Agricultural Engine Retrofit Project

West Coast Collaborative Idaho DEQ Jorge Garcia jorge.garcia@deq.idaho.gov

Project Background

- Project funded by EPA: \$50K
- Project start date: 09-2005
- Contractor: Pacifica Marina Inc.
- Technology used: Diesel Oxidation Catalyst manufactured by ECS
- Location: Treasure Valley, Idaho

Project Results

- 18 tractors were available for retrofits
- Only 8 tractors were retrofited with DOCs
- Engine Manufactured between 1992-2004
- Engine Horsepower range: 110-235 hp
- Retrofit Price range \$899-\$2921/ engine



Problems encountered

- Need more candidate engines
- Most candidate engine discarded due to high "Blow by" emissions.
- Block size constraints
- Integrated exhaust assembly.
- Engine Age.



Leasons learned

- The need for trained local labor.
- Need for pre-selection of candidate engines.
- DOCs are cost effective
- No visible emission reductions.

