

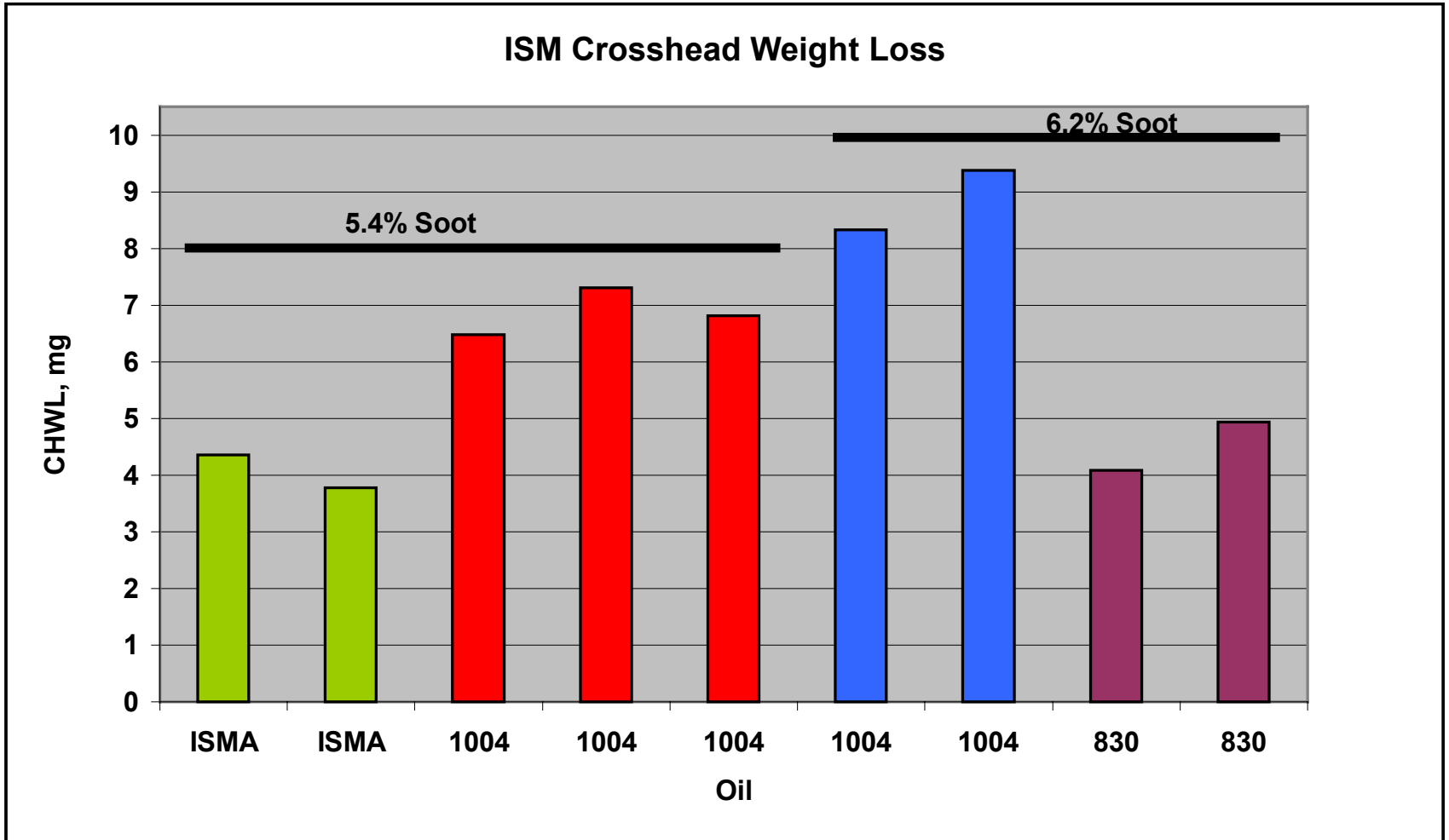
Overview of status of Test Development

- **Initial phase of matrix testing complete.**
- **Additional data generated on two tests run to 300 hours.**
- **Statistical data review of the initial phase of matrix is complete.**
- **Test shows discrimination on CHWL, but other parameters unclear.**
- **Phase II of matrix underway.**

Developments since June '04

- **Soot Target changed to 6.5% at 150hrs**
- **Phase II of test matrix modified.**
 - **3 labs (stands) – Lubrizol, Perkin Elmer, SwRI**
 - **2 oils (1004 and 830)**
 - **Total of six tests planned as matrix runs**
 - **Additional data to be supplied by Afton.**
- **Now running with non-coated intake manifolds**
- **Referencing requirements for labs debated and passed on to Surveillance Panel for action.**
 - **First stand 2 runs**
 - **Second stand 1 run**

ISM Crosshead Weight Loss



ISM Status as M11 EGR Replacement

- **CHWL discrimination established**
 - Soot correction data to be studies from matrix runs
 - Limits to be set based on 830
- **OFDP data correction process under review**

ISM PC-10 Requirements

- **Valvetrain Wear**
 - **Crosshead + Adjusting Screw Weight Loss**
- **Top Ring Weight Loss**
- **Oil Filter Plugging**
- **Sludge**
- **Viscosity Increase**
 - **Some oils in field showing unexpected increases**
 - **Correlate ISM with T11**
- **Possibility of developing a merit system**

ISB Status

- Procedure established
- As many as 7 stands could be installed
- 4 test discrimination matrix in progress
- Cummins will use data from ISM and ISB for determining suitability for field testing
 - Cummins will NOT review any candidate data until matrix testing is done.