

## Jeff Clark

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**From:** Jeff Clark  
**Sent:** Monday, March 28, 2011 3:24 PM  
**To:** Jim Moritz Intertek; Allison Rajakumar; Bill Larch; Bob Campbell; Boese, Doyle; bradley.carter@intertek.com; Carter, James; cathy.devlin@aftonchemical.com; cca@lubrizol.com; charlie.passut@aftonchemical.com; Dan Pridemore; Greg Shank; James McCord; Jan Peters; Jim Gutzwiller; James.Matasic@Lubrizol.com; jiam@chevron.com; Jim Rutherford; xjc@luberdi.com.cn; joe.franklin@intertek.com; john.haegelin@intertek.com; Ken Goshorn; Mark Cooper; Mark Sutherland; michael.l.alessi@exxonmobil.com; Pat Fetterman; Perry Grosch; Philip Scinto; philipe.f.saad@cummins.com; Riccardo Conti; Ron Buck; ryan.johnson@swri.org; Scott Richards; shawn.whitacre@cummins.com; Steven Kennedy; Tom Wingfield; Torreman, Marnix; vlkersey@ashland.com; luwt@ripp-sinopec.com; wvda@chevrontexaco.com; zbishop@tei-net.com; Jeff Clark  
**Subject:** Cummins Conference Call Minutes - March 28, 2011  
**Attachments:** ISB Data Review A3.pptx



ISB Data Review  
A3.pptx (730 K...

Attendance - Jim Moritz, Jeff Clark, Zack Bishop, Riccardo Conti, Shawn Whitacre, Philippe Saad, Chris Castanien, Bob Campbell, Jim Rutherford, Brad Carter, Jim Gutzwiller, Jim Matasic, Tom Wingfield, Jim McCord, Scott Richards

ISM Update: Lubrizol will be starting their PC-9-HS test later this week. We will have a call once that test has been run.

ISB Severity: This conference call was primarily to discuss current ISB severity situation.

### ACTION ITEM REVIEW:

1. Lubrizol will conduct a metrology/metallurgical study.  
Jim Matasic reported that so far no batch differences have been found.
2. Jim Rutherford will try to examine cam/tappet interactions.  
Jim's analysis is attached. Unfortunatley, no revelatory conclusions were available.
3. Cummins will investigate tappet batch A & B manufacturing history.  
Cummins confirmed that both batches were deliberately produced/obtained as discrete batches to minimize variation within the batch (not just pulled from inventory that was produced over time).
4. Labs will confirm ECM cal files and re-flash if necessary.  
It appears that there are newer cal files in use, but the differences and/or impact of the newer files are unknown. It seems the newer ECMs will not load the older files. The lab survey of ECM file use is not yet complete. Jim Moritz will distribute the results of the survey once it is completed. Jim mentioned that their severe run was on the new ECM, newer cal file. However, he is unsure if this is their only run on the newer ECM files. Jim is running a reference with the old ECM and file to see if it reveals anything. Jim will send Philippe Saad some ECMs for examination.

Tom Wingfield was asked if a fuel shift, similar to PC-9, may be involved in the severity trend. Tom stated it could be possible and they are willing to investigate, but will need some guidance as to what to look for.

Plan foward - we will have a call next week to see what information is available from Intertek's test and the ECM information from Cummins.