Wet Scrubber Lessons Learned
2011 APC Round Table

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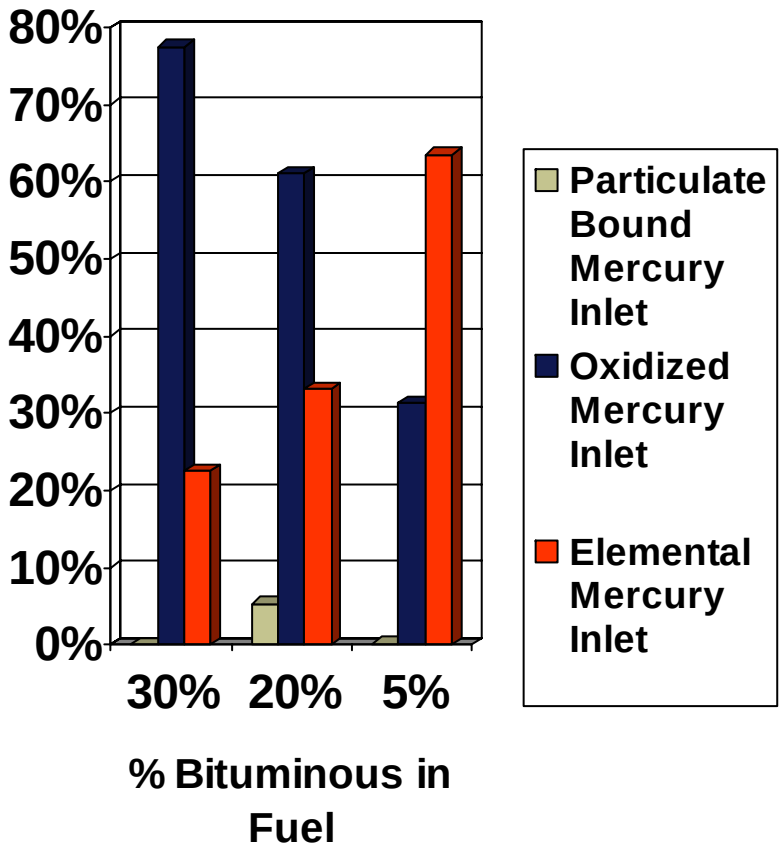
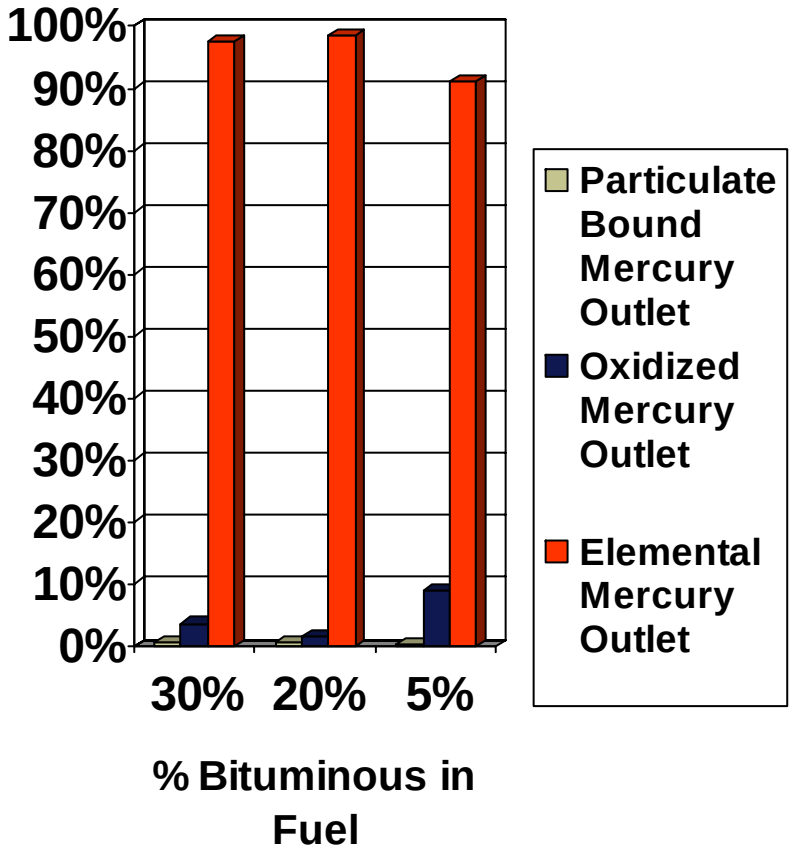
Proven Measurement Methods Can Provide Accurate And Reliable Emissions Information

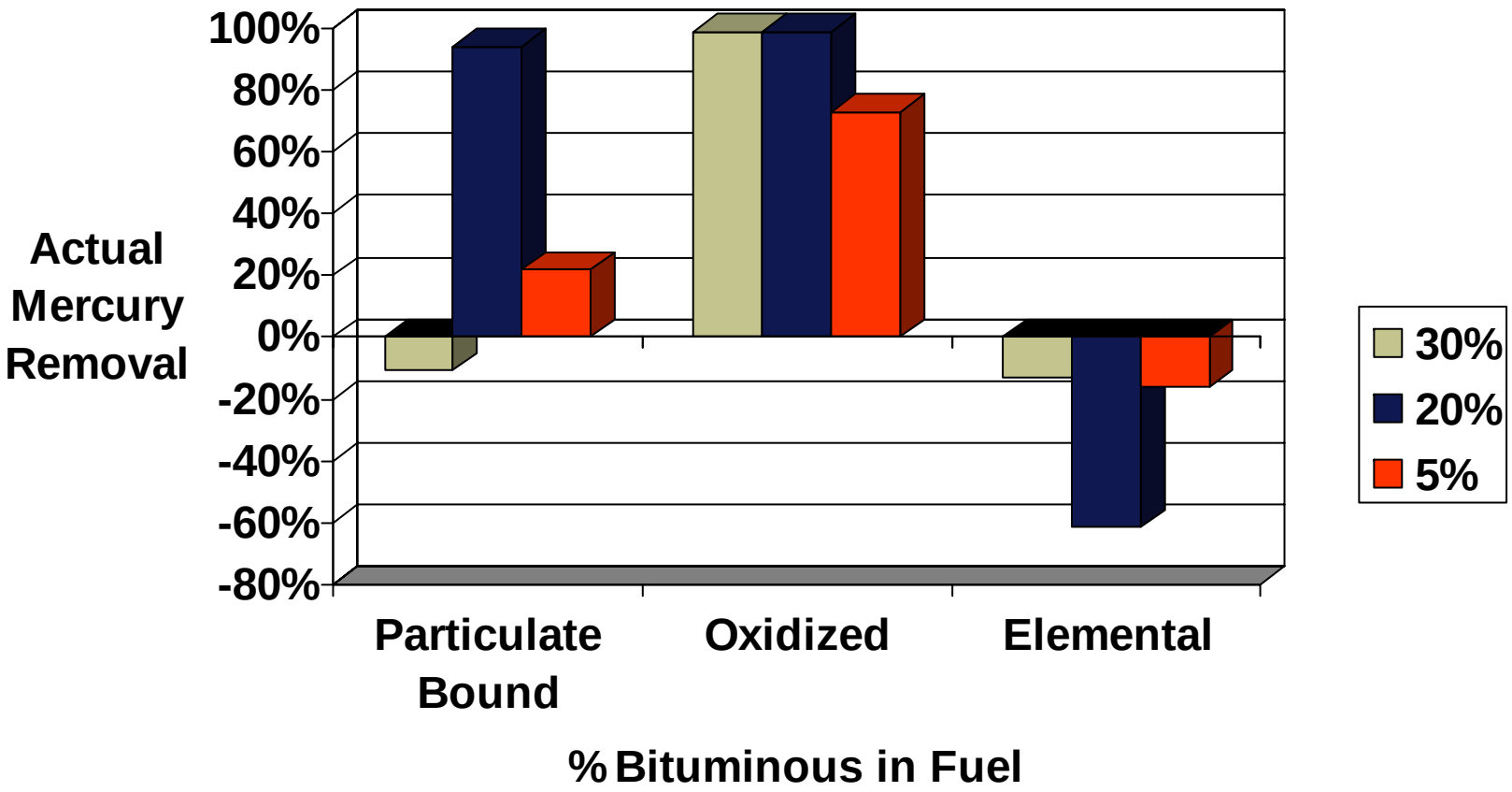
- Mercury CEMS Will Provide Continuous Data
- Sorbent Traps for Mercury Average Emissions Data over Time and Can Provide “Same-Day” Results During Testing
- EPA Method 5B Will Measure Filterable PM Without Presence of Sulfuric Acid Mist
- EPA Method 202 (Dry Impinger) Gives Accurate Condensable Emissions Results With Minimal False Positives
- Controlled Condensation Method Can Measure SO_3 Without Interference from SO_2

Wet Scrubbers Will Remove Mercury From Flue Gas





But Re-emission in the Wet FGD Systems Did Occur



The Utility MACT May Affect Some WFGD Operations

- Based on test results from Wet FGD Systems it appears that;
  - FGD systems following SCR's may be below or at MACT mercury limits
  - Oxidation of $SO_2 \rightarrow SO_3$ from these same SCR's will increase condensable PM emissions
  - A well designed/well maintained particulate collector before the absorber is necessary to meet the proposed PM emission levels
  - Depending upon WFGD pressure drop (L/G) filterable PM and SO_3 emissions can decrease across the absorber
  - WFGD systems treating flue gas from subbituminous coal combustion will probably be below MACT HCl limits (2 ppm)
  - Some HCl removal (by DSI for example) prior to WFGD systems treating flue gas from bituminous coal combustion may be necessary to achieve ≤ 2 ppm HCl emissions