LDEOC/EOEC SURVEILLANCE PANEL

A LDEOC/EOEC conference call was held on Tuesday, April 25th, 2017 at 9 am Central Standard Time. The following members were on the call:

Joe Franklin - Intertek
Kimberly Hernandez - Intertek
Mike Lopez – Intertek
Mike Birke – SwRI
Becky Grinfield - SwRI
Mike McMillan - Infineum
Doyle Boese – Infineum
Jason Bowden – OHT
Matt Bowden - OHT
Vince Donndelinger – Lubrizol
Greg Miiller - Savant
Conika Own-Robinson – Savant
Robert Stockwell - Chevron
Bernadette Hofmann – ISP
Nicola Boyer - ISP
Mike Kasimirsky – TMC

Doyle went over his presentation (attached). The volume change is still showing the same upward severity trend, and the following Industry Correction Factors (ICFs) for Batch 20 ACM-1 are recommended:

- Volume Change: -3.14%
- Hardness Change: 0 (no ICF)
- Tensile Strength Change: 7.43%

Mike Birke stated that the Surveillance Panel only has the authority to apply a correction factor for volume change, while Doyle was under the impression that the SP had authority to apply correction factors to all ACM-1 parameters. Robert Stockwell read from his class panel meeting notes, which stated that the correction factor is for volume change only. Mike Kasimirsky also added there are no provisions in the report forms to apply correction factors to any parameter other than volume change. There was a brief discussion about the recommended tensile correction factor, however, the surveillance panel will have to approach the class panel in the future to ask for the ability to apply industry correction factors on all parameters. Mike Birke put forth a motion to accept the recommended volume change industry correction factor of -3.14%. The result of the vote was 8 affirmatives, 1 waive, and 0 negatives. Mike Kasimirsky will generate an information letter to reflect the Batch 20 ACM-1 volume change correction factor.

The teleconference ended at 9:30 am.

LDEOC ACM-1 BATCH 20 INDUSTRY CORRECTION FACTORS

D. Boese

April 24, 2017

Performance you can rely on.

Infineum

Summary

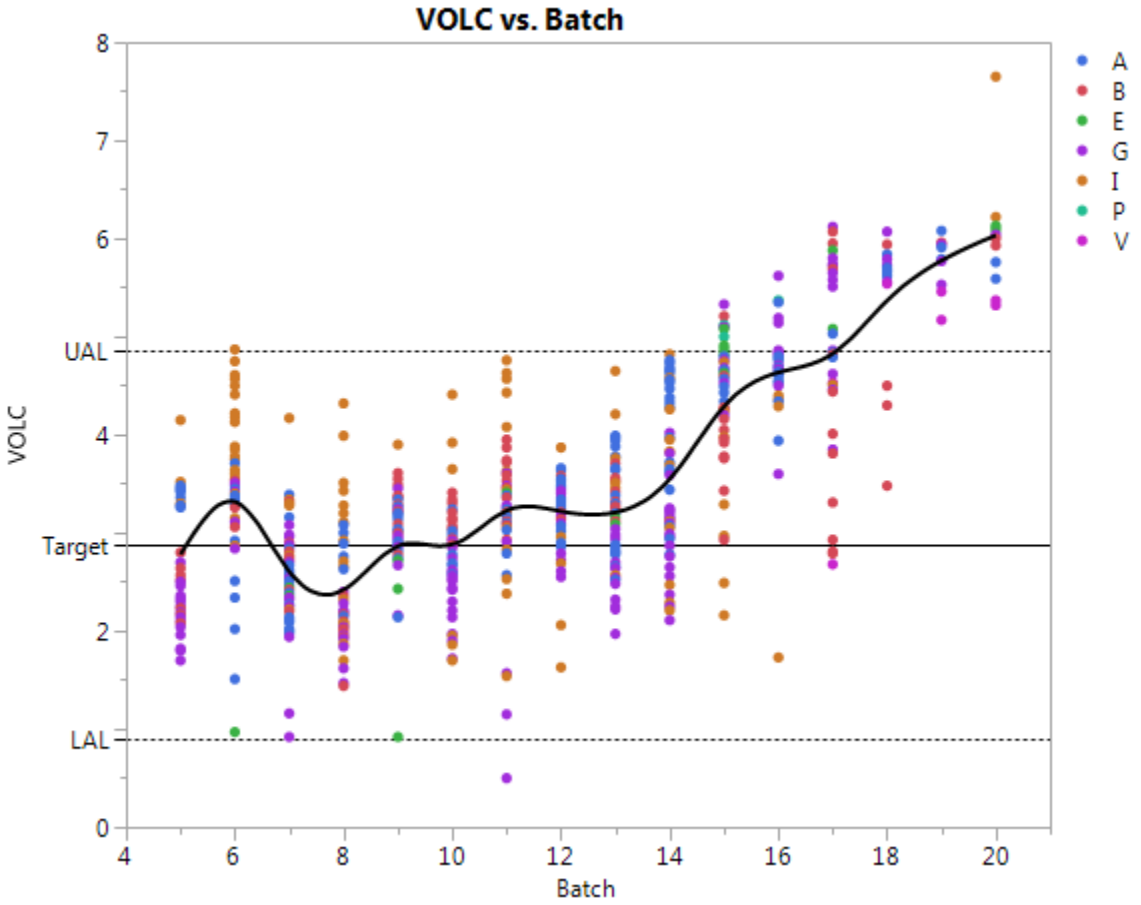
Recommend the following Industry Correction Factors (ICFs) for Batch 20 ACM-1:

- Volume Change: -3.14%
- Hardness Change: 0 (no ICF)
- Tensile Strength Change: 7.43%

Data

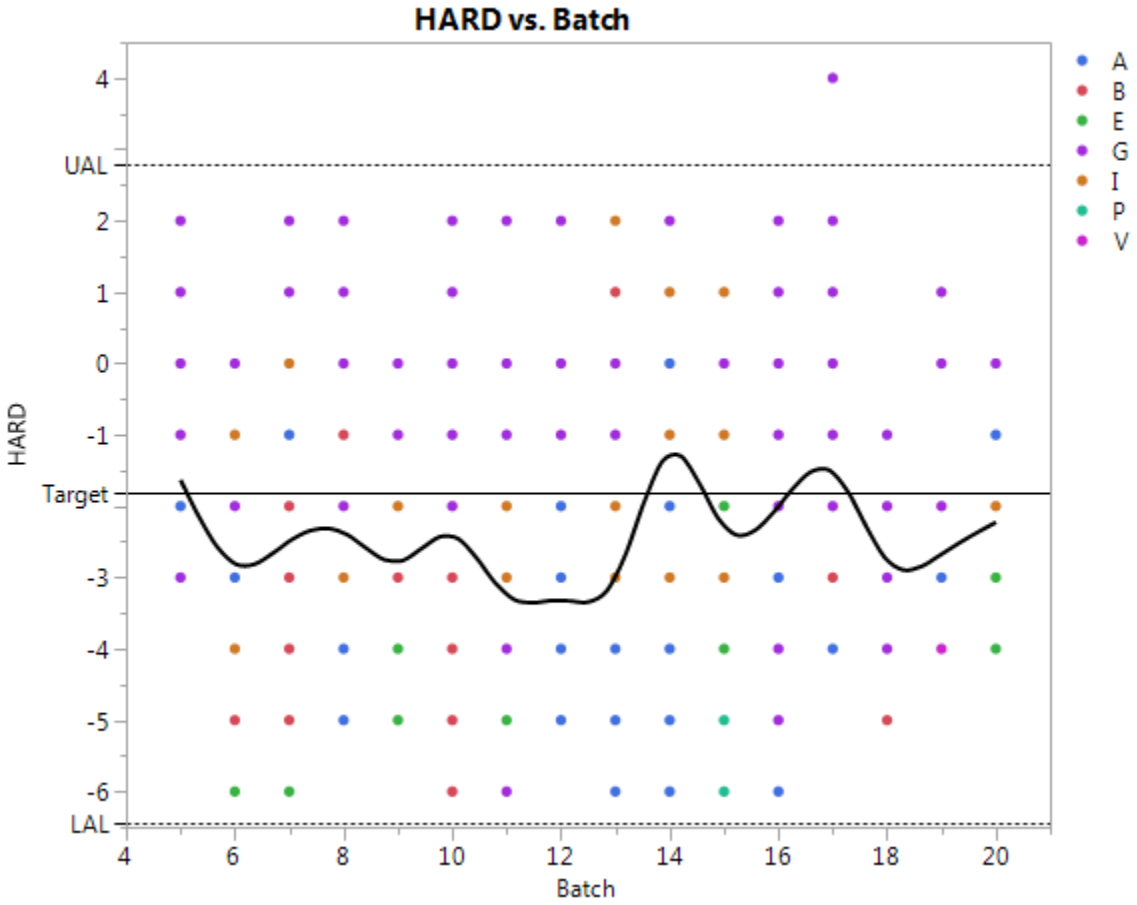
- The data is as of April 17, 2017.
- Six labs (A, B, E, G, I and V) each reported 2 tests on Batch 20 ACM-1.

Uncorrected Volume Change



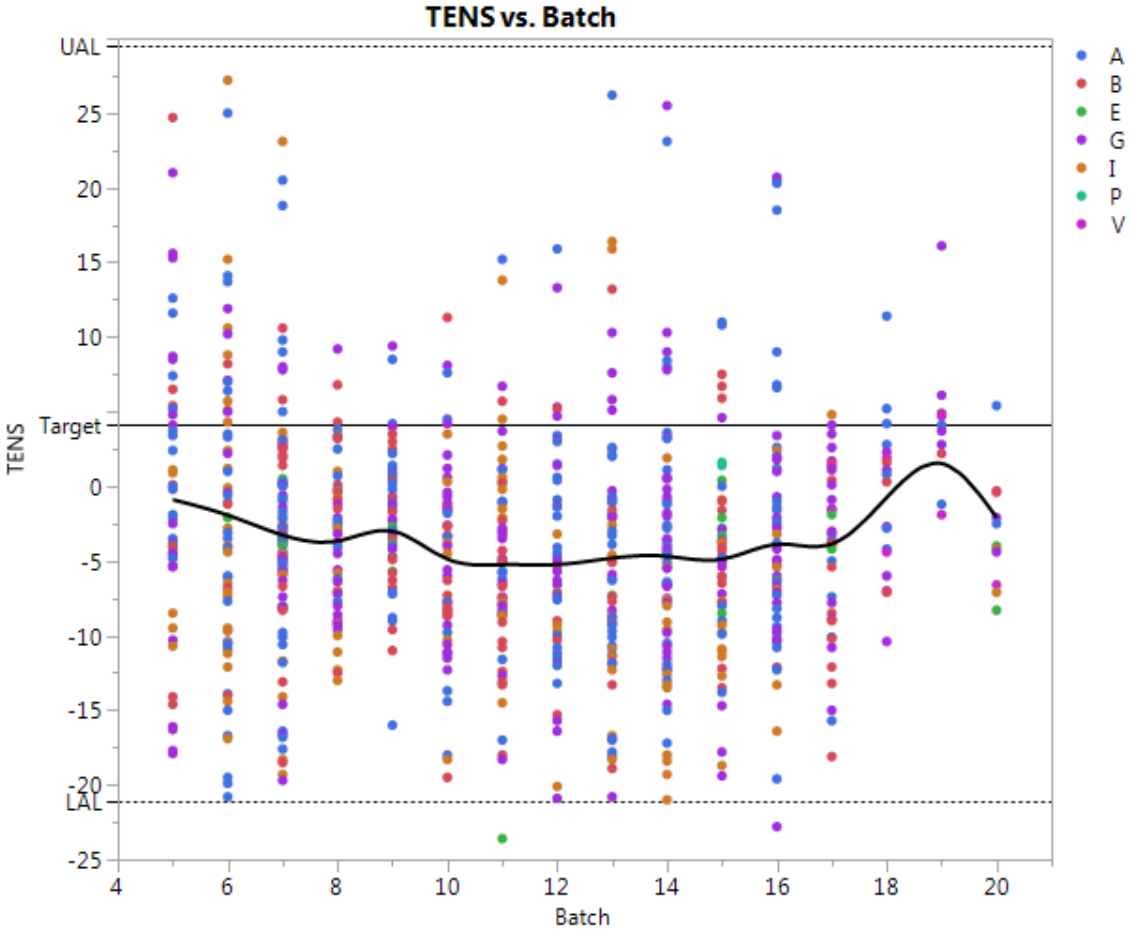
- Plotted is Volume Change without ICF for batches at the current target.
- The severe trend appears to continue.

Uncorrected Hardness Change



- Plotted is Hardness Change for batches at the current target.
- The last 3 batches have been slightly negative of target but within a standard deviation.

Uncorrected Tensile Strength Change



- Plotted is Tensile Strength Change for batches at the current target.
- Each of the batches have averaged below target with the last 3 batches averaging within a standard deviation.

Industry Correction Factors

- The ICFs (Target – Batch 20 Average) is tabulated.
- ICFs for Volume Change and Tensile Strength Change are statistically significant.
- Recommend the following ICFs:
  - Volume Change: -3.14%
  - Hardness Change: 0 (not statistically significant)
  - 7.43%

Statistic	VOLC	HARD	TENS
Batch 20 Average	6.02	-2.25	-3.24
Target	2.88	-1.82	4.19
Batch 20 ICF	-3.14	0.43	7.43
p-Value	< 0.0001	0.333	0.002