

EMA – Biodiesel Status

- **B20 Effects on Engine Oil**
- **Performance Concerns**
 - Oxidation**
 - Deposits**
 - Corrosion**
 - Fuel Dilution**
 - Oil Drain Interval**
- **NBB / EMA Engine Oil Test**
 - **C13**
 - **ISB**
 - **T12**
 - **Test Run with Reference Oil**
 - **Test to Include Additional Oil Analysis & Hardware Insp.**
- **EMA Report to HDEOCP in 4th qtr**

EMA CJ-4 / 2010 Status

- **CJ-4 Oil Field Performance**
Limited Data Looks Good
Possible Less TBN Retention

**Request Industry Data to be Submitted
to EMA for Report & Discussion at December
HDEOCP Meeting**

- **Additional Performance Requirements**
Oxidation – IIIF-IIIG Robo?
Turbo Deposits
Fuel Economy
- **Chemical Limits - tbd**
- **Review Test Redundancy**