral National:n/a

The validation check performed upon the "Mass Retained On 4.75mm Sieve" should now appear correctly.

**Bug#1126 Billable Item List - checking Code-Name combination**

PSI National USA:780

The Billable Items list requires that the "Item Code"- "Item Name" combination be unique. This check is performed when adding items to the Billable Items list via QESTLab. An edge case was identified when the unique Code-Name combination would fail. This has now been rectified.

**Bug#1127 Atterberg Limits [Tex-104-6]**

PSI National USA:779

The Plastic Limit and Plasticity Index are now calculated using rounded results from the individual specimens.

**Bug#1104 Reports and charts - Out of spec highlighting when difference to target option is enabled**

Internal (Spectra QEST):INTERNAL

A bug in the code that flags which values are within spec/out of spec in management reports has been fixed. When using the "display as difference to target" option is enabled, the underlying value will be compared to the specification limit, rather than the value that is displayed.

e.g. I have a spec limit of 40-60, and a value of 105, which is clearly out-of-spec. If the "display as difference to target" option is enabled, the value displayed is 55. Previous versions of QESTLab compared the displayed value (55) to the spec limit (40-60), and would not have highlighted it in the report.

**Bug#1070 Proctor - Standard [ASTM D 698 - 07]**

*PSI National USA:764*

The following changes have been made to the proctor screen for ASTM D 698 - 07:

- The oversize adjustment is only applied when there is more than 5% by mass oversize material removed.
- If no oversize moisture content is entered, the moisture value is no longer corrected. Previously 0% moisture was assumed.
- Alternative methods can now be selected for ASTM screens.

If reports are not displaying adjusted values please check you are not viewing archived reports. If problems persist please contact Spectra QEST.

Please use the QLA document option "Configuration > Documents > Proctor - Standard [ASTM D 698 - 07] > Use Passing SG/Density If No Oversize SG" to turn off the feature where the fine/undersize specific gravity is used for coarse/oversize material.

Oversize sieve size is not automatically overwritten when the method changes. If you would like to reset it to the default method value, clear the "Sieve Size" and "Oversize (%)" fields, and it will import the method defaults again.

**Bug#1119 Concrete Sample [ASTM] Test Groups**

*PSI National USA:776*

All concrete test groups are now available for selection in the concrete bulk entry when no test method is selected.

**Bug#1121 Marshall Stability [AASHTO T 245 - 97]**

*City Of Las Vegas:n/a*

The screen has been modified so that data entry duplicated from AASHTO T 166 is now optional, with the fields Thickness, Stability and Flow being the minimum requirements. Additionally, the screen now uses only Imperial units to calculate and report all its values.

**Bug#1054 Dry Sieving [NZS 3111:1986 Test 6] - reporting of Uniformity and Curvature Coefficients**

*Fulton Hogan:QL-1956*

The Grading method (NZS 3111 Test 6) will no longer be referenced when the Uniformity and Curvature Coefficients are reported (and the Fineness Modulus is not) as those calculations are not part of the NZS 3111 Test 6 test method.

**Bug#1094 Chemical and Draindown Characteristics tests**

*PSI National USA:n/a*

The following tests can now be added to work templates again:

Chemical Tests (10050)

Determining Draindown Characteristics in Bituminous Materials [Tex-235-F] \* (110722)

Determining Draindown Characteristics in Bituminous Materials [Tex-235-F] (110749)

In addition, the Chemical Tests screen is once again functional and able to report on the Agg/Soil Test Report and the Multiple Sample Agg/Soil Test Report.

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## Release Notes for QESTLab Version 3.3.900

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**Bug#1080 Visual Comparison [AS 1141.30.1]**

*Fulton Hogan:QL-2094*

A new test for Visual Comparison [AS 1141.30.1] (10122) is now available in QESTLab. Kindly contact SpectraQEST to be licenced for this test.

**Bug#1086 Field Density Report (NZS)**

*Fulton Hogan:QL-2097*

1. The position of the Roller column on the Plateau view Field Density Report (18988) was fixed in Bug 1193.
2. Wet Density has been added to report on the Road view Field Density Report (18988).

**Bug#1060 Particle Size Distribution (Wet Method) [Nzs 4402:1986 Test 2.8.1]**

*Fulton Hogan:QL-2022*

The screen now calculates correction factors from the "Wet Mass Passing" and "Wet Split Mass" values. This results in correct percentages being calculated. The dry values have also been hidden as they are not required.

**Bug#1072 Concrete Compactibility Index (AU)**

*Boral National:N/A*

Compactibility Index is now reported to the nearest whole number on all Australian Concrete Test Reports (AS, RTA, Q methods).

**Bug#1189 Proctor - Standard [MnDOT 1305]**

*Braun Intertec USA:BUG 226*

The Corrected Maximum Dry Density and Corrected Optimum Moisture Content are no longer reported.

**Bug#1166 Edit User Document window, "Parent Documents" list now ordered**

*PSI National USA:795*

The "Parent Documents" list in the "Edit User Document" window in the QEST Administrator Console now sorts by QestID to allow documents to be found more easily.

**Bug#1168 List items with counter-generated fields**

*Coffey Information:Cof11.072*

When adding a new list record, field values generated by counters will now be displayed correctly. Previously the value was generated, but was not displayed correctly until the list was refreshed from the database.

**Bug#1187 Concrete Plant on Reports (US)**

*Braun Intertec USA:BUG 229*

The Concrete Plant is now reported on the following reports; Concrete Test Report [ASTM] (18970), Concrete Test Report [TxDOT], Generic Concrete Test Report (Extended) (18947).

N.B. If the Sample Fields option for a report is being utilised, this change will not cause the plant to show. The Sample Fields option(s) will need to be updated to show the plant.

**Bug#1173 Edit User Documents window no longer accepts commas**

*PSI National USA:n/a*

On the Edit User Documents window, the Prompt and Format of fields cannot contain a comma. This would previously cause errors, but a message is now raised to alert the user if a comma is entered.

**Bug#1174 Printable worksheets - speed & efficiency for large batches**

*Coffey Information:Cof11.042*

Printing large batches of printable worksheets - for example from a work order with a large number of samples and tests - can now operate up to 40% faster, depending on the system. The speed improvement derives from the Word/Excel application not being shut down until the entire batch of documents has been printed.

In addition, note that the existing option "Printer yield delay (secs)" has been split into two options:

- \* Printer yield delay (secs) - individual. This controls the number of seconds to wait between the printing of individual documents in a batch of Word/Excel documents. May be set to 0 to increase the speed of printing. The default value of 1 is still recommended if some items in a batch are not printing out.
- \* Printer yield delay (secs) - batch. This controls the number of seconds to wait after an entire print batch before quitting Word/Excel. This does not significantly affect printing speed, but setting to a non-zero value does better facilitate the use of the "Disable close of documents during batch print" option. The default value of 1 is recommended.

An additional option has also been added:

- \* Disable close of documents during batch print. Setting this to True will use more memory, but it will also allow for faster printing. Note that setting to True bypasses the "Printer yield delay (secs) - individual" option; there will be no delay between the printing of individual documents.

In short, for the fastest printing speed set the following options:

- \* Printer yield delay (secs) - individual = N/A
- \* Printer yield delay (secs) - batch = 0
- \* Disable close of documents during batch print = True

If there are memory issues while printing large batches, set the following options:

- \* Printer yield delay (secs) - individual = 0
- \* Printer yield delay (secs) - batch = 0
- \* Disable close of documents during batch print = False

If some documents are lost when printing large batches, set the following options:

- \* Printer yield delay (secs) - individual = 1 (or higher)
- \* Printer yield delay (secs) - batch = 1 (or higher)
- \* Disable close of documents during batch print = False

Note that all documents will now be prepared together before being printed in a batch, so although the overall speed should improve there may be a longer delay before the print job actually begins.

Finally, the temporary files created during the printing of printable worksheets are now deleted when QESTLab is closed.

**Bug#1175 Printable worksheets - Location (LocationDescription)**

*Coffey Information:n/a*

All printable worksheets which map the QESTLab field "LocationDescription" will now show the most up-to-date data, without requiring the user to move off and onto the work order again.

**Bug#1156 Unconfined Compressive Strength of Cohesive Soil [ASTM D 2166 - 06]**

*Braun Intertec USA:BUG187*

A dropdown field has been included on the screen to specify the preparation method, which is also reported when set. In addition, the Initial Dry Density should now report to four significant figures in accordance with ASTM D 6026.

**Bug#1158 Maximum Dry Density - Standard [Q142A]**

*Boral National:n/a*

The Additive Source, Type and Proportion are now available on the Additives tab for entering the details of the Stabilising Agent. In addition, the Preparation Method can be entered on the Details tab. All these values are reported when present.

**Bug#993 Concrete Curing (US)**

*Braun Intertec USA:BUG 222*

The Standard Concrete Report [ASTM] has been updated to report Site and Air type curing.

**Bug#995 Concrete Specimens - Bulk Checking**

*Braun Intertec USA:BUG 224*

The Concrete Multiple Specimens Electronic Worksheet now allows the user to select from a list of people in order to set the Measured By, Tested By and Checked By through the bulk marking/checking buttons.

Also resolves: PSI National USA: 747

**Bug#997 Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927, D 6926, D 3549, D 2726]**

*Fulton Hogan:QL-1992*

Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927, D 6926, D 3549, D 2726] both the 2005 (117113) and 2010 (117122) versions now report Bulk Specific Gravity to ASTM D 3203 for Open Graded Mixes. ASTM D 2726 is still reported for Dense Mixes.

**Bug#982 Brookfield Viscosity of Asphalt (& Torque) [ASTM D 4402 - 06]**

*Fulton Hogan:QL-1972*

N/A yet

**Bug#959 Add/Edit Work Order Form**

*Fulton Hogan:QL-1948*

The mouse pointer will now display as "busy" while the Add/Edit Work Order form is being loaded.

**Bug#936 The Order No is not displayed immediately on the Work Order when importing a concrete docket**

*Boral National:1380217*

This has been fixed such that the Order No will be displayed immediately after importing a docket in the bulk entry.

Note that the Work Order control is "folded up" when the first sample is added in the bulk entry so the Order No field is hidden immediately after docket import. Folding the Work Order down again will reveal the Order No field and the imported value.

**Bug#414 Multiple email addresses displayed when emailing a test report**

*Boral National:BOR\_139*

Email addresses are now restricted to the Client and Project details pertinent to the laboratory from which the report is being emailed. Global laboratory details are included conditional on the Client and Project list options.

Email addresses that correspond to blank Project and Client Codes are no longer included in the list.

NOTE: If there are duplicate Project Codes within the same laboratory then these should be fixed to avoid future problems. Please contact the Spectra QEST HelpDesk for a script that will assist in identifying the laboratories that have multiple duplicate Project and/or Client Codes.

**Bug#311 Archived test reports**

*PSI National USA:PSI 652*

The caption displayed in the tree for archived test report revisions has been modified so that items are ordered consistently in the QESTLab tree.

The date/time part of the caption is now formatted as "yyyy-mm-dd hh:mm" (e.g. 2011-07-23 14:28) rather than using the default date format (which vary depending on your computer's regional settings).

**Bug#377 Height, Marshall Stability and Flow of Compacted Asphalt (Metric)**

*Fulton Hogan:FH\_QL-1385*

The following screens can now report individual results via the child test report (18987):

- Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927 - 06, D 6926 - 04, D 3549 - 03, D 2726 - 05a] (117113)
- Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10] (117122)

**Bug#272 Marshall Stability [MnDoT 1805]: Minimum number of specimens restriction**

*Braun Intertec USA:BUG198*

The three specimen restriction has been removed from the MnDoT 1805 (117150) test screen as it is not a requirement of the standard. This implies that, if required, specimens can be added or removed from testing as desired.

**Bug#275 Aggregate/Soil Test reports: "Show Test Dates" option**

*Braun Intertec USA:BUG200*

When the "Show Test Dates" document level option, accessible via QEST Administrator Console -> Lab -> Configuration -> Documents -> System -> Aggregate/Soil Sample Test Report [18909], is enabled then the "Tested Date" will no longer be reported twice. This was particularly noticed when the "Finer 75um [AASHTO T 11-05]" test method was reported.

**Bug#191 External document accreditation image and text**

Fulton Hogan: FH\_QL-555

External reports now provide better support for accreditation logos and endorsement text.

An accreditation logo now only displays in a report if:-

- the report is signed, and
- the report is not a preliminary report, and
- the report is not non-endorsed, and
- a suitable accreditation can be found

In addition, a new metadata field, "Endorsement Text" (METADATA\_EndorsementText) is available for mapping into reports. This provides the accreditation endorsed/non-endorsed text configured for the accreditation. If the report is preliminary, this will instead provide the text configured for the lab-level option "Preliminary Report Text".

**Bug#167 Nuclear Density Report**

Fulton Hogan: FH\_QL-728

The Nuclear Density Report (18988) will now only ever show one set of Moisture Content (adjusted), Wet Density and Dry Density. In the absence of the relative compaction (10298) the results come from either nuclear density field results (10331 or 10332). In the presence of the relative compaction (10298), results come from the relative compaction (which adjusts the nuclear field results per the oversize).

**Bug#174 Default "complete" status for reduced tests and user documents**

Braun Intertec USA: BUG177

Until now, user documents have automatically had their status set to "complete" once they are viewed, irrespective of the "Completed" checkbox, or any values uploaded via dynamic worksheets.

There are now 3 ways in which the "complete" status may be set on a user document:

- 1) A user document may be created with the complete status set to True by default. This is achieved via the QEST Administrator Console, Lab > Configuration > Documents > System > right click document -> Edit Defaults/Options. On the Defaults tab, set the field QestComplete with a value of 1. The QestComplete field has not been available on this screen before now.
- 2) Set the complete status manually via the "Completed" checkbox on the user document screen.
- 3) For user documents mapped to a dynamic worksheet, map the field "Is Completed" (QestComplete) as an export field, and set the value of this field in Word/Excel to 1 for complete and 0 for not complete. When the document is re-uploaded to QESTLab, the Completed checkbox will update to reflect the uploaded value.

A patch will set the defaults as per (1) above on all existing user documents, to make them behave as they did before (i.e. automatically completed).

There has previously been some confusion in regards to the option in the QEST Administrator Console, Lab > Configuration > Options > External Documents > Always set as complete. In fact this option only applied to "vanilla" external documents added to work orders and samples, and not to special external documents such as dynamic worksheets that are mapped to user documents. Regardless, the enhancements described above allow this option to be deprecated, so it has now been removed; to change the behaviour, set the defaults for QestComplete accordingly on document 18200. As part of this upgrade, the defaults will be set according to your existing configuration of this option.

There has also been some minor consolidation of the fields available for use in the Defaults tab in the aforementioned Edit Defaults/Options window. In addition the "Copy Fields" tab, available on this window for some sample types, is redundant and has been removed.

Note that reduced tests, though visually similar to user documents, continue to use independent logic to set the complete status, and this cannot be overridden by the user.

**Bug#178 Benkelman Beam Equipment Item**

Fulton Hogan: FH\_QL-648

The Benkelman Beam Correction Factor can now be entered to four decimal places for increased precision.

**Bug#684 Wet/Dry Strength Variation [AS 1141.22]: Limit of performance for balances**

Boral National: 1300159

The precision for "Mass of Aggregate" has been changed to 1 decimal place to keep it aligned with the Limit of Performance for the Balance equipment item, as specified in the standard.

NOTE: The precision for "Mass of Aggregate" for the RTA T215 and Q205A,B,C standards remains unchanged.

**Bug#766 Non Conformance Report - User Dropdowns**

Boral Asphalt: AQUA3

A bug on the NCR screen that resulted in the user dropdowns (Raised By, Actioned By, Audited By) only displaying a single item has been resolved.

**Bug#495 Flakiness Index [AS 1141.15]**

*Boral National: BOR\_129*

The grading data is now copied to the correct decimal places to the Flakiness Index [AS 1141.15] (10180) test screen.

**Bug#501 Bulk Specific Gravity of Asphalt [ASTM D 2726 - 05a]**

*Braun Intertec USA: BUG214*

The screen now uses the rounded result to determine whether the Relative Density is met or not.

**Bug#464 Degradation Factor [Q208B] and [Q208A]**

*Boral National: n/a*

The Error 91 that is observed on the Degradation Factor [Q208B] screen, when the "Height" is changed, has now been fixed.

In addition, the Degradation Factor [Q208A] screen was not displaying the "Deleterious material was removed" checked value correctly. This has also been fixed.

**Bug#465 Concrete Sample (AU)**

*Boral National: 1308836*

"Sampling Procedure" has been renamed to "Sampling Locations" and "Sampling Method" to "Sampling Procedure" on the concrete sample screen and bulk entry for Australian Producers and Testers.

**Bug#1231 Incorrect lab context in 'Edit Work Order' for old work orders**

*PSI National USA: 815*

When using 'Edit Work Order' screen for Work Orders created prior to QESTLab 3.3, the laboratory context was not being set to the lab of the work order. Instead, the previously used lab context would be selected initially. This has been corrected.

**Bug#1248 Determining Asphalt Content from Asphalt Paving Mixtures by the Ignition Method [Tex-236-F]**

*PSI National USA: 825*

The correction factor will now be added to the Asphalt Content value. This implies that that a negative correction factor will result in a subtraction.

**Bug#1251 Moisture Susceptibility [ASTM D 4867 - 04]**

*Fulton Hogan: QL-2192*

The "Conditioned Saturation" field now requires a minimum saturation of 55% instead of 80%.

**Bug#1228 People and Roles sometimes crashes when saving changes**

*Boral Asphalt: PEOPLE*

A bug that resulted in QESTLab crashing while saving changes to the home laboratory for a person has been resolved.

A side affect of resolving this bug is that the node that represents the person will not be moved in the tree until the filter is refreshed.

**Bug#1215 List Screens**

*Internal (Spectra QEST): n/a*

Several bugs and minor inconsistencies in the screen used to edit list entries have been resolved.

The most significant of these were:-

- A bug where list entries could not be deleted using the red 'X' in the toolbar
- A bug where the header text above each column in the list would sometimes not be displayed
- A bug where values generated by counters (for new list items) would not be displayed until the list was refreshed/reloaded (Bug#1168)
- A bug where highlighting of the current row in the grid would sometimes fail to be cleared after selecting a different row

**Bug#1216 Particle Size Distribution/Grading Moisture Content**

*Coffey Information: Cof11.026\_UAT*

The Particle Size Distribution/Grading tests now clear the moisture content when the "Ignore Sibling MC" checkbox is checked.

**Bug#1212 New Australian Maximum Density Average document at the Work Order level**

*Boral Asphalt:n/a*

A new document 'Maximum Density Average' (17056) has been added which can be attached under Work Orders.

This document calculates the average of maximum density test results on that work order for Australian maximum density tests (AS 2891.7.1, AS 2891.7.3, TSA-MAT-TP435).

It is also possible to calculate the average of any past maximum density tests, selecting by date tested. Individual maximum density tests can be included or excluded as required.

The average result can then be imported to other test method as a maximum density result by entering the Work Order ID rather than a Sample ID for the source of the maximum density.

**Bug#1193 Nuclear Density [NZS]**

*Fulton Hogan:QL-2177*

1. "Elevation" is now reported to 3 decimal places on the Site and Fill type reports.

2. "Longitude" and "Latitude" have been replaced with "Northing" and "Easting" on the Fill and Site type reports.

3. "Dry Density", "Wet Density" and "Moisture Content" are now correctly reported once from the Relative Compaction test. If no Relative Compaction test is present, they are reported from the Nuclear Density test.

4. The Nuclear Density bulk entry view now shows Adjusted Maximum Dry Density and Adjusted Optimum Moisture Content since those are the values used to calculate compaction.

6. A bug on the compaction screen has been fixed where Adjusted Maximum Dry Density was calculated incorrectly when the screen was visited.

7. A bug has been fixed where the reported field "MDD @ OMC" was incorrectly calculated.

8. Water Density has been added to the Nuclear Density bulk entry view to calculate Air Voids for the Plateau type report

9. General formatting issue have been fixed where various columns of the grid were different font sizes. All columns of the grid are now shown regardless of if data exists yet. And various columns headings now fit correctly

10. The moisture correction factor is now assumed '1' for the purpose of calculating corrected moisture content values when the moisture correction.

11. A single non-multi-lined Location Description field is now in the Nuclear Density bulk entry view for non-roadwork samples. Note that this field is not reported. The Site Tested field in the Test Details section of the report is populated from the work order's Location field.

**Bug#1195 Consolidation and fixing of external document options**

*Internal (Spectra QEST):n/a*

The following external document options have been removed, as analysis has shown that they are either not used, or no longer required:

"Always save file in database" - linked external document files have not been extensively used and are no longer supported. The "Save Link Only" checkbox is no longer available.

"Always set as complete" - this behaviour can now be controlled by setting a default value of 1 for the QestComplete field on the "External Document" test (18200). The "Complete" checkbox will always appear on

"vanilla" external documents added to samples and work orders, but the initial value will be controlled by the default. A default value will be automatically set according to the current value of this option.

"Overwrite existing data in Office documents" - a value of False has never been used and is no longer supported.

"Overwrite existing data in QESTLab" - a value of False has never been used and is no longer supported.

"Disable local caching of network files" - a value of True has never been recommended and is no longer supported.

In addition, the following options now work correctly:-

- Default directory - Equipment
- Default directory - Work Orders
- Default directory - Samples
- Default directory when saving

Finally, the external document options in the QEST Administrator Console have been subdivided into the additional groups "Printing" and "Citrix" where appropriate.

**Bug#1200 Concrete/Masonry OTHER type specimen**

*Braun Intertec USA:BUG 231*

A bug has been fixed that prevented the Concrete/Masonry OTHER type specimens from being selected.

**Bug#1206 Display of Inclusive Range specification limits**

*Fulton Hogan:n/a*

A global option, "Display Inclusive Range Specification limits using 'to'", accessible via QEST Administrator Console -> Lab -> Options -> General has been added.

When this option is enabled (and Simple Specifications is also enabled) then specification limits for the Inclusive Range case will be described by separating the two values with the text "to" instead of "-". By default this option is False.

**Bug#1207 Atterberg Limits [AASHTO T 89-02/T 90-00]: Processing Method**

*PSI National USA:806*

The "Mortar + Pestle" item in the Processing Method dropdown was incorrectly spelt as "Mortar + Pestal". This has now been corrected.

Any existing tests that had the incorrect spelling have also been retroactively corrected.

**Bug#1209 Reduced icon not displayed**

*PSI National USA:807*

Three areas where the "Reduced" icon was not being displayed next to reduced/results only test methods have been corrected.

These are:-

- Laboratory documents/accreditations (QLA)
- People and Roles
- Specification Limits

**Bug#1219 Marshall Stability reporting**

*PSI National USA:n/a*

The Average Stability is now correctly reported in pound force (lbf) for Marshall Stability [MnDOT 1805 - 02] (117150) and Marshall Stability (Imperial) [ASTM D 6927 - 06] (117111).

**Bug#1220 Measuring Thickness of Pavement Layer [Tex-140-E]: frame heading**

*PSI National USA:809*

The frame heading for this test has been changed from "Deleterious Materials" to "Thickness of Pavement Layer".

**Bug#1221 Moisture Content of Aggregate [Tex-103-E]**

*PSI National USA:812*

The field, "Dish Number", has been removed from the Moisture Content of Aggregate [Tex-103-E] test screen as it is redundant. The "Tray Number" field should suffice to capture that data entry requirement.

**Bug#1223 Proctor [Tex-113-E / Tex-114-E]**

*PSI National USA:811*

The following changes have been made to the proctor screen:-

- All masses can be entered to 3 decimal places.
- The moisture content calculation values are now in pounds.
- The option "Compaction IP" has been removed and the compaction values are now always in pounds.

This affects the following methods:-

- Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E]
- Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E]

**Bug#1224 Sieve Analysis Wet Mass and Moisture Content Fields**

*PSI National USA:810*

Any field relating to a "Wet Mass" has been removed from the following test methods, as they are not required:

- Sieve Analysis for Fine & Coarse Aggregate [Tex-401-A Part 2/Tex-402-A]
- Sieve Analysis of Surface Treatment Aggregates [Tex-200-F Part 2]
- Sieve Analysis of Non Surface Treatment Aggregates [Tex-200-F Part 1]
- Sieve Analysis of Fine and Coarse Aggregates [Tex-229-F]
- Amount of Material in Soils Finer than the 75µm Sieve [Tex-111-E]
- Particle Size Analysis [Tex-101-E Part III]

Note: this does not affect the ability to enter washed masses.

Additionally the moisture content controls have been hidden from any test that does not contain a wet mass field. This affects all of the above methods and the following:

- Grading [WA210.1]
- Dry Sieving [NZS 4407:1991 Test 3.8.2]
- Dry Sieving [NZS 3111:1986 Test 6]
- Particle Size Distribution (Wet Method) [NZS 4402:1986 Test 2.8.1]
- Particle Size Distribution (Dry Method) [NZS 4402:1986 Test 2.8.2]
- Particle Size Distribution - Dry Method [BS 1377-2: 1990 cl 9.3]
- Particle Size Distribution (Wet Method) [NZS 4402:1986 Test 2.8.1]
- Wet Sieving [NZS 4407:1991 Test 3.8.1]
- Finer 75µm [AASHTO T 11 - 05]
- Material Finer than 75µm in Aggregate [ASTM C 117 - 04]

**Bug#1225 Expansion Index test reporting**

*Twining Labs:EXPANSION*

The Expansion Index test now references to the ASTM D 4829 test method when reporting.

**Bug#1226 Particle Size Analysis - Hydrometer [Tex-110-E] - help reference**

*PSI National USA:816*

The help reference for the Particle Size Analysis - Hydrometer [Tex-110-E] has now been corrected to refer to the Context Sensitive Help icon (?) instead of the Document Information icon (i).

**Bug#1264 An error occurs adding tests to a Work Template when a grouping node is checked.**

*Internal (Spectra QUEST):n/a*

This has been corrected such that group nodes are ignored when adding samples and tests to a Work Template.

**Bug#1265 Reporting of Uniformity and Curvature Coefficients for all NZS Particle Size Distribution tests**

*Fulton Hogan:QL-1956*

The Grading method will no longer be referenced when the Uniformity and Curvature Coefficients are reported as those calculations are not part of the NZS standards.

This change applies to:

- 10025 - Wet Sieving [NZS 4407:1991 Test 3.8.1]
- 10026 - Dry Sieving [NZS 4407:1991 Test 3.8.2]
- 10027 - Dry Sieving [NZS 3111:1986 Test 6]

The change does not apply to results entry screens, or to NZS test methods where these fields are not reported (i.e. NZS 4402).

**Bug#1267 Proctor [AASHTO T 99 – 01], Proctor Report**

*Braun Intertec USA:BUG176*

The following changes have been made:

- The mold volume now displays in cubic centimetres.
- The chart now displays densities to the nearest whole number.

Please note, the "Display Grid In Report" option refers to whether or not grid lines are drawn when specimen data is reported. It does not affect whether or not the specimen data is reported.

**Bug#1268 'Jump to Role' button does not enable on single-lab systems**

*Internal (Spectra QEST):n/a*

This has been corrected such that the button will enable when a role has been selected.

**Bug#1269 Height, Marshall Stability and Flow of Compacted Asphalt [ASTM D 6927 - 06, D 6926 - 04, D 3549 - 03, D 2726 - 05a]**

*Fulton Hogan:QL-2278*

The precision of the Bulk Specific Gravity measurements has been changed to match the standard. They now need to agree to within 0.02 of the mean, rather than 0.023.

**Bug#1254 Option name not populated in options table**

*Internal (Spectra QEST):n/a*

A bug where the OptionName field was not being populated for new options has been fixed.

A patch has been added to ensure that this field is populated for existing records in the table.

**Bug#1257 "Laboratory Technician" dropdown on Work Order screen locked**

*PSI National USA:826*

The "Laboratory Technician" dropdown on the Work Order screen is no longer incorrectly locked when no work template has been associated with the Work Order.

NOTE: This issue would only be noticed for customers that have a "Lock Field" mask set for the "Project Owner" field.

**CR#660 Materials/Products with no specification**

*PSI National USA:PSI\_502*

A new option has been added to control the behaviour of sample screens when selecting a material/mix/product that has not been assigned a specification.

The option is available under Configuration > Options > General in the QLA, and is named "Retain current specification when selecting a material with no specification".

When this option is set to False, selecting a material that has not been assigned a specification will clear the specification group and specification dropdowns. This is also the default behaviour if the option has not been set.

When this option is set to True, selecting a material that has not been assigned a specification will not change the value in the specification group or specification dropdowns. If a specification was previously selected, it will remain selected after selecting the material.

The option applies to the following sample types:

- Aggregate/Soil Field Test
- Aggregate/Soil Sample
- Asphalt Field Test
- Asphalt Sample
- Bitumen Sample
- Other Sample

It does not apply to concrete samples, as items in the Concrete Mixes list are not associated with specifications.

**Bug#1236 Minor external document efficiency improvements**

*Internal (Spectra QEST):n/a*

External documents now make fewer calls to the database when they are populated, theoretically increasing the speed with which they open and print. This may not bring a noticeable speed improvement to many QESTLab installations, however it will ensure more consistent speeds into the future.

**CR#624 Moisture Susceptibility [ASTM D 4867 - 09]**

*Fulton Hogan:N/A*

Updated versions of Moisture Susceptibility [ASTM D 4867] for the 2009 version have been added to QESTLab; 117160 (InchPound) and 117161 (Metric)

**CR#625 Height, Marshall Stability and Flow of Compacted Asphalt [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10]**

*Fulton Hogan:N/A*

The following screens are now available:

Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10] (117122)

Height, Marshall Stability and Flow of Compacted Asphalt (Inch-Pound) [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10] (117123)

Kindly contact Spectra QEST to be licensed for these screens.

**CR#626 Height, Marshall Stability and Flow of Compacted Asphalt [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10]**

*Fulton Hogan:N/A*

The following screens are now available:

Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10] (117122)

Height, Marshall Stability and Flow of Compacted Asphalt (Inch-Pound) [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10] (117123)

Bulk Specific Gravity of Asphalt [ASTM D 2726 - 10] (117124)

Kindly contact Spectra QEST to be licensed for these screens.

**CR#820 New system external report "Mailing Labels" (14501)**

*Twining Labs:n/a*

QESTLab now includes a new system external report "Mailing Labels" (14501), intended for external reports that the customer may design for printing distribution labels. Please contact SpectraQEST if you wish to be licensed for this test.

For use with mapping any external reports, there are now fields available for mapping distribution contact information into Word and Excel. This allows the mapping of up to 10 selected contacts, using any of the following fields:

ContactName

Street

City

State

PostCode

Country

Phone

Facsimile

Email

Street2

Street3

ContactType

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## Release Notes for QESTLab Version 3.3.1000

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**CR#814 Project List entry screen: Billing Client width**

*Coffey Information:Cof11.070\_2*

The width of the "Billing Client" dropdown has been increased a little to allow better readability of the items in the list.

NOTE: This dropdown is only visible if the "Allow Alternative Billing Clients on Invoices" option is enabled.

**CR#842 Reduced Michigan Proctors**

*PSI National USA:820*

Reduced test for Michigan One-Point T99 (110080), Michigan Modified T180 (110081), Michigan Cone Test (110082) and Michigan One-Point Cone Test (110083) are now available in QESTLab. Kindly contact SpectraQest to be licenced for these test.

**CR#843 TxDOT Method Naming**

*PSI National USA:837*

The following TxDOT method names have changed so that the word "Part" is now followed by a Roman Numeral, rather than a number:

110701	Tex-104-E Part I
110706	Tex-115-E Part I
110707	Tex-115-E Part II
110723	Tex-401-A Part II
110739	Tex-101-E Part III
110741	Tex-401-A Part II/Tex-402-A
110760	Tex-200-F Part II
110764	Tex-104-E Part I
110771	Tex-121-E Part II
110772	Tex-120-E Part I
110773	Tex-101-E Part III
110800	Tex-115-E Part I

**CR#847 Nuclear Density [NZS]**

*Fulton Hogan:QL-2304*

Moisture Content [NZS 4407:1997 Test 3.1] is now included in the Nuclear Density Group view.

**CR#871 Field Density Report (NZ) - Date/Time tested**

*Fulton Hogan:QL-2314*

The fields "date tested" and "time tested" will now be reported from fields entered on the work order, rather than from the first agg/soil sample on the test report.

Previously, date tested came from the "date sampled" field on the sample, and time tested came from "time sampled" (also on the sample).

Date tested is now populated from "work date", and time tested comes from "start time", both on the work order.

**CR#737 Core Density Testing**

*City Of Las Vegas:N/A*

There is a QLA option to limit the average thickness maximum to +10% of the specification value entered. This can be found under:

"QLA > Configuration > Documents > System > Thickness of Paving Mixing [ASTM D 3549] (117200) > Maximum +10% specification".

The following changes have been made:

- The "Thickness of Paving Mixing [ASTM D 3549]" screen and bulk entry now displays the "Corrected Average Thickness". This will either be the "Average Thickness" or the +10% value.
- The "Date Cored" has been renamed to "Date Paved".
- The "Client Specification" field has been added to the report.
- A "Calculate Specific Gravity" checkbox has been added to "Bulk Specific Gravity [AASHTO T 275, ASTM D 1188]". This allows the user to manually edit the value.

**CR#704 Inactive proctors view**

*PSI National USA:UST555*

Several new columns have been added to the inactive proctors view to help with identification.

The list of columns now shown is:

- Sample ID
- Date Sampled (new)
- Date Tested (new)
- Standard/method (new)
- General Location (new)
- Specific Location (new)
- Material Name
- MDD
- AMDD
- OMC
- AOMC
- Inactive

Rounding:

- MDD, AMDD, OMC and AOMC are all displayed to 1 decimal place.

Read only columns

- Read-only columns are now shown with a grey background in this view (i.e. all columns except for "Inactive")

**Bug#1309 Equipment calibration schedules**

*PSI National USA:842*

A bug where setting the calibration schedule to "Rekurs [N] [Periods] after last calibration, starting [Date]" was not saved to the database, and would revert to "Rekurs [N] [Periods] starting [Date]" has been resolved.

**Bug#1310 Height, Marshall Stability and Flow of Compacted Asphalt [ASTM D 6927 - 06, D 6926 - 10, D 3549 - 03, D 2726 - 10]**

*Fulton Hogan:QL-2278*

The screen has been modified so that the difference checks on the Bulk Specific Gravity are done against the Average Bulk Specific Gravity. It was previously comparing the difference between the highest and lowest values entered.

**Bug#1258 Balance Calibrations: Data entry decimal places**

*Coffey Information:Cof11.066\_1*

Load can now be entered to 4 decimal places.

### **Bug#1262 Sieve Analysis [Tex-229-F, and others]**

*PSI National USA:824*

The following changes have been made to the sieve analysis screen:

- The "Finer No.200" sieve is displayed on the screen and report whenever it is used. This includes when the "Add Pan to Finer 75um" option is used without washing.
- The "Finer No.200" value now clears rather than being saved as "-1" when it's not calculated. This avoids "-1" values appearing on the report.
- The "Total Dry Mass" is no longer deleted when opening an asphalt sieve analysis screen. The value is sometimes imported from another screen like a bitumen content, so it doesn't need entering. However if there are no other tests to import from, the value can now be entered manually.

The following changes have been made for Tex-229-F (110768):

- The default washing for this standard is now "Total", rather than "(none)".
- Percentages are displayed to 1 decimal place, consistent with the worksheet.
- Correction factors are now available for all required sieves, and import from the Asphalt Mix List.
- Correction factors are applied to the "Cumulative Passing (%)" value, and then the retained percentages are then calculated from this.

The following changes have been made to the Asphalt Mix List (20007) and Agg/Soil Materials List (20004):

- Sieve labels are displayed dependent on the QLA option: "QLA > Options > General > Sieve Units Format". This will display the label in either metric, imperial, or combined units. This is the same option that is used to display the labels on the sieve analysis and specification screens. These and the lists will now all display consistent units.

To calculate the total amount of material passing the No.200 sieve, including washing and remaining material, please do the following:

- Configure your specification used to use the pan and finer fields, "Sieve\_Pan" and "Sieve\_Finer75".
- Set the document option "QLA > Configuration > Documents > System > Sieve Analysis of Fine and Coarse Aggregates [Tex-229-F] > Add Pan to Finer 75um" to "Yes"
- The pan represents anything passing the final sieve, in this case passing the No.200. This is how the "-No.200" is entered.

### **Bug#1263 Flakiness Index [Q201A - 87, Q201B - 87]**

*Coffey Information:Cof11.094*

The following changes have been made to the Flakiness Index screen:

- Changed the label "Flaky Particles (%)" to "Aggregate Passing Slot (%)".
- Improved the screen resizing code.
- Added an extra row to show the total "Mass of Fractions", which is used in calculations. This also displays the total "Retained (%)" as well.

### **Bug#1276 Field Density Reports (US) - Proctor Reporting**

*PSI National USA:723*

A patch has been added which will update 3.2 field density tests so they correctly report proctor information on the 3.3 version of the report. (Field Density Test Report - 110244).

### **Bug#1284 Field Density**

*PSI National USA:835*

The test report can be configured such that it only reports location data for samples with compactions. To use this feature set the following QLA document option to "Yes": "QLA > Configuration > Documents > System > Field Density Test Report [11024] > Options > Only Report Compaction Locations".

Additionally, the test numbers for the "Test Results" and "Location" sections on the report now match up correctly.

If the "Sample Fields" option for the 110224 document is being used, the new fields will have to be manually added to it. The 2 new fields added are below. Please note the numbers "X" and "Y" will need to be changed to suit whatever configuration you have:

- SampleDetailsLongX=Section=Location;FieldName=TestNumber;Prompt=Test No.;ValueFormat=0;Width=500;Order=0;ValueStyle=text-align:center\;;|
- SampleDetailsLongY=Section=Location;FieldName=ReportLocation;Prompt=Report Location?;Visible=False;PrintFlag=T;|

### **Bug#1286 Management reports - Text wrapping does not work**

*Internal (Spectra QEST):TEXT\_WRAPPING*

A bug where the "Wrap Text" setting for management report columns was not being loaded/saved correctly has been resolved.

### **Bug#1287 Adding documents via the Tests/Documents node**

*PSI National USA:838*

The Concrete Diameter (and other relevant documents) can once again be added via the "Tests/Documents" node. Kindly contact the SpectraQEST HelpDesk if a particular document still cannot be added via that node.

**Bug#1290 Relative Compaction.**

*Fulton Hogan:QL-2299*

1. Relative Compactions now build their Maximum Dry Density import list using the latest sampled as per Date Sampled and order the tests by Sample ID.
2. Relative Compaction [NZZ] (10298) now has the Document Level Option "MDD Sample List Size" which sets the maximum number of samples that can populate the Maximum Dry Density import list. Enter the option as an Integer 20 to 100.

**Bug#1291 Maximum Dry Compressive Strength [RTA T114]**

*Coffey Information:Cof11.032(?)*

Maximum Dry Compressive Strength [RTA T114] (10564) now supports multiple specimens.

**Bug#1293 Particle Size Distribution [NZZ 4402:1986 Test 2.8.1]**

*Fulton Hogan:QL-2309*

Moisture content's can now be imported to this particle size distribution test.

**Bug#1300 Grading Tests - Date Tested Reported Twice**

*Coffey Information:Cof11.104*

The "Date Tested" is no longer reported twice on test reports for grading tests.

**Bug#1301 Reports & Charts: Searching on the 'Name' column for lists**

*PSI National USA:840*

When creating filters that lists and searches on the "name" column of a QESTLab list then, in some databases, ODBC errors would result. This has now been fixed.

NOTE: These errors are particularly noticed on databases that have the Compatibility Level set to "SQL Server 2005".

**Bug#1302 Marshall Stability [MnDoT 1805]: Error on decreasing the number of sites**

*Braun Intertec USA:BUG198\_UAT*

The errors that were thrown when reducing the number of sites to test should now be resolved.

**Bug#1303 Relative Compaction - Moisture Variation**

*Coffey Information:Cof11.103*

The "Moisture Variation" field is now correctly reported as wet or dry.

**Bug#1306 Report and Chart Permissions**

*Internal (Spectra QEST):n/a*

A bug where a report/chart group names containing single quotes would crash the Edit Role screen when changing report/chart permissions has been resolved.

**Bug#1307 Brookfield Viscosity of Asphalt (& Torque) [ASTM D 4402 - 06] & Brookfield Viscosity of Emulsion (Method A & Torque) [ASTM D 2196 - 05]**

*Fulton Hogan:QL-1972*

The child test report for these tests is no longer automatically added to the Work Order when the Sample(s) are created. However the child test report can be manually added to the sample, when required.

**Bug#1312 Compressive Strength of Soil-Cement Cylinders**

*Twining Labs:SOILCEMENT*

Compressive Strength of Soil-Cement Cylinders [ASTM D 1633 - 07, ASTM D 559 - 03 (110057) and Compressive Strength of Soil-Cement Cylinders [ASTM D 1633 - 07, ASTM D 1632 - 07] (110058) now correctly allow Design and Actual Cement (%) amounts to be entered. The associate report Compressive Strength Test Report (110056) now correctly reports the Tested By person.

**Bug#1313 Particle Size Distribution Chart Units [ASTM C 136 - 06, ASTM C 117 - 04]**

*PSI National USA:845*

The Particle Size Distribution chart units now reflect those on the screen, rather than always being in metric.

**Bug#1314 Proctor Air Voids Graph Line**

PSI National USA:847

A number of proctor and maximum dry density screens were not reporting the specific gravity of undersize material. The following methods have been updated to report both the undersize (fine) and oversize specific gravity:

- 110032 - Proctor - Standard [ASTM D 698 - 07]
- 110033 - Proctor - Modified [ASTM D 1557 - 07]
- 110036 - Proctor - Standard (One-Point Verification) [ASTM D 698 - 07]
- 110037 - Proctor - Modified (One-Point Verification) [ASTM D 1557 - 07]
- 110400 - Proctor - Standard (Metric) [ASTM D 698 - 07]
- 110401 - Proctor - Modified (Metric) [ASTM D 1557 - 07]
- 110402 - Proctor - Standard (One-Point Verification) (Metric) [ASTM D 698 - 07]
- 110403 - Proctor - Modified (One-Point Verification) (Metric) [ASTM D 1557 - 07]

Additionally an option has been added to these screens so that the 0% Air Voids line will always be visible when drawn. By setting the following option to "No", the line will always be visible:  
"QLA > Configuration > Documents > System > (Proctor Screen of Choice) > Options > Conserve Chart Space"

**Bug#1317 Sand Replacement, Standard/Modified Compaction**

PSI National USA:849

Several changes have been made to the reported result for the Sand Replacement (110304) density testing on the report Field Density Report (110244) in order to fit the columns better.

1. The Sand Cone Apparatus ID is now reported as a common field in the Testing Details section.
2. The column "Test Hole Volume (ft<sup>3</sup>)" renamed to "Hole Volume (ft<sup>3</sup>)"
3. The column "Depth Tested (in)" have been removed entirely.
4. The column "Sand Pouring Apparatus Volume (ft<sup>3</sup>)" has been renamed to "Sand Cone Volume (ft<sup>3</sup>)"

**Bug#1326 Grading [WA115.1]**

Coffey Information:Cof11.110

The report now displays percentages to whole numbers.

**Bug#1327 Maximum Dry Density [NZS 4402:1986 Test 4.1.1, 4.1.2, 4.1.3]**

Fulton Hogan:QL-2296

The Maximum Dry Density screen now allows free entry of the "Assumed Particle Density" field. If the value is not entered manually, it will be calculated. This calculated value can be overwritten by the user if desired. The report will display whether the value is assumed or not, once again.

**Bug#1227 Reduced Proctor Methods**

PSI National USA:817

The following test methods now display and report Adjusted Optimum Moisture Content as (%) instead of (lb/ft<sup>3</sup>):

- Proctor - Standard [ASTM D 698 - 07] \* (110377)
- Proctor - Modified [ASTM D 1557 - 07] \* (110378)
- Proctor - Modified [AASHTO T 180 - 01] \* (110379)
- Proctor - Standard [AASHTO T 99 - 01] \* (110380)

**Bug#1213 Billing Document: charges for deleted documents persist**

PSI National USA:640

When the "Generate Billing on Work Order/Sample Complete/Update" option is enabled then deleting documents from the Work Order (this includes concrete specimens that might be deleted from the sample) would not result in the billing charges being updated. This has now been rectified.

NOTE: If the "Enable Billing Exclusions" option is also enabled and the Billing Document is set to be visible then charges on the Billing Document will not update automatically. This is by design.

**Bug#1217 Random Site Location [AS 1289.1.4.1, 1289.1.4.2, RC 316.10, RTA Q6, Q050, WA 0.1]**

Coffey Information:Cof11.031\_5

The edge boundaries should now follow the intermediate readings. In addition, the actual site location should not appear within the offset boundary.

**Bug#1230 Concrete HOLPRIS Specimens**

*PSI National USA:804*

The Standard Concrete Report (18970) reports Net Strength vs Required Strength for HOLPRIS specimens. But with the absence of an Assumed Net Area, the Net Strength cannot and is not calculated. Instead the Standard Concrete Report reports (Gross) Compressive Strength vs the Required Strength (when Assumed Net Area is not entered). This functionality has not changed.

Functionality has changed for the HOLPRIS specimens themselves. They will now check Required Strength vs the Net Strength (Instead of Gross Strength) when an Assumed Net Area is entered. This means: HOLPRIS specimens calculate both Net Strength and Gross Strength, and check and report Net Strength against the Required Strength when an Assumed Net Area is entered. HOLPRIS specimens calculate Gross Strength but not Net Strength, and check and report Gross Strength against the Required Strength when an Assumed Net Area is not entered.

NB This functionality excludes the HOLPRIS specimen for Masonry samples.

A Dynamic Script "QESTLab 3.3 - Concrete HOLPRIS Required Strength" is available which updates all existing HOLPRIS specimen and their samples such that the Standard Concrete Report has the correctly data and the specimens and samples are correctly flagged is Out of Specification.

**Bug#1252 Unified Soil Classification System [ASTM D 2487 - 06], Classification of Soils for Highways [AASHTO M 145 - 91]**

*PSI National USA:803*

Calculations have been updated so that values are cleared when calculations cannot be performed. This avoids left-over results appearing and reporting that are not consistent with the data present. Additionally the size of the "Group Name" has been increased so that longer names will fit properly.

**Bug#1249 Density of Bituminous Mixtures [Tex-207-F]**

*PSI National USA:819*

The following changes have been made to the screen: -

- "Press Correlation Factor" has been added to the test screen as well.
- The "Asphalt Specific Gravity" prompt has been changed to "Asphalt Specific Gravity (G1)" to make it clearer
- The calculation of Bulk Specific Gravity has been fixed and now also takes the "Press Correlation Factor" into account.

**Bug#1250 Concrete Reports (TxDOT, Generic)**

*Internal (Spectra QEST):*

Concrete Reports (TxDOT (18953), Generic (18947), Drilled Core Report ASTM (18961) and Drilled Core Report TxDOT (18949)) now support reporting specimen ages in hours, held (Age = 999) specimens and Air and Site Cured specimens.

**Bug#1232 Particle Size Analysis of Soils [ASTM D 422 - 07, AASHTO T 88 - 00]**

*PSI National USA:805*

The following changes have been made to the particle size analysis screen:

- The default times for the hydrometer test have been changed to match the standard times.
- A split on the No. 10 sieve is automatically added when the test is opened.
- The screen now uses "Air Dry Mass" at all times, rather than when a hygroscopic moisture is added as well. This allows the screen to be used independently of a moisture content test if desired. The value for hygroscopic moisture content can be entered directly on the screen. This also prevents using the screen in a non-standard mode, such as using a "Total Wet Mass" or "Total Oven Dry Mass", rather than "Total Air Dry Mass" for the sample tested.
- The AASHTO T 88 method now behaves the same way as ASTM D 422, as per the standard.

The following methods have been affected by these changes:

- Particle Size Analysis of Soils [ASTM D 422 - 07] (110022)
- Particle Size Analysis of Soils - Wash#200 Only [ASTM D 422 - 07] (110023)
- Particle Size Analysis of Soils - Sieve & Wash#200 [ASTM D 422 - 07] (110024)
- Particle Size Analysis of Soils - Sieve & Hydrometer [ASTM D 422 - 07] (110025)
- Particle Size Analysis of Soils [AASHTO T 88 - 00] (110026)

**Bug#1242 Moisture Content Correlation reporting**

*Coffey Information:Cof11.051\_6*

The regression line factor of 'A' is reported to 0.01 and the factor 'B' is reported to 0.001. The Standard Error of estimate (Syx) is reported to 0.01. These changes are also reflected on the Moisture Content Correlation screens.

**Bug#1245 Field Density Report - Locations and Specification Comments**

*PSI National USA:802*

The following changes have been made to the field density report:

- The test report can be configured such that it only reports location data for samples with compactions. To use this feature set the following QLA document option to "Yes": "QLA > Configuration > Documents > System > Field Density Test Report [11024] > Options > Only Report Compaction Locations".
- Legend items only print once.
- Specification note codes and note descriptions are sorted in alphabetical order on the Field Density Report.

**Bug#479 Relative Compaction**

*Fulton Hogan:QL-1494*

Assumed Particle Density and Minimum Density values will now not be cleared when the relative compaction screen or bulk entry is loaded.

**Bug#482 Relative Compaction**

*Fulton Hogan:QL-1495*

Relative Compaction tests now are flagged correctly complete/not complete when updated via the bulk entry.

**Bug#514 Converted Wet Density [RTA T162]**

*Cardno Bowler:N/A*

Converted Wet Density [RTA T162] (10057) now plots the Wet Density vs Moisture Content chart using Moisture Variation. The percentage added moisture per specimen can now be calculated.

**Bug#517 Converted Wet Density: Peak Converted Wet Density calculation from the chart**

*Cardno Bowler:N/A*

The curve that is drawn to calculate the Peak Converted Wet Density has been corrected so that points (on either side of the peak converted value) that have the same Converted Wet Density are no longer ignored. Previously, the Peak Converted Wet Density would not be calculated. Kindly contact the SpectraQEST HelpDesk with any further queries.

**Bug#533 Solid Density tests [NZS 4402 Test 2.7.1 and 2.7.2], [NZS 4407 Test 3.7.1]**

*Fulton Hogan:QL-1037*

The difference criteria that is applied (for compliance) to the two Solid Particle Density results are now applied to the rounded results instead of the raw values.

**Bug#683 California Bearing Ratio [Q113]**

*HOLCIM AU:Hol\_264*

California Bearing Ratio [Q113], A, B and C (10226, 10227, 10228) now graph and calculate the California Bearing Ratio results at 2.5 mm and 5.0 mm penetration using load values in Newtons rather than kiloNewtons.

**Bug#650 Invoice and billing document mismatch**

*Coffey Information:Cof10.044*

When marking an Invoice as having been Printed, if QESTLab crashes (for whatever reason) then it has been noticed that there would be a mismatch between the Billing items said to have been included on the Invoice and the Invoice itself. Some billing documents were found to not be on the Invoice itself. This could occur because the details of the charges included on the Invoice were not saved before the crash (previously the Invoice was saved when the user stepped off the Invoice).

Changes have been made so that the Invoice data is saved immediately after the Billing records are updated, thus eliminating the need to step off the Invoice to save it.

**Bug#757 Sand Equivalent [NZS4407 Test 3.6]: Average Sand Equivalent calculation**

*Coffey Information:Cof11.009*

The calculation of the Average Sand Equivalent has been corrected so that it calculates using the rounded Sand Equivalent values instead of the raw values.

**Bug#726 Dates on the Document Information form default to August 2002**

*PSI National USA:PSI\_600*

The Tested By and Checked By dates (and the Due Date if "Enable Urgent Tests" option is enabled) now default to today's date instead of August 2002.

**Bug#744 Calcium Carbonate Content [WA 915.1]: Precision of data entry**

*Coffey Information:Cof11.007*

The precision of all data entry fields has been increased to 3 decimal places to allow for higher precision equipment items. Reporting of "Calcium Carbonate Content" will continue to be to nearest 0.1%.

**Bug#750 Particle Shape**

*Boral National:1381092*

The Particle Shape test is no longer affected by Finer grading tests.

**Bug#830 Particle Shape and Flakiness Index Screens**

*Boral National:1401178*

The Particle Shape and Flakiness Index test screens are no longer affected by Finer grading tests.

**Bug#861 Proctor - Standard [ASTM D 698 - 07, ASTM D 1557 - 07]**

*PSI National USA:726*

The following changes have been made to the Proctor screen:

- Errors when opening the screen should no longer occur.
- The "Plot 0% Air Voids Line" checkbox is ticked by default.
- Reported values have been reworked so that they correctly report on old and new screens and reports.
- If a proctor has the "Use SSD Method for Oversize" document option set, but data has been filled out using the conventional Wet/Dry fields, the Wet/Dry fields will still display unless they are deleted. Once deleted, if the screen is re-opened, the SSD-method fields will appear.

**Bug#190 Benkelman Beam Test Report**

*Fulton Hogan:FH\_QL-556*

The page footer on the Benkelman Beam Test Reports will no longer overlap results.

**Bug#215 Particle Size Analysis of Soils - Sieve & Hydrometer [ASTM D 422]**

*Braun Intertec USA:BUG189*

The following changes have been made to the screen:

- Problems with hydrometer data changing when reloading the screen have been corrected. This should prevent temperatures entered with decimal places from becoming whole numbers.
- The "K" correction factor now calculates on temperatures that are not whole numbers by rounding to the nearest whole number from the correction factor table.
- The "K" correction factor now rounds specific gravity values to the nearest 0.05 when selecting a value from the correction factor table as well.
- A "popup-tip" has been added to the correction equation's temperature fields to indicate they are meant to be between 16 and 30 degrees.

Please note that the hydrometer "Total Sample Mass (W)" is not the same as the "Dry Mass Before Split" value. The ratio of the dry mass before and after the split (riffing factor) is used to convert the total dry mass (Dry Mass) of the original sample to the equivalent total dry mass (Total Sample Mass - W) of the split sample.

**Bug#217 Hydraulic Conductivity [ASTM D 5084]**

*Braun Intertec USA:BUG188*

1. Initial and Final dimensions are now reported for the Remolded version (110312).
2. Initial and Final Masses are now reported for both Undisturbed and Remolded versions (110311, 110312).
3. Initial and Final saturations can now be entered on the screens and reported for both Undisturbed and Remolded versions (110311, 110312).
4. Initial and Ending Hydraulic Gradients are now calculated and reported for both Undisturbed and Remolded versions (110311, 110312).
5. An Assumed Specific Gravity can be entered on both Undisturbed and Remolded versions (110311, 110312) and is only reported when it's entered. If the Specific Gravity is measured/tested (not assumed), then it should be tested for on a different test document and will be reported by that test. e.g. Specific Gravity of Soil [ASTM D 854 - 06] (110261)
6. Corrected (Average) Hydraulic Conductivity is now calculated reported. Start and end temperatures can now be entered on the screen to calculate the Corrected (Average) Hydraulic Conductivity.
7. Terminology; Average Permeability is now labelled as Average Hydraulic Conductivity.

**Bug#212 Concrete Flexural Beams (AU)**

*Coffey Information:Cof08v3.117*

Concrete Flexural Beams (FLEXxxx) are now capable of Density by Water Displacement (AS 1012.12.2), in the same way as Compressive Cylinders are (COMPxxx).

**Bug#288 Atterberg Limit (Cone Penetration) [Q104A/Q104D/Q105/Q106 - 2010]**

*Boral National:BOR\_26*

Test screens for Atterberg Limits [Q104A/Q105/Q106 - 2010] (11052) and Atterberg Limits [Q104A/Q105/Q106 - 2010] (11053) now use the Q201A Moisture Content dry constant mass procedure to check when the specimen is dry.

**Bug#301 Relative Compaction [NZS]**

Fulton Hogan:QL-1324

The relative compaction now calculates from the rounded results of individual dry densities and the maximum dry density.

**Bug#258 California Bearing Ratio [Q113]**

Boral National:BOR\_98

Proving Rings (30034) can now be calibrated in KiloNewtons or Newtons. The Gauge/Load calibration values are still entered per normal, but there is a new calibration value called "Force Units". Force Units can be selected as "KiloNewton", "Newton" or "Pound Force". Force Units is used by the California Bearing Ratio screen. Any Proving Ring regardless of the Force Units can be used and the screen calculates results by converting the calibration as needed. The Q113 methods that record loads in Newtons will convert the results of an in-KiloNewtons Proving Ring to Newtons and non-Q113, metric California Bearing Ratios will convert results of an in-Newton Proving Ring to KiloNewtons. The Pound Force exist to avoid confusion for American based systems. Not selecting a Force Units or selecting Pound Force will cause the California Bearing Ratio to exhibit default behaviour, that is, KiloNewtons for metric and Pound Force for Inch Pound systems.

**Bug#453 Concrete Core Samples**

Cardno Bowler:n/a

Concrete samples that contain only cores will not be flagged 'non standard'. This will prevent incorrect initial curing remarks, associated with a sample being nonstandard from being printed on a report.

**Bug#1159 Moisture-Density Relations of Soils / Sand [Tex-113-E, Tex-114-E]**

PSI National USA:729

The following changes have been made to the moisture-density relations screens:-

- Additional error handling has been added to the Mould equipment dropdown. This should prevent further errors appearing.
- The "Proctor Test Report" (110031) now automatically adds along with the tests. The reported details have also been changed so they are easier to read.
- The axes of the chart have been extended to make the zero air voids line more easily seen.
- The "Volume per Unit Height" field can now be manually entered provided there is no mold diameter entered, otherwise it will be calculated from the diameter.

Note that checkboxes (and most other fields) can have default values applied to them, so that whenever the document is added they are already configured as required. To enter a default for one of these tests:-

- Open the QLA and open the document's default options under "QLA > Configuration > Documents > System > Moisture-Density Relations of Soils / Sand > Defaults".
- Select the field required (e.g. "CalculateR2" or "Plot0AirVoids") in the "Field" dropdown.
- Enter a default value of "1" to automatically "check" the checkbox.
- Click "Set"
- The default is now set for the selected document.

To report custom sample fields, such as the "Stamp Code Name" on the "Proctor Test Report" please do the following:-

- Open the sample results fields screen in the QLA under ""QLA > Configuration > Documents > System > Proctor Test Report (110031) > Results Fields".
- Enter a row with the following details:  
Field: "\_StampCodeName"  
Name: "Stamp Code"  
- Close the QLA.
- The report should now display the field entered.

**Bug#1147 Concrete Report [Q]**

Coffey Information:Cof11.064

The Concrete Report [Q] (18945) now correctly reports moisture condition to Q473 instead of Q473A.

**Bug#1164 Stabilisation Agent Content [Q134 Calibration]: Temperature Rise calculation**

HOLCIM AU:Ho\_324()

Previously the "Dry Mass" was being used to calculate the Temperature Rise. This has been corrected to use the "Mass of Test Portion" instead (Section 5.4.9 of the standard).

NOTE: Section 5.4.9 of the standard also requires that the calculation of Temperature Rise be done to the nearest 0.01 degrees.

**Bug#992 Sand Circle Test Report**

*Fulton Hogan:QL-1981*

Various changes have been made to the Sand Circle Test Report (17017)

1. The "Lane Name" column is now split up into Direction, Lane and Position columns.
2. The results table has been renamed to "Test Site Details"
3. The report name has been renamed to "Sand Circle Test Report".
4. Font style, size and alignment has been standardised.

NOTE: Any changes to the reporting of Sample Details can be achieved via the Results Fields editor accessible on the "Texture by Sand Circle Test Report" via Configuration -> Documents -> System -> [17017]  
Texture by Sand Circle Test Report -> Result Fields

**Bug#1057 Errors occur when leaving the Work Order screen while the Client list is loading,**

*Fulton Hogan:QL-1983*

This has been corrected.

**Bug#1098 Inactive proctors**

*PSI National USA:767*

The inactive proctors view is now able to be used in conjunction with the following test methods:

- 110032 - Proctor - Standard [ASTM D 698 - 07]
- 110033 - Proctor - Modified [ASTM D 1557 - 07]
- 110034 - Proctor - Standard [AASHTO T 99 - 01]
- 110035 - Proctor - Modified [AASHTO T 180 - 01]
- 110036 - Proctor - Standard (One-Point Verification) [ASTM D 698 - 07]
- 110037 - Proctor - Modified (One-Point Verification) [ASTM D 1557 - 07]
- 110377 - Proctor - Standard [ASTM D 698 - 07] \*
- 110378 - Proctor - Modified [ASTM D 1557 - 07] \*
- 110379 - Proctor - Modified [AASHTO T 180 - 01] \*
- 110380 - Proctor - Standard [AASHTO T 99 - 01] \*
- 110704 - Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E] \*
- 110705 - Moisture-Density Relations of Subgrade and Embankment Soils [Tex-114-E] \*
- 110775 - Moisture-Density Relations of Base Material and Cohesionless Sand [Tex-113-E]
- 110776 - Moisture-Density Relations of Subgrade & Embankment Soils [Tex-114-E]

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## Release Notes for QESTLab Version 3.3.1100

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**Bug#487 Rounding for Specifications**

*Boral National:1305874*

To address the problem of test values rounding into and out of specification, a "Precision" column has been added to specifications. This problem would mostly occur for grading tests. A rounding value can be provided here in the same way as the "Format" column, e.g. "0.00" The specification will then be applied with the value rounded to that precision. Kindly contact the HelpDesk for assistance on how to set this up for a particular Specification.

Note that the format and precision settings will almost always be the same. If you wish to have precision set this way system-wide, please contact the Helpdesk. For the time being format and precision are separate to avoid any changes in how specifications evaluate for users live with 3.3. In future versions this functionality will be extended.

**Bug#1336 Compressive Strength of Masonry Prisms [ASTM C 1314]**

*Twining Labs:MASONRY\_1314*

The h/t Ratio now correctly reports for Compressive Strength of Masonry Prisms [ASTM C 1314] under the Concrete and Masonry samples.

**Bug#1340 Atterberg Limits [Tex-104-E Part I]**

*PSI National USA:850*

The method used to determine the Plasticity Index should now report correctly without affecting other reported fields.

**Bug#1353 Hydraulic Conductivity [ASTM D 5084]**

*Braun Intertec USA:n/a*

Hydraulic Gradient is now spelt correctly, reports correctly and is now dimensionless rather than as a percentage (no calculation change was made) for the Hydraulic Conductivity [ASTM D 5084] tests (110311 and 110312).

**Bug#1354 Concrete Pavement Thickness Report**

*PSI National USA:848*

The Technician, Test Date, and Method should now appear on the report.

**Bug#1358 Reports and Charts**

*Internal (Spectra QEST):n/a*

Several changes have been made to the display, printing, and exporting for management/quality control charts. The underlying functionality used to build the individual charts is unchanged, however, they will now be rendered more like a report.

To summarise the key changes:

- Charts now support paper size settings correctly, both when viewing the chart in QESTLab, and when printing or exporting the chart.
- Charts now support standard report navigation controls, including the ability to zoom in/out.
- When saving charts as pdf files, the name of the chart will now be used as the default file name.
- The form number can now be entered, and will be displayed in the footer of each page, along with the page number.
- A bug where the label would not be printed for the first point on a chart using the "plot sequentially" x-axis option has been corrected.
- Charts no longer support export to wmf (windows metafile).

**Bug#1359 No. of copies for printable worksheets.**

*Internal (Spectra QEST):INTERNAL*

Printable worksheets will now print multiple copies when specified in the print dialog.

**Bug#1361 Degradation Factor [Q208A] and [Q208B], Degradation Factor - Source Rock [AS 1141.25.1], Coarse Aggregate [AS 1141.25.2], Fine Aggregate [AS 1141.25.3]**

*Boral National:n/a*

The Flocculate Column Height should no longer change when entered. Previously, this value was being rounded in accordance with Australian Standards, which require it to be determined to the nearest 2 millimetres.

In addition, the calculation of the Degradation Factor was incorrect for the Australian Standards, as the rounded Flocculate Column Height value was not being used for calculations. This has also been corrected.

**Bug#1362 Sieve Analysis of Fine & Coarse Aggregate by Washing [ASTM C 136 - 06/C 117 - 04]**

*Twining Labs:SPLIT*

The "Washing" dropdown is now unlocked and available for input.

**Bug#1365 Unified Soil Classification System [ASTM D 2487 - 06]**

*PSI National USA:856*

The screen will now determine the Cc and Cu values independently without relying on the entry of Atterberg results.

**Bug#1366 California Bearing Ratio [Q113A, Q113B, Q113C]**

*Boral National:Issue\_8*

The "offset limit" now works correctly and applies an upper limit of 0.5 to the CBR offset.

**Bug#1368 Concrete Multiple Specimens Electronic Worksheet**

*Boral National:n/a*

A bug has been fixed where direct changes to a specimen in the Concrete Multiple Specimens Electronic Worksheet would not trigger the specimen to update, indirect changes would. eg setting the 'checked by' field (a direct change would not trigger the specimen to update, but setting the 'load', a direct change, sets the strength, an indirect change, would trigger the specimen to update.

**Bug#1379 Hydraulic Conductivity [ASTM D 5084 - 03]**

*Braun Intertec USA:n/a*

Hydraulic Gradient is now spelt correctly, reports correctly and is also dimensionless rather than as a percentage for the Hydraulic Conductivity [ASTM D 5084] tests (110311 and 110312). The Initial and Ending Hydraulic Gradients should now calculate and report correctly too.

**Bug#1389 Asphaltic Concrete Core Report**

*City Of Las Vegas:n/a*

Some minor changes have been made to the reporting of the Details and Results sections of the test report. Kindly contact the Spectra QEST HelpDesk for details of these changes.

**Bug#1396 Grading [WA115.1]**

*Internal (Spectra QEST):n/a*

An option, "Add Pan to Finer 13.5um" has been added and can be accessed via "QLA > Configuration > Documents > System > WA115.1 > Options > Add Pan to Finer 13.5um". This will allow the PSD to report the full amount of material passing the 13.5um material, by combining the decanted material with the amount in the pan.

**Bug#1397 Core Density Test Report**

*Boral Asphalt:33*

The Location field should no longer overlap with the Reference Density field.

**CR#899 Binder Content and Grading by Ignition Oven [AG:PT/T234], [AG:PT/T234, AS 1141.11.1]**

*Boral Asphalt:n/a*

The following screens are now available. Kindly contact Spectra QEST to be licensed for these screens:

- Bitumen Content [AG:PT/T234] (17018)
- Aggregate Grading [AG:PT/T234, AS 1141.11.1] (17034)

**CR#902 Concrete Mix Code (AU)**

*Coffey Information:Cof11.106*

The Concrete Mix Code on the Australian Concrete Sample can now save up to (and including) 12 characters in length. Concrete Test Reports can print and display this many characters too.

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**CR#914 Asphaltic Concrete Core Report**

*City Of Las Vegas:N/A*

"Req'd" has been added to the header for the average result limits, to indicate they are the required values or ranges.

**CR#933 Stabilisation Agent Content [Q134]**

*Boral National:13*

The reported item label "Combined Mass of Soil" has been changed to "Combined Mass".

**CR#823 Work Order - Agg/Soil Views**

*Coffey Information:Cof11.088*

Work Order - Agg/Soil Views; Data Entry and Nuclear Density Test Group now show different fields in their rows.

NB This configuration change is only available to Coffey.

**Bug#1401 Multiple Sample Types on Work Orders**

*Internal (Spectra QEST):*

Warning messages that are displayed when navigating from a work order that has both Concrete and Agg/Soil samples have been fixed.

**Bug#1402 Concrete Pavement Thickness Report**

*PSI National USA:848*

The Technician, Test Date, and Method should now appear on the report.

**Bug#1408 Concrete Weighing and Crushing Stations**

*Boral National:15*

Measured By and Crushed By is now correctly set on the Concrete Weighing and Crushing Stations.

**Bug#1411 Aggregate Grading [AS 2891.3.3, AS 1141.11.1]**

*Boral Asphalt:154*

The grading now imports from the Bitumen Content [AS 2891.3.3] screen correctly.

**Bug#1420 Core and Nuclear Density Testing Reports**

*Boral Asphalt:160*

The list of "Test Methods" that is reported will no longer include duplicates if any of the test methods are configured to not be accredited at that laboratory.

**Bug#1436 Grading [RTA T106, T107, AS 1289.3.6.1]**

*Coffey Information:Cof11.129*

The following changes have been made to the screens:

- A bug has been fixed so that all 3 ratios are now calculated again (A, B, and C).
- The washing has been unlocked so that it can be performed on either the total, first split, or second split.
- The document option "Calculate Finer 13.5um" has been removed from these screens, and they now default to using the 13.5um sieve.
- The RTA T107 method which doesn't include RTA T106, will now assume the Total Dry Mass is the Mass Passing the 2.36mm sieve. This allows the mass passing to be tested independently.

Please note that multiple splits are possible on RTA T106 and AS 1289.3.6.1 as well.

**Bug#1381 Relative Compaction [NZS]**

*Fulton Hogan:UAT QL-1324*

The screen should now format the Relative Compaction result correctly for externally tested Maximum Dry Density tests.

**Bug#1370 Bulk Entry - Nuclear Density Test Group view**

*Fulton Hogan:QL-2325*

The MDD Method, Solid Density and Solid Density Type fields are now available on the bulk entry and are all reported.

**Bug#1376 Multi-Sample-Type Work Orders**

*PSI National USA:861*

Errors and warnings that could result when different sample types are added to the same Work Order have now been resolved.

**Bug#1377 Measure of Texture by the Sand Circle Method [TNZ T/3 1981]**

*Fulton Hogan:UAT QL-1981*

The field labelled "Lanes Tested" has been changed to "Number of Positions". In addition, the reported field "Transverse Position" now reports its units as well (i.e. metres).

**Bug#1364 Concrete Measured By**

*PSI National USA:857*

The logic for when a specimen can be set as Measured via the Bulk Measured By button on the Concrete Multiple Specimens Electronic Worksheet has been modified in the case that the global option "Fully Measured Concrete Specimens" is set to 'False'. Each specimen can now be Measured By when excluding the load(s), the specimen is complete.

For Example: A COMP100 has two Diameters and one Height data entry point. Only one diameter needs to be entered (and the height) for the new functionality to allow the specimen to be Measured By.

**Bug#1341 Particle Size Distribution - Reporting of Finer 75um Field**

*Internal (Spectra QEST):n/a*

The Finer 75um field no longer reports when washing is done, unless it is "used" in the related specification.

**Bug#1345 Nuclear Density Bulk Entry View**

*Fulton Hogan:QL-2385*

Completed Aggregate/Soil Samples will now flag as complete when using the Nuclear Density Bulk Entry View.

**Bug#1444 Reports and charts - new charts cannot be loaded - "Invalid use of null"**

*Internal (Spectra QEST):NA*

A bug when loading newly created charts, that displayed "Invalid use of null" has been resolved. This applied to charts created in 3.3.1100 (release candidate).

**Bug#807 Shrink/Swell Index [AS 1289.7.1.1]**

*Coffey Information:Cof11.015*

The tab order sequence on the Shrinkage Test tab is now in the correct order.

**Bug#213 Deleting Documents**

*Coffey Information:Cof08v3.113*

An error that can potentially occur when deleting documents has now been fixed.

**Bug#1056 Test Reports - Options Tab**

*Fulton Hogan:QL-2011*

This bug addresses the issue that results in the creation of duplicate accreditations when upgrading a database from QESTLab 3.2 to QESTLab 3.3.

NOTE: For databases that have already been upgraded to QESTLab 3.3, please contact the Spectra QEST HelpDesk for a script that will remove the duplicate records.

**Bug#986 Benkelman Beam Deflection [RTA T160, T199]**

*Coffey Information:Cof11.027\_3*

The screen and the child test report (Benkelman Beam Test Report [RTA]) have been modified to accommodate the new reporting requirements.

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## Release Notes for QESTLab Version 3.3.1300

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**Bug#947 California Bearing Ratio [ASTM D 1883 - 07]**

*PSI National USA:754*

The screen no longer rounds the Mould Height to the nearest whole number.

**Bug#879 Specific Gravity of Soil [ASTM D 854 - 06]**

*PSI National USA:736*

The individual specimen Specific Gravity (at 20°C) results are now used to determine the final Specific Gravity (at 20°C).

**Bug#1485 Converted Wet Density [RTA T162]**

*Coffey Information:Cof11.147*

Errors with the relative compaction being incorrectly calculated when viewing the converted wet density screen have been corrected.

**Bug#1449 Field Density Test Report**

*PSI National USA:863*

Field Density Test Report (110244) will now print passing and failing notes in the footer remarks correctly when the specimens/sample per page does not flow on to subsequent page. This does not mean multi-page reports with a grid of specimens doesn't work. Only when the number of specimens/samples per page is high enough that the grid overflows on to the next page will the footer notes lose sync with the table.

**Bug#1453 Concrete field reports**

*Internal (Spectra QEST):INTERNAL*

Concrete field reports will now be assigned the "field-report" tag when published to Construction Hive.

**Bug#1455 Aggregate/Soil Samples on Work Orders**

*PSI National USA:881*

Fixed a problem with adding multiple sample types to the same work order, when one of them was an Aggregate/Soil sample.

**Bug#1468 Reports Toolbar - Zoom to Chart Dropdown**

*Internal (Spectra QEST):*

A bug where the "zoom to chart" dropdown was being shown for controls where it could not be used has been corrected. This dropdown is used to show a single chart per page in the reports and charts area, and was incorrectly being displayed for other types of report (such as test reports).

**Bug#1469 Invoice Table Headings**

*Twin Ports Testing Inc.:INVOICE*

The table heading on invoice reports is now correctly printed on each new page.

**Bug#1470 Random Site Location [RTA Q6]**

*Coffey Information:Cof11.136*

The screen will now determine the required Number of Tests based upon Specified Relative Compaction when the screen is loaded.

**Bug#1472 Proctor [AASHTO T 180 - 01, T 99 - 01]**

*PSI National USA:877*

The MDD and OMC results are now rounded to whole numbers.

**Bug#1473 Work Order, Agg/Soil Views - Data Entry, Nuclear Density Test Group**

*Coffey Information:Cof11.138*

Work Order, Agg/Soil Views - Data Entry, Nuclear Density Test Group now correctly auto-populate data between samples.

**Bug#1475 Material Lists - column width for preferred lab**

*Fulton Hogan:QL-2625*

The Preferred Lab column width in some QESTLab lists (most noticeable in Material lists) now resizes to display the entire dropdown.

**Bug#1476 Asphalt Content by Centrifuge Extraction [MnDOT 1852 - 05]**

*Braun Intertec USA:235*

Asphalt Content by Centrifuge Extraction [MnDOT 1852 - 05] (117034) will now not require the Minerals by Ashing, Extracted Mineral Matter Mass to be calculated (on screen) in order for Asphalt Content to be calculated.

**Bug#1477 Nuclear Field Density [Q112 - 02, Q111A - 08]**

*Coffey Information:Cof11.144*

The Dry Density and Wet Density values now correctly export to Relative Compaction screens.

**Bug#1480 Custom Fields Reporting**

*PSI National USA:886*

Laboratories that are denied custom fields will no longer report these custom fields on custom reports such as field density reports.

**Bug#1481 Organic Impurities [MnDOT 1212 - 00]**

*Braun Intertec USA:237*

The screen was being added with a child test report. The report has now been removed from being added automatically.

**Bug#1486 Proctor [AASHTO T 99, T 180]**

*PSI National USA:891*

The oversize corrections no longer occur unless the oversize is greater than 5%. Selecting a method will also populate the oversize sieve size, provided there is not already a size entered.

**Bug#1488 Concrete Sample (US): spelling correction**

*PSI National USA:888*

The spelling mistake in "Condition" in the Concrete Sample (US -1602) bulk entry has been fixed.

**Bug#1489 Invoice: Precision of Units column increased.**

*Internal (Spectra QEST):INTERNAL*

The "Units" column on the Invoice was rounding to 1 decimal places, even if the units on the billing document was entered to 2 decimal places. This has now been fixed.

NOTE: This was only a display issue and the Total Costs were always calculated using the unrounded information.

**Bug#1491 Field Density Report: Complete when Signed and Emailed.**

*Fulton Hogan:QL-2693*

The "Complete if Signed and Emailed" option has now been included for the Maximum Dry Density Test Report [18995] too. It should now be possible to mark the test report as being complete once it has been signed and emailed.

**CR#236 Concrete - Time In Truck**

*PSI National USA:493*

Concrete "Time In Truck" is now calculated correctly when the duration of time between batching and placing crosses midnight.

**Bug#1346 Custom Reports and Pictures**

*PSI National USA:858*

Pictures can now be attached to Custom Reports, without errors.

**Bug#1347 Particle Size Distribution [ASTM D 422 - 07, AASHTO T 88 - 00]**

*PSI National USA:859*

The drying is now locked to "After Split" to ensure the methods comply with the standard. Additionally default splits will not be applied to a screen if the default split sieve is not included in the specification. This avoids "hidden splits" occurring.

**Bug#1369 Multi-Sample-Type Work Orders**

*PSI National USA:844*

Work Orders with multiple Sample-Types (Concrete, Asphalt, Agg/Soil, etc) will no longer cause various work order level reports to print extra blank pages.

**Bug#1191 Density by Drive-Cylinder [ASTM D 2937 - 04]**

*PSI National USA:801, 889*

Failing results on the test report can be highlighted by setting the document level option "Show Out Of Spec Values In Red (Y/N)" to Yes

(QLA -> Configuration -> Documents -> System -> 110244 - Field Density Test Report -> "Show Out Of Spec Values In Red (Y/N)" = Yes) which must be set in conjunction with the option "Display out of Specification Warning" that must also be set to Yes.

The Volume can now be entered as a calibration item of the Drive Cylinder. When present, the Volume will be imported and used for calculations on the screen. When it isn't entered as part of a calibration, it can be determined by entering the Height and Diameter of the Drive Cylinder on the screen, or by entering the it directly on the screen.

The Moisture Content by Means of a Moisture Tester [FM 5-507] test is now reported as a Field Method rather than a Lab Method.

The Dry Density is now re-calculated at all times when the Moisture Content value is changed.

The Visual Description remains a requirement of the standard, and so the field should be locked via a mask if not used.

**Bug#1437 Nuclear Density [Tex-115-E]**

*PSI National USA:878*

The bulk entry and reduced test screen for Nuclear Density [Tex-115-E] (110706 and 110800) have been updated.

**Bug#1438 Proctor [ASTM D 698, D 1557, AASHTO T 180, T 99]**

*PSI National USA:876*

The following changes have been made to the screens:

- The document option "QLA > Configuration > Documents > System > Proctor > Use SSD Method for Oversize" has been added to AASHTO proctors.
- Selecting a method populates the "Oversize Sieve" and "Oversize (%)". If these fields have existing values in them, they will be overwritten. The values can be manually changed afterwards if desired.
- The "Mould Type" no longer causes the "Oversize Sieve" to be overwritten. This fixes a number of bugs, such as being able to manually enter a sieve size, or clearing the "Oversize (%)" value.
- The grading no longer has to be completely filled out for method suggestions to appear.
- The rounding on the oversize control's percentages are now to the nearest percent.
- ASTM D 1557 now checks the oversize percentage is greater than 5% before applying adjustments to the results, identical to ASTM D 698.
- The option "QLA > Configuration > Documents > System > Proctor > Use Passing SG/Density If No Oversize SG" has been fixed so that when its value is "Yes", the passing density is used. It was working in reverse, being used when the option was set to "No".
- The 3/4 inch sieve is now used for oversize when selecting method "C".
- Calculating density from the specific gravity has been corrected so it works for both metric and inch-pound units.

**Bug#1427 Non Conformance Report**

*K and H Geotechnical:n/a*

The Non Conformance Report (NCR) document is now available under concrete, masonry, bitumen and other samples too.

**Bug#1434 Work Template Default Views**

*PSI National USA:875*

Work Template Default Views now correctly initialise the Work Order View when a Work Order is select via the Edit Work Order mode.

**Bug#1413 Proctor Reporting [ASTM D 698 - 07, D 1557 - 07, AASHTO T 180 - 01, T 99 - 01]**

*PSI National USA:865*

The reporting has been updated to always display the raw and adjusted Maximum Dry Density and Optimum Moisture Content values.

**Bug#1425 Field Density Testing [ASTM, TxDOT]**

*PSI National USA:863*

A patch has been written that will recalculate the Moisture Variation results using the correct formula, and update whether they're reported as wet or dry.

A second patch has also been written that will fix the reporting of the test number and location data on field density reports.

**Bug#1448 Field Density Reporting [TxDoT]**

*PSI National USA:879*

The report no longer displays samples that do not contain density ratios.

**Bug#1418 Relative Compaction [ASTM, TxDOT]**

*PSI National USA:869*

The ASTM and TxDOT relative compactions now correctly import adjusted values from Maximum Dry Density tests.

**Bug#1419 Nuclear Field Density [ASTM D 6938]**

*PSI National USA:870*

When the Nuclear Field Density test is performed in conjunction with a Relative Compaction [ASTM] test, the Proctor Method on the test report will now wrap correctly.

**CR#803 Converted Wet Density [RTA T162]**

*Coffey Information:n/a*

A version of the "Converted Wet Density [RTA T162]" that conforms to the 2011 standard is now available (10075). Kindly contact the Spectra QEST Help Desk to be licensed for this screen.

In this version, the Maximum Moisture Adjustment (%) is now determined and reported to the nearest 0.5%.

**CR#961 List Column Widths**

*Fulton Hogan:QL-2739*

The width of the Code column for some QESTLab Lists (viz. Agg/Soil Materials, Asphalt Mixes, etc) have been increased to allow for better identification of longer codes.

**CR#941 Work Order Agg/Soil Bulk Entry Views**

*Coffey Information:Cof11.088\_2*

Supplier has been removed from the Data Entry view, the Nuclear Density Test Group view, the Work Order Row view and the Work Order Column view for Agg/Soil Samples.

Product has been renamed as Material on the Nuclear Density Test Group view for Agg/Soil Sample.

NB This configuration change only affects Coffey.

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## Release Notes for QESTLab Version 3.3.1400

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**CR#958 PSI Custom Header**

*PSI National USA:887*

The space available for endorsement text has been increased.

Kindly contact Spectra QEST HelpDesk for an updated header.

**CR#973 Sand Equivalent [Nzs 4407:1991 Test 3.6]**

Fulton Hogan:n/a

An option has been added that allows for the rounding of the Average Sand Equivalent to the next highest whole number, even if the average is a whole number. (QEST Administrator Console -> Configuration -> Documents -> System -> 10318 - Sand Equivalent [Nzs 4407:1991 Test 3.6] -> Always Round Average up to Next Whole Number = Yes).

**CR#978 Invoice copy text not showing on Invoice**

Coffey Information:Cof11.161

The Coffey custom invoice header has been updated to allow for additional room on the top to display the various labels (as configured in the QEST Administrator Console).

Kindly contact the Spectra QEST HelpDesk for the updated custom header.

**CR#981 Equipment Filter**

PSI National USA:900

Equipment items that are Not In Service can now be excluded when using the "Calibration Due" filter.

**Bug#1494 Concrete Specimen Age in Hours**

PSI National USA:884

1. A bug has been fixed that caused reports using the document level option "Show Hours" = "Normal" to sometimes incorrectly report a Concrete Specimen Age in Hours to the wrong value.
2. A third option has been added to document level option "Show Hours" on reports 18947, 18953 and 18970; "Whole Hours". "Whole Hours" reports a specimens age, when in hours, to the nearest hour. A 'h' suffixes this age and accompanying page footer remark added to denote that the 'h' means the specimen age is reported in hours.

**Bug#1496 Concrete "Time In Truck"**

PSI National USA:

The "Time In Truck" is now reported directly from the database field instead of recalculating on the test report, 18970. This field is new to 3.3, but Patch 115 has already taken care of historical data.

**Bug#1497 Height, Marshall Stability and Flow of Compacted Asphalt (Metric) [ASTM D 6927 - 06, D 6926 - 04, D 3549 - 03, D 2726 - 05a]**

Fulton Hogan:NA

The following changes have been made:

- The report now displays methods correctly.
- Unused bulk entry controls have been removed.
- The screen is now set to "complete" based on all the specimens, rather than just the final one.

**Bug#1512 Maximum Dry Density [RTA T130]**

Coffey Information:Cof11.146

The Additive Proportion can now be entered and is reported to the nearest 0.1 percent. In addition, the Oversize Sieve and Percentage are now reported.

**Bug#1513 Concrete Sample (US) - Batched Time**

PSI National USA:895

The Concrete Sample (1602) "Batched Time" will no longer copy between samples on the Work Order Bulk Entry screen.

**Bug#1517 PortalUUIDs no longer inherit from parents**

PSI National USA:

Unique Hive IDs are assigned to work orders, samples, tests, reports etc upon publishing a report to Hive. In QESTLab 3.3, these IDs have been erroneously copying down to any children added after a report publication, resulting in errors during Hive publishing.

PortalUUIDs no longer inherit from their parents, and will remain NULL in the database until assigned a new unique ID from a Hive publish.

**Bug#1520 Previous Page icon not shown for Lists**

Coffey Information:Cof11.162

The "Page Up" icon, for lists, now appears as required.

**Bug#1525 Limerock Bearing Ratio [FM 5-515]**

*PSI National USA:902*

The Dry Density result is now calculated correctly.

**Bug#1527 Concrete TxDOT Reports.**

*PSI National USA:901*

The old Concrete TxDOT Reports (18941 and 18942) have been updated to work in 3.3.

1. Specimens age now reports '999' as 'Hold'. Age in Hours and Air or Site Curing are now supported.
2. Specimen marks are now reported alongside fracture types.
3. Average Strength now correctly reports and aligns with the Strength column.
4. Stamp Code is reported correctly, so long as the Average Strength is reported.
5. The cylinder report (18941) can now only report COMPxxx type specimens and likewise the flexural report (18942) can only report FLEX specimens.
6. A bug causing the flexural report (18942) to prompt error messages and fail to load has been fixed.
7. The Required Strength will not print on underaged or hold specimens.
8. Diameter and Height now correctly report for COMPxxx specimens on the cylinder report (18941).

There is also a new script available at request to remove 3.2 concrete triggers that are no longer required in 3.3 and can also cause erroneous behaviour.

**Bug#1528 Field Density Test Report**

*PSI National USA:898*

Passing Specification Notes will no longer appear when one or more fields are not within specification.

**Bug#1532 Equipment Calibration Header**

*PSI National USA:909*

The Date Performed should no longer change when tabbing or clicking off of the field.

**Bug#1533 Concrete Delivery**

*PSI National USA:905*

A bug causing Concrete Samples in the Concrete Delivery Worksheet to be incorrectly locked has been fixed.

**Bug#1537 Field Density Test Report (110244)**

*PSI National USA:912*

The Field Density Test Report (110244) has now increased the lateral space for the field; Field Sample ID.

**Bug#1539 Error 372 when viewing multiple Concrete Sample screens**

*PSI National USA:911*

When viewing multiple Concrete Sample screens one after another an Error 372 would be thrown. This would result in requiring to restart QESTLab to allow continued use.

This error should now be fixed.

Kindly contact the Spectra QEST HelpDesk should this error persist.

**Bug#1540 Asphalt Sample**

*PSI National USA:914*

The Asphalt Sample Bulk Entry now allows selection of Sampling Method.

**Bug#1541 Concrete Delivery**

*PSI National USA:916*

The Concrete Delivery Worksheet will no longer error and crash when data in the specimens grid is changed.

**Bug#1546 Relative Compaction [TxDOT]**

*PSI National USA:918*

Updated the reported results to match the Relative Compaction [ASTM] screen.

**Bug#1548 Asphalt Bitumen Type**

*Boral Asphalt:9*

Asphalt Bitumen Types when selected on the Asphalt Sample now correctly load in Density and Heat Tolerance from the Bitumen Materials List. The Asphalt Sample Bulk Entry can now correctly handle Global List items when retrieving Bituminous Materials.

**Bug#1550 Login does not update when deleted users are reactivated**

*PSI National USA:919*

Previously when deleted users were reactivated (including activating of login) then the login name would not update i.e. the brackets, [], would persist thus preventing the use of automatic Windows authentication to log into QESTLab.

This has now been addressed such that when a deleted user is re-added and activated then the login name will also update.

Kindly contact the Spectra QEST HelpDesk with any additional queries.

**Bug#1555 Compaction of Asphalt Specimens [AS 2891.2.2]**

*Boral Asphalt:81 & 82*

The following changes have been made to the Compaction of Asphalt Specimens test:-

1. The Oven is now referred to as "Oven" rather than "Drying Oven".
2. The screen now allows a Gyratory Compactor to be selected.
3. Any reference to the year 1995 has been removed from the method.

In addition, a new Gyratory Compactor (30117) equipment item is now available for this test. Please contact the SpectraQEST Help Desk to be licensed for it.

**Bug#1524 Dynamic Script - Concrete Fields 3.3**

*Internal (Spectra QEST):*

The Dynamic Script "Update Concrete Fields in 3.3" now correctly includes FLEX100 and FLEX150 specimens in the calculation of the number of specimens that need updating and thus will also accurately display its progress bar.

NOTE: FLEX100, FLEX150 were still processed correctly before this change even though the total number of specimens was miscalculated.

**Bug#1124 Calibration screens - memory leak**

*Internal (Spectra QEST):*

A memory leak that affected all equipment calibration screens has been resolved.

The bug resulted in the screens remaining loaded in memory, even after being closed. The effect of this was that memory consumption would gradually increase each time a calibration screen was loaded, and users would eventually experience an out of memory error, or simply have QESTLab crash.