CAT C13 Oil Test Engine Program - Dec 8, 03

- C13 Engine Availability has been resolved.
- C13 will be used for ECF-2 & PC-10.
- Expect to be ready for CI-4 upgrade end 1st Qtr 04 to meet CI-4 Supplement.
- PC-10 test will follow on after CI-4 supplement completion – CCV and after-treatment? Planned completion 3rd Qtr 04









CAT C13 Oil Test Engine Program – Dec 8, 03

- C13 oil test engines status.
 - All Production Hardware
 - Test cycle defined
 - Operating Conditions defined
 - Ref Oils defined
 - 14 available Engines at this time.
 - 6 Engines at labs
 - 2 ready to begin test by 17 Dec 03
 - Team defined









CAT C13 Oil Test Engine Program – Dec 8, 03

- C13 oil test engines Data status.
 - Early deposit concerns with commercial oils in field, similar to C12
 - Engine desensitized to deposits, oil consumption
 - Tests being conducted on oils known to be worst for deposits – need for failing ECF-1 oils.
 - Possible other handles for tweaks:
 Hardware, Injection timing, Oil, Operating conditions

CCV effects on deposits to be determined









CAT C13 Oil Test Engine Program - Dec 8, 03

ECF-1	ECF-2	PC-10
Completed June '03	Apr \04	June '06
CAT 1P	C-13	C-13
500 ppm	500 ppm	500 or 15 ppm (Depending on Severity)







