

## OSCT Surveillance Panel Meeting Minutes

From Teleconference Conducted on 9/29/08

Don Bell (OSCT Chairperson)

9/30/08

### Attendees:

Mike Kasimirsky (TMC)  
Jerry Gropp (Lz)  
Don Bartlett (Lz)  
Don Bell (Afton)  
Bruce McGlone (ArvinMeritor)  
Becky Grinfield (SWRI)  
Diane Misich (Lz)  
Clayton Knight (TEI)  
Zack Bishop (TEI)

### Minutes:

We reviewed the recent reference seal data from Lz that is available on the TMC website for the new Fluoroelastomer batch, FL-374, consisting of 200 slabs. SWRI will not have data available until mid-October 2008 for this batch of FL-374. It will be reviewed by TMC at that time, and if it fails to meet Shewart severity limits, then D. Bell will be notified and a possible OSCT SP teleconference will possibly be established for further review of the data. Inspection of the FL-374 Lz-generated data relative to Shewart severity limits shows that shore hardness, % volume change, and % elongation for FL-374 fall within the current Fluoroelastomer acceptance bands and most values, aside from shore hardness in reference oil 161-1, are very close to typical using TMC reference oils 160-1 and 161-1. The shore hardness in reference oil 161-1 is still within the limits, just slightly elevated.

Motion by M. Kasimirsky and seconded by J. Gropp: Effective 9/29/08, approve Fluoroelastomer batch FL-374 for reference and candidate oil tests since the data are within acceptance bands. Motion approved (4 approved/0 abstentions/0 opposed).

TMC is in the process of distributing FL-374 to test labs for candidate testing as per orders placed by the test labs. TMC will re-order a new lot of Fluoroelastomer.

Freudenberg notified TEI that the next shipment of nitrile, NI-333, will be delayed by at least three weeks, and the current lot of NI-332 will expire on October 10<sup>th</sup> 2008. SWRI

only has 5 sheets and Lz is also extremely low on nitrile and are to provide a count to D. Bell, thus a severe nitrile shortage exists.

In order to investigate the possibility of extending the elastomer shelf life beyond the current 2 years, the attached list of older elastomers was reviewed by the panel. The objective is to test an older lot of elastomer that is at least 5 years old with the goal of revising the shelf life to 5 years and therefore allowing labs to use any of the elastomers that meet this requirement, thus the few sheets of NI-332 could be used past October 10<sup>th</sup> and older lots of Fluoroelastomer and Polyacrylate may also then be available for candidate testing as well. However, it takes 22 sheets total to conduct the reference testing by both labs, so there was not a sufficient quantity of Polyacrylate. The only quantity (55 slabs as per TEI on 9/29/08) of nitrile available for this testing was ~3 years old. During the meeting, the table erroneously showed that there were 51 slabs of FL-363 available for testing that were ~5 years old, however, upon further investigation by TEI, there is only 1 slab of FL-363 available. TEI did confirm that there is 91 slabs of FL-364 that is 3 years old, so this may be an alternative lot to test. Unfortunately, the following motion made by M. Kasimirsky and seconded by D. Misich that was approved (4 approved/0 disapproved/0 abstentions) is no longer completely valid due to the lack of FL-363.

Motion: Each lab to investigate the possibility of extending the shelf life allowance by conducting reference test data as per the new batch approval on NI-330 and FL-363. The Panel will be contacted to discuss the next step for testing to potentially extend shelf life.

A negative vote was received on the D02 Ballot of OSCT Information Letter 07-2. The negative voter noted that ASTM D 471 allows for a 2°C temperature variation of test oils, while both the IL and ASTM D5662 show a 1°C test oil temperature variation (see 8.4.4 in method). In 8.7, the temperature isn't explicitly listed as one of the areas in which the test deviates from the procedure listed in D 471. To resolve this issue, a motion was made by M. Kasimirsky and seconded by B. Grinfield. Motion: Approve the addition of 8.7.1.2 as written below to be added to this section in ASTM D5662:

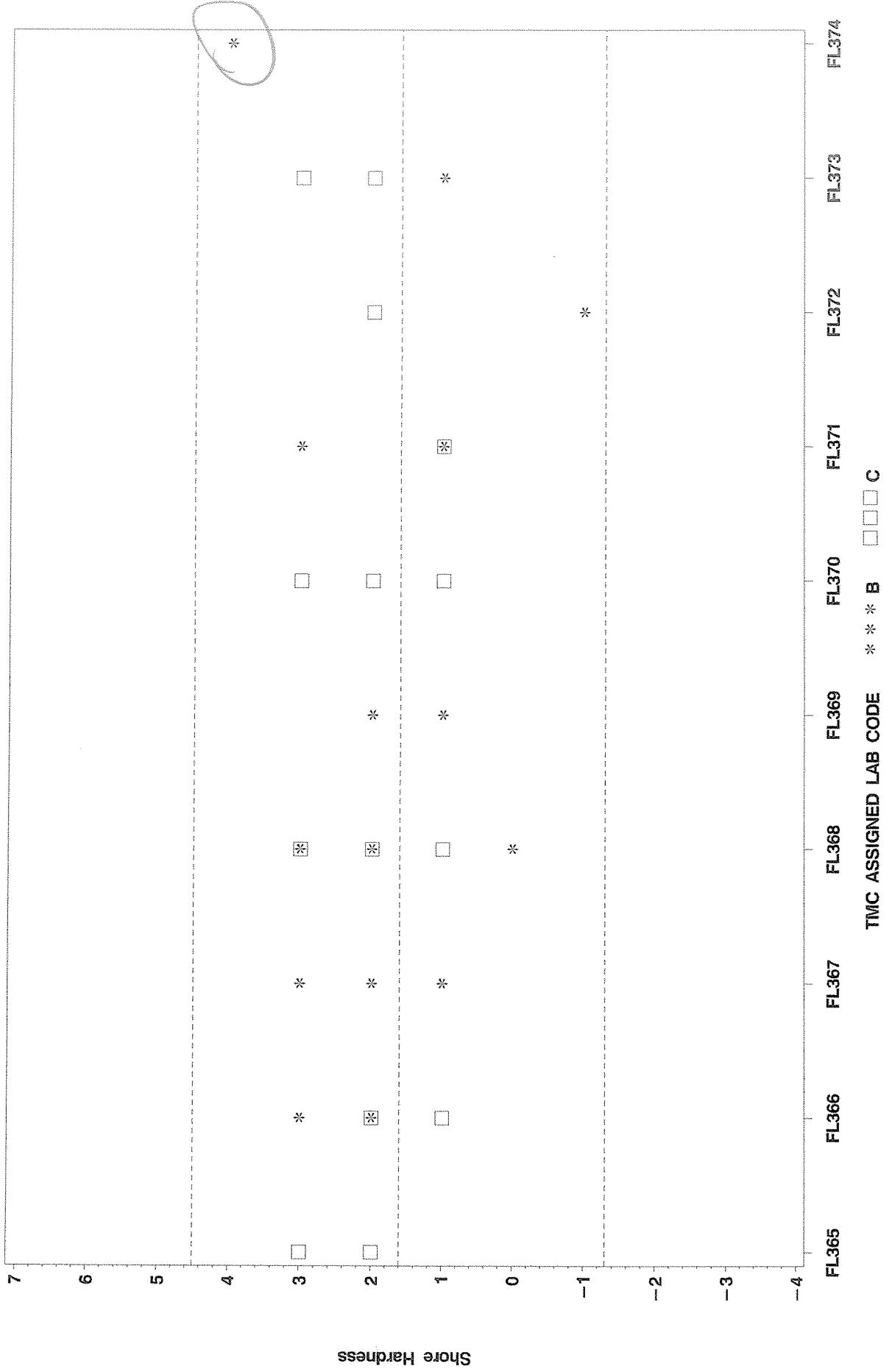
8.7.1.2 Conduct all reference and non-reference oil testing on each seal elastomer in an oil bath capable of maintaining a test oil temperature within  $\pm 1^\circ\text{C}$  for a period of  $240 \pm 0.5$  h.

The motion was approved (4 approved/0 disapproved/0 abstentions). This is an editorial change since each lab is currently running this way, but this is necessary to clarify this critical parameter. TMC will issue a new OSCT information letter to address the D02 ballot on this topic.

OSCT (FL)

Reference Oil 161-1 (Mean = 1.6)

Shore Hardness Results VS Shewhart Severity Limits

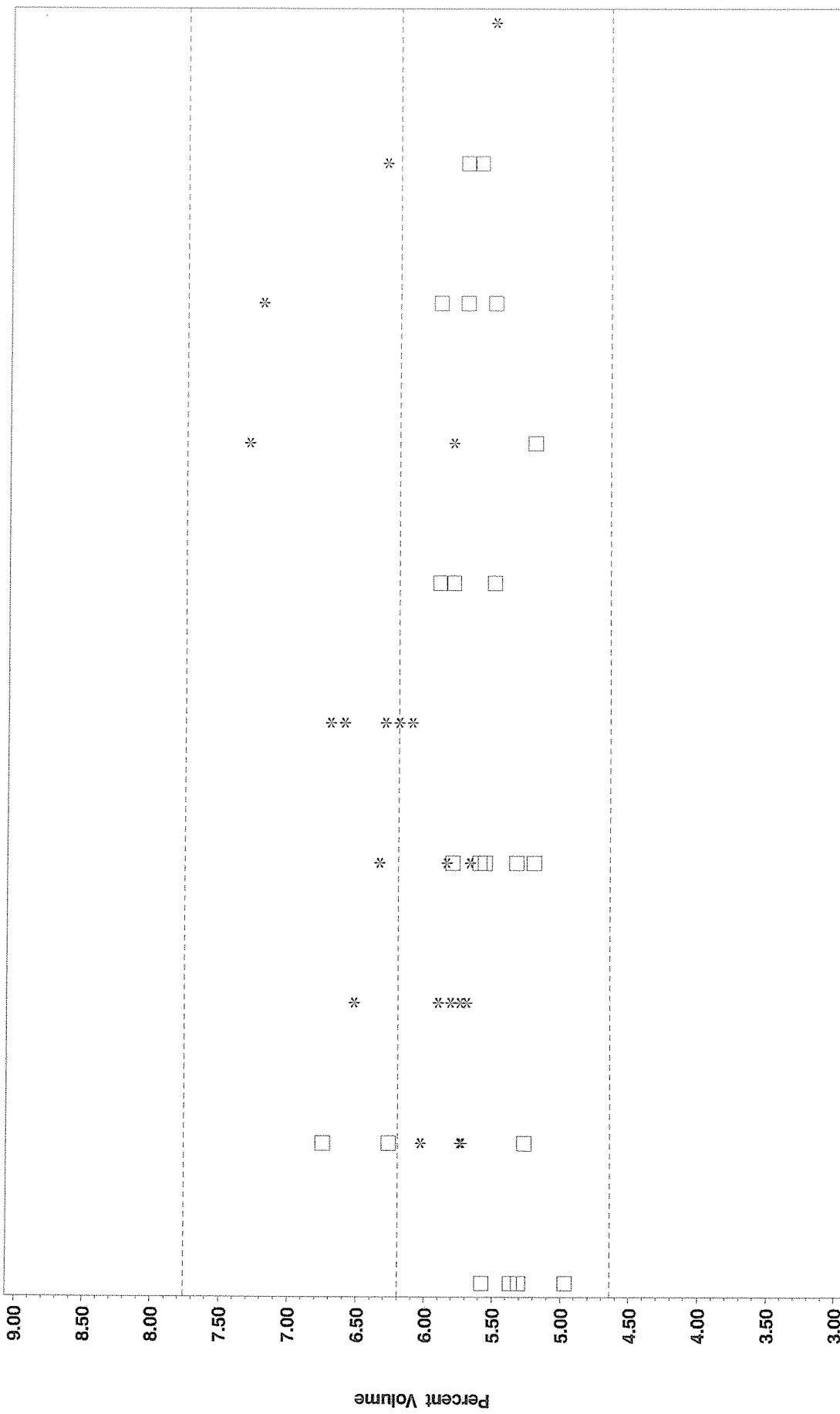


TMC ASSIGNED LAB CODE \* \* \* B □ □ □ C

# OSCT (FL)

Reference Oil 161-1 (Mean = 6.199)

## Percent Volume Results VS Shewhart Severity Limits

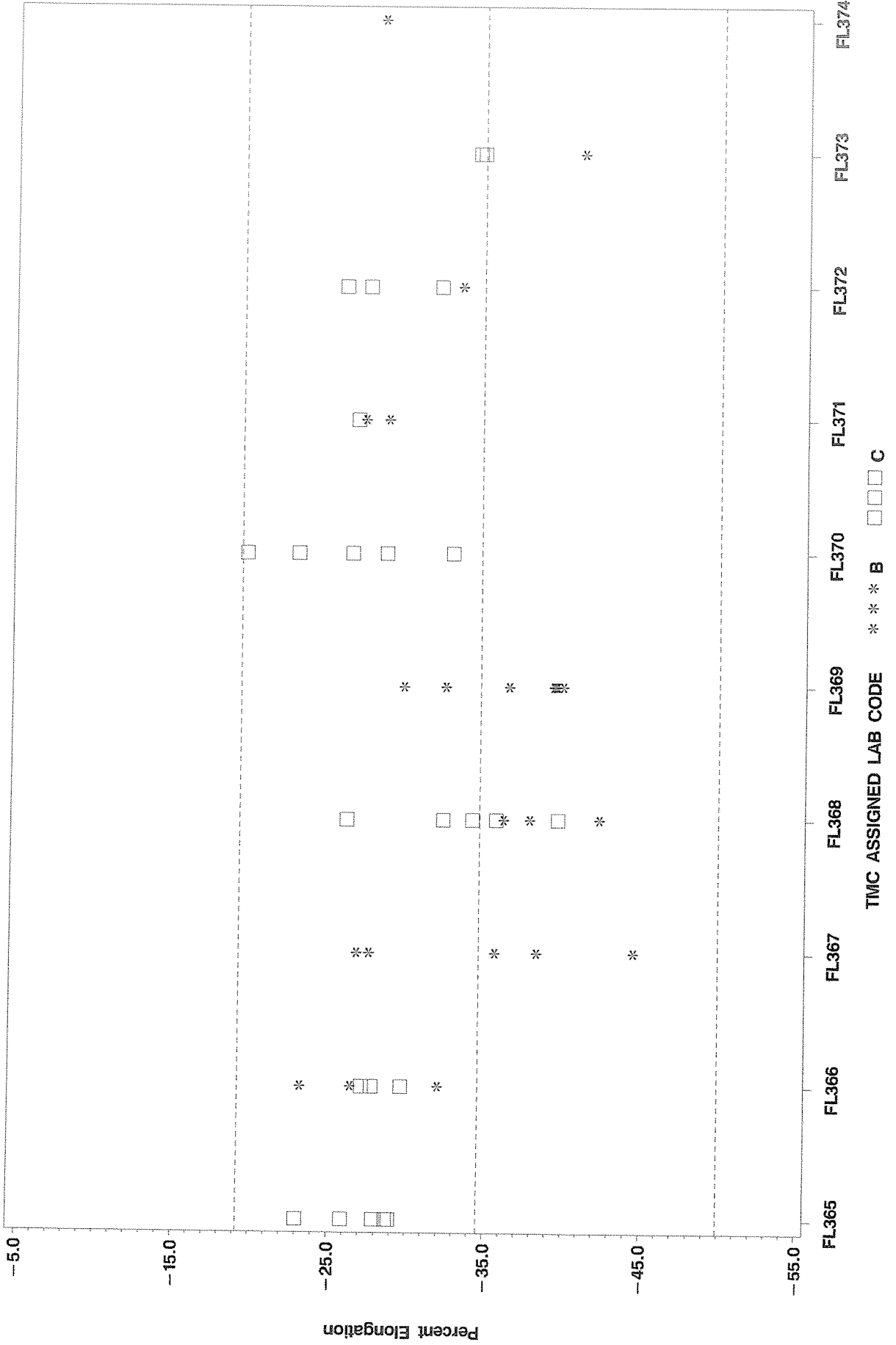


FL365 FL366 FL367 FL368 FL369 FL370 FL371 FL372 FL373 FL374  
TMC ASSIGNED LAB CODE \* \* \* B □ □ □ C

## OSCT (FL)

Reference Oil 161 -1 (Mean = -34.57)

### Percent Elongation Results VS Shewhart Severity Limits





Bell, Don

From: ZACK BISHOP [zrbi@sbcglobal.net]  
Sent: Wednesday, September 03, 2008 12:14 PM  
To: Bell, Don  
Cc: Zack Bishop; Ron Buck; John Knight; Clayton Knight  
Subject: List of Expired OSCT Elastomers at TEI

Don,

I had an action item from the last teleconference meeting to put together a list of expired elastomers currently stored in refrigerators at TEI. Below is that list:

| Elastomer | Manufacture Date | Quantity of Slabs Left          |
|-----------|------------------|---------------------------------|
| PA 334    | 12/11/2003       | 4                               |
| PA-327    | 1/31/2000        | 9                               |
| NI-326    | 11/16/2001       | 90                              |
| NI-321    | 1/31/2000        | 60                              |
| NI-324    | 2/28/2001        | 69                              |
| NI-330    | 3/12/2005        | 60 <sup>55</sup>                |
| NI-319    | 8/16/1999        | 8                               |
| NI-329    | 11/21/2003       | 16                              |
| NI-328    | 5/12/2003        | 6                               |
| NI-320    | 11/12/1999       | 30                              |
| FL-347    | 10/29/1999       | 27                              |
| FL-360    | 10/31/2003       | 4                               |
| FL-361    | 11/8/2003        | 6                               |
| FL-362    | 4/22/2003        | 4                               |
| FL-350    | 10/5/2000        | 6                               |
| FL-359    | 3/24/2003        | 8                               |
| FL-357    | 3/5/2003         | 8                               |
| FL-356    | 2/26/2003        | 15                              |
| FL-364    | 2/14/2005        | 91 <i>confirmed</i>             |
| FL-365    | 2/14/2005        | 16                              |
| FL-349    | 7/4/2000         | 39                              |
| FL-367    | 3/1/2006         | 57                              |
| FL-363    | 11/6/2003        | 51 <i>→ only 1 (correction)</i> |

Any of the above material can be sent to the labs for use in the study of determining actual shelf life of elastomer slabs. We await your direction.

Best regards,

Zack Bishop