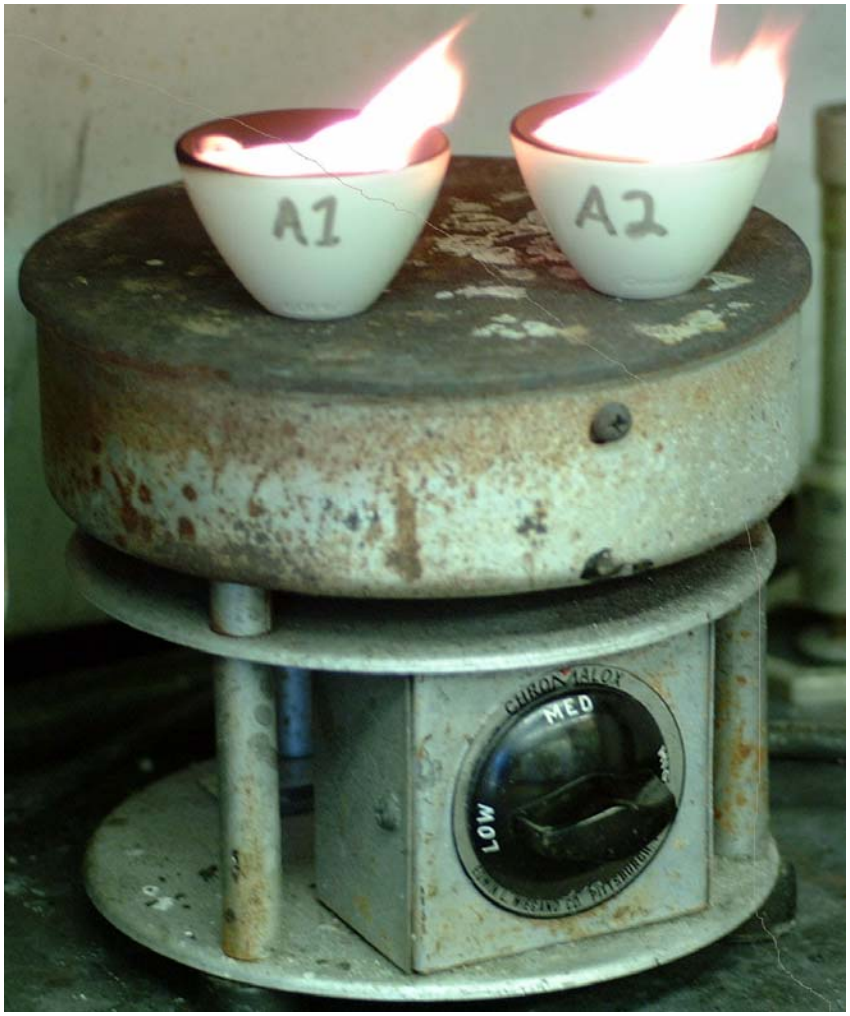
ASTM D02.B0.07
D874 Surveillance Panel



Objectives of this presentation

1. Update SP progress and next steps
2. Invite guidance on future directions

From D02.B0.07 mtg June 06 at Toronto

2006 Deliverables

- Detailed implementation plan for LTMS
  - Including selection of reference oils
  - Fully adopted before year-end, if possible
- Recommendation on future viability of a sulfated ash calculation method (e.g. SAE J1787),

A Team Effort

- Kishore Nadkarni
- Tom Schofield
- Joe Franklin
- Becky Grinfield
- John Mattern
- Pat Fetterman
- Lew Williams
- David Hwang
- And many others ….

Monitoring System

Option C was consensus selection

- Test reference oil RL90 once per calendar day on which candidate tests are conducted. This will encourage SPC charts.
- blind TMC samples will be tested at 90 day frequency.
- Cost per lab will be ~$2500 per year

Round Robin

- 8 participating labs
- 6 TMC reference oils
  - Not as broad spectrum as basis for existing D874 precision statement
  - Purpose is to select oils for blind referencing process
  - Triplicate determinations, on different days
- RR completed last week !

Oil	90	91	811-2	820-2	862-1	PC10A
n	21	21	21	21	20	21
Min	0.95	0.76	0.76	1.45	0.76	0.85
Average SAsh, Mass %	**1.08**	**0.82**	**0.92**	**1.58**	**0.82**	**0.89**
sR	0.08	0.05	0.09	0.08	0.05	0.03
Max	1.27	1.03	1.13	1.80	0.95	0.98
95% Upper	1.24	0.93	1.10	1.74	0.92	0.96
95% Lower	0.92	0.72	0.74	1.42	0.73	0.83
Median No. Resulfates	0	0	0	0	0	0
Median Final Furnace Cycles	5	3	4	3	4	3

Overall (6 oils)
sr = 0.041
sR = 0.069
r = 0.115
R = 0.193

D874-06 @ 1.0 Mass % SAsh

r = 0.060
R = 0.142

Interactions significant
(not all labs characterized the six oils the same way)

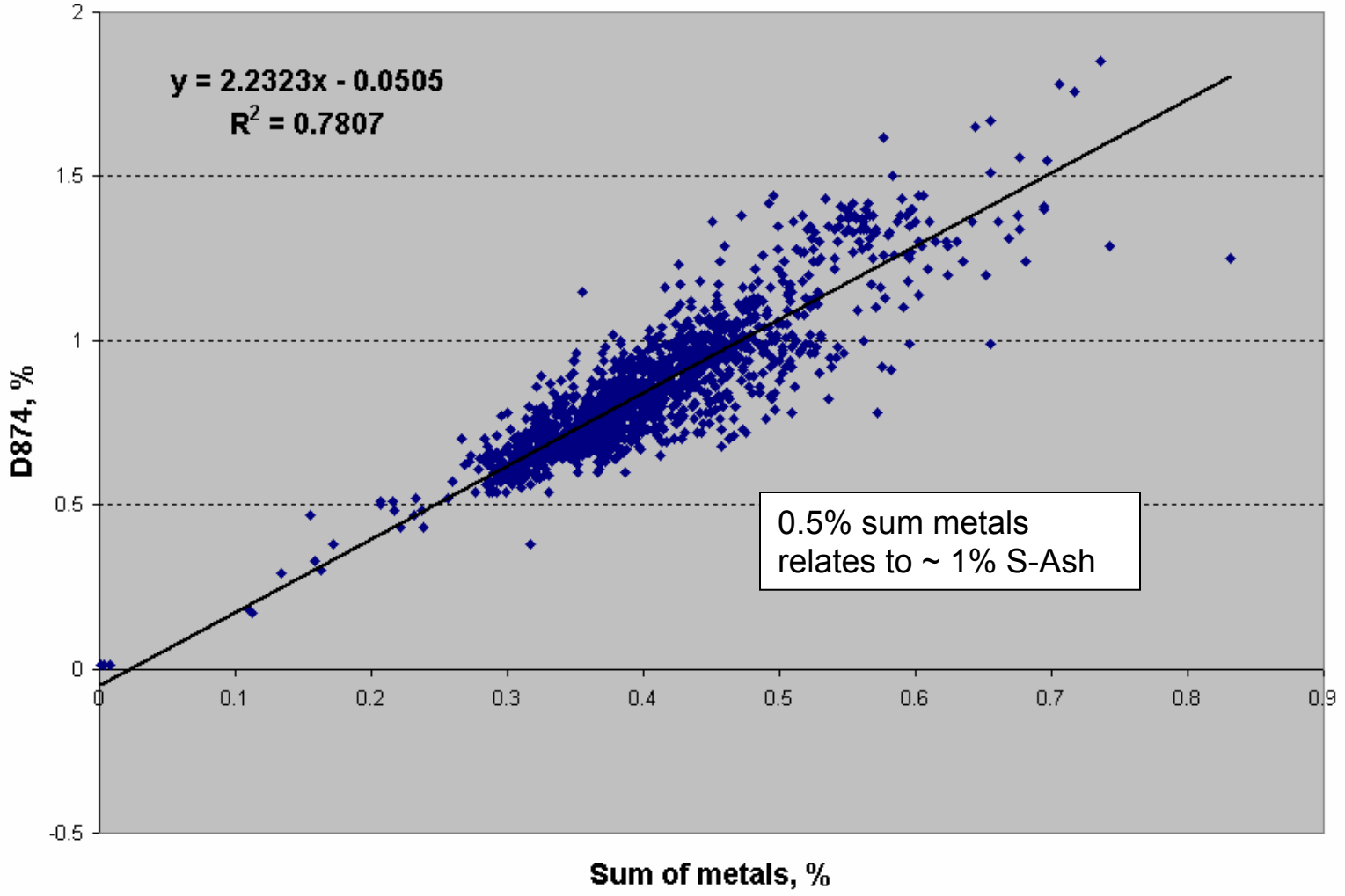
SP Next Steps

- Consensus on RR analysis
- Confirm selection of references for blind monitoring
- Recruit more participation
  - Presently only 3 labs
- Plan “rater” workshop(s), contingent on adequate participation

Limiting Factors

- D874 has many applications and a long history, and no one seems interested in changing it
- Technolgies for an improved D874 (wet-chemistry based) would require substantial development

SP found no support for development of calculation approach



What's Next ?

- Many questions remain to be answered about relationships between lube oil metals content and DPF plugging
- Everyone should want something more precise than D874 for future LEDL specifications, but what will it be?