AASHTO re:source MSCR PSP Data: A Brief Update

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Asphalt Binder ETG Meeting
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Data from Spring 2016 Sample Round

Percent Recovery at 3.2kPa (PGB 243/244)
Significance

Statistical significance existed between manufacturers for the following parameters:

• % recovery at 0.1 kPa (all manufacturers)
• % recovery at 3.2 kPa (all manufacturers)
• % difference in recovery (all manufacturers)
• % difference in jnr (all manufacturers)
Corrective Actions: Working with Manufacturers

• Contacted rheometer manufacturers to cross-reference the reported software reported versions.
  • Communication indicated that laboratories were not certain on what type of software they had.
  • Rheometer manufacturers reached out to customers to ensure that software is being updated to the most current versions.
Corrective Actions: AASHTO re:source Assessments

• Identified devices without most current software.
• Assessors reviewed data in the field to determine if correct conditioning cycles were being applied.
Outcome

• Current PSP Data indicates that no significant differences exist between manufacturers
• This is evident in three most current sample rounds
  • PGB 245/246 (Fall 2016)
  • PGB 247/248 (Spring 2017)
  • PGB 249/250 (Fall 2017)
• Analysis for 251/252 will be available by May 2017
MSCR Plots from PGB 245/246 (Fall 2016)
(Recovery at 0.1 and 3.2 kPa)
MSCR Plots from PGB 245/246 (Fall 2016)
(Jnr at 0.1 and 3.2 kPa)
MSCR Plots from PGB 247/248 (Spring 2017)
(Recovery at 0.1 and 3.2 kPa) – neat binder
MSCR Plots from PGB 247/248 (Spring 2017)
(Jnr at 0.1 and 3.2 kPa)
MSCR Plots from PGB 249/250 (Fall 2017)
(Recovery at 0.1 and 3.2 kPa)
MSCR Plots from PGB 249/250 (Fall 2017)
(Jnr at 0.1 and 3.2 kPa)
Conclusions....

No News Is Good News!