

D6082 High Temp Foam

FOAMB18 Data Summary

June 3, 2024

FOAMB18 Reference Oil Industry Data Summary

D6082 Average Analysis 19000000 -99999999 (LTMS DATE date) DSTEMP

The MEANS Procedure

TMC OIL CODE=FOAMB18

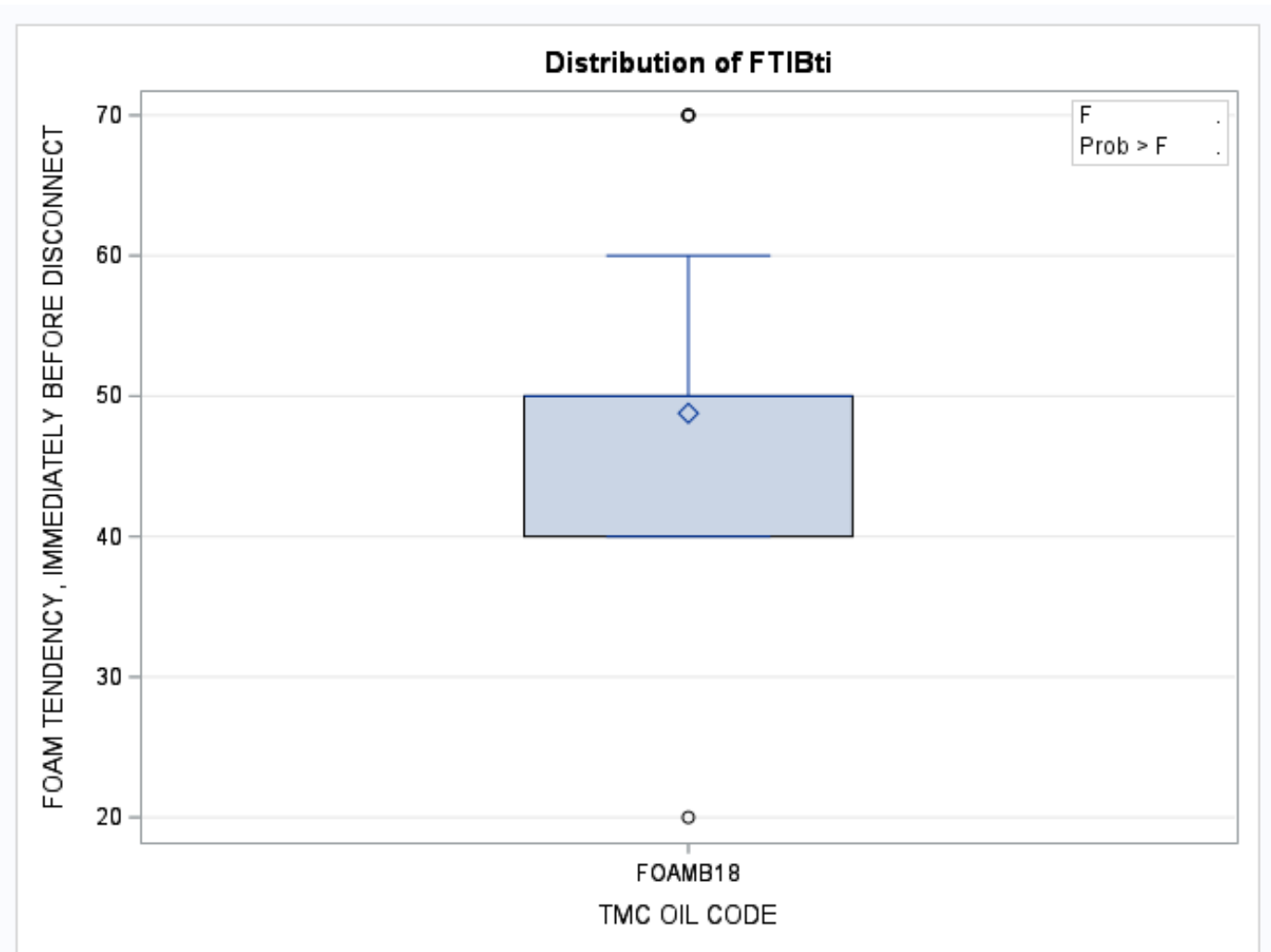
| Analysis Variable : FTIBti | | | | |
|-----------------------------------|-------------|----------------|----------------|----------------|
| N | Mean | Std Dev | Minimum | Maximum |
| 131 | 48.7786260 | 7.3665461 | 20.0000000 | 70.0000000 |

Notes:

Only 1 failing Calibration result for FOAMB18 (FTIBti = 20ml)

Only 3 Calibration results for FOAMB18 at 70mL

FOAMB18 Mean Box and Whisker Plot Foam Tendency (FTIBti)



FTBlyi: Shewhart Severity

D6082 Pooled s - FTIByi 19000000 -99999999 LTMS DATE date DSTEMP

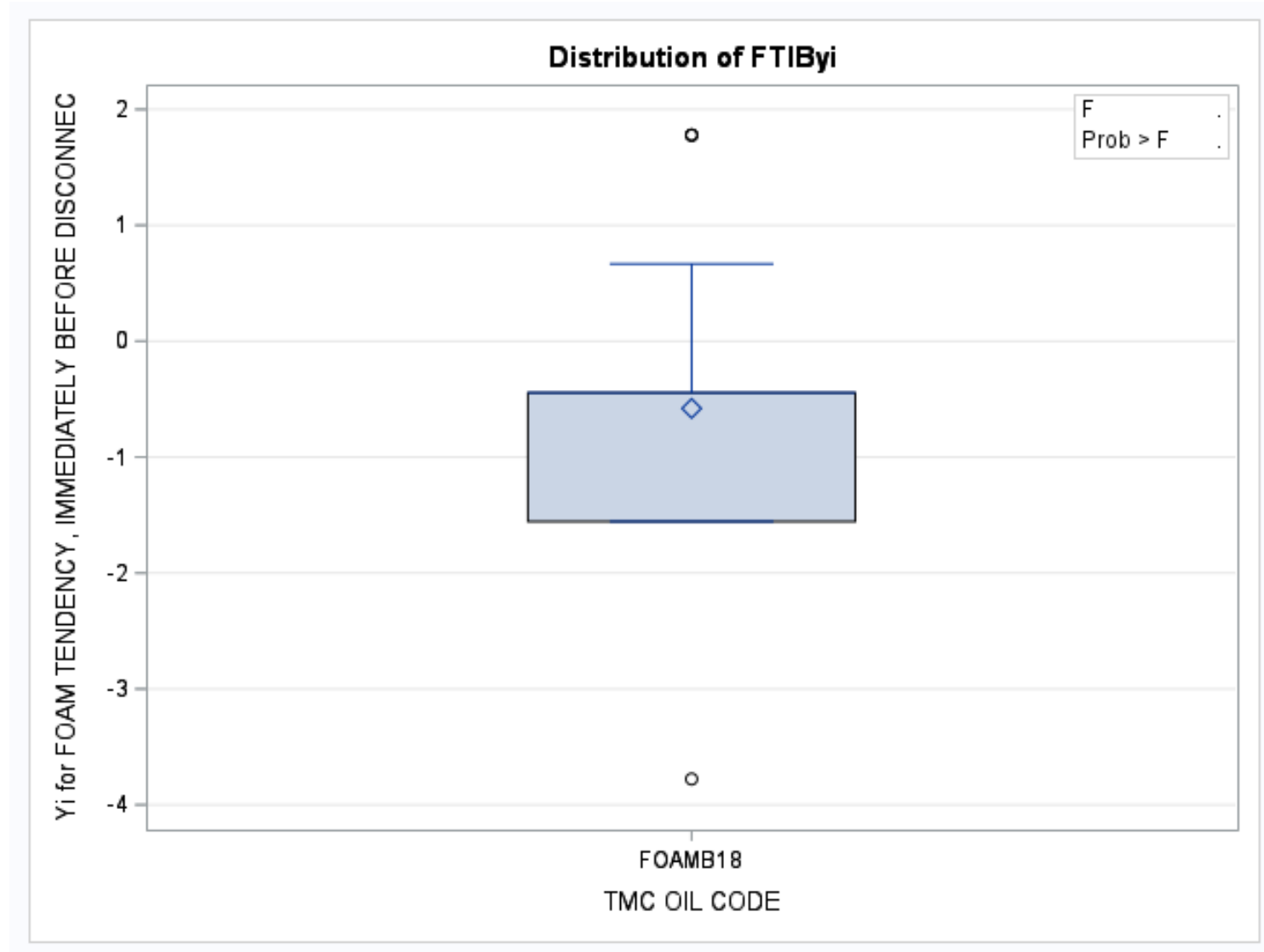
The GLM Procedure

Dependent Variable: FTIByi Yi for FOAM TENDENCY, IMMEDIATELY BEFORE DISCONNEC

| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|-----------------|-----|----------------|-------------|---------|--------|
| Model | 0 | 0.00000000 | . | . | . |
| Error | 130 | 87.09358213 | 0.66995063 | | |
| Corrected Total | 130 | 87.09358213 | | | |

| R-Square | Coeff Var | Root MSE | FTIByi Mean |
|----------|-----------|----------|-------------|
| 0.000000 | -141.0844 | 0.818505 | -0.580153 |

Shewhart Severity Plot: FOAMB18



Suggested Acceptance Bands for FOAMB18

TENDENCY*

(n=131; mean=48.8; s=7.4)

| REF OILS | Target & StDEV Range (Low, High) | | | | REF OILS | Target & StDev Range (Low, High) | | | |
|----------------|-------------------------------------|----------|-----------|-----------|----------------|-------------------------------------|------------|-------------|-------------|
| | Current | | | | | Proposed Revised | | | |
| | target | sd | Low | High | | target | sd | Low | High |
| FOAMB18 | 54 | 9 | 36 | 72 | FOAMB18 | 48.8 | 7.4 | 34.3 | 63.3 |
| 66 (Discrm) | >100 | | >100 | --- | 66 (Discrm) | >100 | | >100 | --- |

* STABILITY RESULTS (after 1 minute) MUST ALWAYS BE ZERO (0).

FOAMB18 Data Review

- Results for the FOAMB18 reference oil is very close to the initial data set.
- FOAMB18 TENDENCY average result is slightly lower than initial target (48.8ml vs 54ml).
 - StDEV of larger data set is tighter (7.4 vs 9)
- Option 1: Keep the current Acceptance Band
 - **40ml to 70ml** (because readings are rounded to nearest 10ml)
 - 36 to 72
- Option 2: Base Acceptance Band on 131 data points
 - **40ml to 60ml** (because the sd is smaller in larger data set)
 - 34 to 63