




## Test Monitoring Center

@ Carnegie Mellon University  
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<http://astmtmc.cmu.edu>  
412-365-1000

MEMORANDUM: 15-008  
DATE: April 8, 2015  
TO: Angela Trader, Chairman, L-33-1 Surveillance Panel  
FROM: Scott Parke   
SUBJECT: L-33-1 Testing from October 1, 2014 through March 31, 2015

Please find attached a summary of testing activity this period.

SDP/sdp/mem15-008.sdp.doc

cc: Frank Farber

Jeff Clark

L-33-1 Surveillance Panel

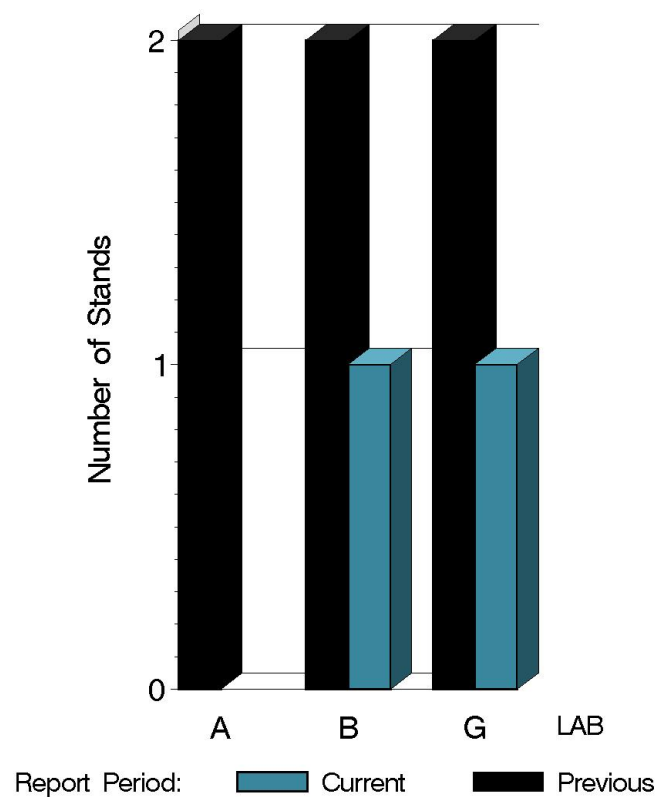
<ftp://ftp.astmtmc.cmu.edu/docs/gear/l331/semiannualreports/l331-04-2015.pdf>

Distribution: email

# L-33-1 (D7038)

|                  | Reporting Data | Calibrated on 3-31-15 |
|------------------|----------------|-----------------------|
| Number of Labs   | 2              | 2                     |
| Number of Stands | 2              | 2                     |

BY-LAB STAND  
DISTRIBUTION



10:05:37 08APR2015

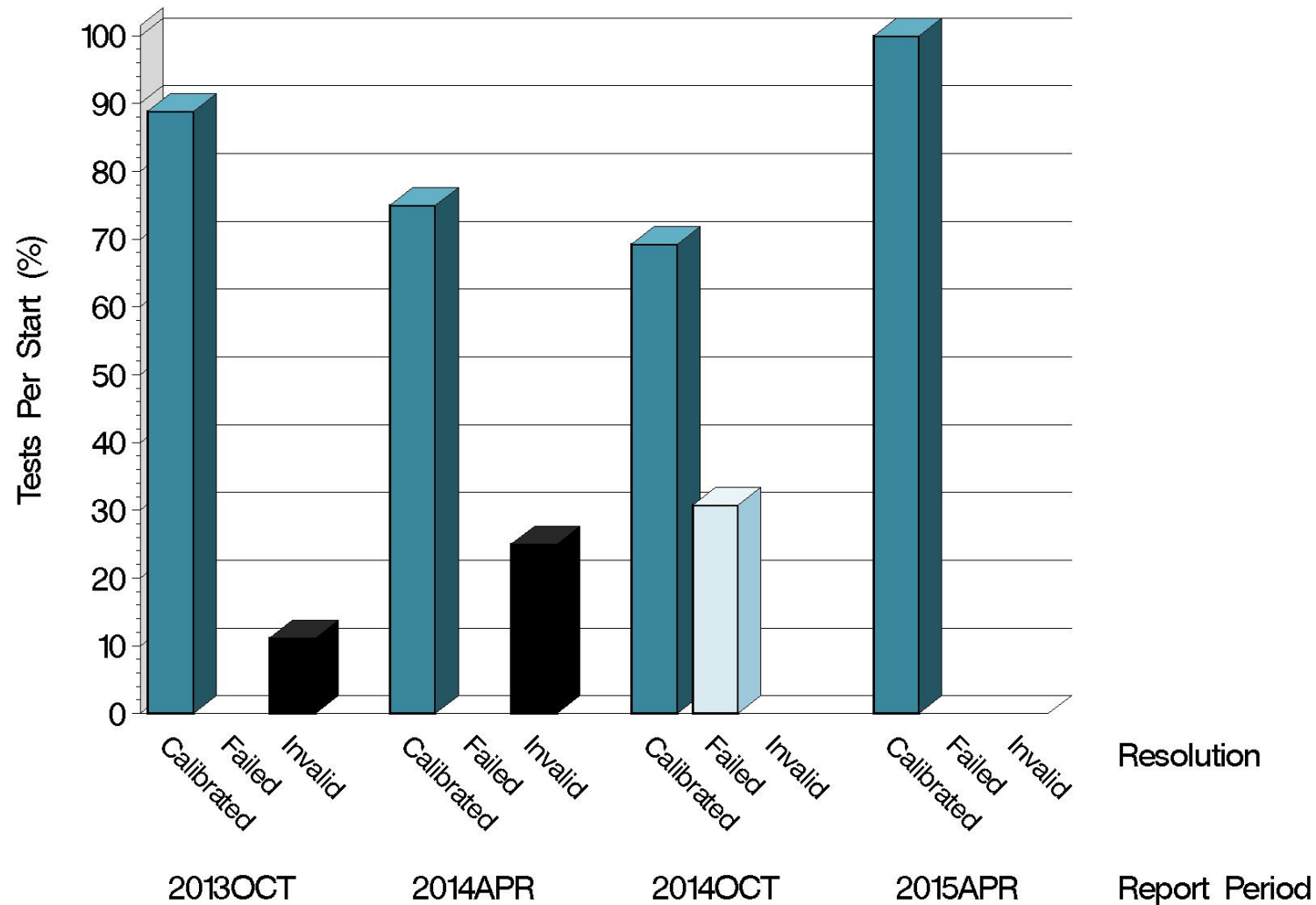
# L-33-1 (D7038)

## Test Distribution by Oil and Validity

|                          |    |       |     |       | Totals      |             |
|--------------------------|----|-------|-----|-------|-------------|-------------|
|                          |    |       |     |       | Last Period | This Period |
|                          |    | 123-2 | 155 | 155-1 |             |             |
| Accepted for calibration | AC | 1     | 0   | 1     | 8           | 2           |
| Rejected (Mild)          | OC | 0     | 0   | 0     | 0           | 0           |
| Rejected (Severe)        | OC | 0     | 0   | 0     | 2           | 0           |
| Rejected (Precision)     | OC | 0     | 0   | 0     | 2           | 0           |
| Invalidated calibration  | LC | 0     | 0   | 0     | 0           | 0           |
| Aborted                  | XC | 0     | 0   | 0     | 0           | 0           |
| Accepted information run | NI | 0     | 0   | 0     | 4           | 0           |
| Total                    |    | 1     | 0   | 1     | 16          | 2           |

# L-33-1 (D7038)

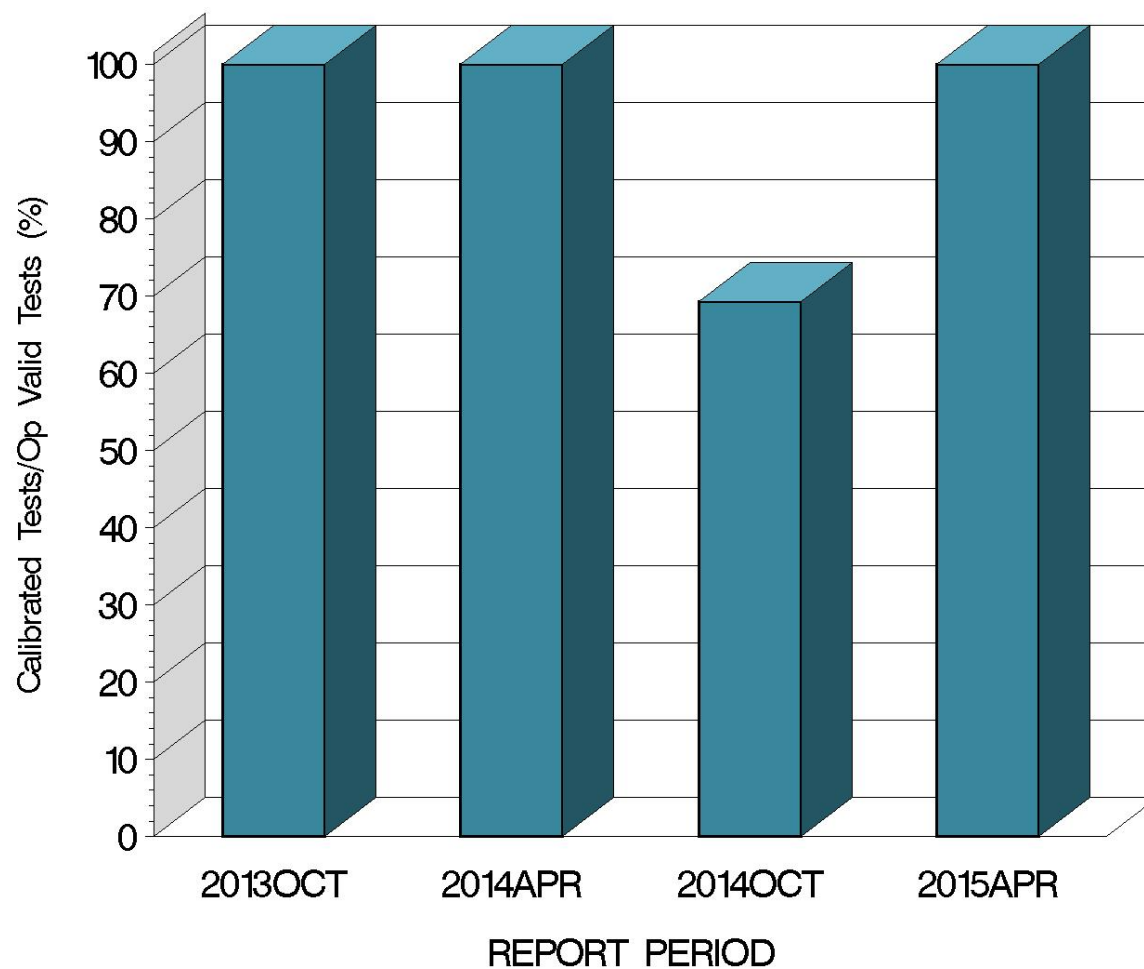
## CALIBRATION ATTEMPT SUMMARY



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# L-33-1 (D7038)

OPERATIONALLY VALID TESTS  
MEETING ACCEPTANCE CRITERIA



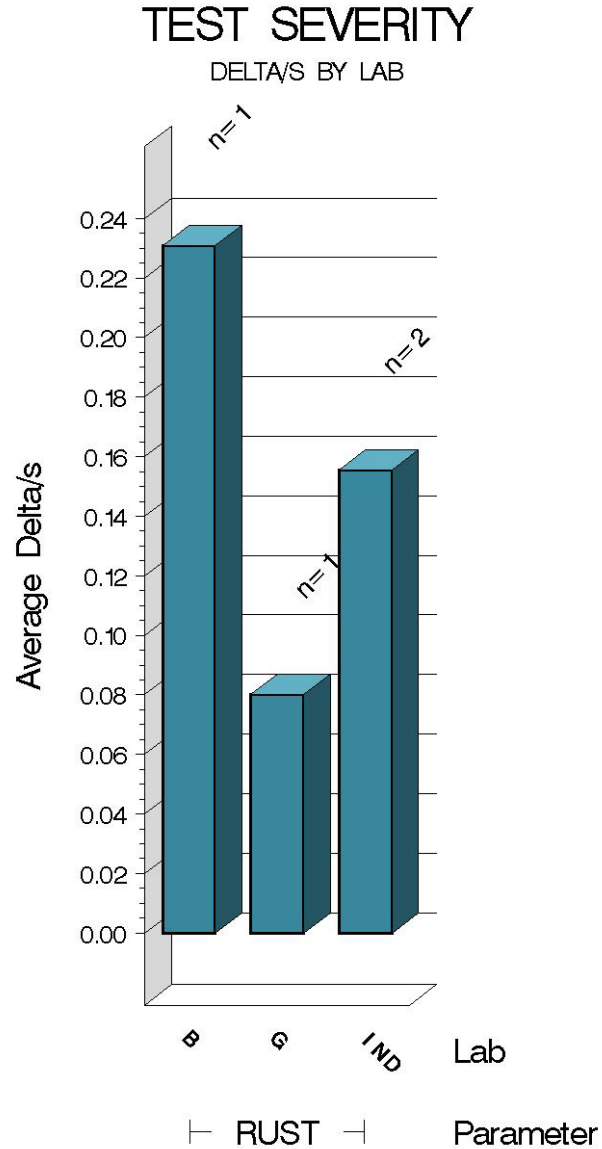
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# L-33-1 (D7038)

## CAUSES FOR LOST TESTS

|     |                                 | Oil   |     |       | Validity |    |    | Loss Rate |        |    |
|-----|---------------------------------|-------|-----|-------|----------|----|----|-----------|--------|----|
| Lab | Cause                           | 123-2 | 155 | 155-1 | RC       | LC | XC | Lost      | Starts | %  |
|     | No tests were lost this period. |       |     |       |          |    |    | 0         | 2      | 0% |
|     | Lost                            | 0     | 0   | 0     | 0        | 0  | 0  |           |        |    |
|     | Starts                          | 1     | 0   | 1     | 2        | 2  | 2  |           |        |    |
|     | %                               | 0%    | 0%  | 0%    | 0%       | 0% | 0% |           |        |    |

# L-33-1 (D7038)

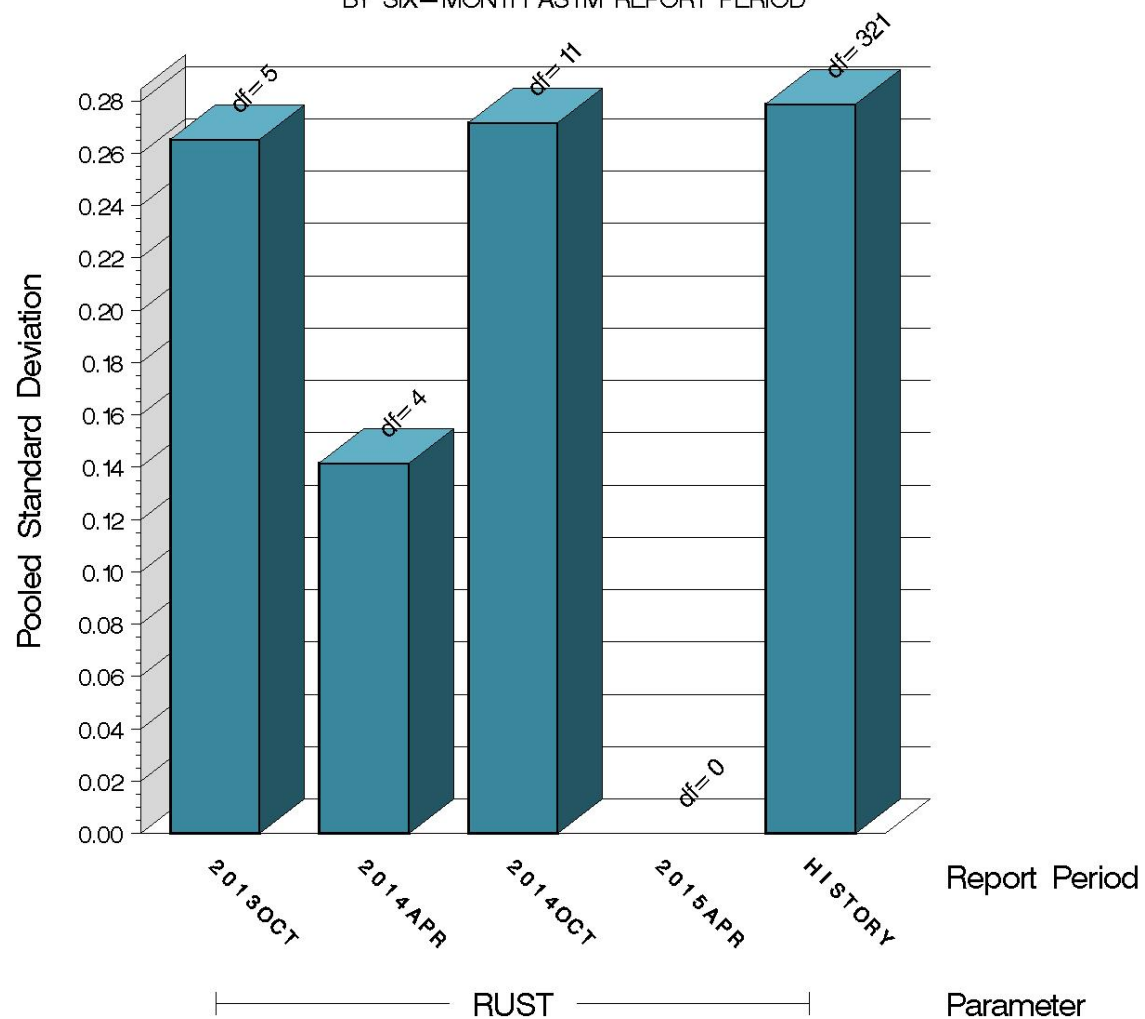


| Average $\Delta/s$ by Lab |   |       |
|---------------------------|---|-------|
| Lab                       | n | RUST  |
| B                         | 1 | 0.231 |
| G                         | 1 | 0.080 |
| Industry                  | 2 | 0.155 |
| Shift                     | 2 | 0.039 |

# L-33-1 (D7038)

## TEST PRECISION

POOLED STANDARD DEVIATION  
BY SIX-MONTH ASTM REPORT PERIOD



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# L-33-1 (D7038)

## SUMMARY OF SEVERITY & PRECISION

| Severity  |
|---|
| Average RUST $\Delta$ /s this period was 0.155. Using the target standard deviation for oil 155, this equates to 0.039 merits mild. |
| Precision   |
| Precision remained within-limits throughout the period.   |

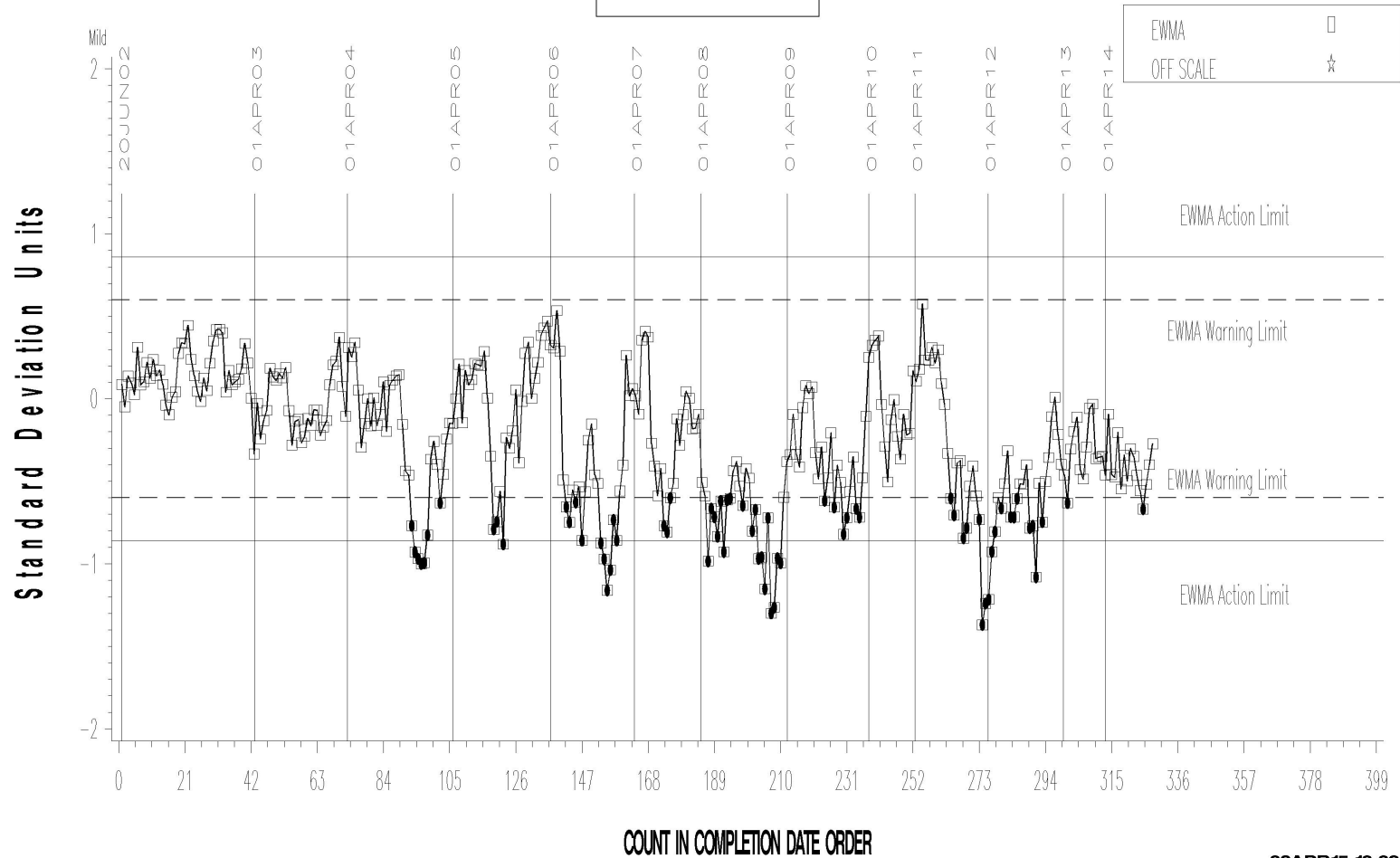
Industry control charts follow.

# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

LTMS Severity Analysis



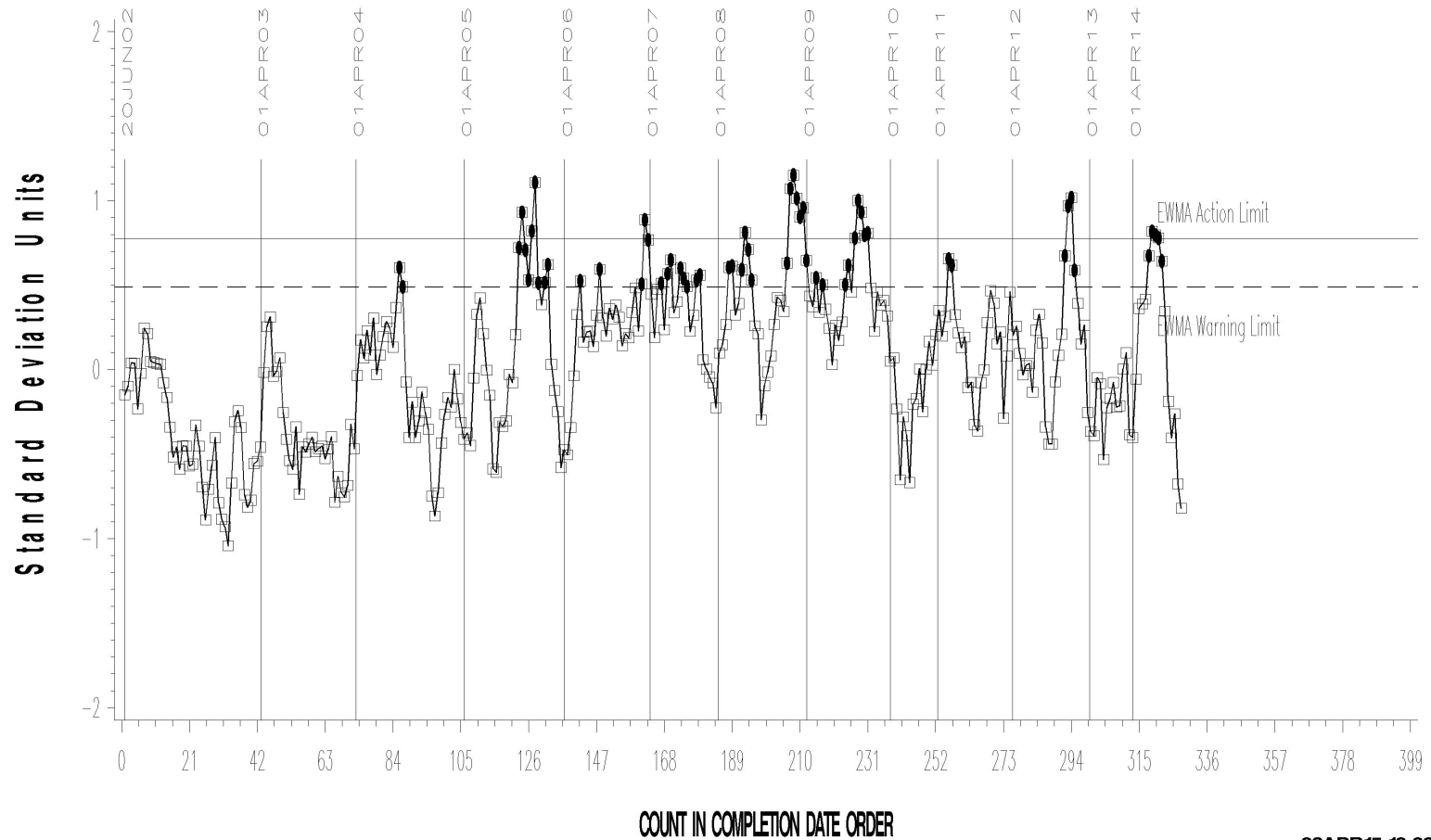
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# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

LTMS Precision Analysis



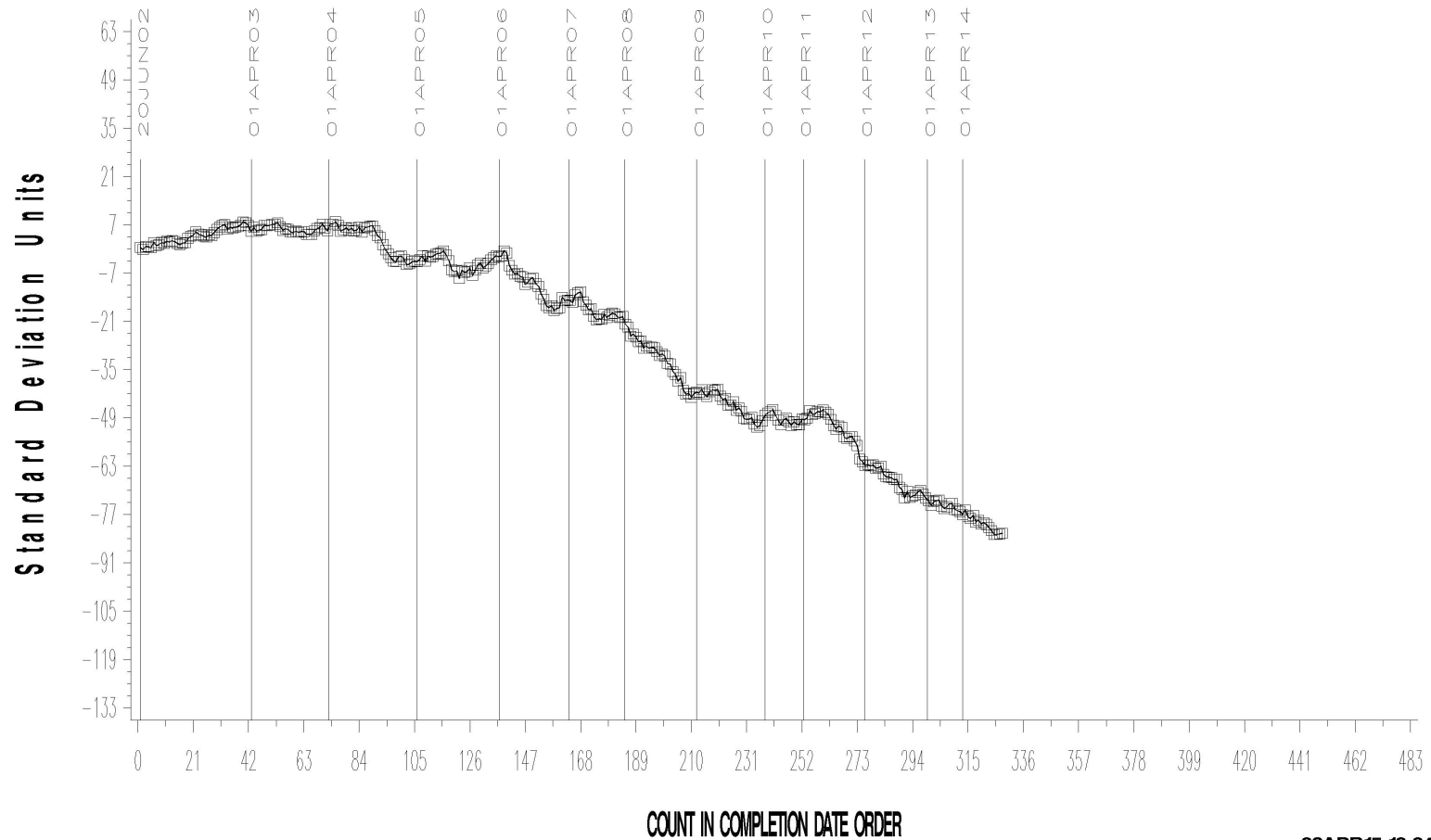
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# L-33-1 (D7038)

L-33-1 INDUSTRY OPERATIONALLY VALID DATA

FINAL RUST RESULT

CUSUM Severity Analysis



08APR15:10:04

# L-33-1 (D7038)

## TIMELINE ADDITIONS

| Effective Date | Information Letter | Event                             |
|----------------|--------------------|-----------------------------------|
|                |                    | There were no timeline additions. |

# L-33-1 (D7038)

## LAB VISITS

No L-33-1 lab visits were conducted during this period.

## INFORMATION LETTERS

No information letters were issued this period.

# L-33-1 (D7038)

## STATUS OF REFERENCE OIL SUPPLY

|       |             | @ TMC |         |
|-------|-------------|-------|---------|
| Oil   | Cans @ Labs | Cans  | Gallons |
| 123-2 | 6           | 151   | 151.8   |
| 155   | 0           | 15    | 15.0    |
| 155-1 | 10          | 265   | 265.0   |
| Total | 16          | 431   | 431.8   |

The TMC quantity remaining presumes usage only for L-33-1 testing. Oil 155/155-1 is also used in other test areas (L-37, L-37-1, L-60-1, and HTCT).