

Cummins Surveillance Panel

ISB (ASTM D7484)

ISM (ASTM D7468)

ISBVIS (ASTM D8617)

06/04/2026

Prepared By: Joshua Ward, S.P. Chairman



Agenda

- Review ISM Coordinated Reference Results
- ISM Batched Hardware Inventory
- ISB BOI/VGRA Matrix Timing and Reference Status
- Review ISBV Latest Reference Results
- AOB

ISM Coordinated Reference Results

Lab	CWL	OILDPFNL	ASR	IAS
A	4.1	11	8.2	32.5
D	3.4	10	9	38.5
C	2.9	18	8.5	17.2

Industry Zi Warnings



CROSSHEAD WEAR AT 3.9% SOOT
Unit of Measure: Milligrams
CRITICAL PARAMETER

Reference Oil	Mean	Standard Deviation
830-2	5.1	1.5
830-3	5.1	1.5

OIL FILTER ΔP
Unit of Measure: LN(OFD_P+1)
CRITICAL PARAMETER

Reference Oil	Mean	Standard Deviation
830-2	2.5209	0.3274
830-3	2.9653	0.3274

AVERAGE SLUDGE RATING
Unit of Measure: Merit Rating
CRITICAL PARAMETER

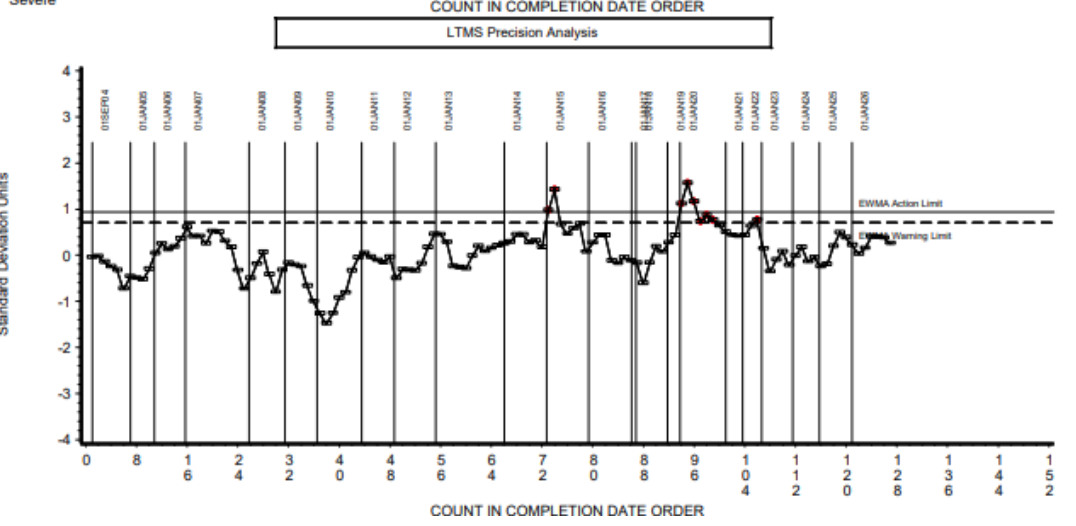
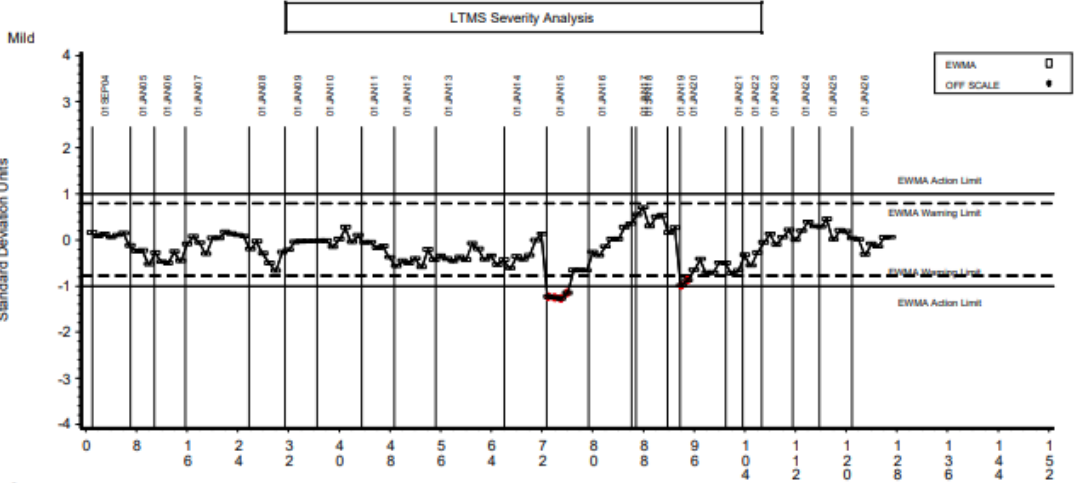
Reference Oil	Mean	Standard Deviation
830-2	9.00	0.15
830-3	8.24	0.50

INJECTOR ADJUSTING SCREW WEAR AT 3.9% SOOT
Unit of Measure: Milligrams
NON-CRITICAL PARAMETER

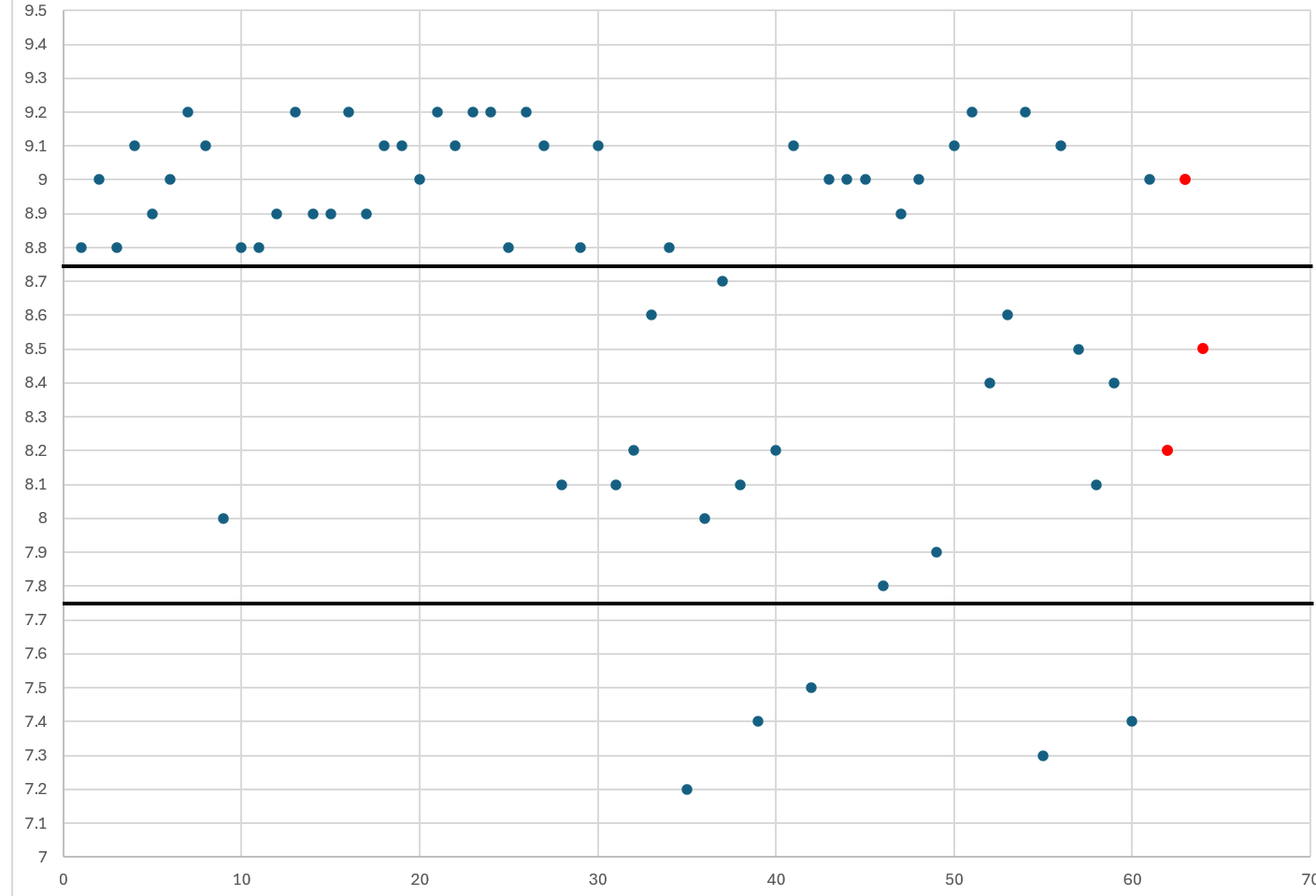
Reference Oil	Mean	Standard Deviation
830-2	29.5	5.7
830-3	29.5	5.7

ISM Coordinated Reference Results

ISM INDUSTRY OPERATIONALLY VALID DATA
AVERAGE SLUDGE RATING



ASR



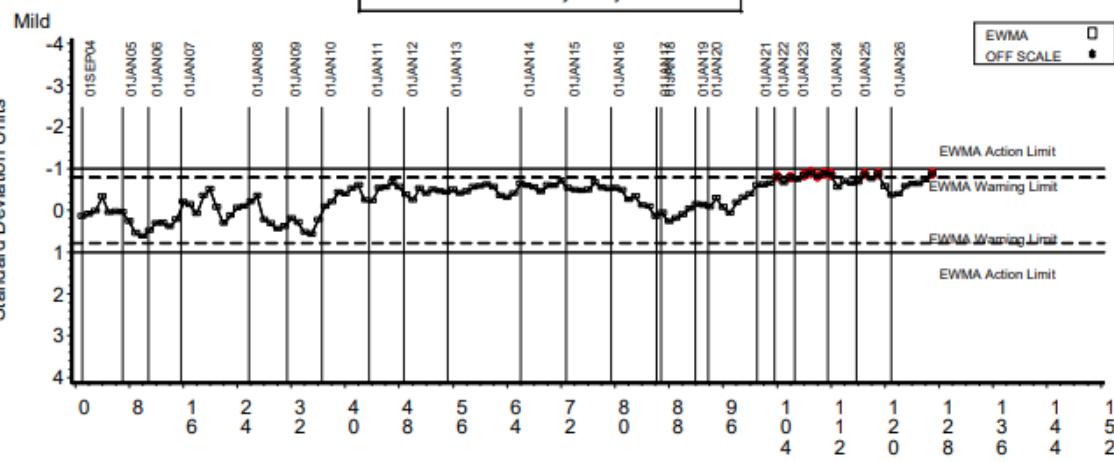
ISM Coordinated Reference Results

ISM INDUSTRY OPERATIONALLY VALID DATA

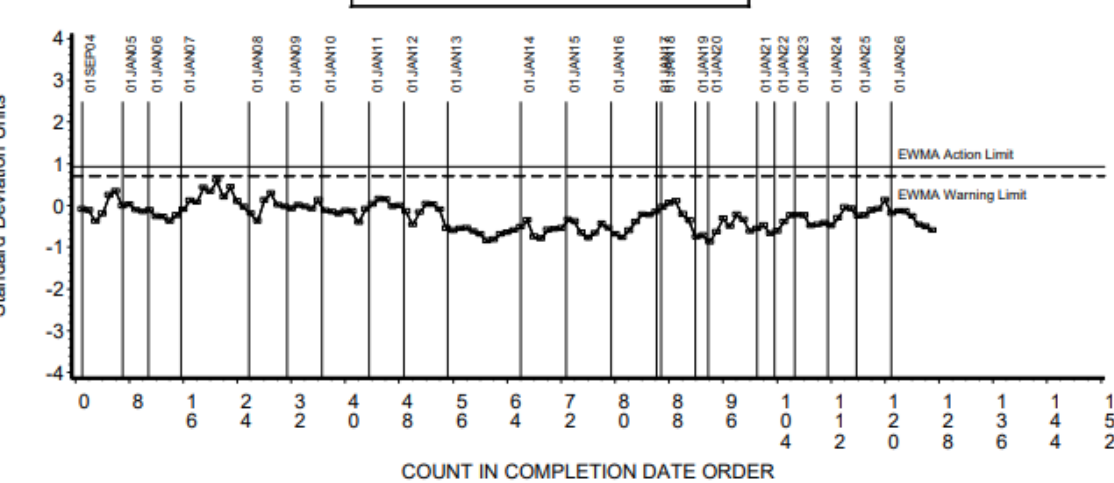
CROSSHEAD WEIGHT LOSS ADJUSTED TO 3.9 % SOOT



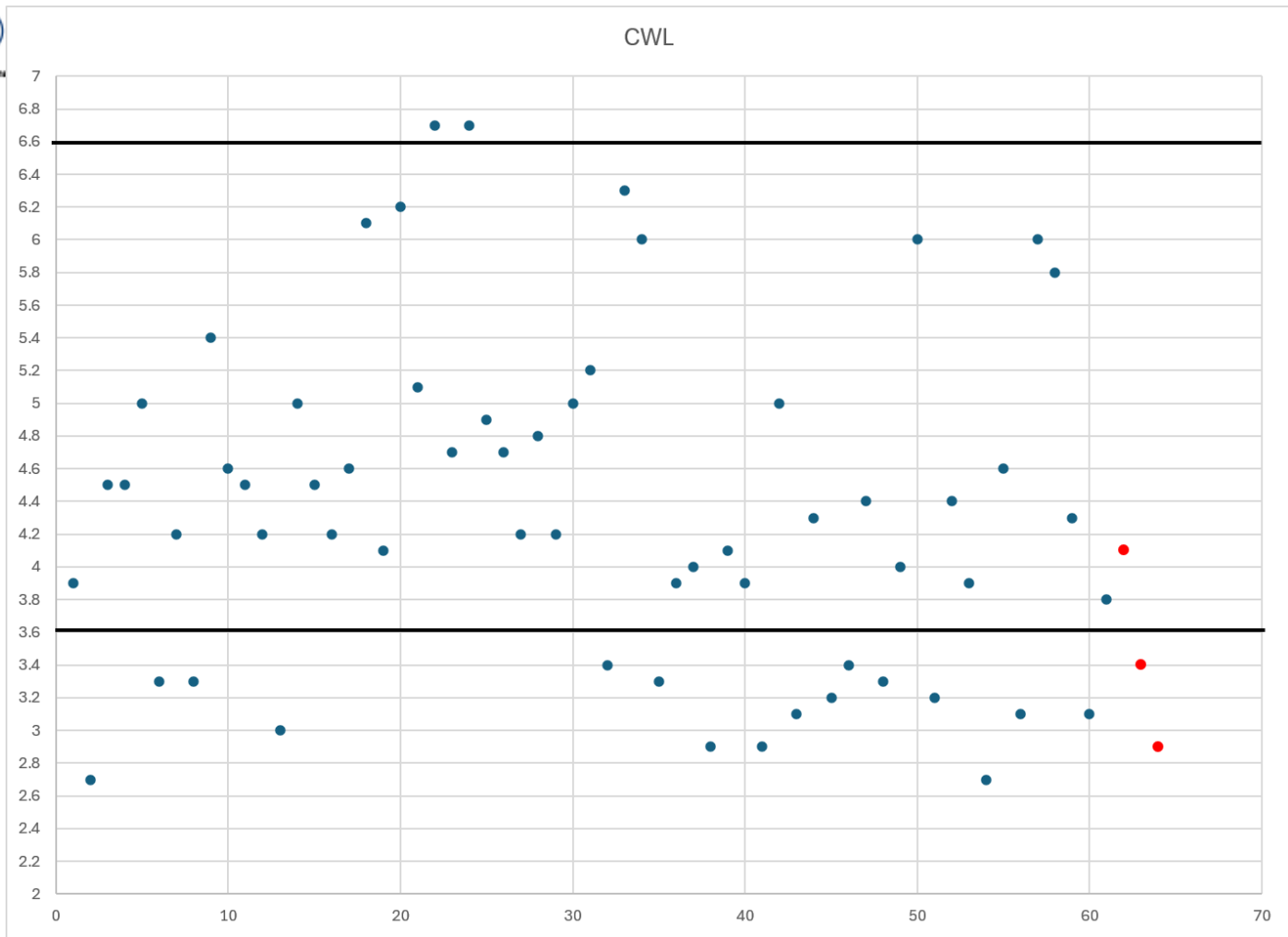
LTMS Severity Analysis



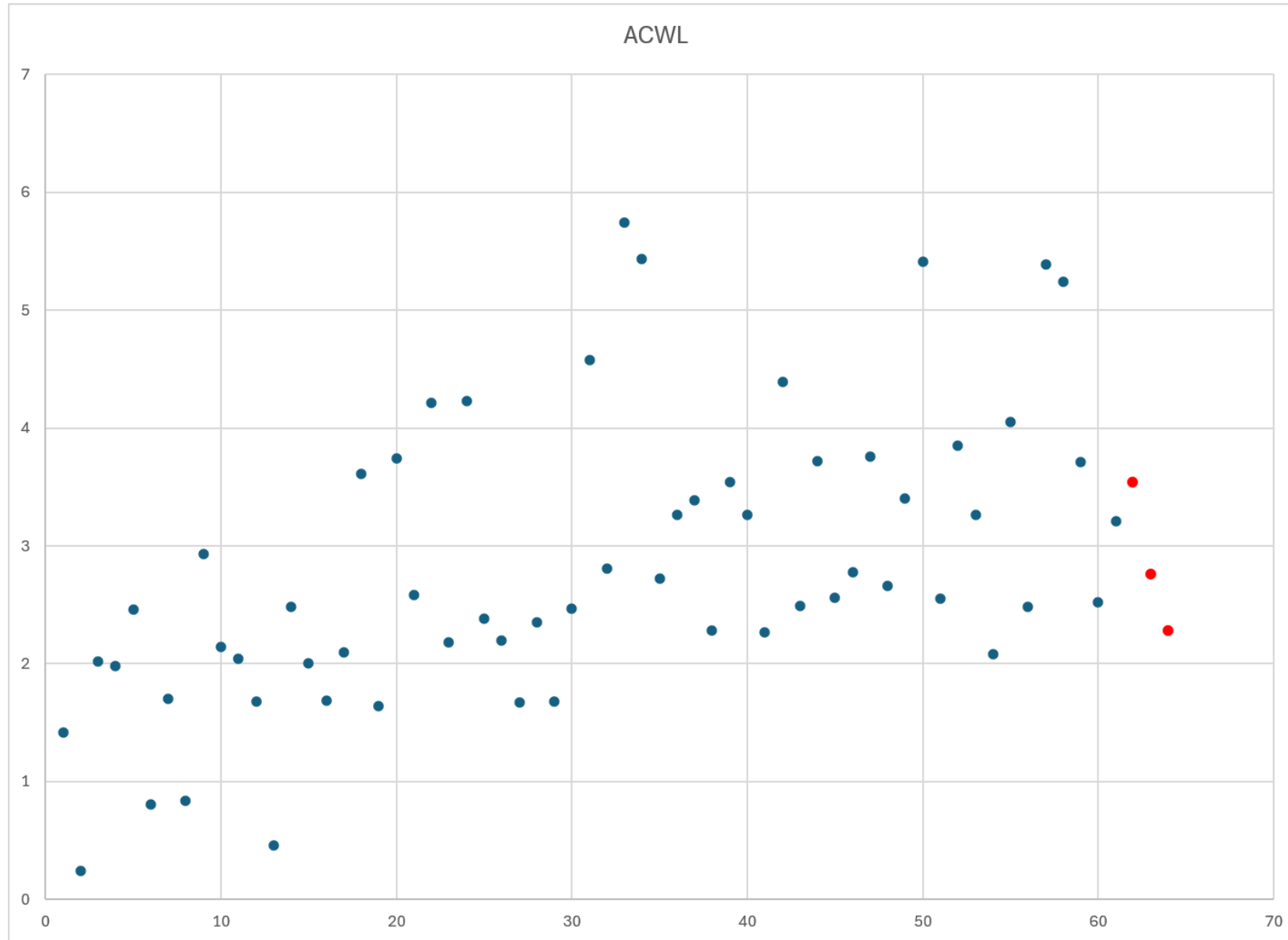
LTMS Precision Analysis



CWL



ISM Coordinated Reference Results



ISM Coordinated Reference Results

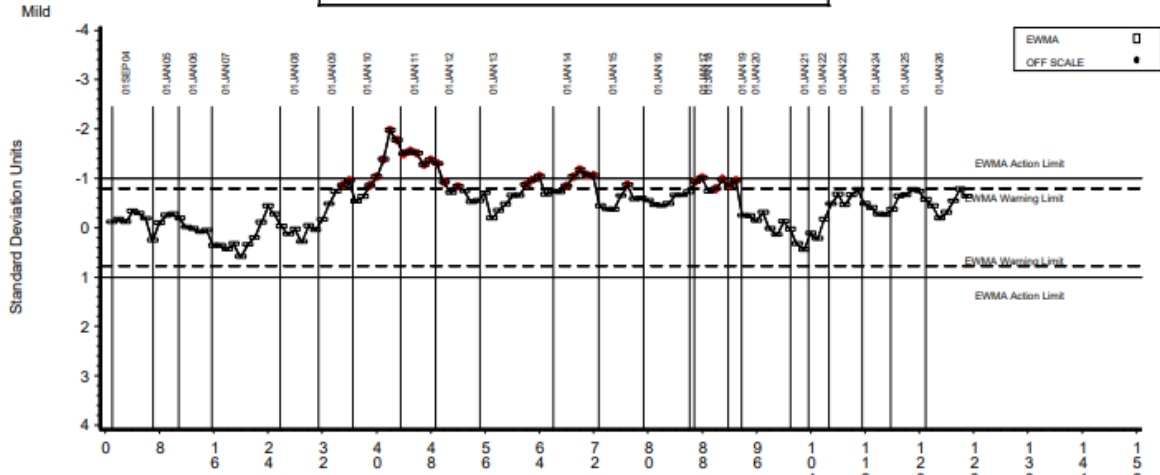
ISM INDUSTRY OPERATIONALLY VALID DATA

OIL FILTER DELTA PRESSURE

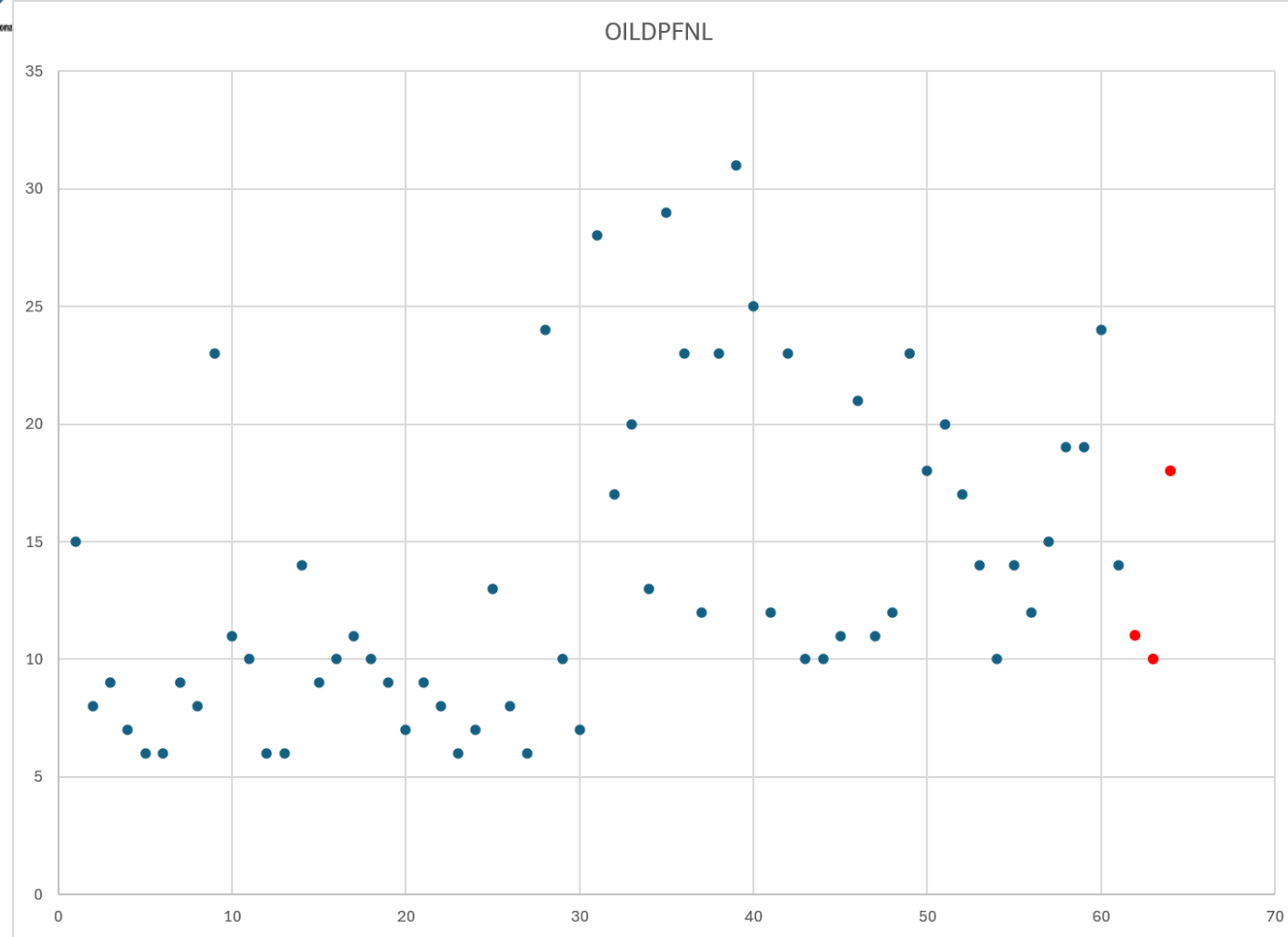
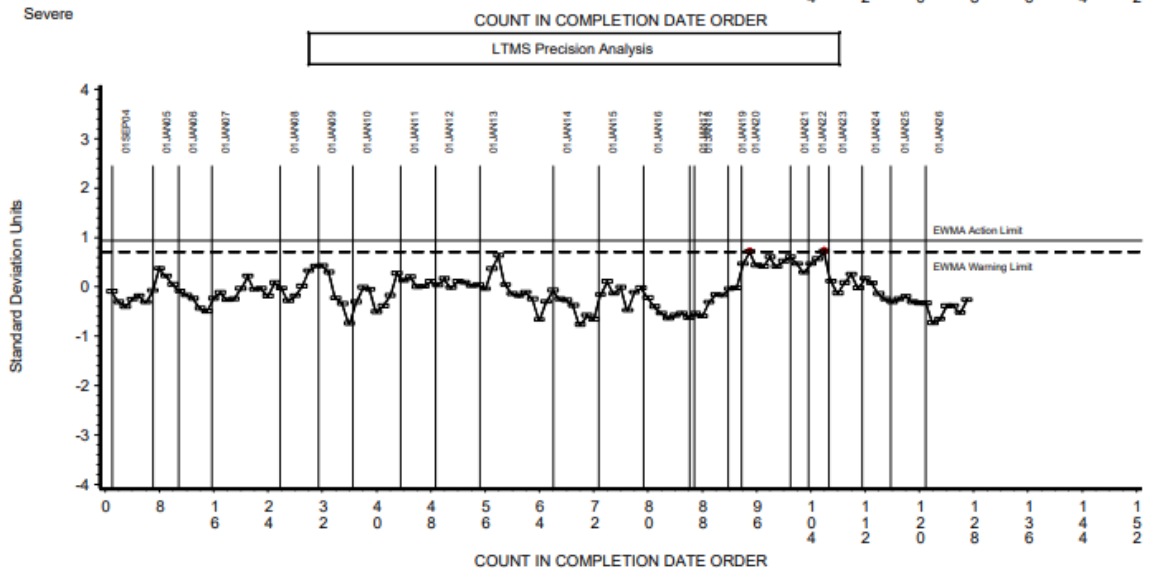


A Program of ASTM International

LTMS Severity Analysis

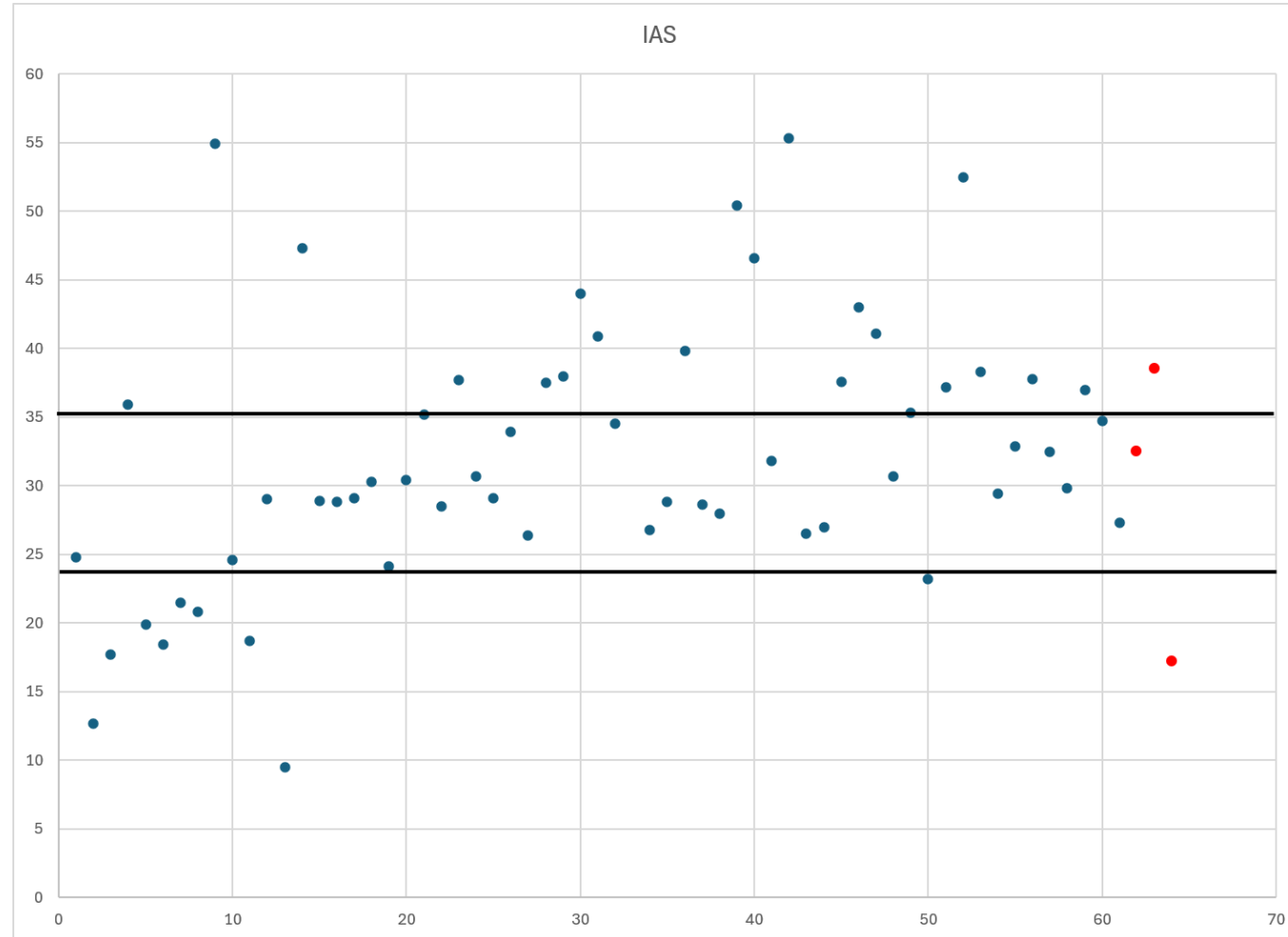
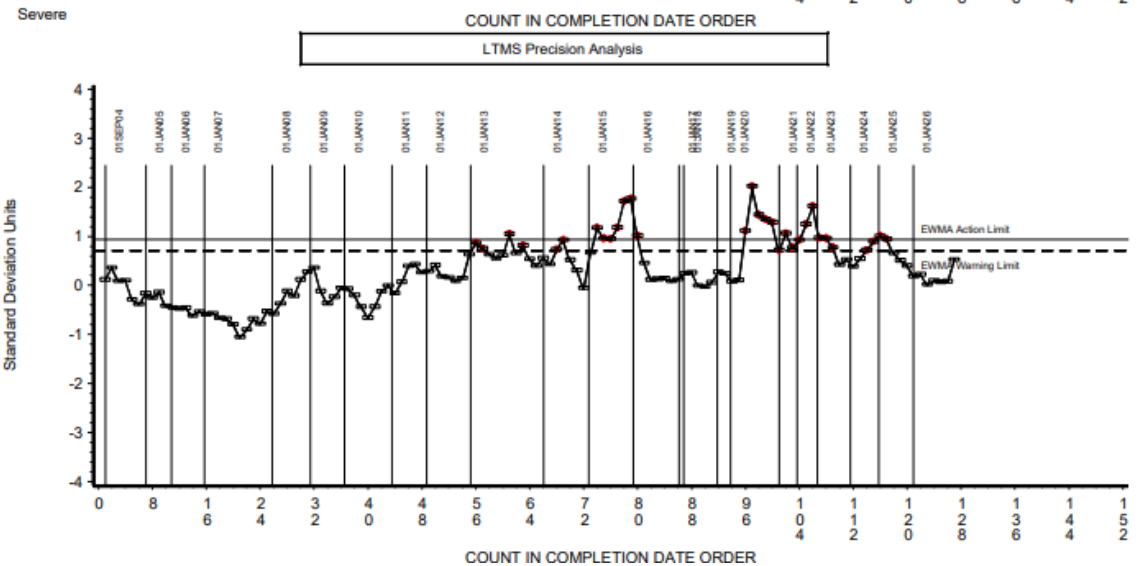
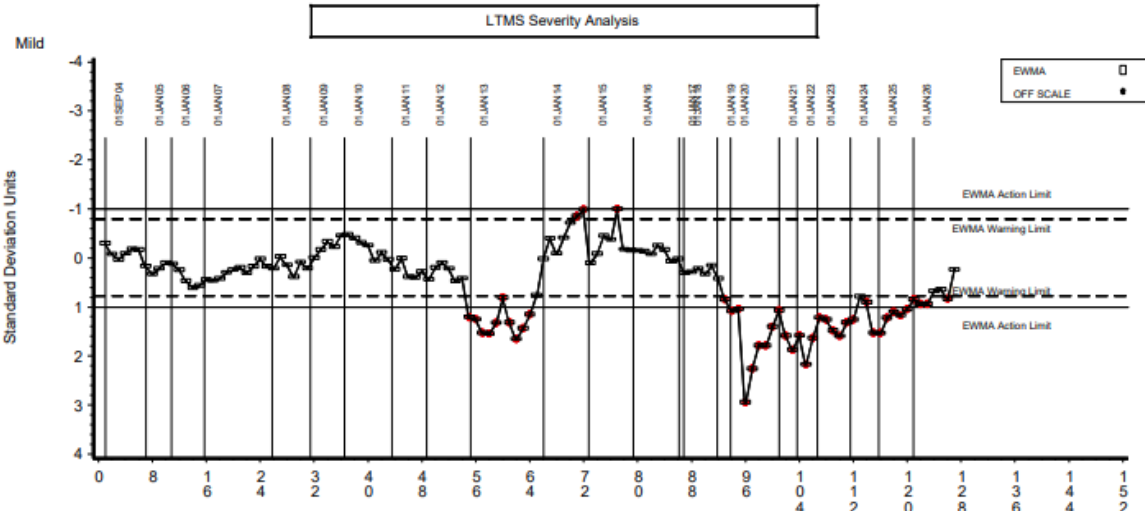


LTMS Precision Analysis



ISM Coordinated Reference Results

ISM INDUSTRY OPERATIONALLY VALID DATA
INJECTOR SCREW WEIGHT LOSS ADJUSTED TO 3.9% SOOT



ISM Batched Hardware Inventory

- Crossheads: 70 kits
- Adjusting screws: 308 kits
- Push rods: 169 kits
- Intake valves: 94 kits
- Exhaust valves: 85 kits
- Test Filters: 409 kits

ISB BOI/VGRA Matrix

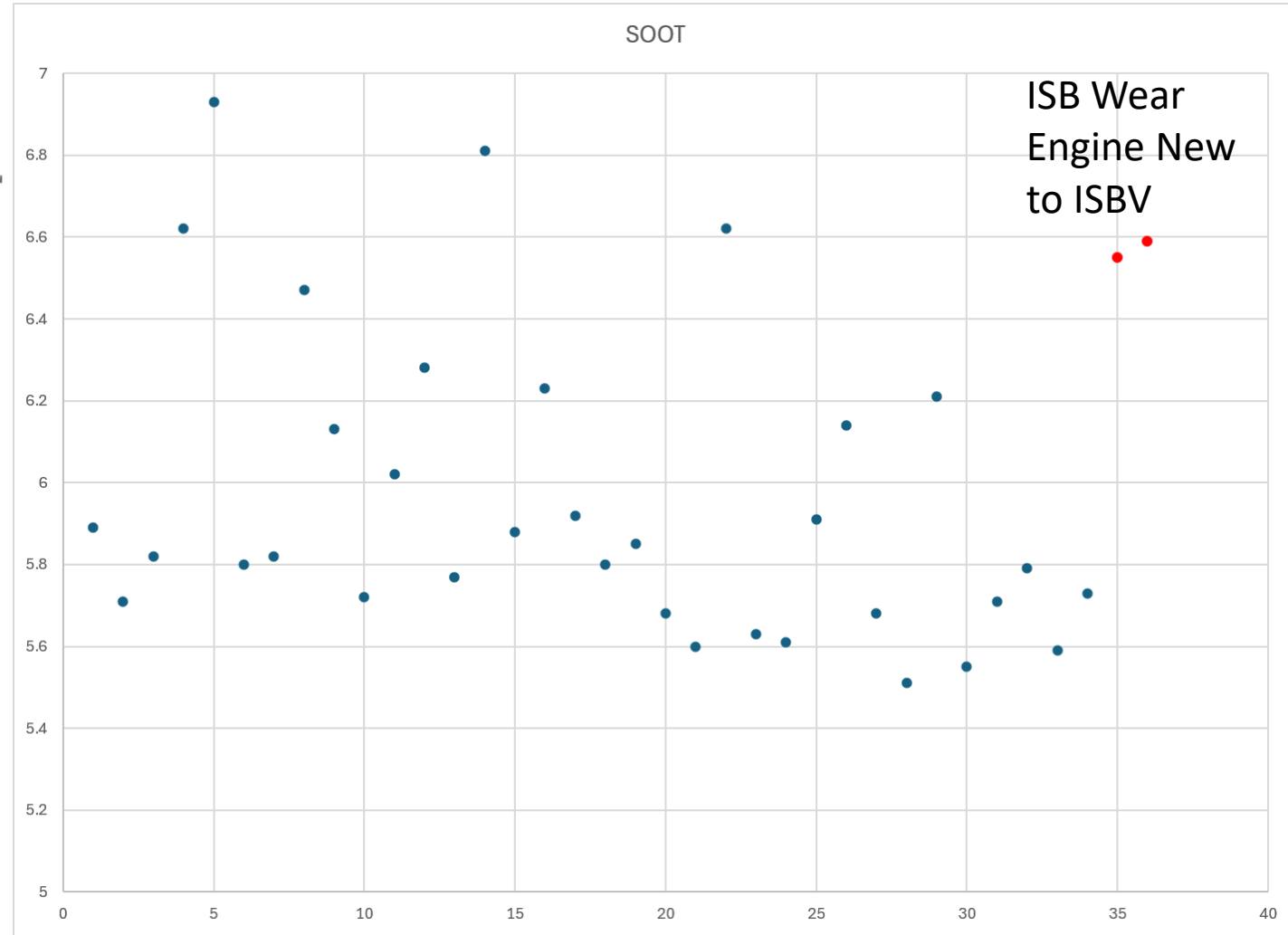
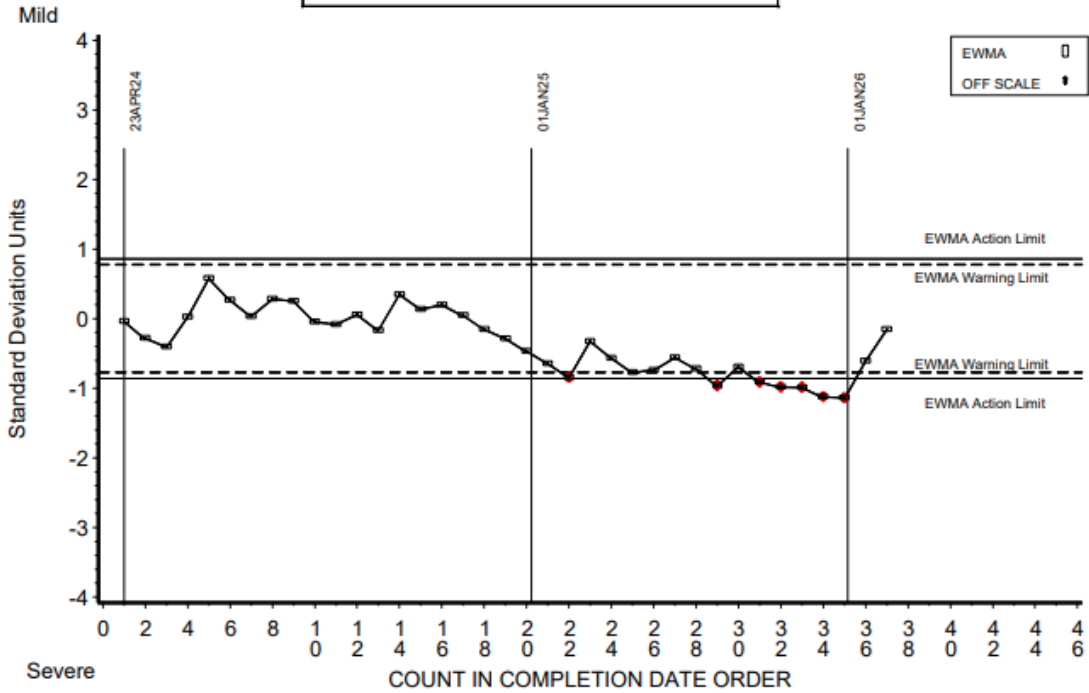
- Oils expected to be ready for testing in July 2026
- Calibration status of participating stands?

ISBV LTMS

CUMMINS ISB VISCOSITY TEST 156 HR INDUSTRY OPERATIONALLY VALID |
 FINAL SOOT % AT 12 cSt [>]



LTMS Severity Analysis



Concluding
Remarks

