

Oil Seal Compatibility and Testing (OSCT, ASTM D5662) Surveillance Panel

Meeting Minutes

Teleconference

Don Bell

9/23/2010

Attendees:

Jerry Gropp (Lz) Don Bell (Afton) Scott Parke (TMC) Michele Holzer (SWRI)
Jennifer Keiter (Lz) Thelma Marougy (Eaton) John Mattern (Lz, phone)

The OSCT Surveillance Panel meeting was called to order at 2:04 pm on 9/23/2010 by D. Bell.

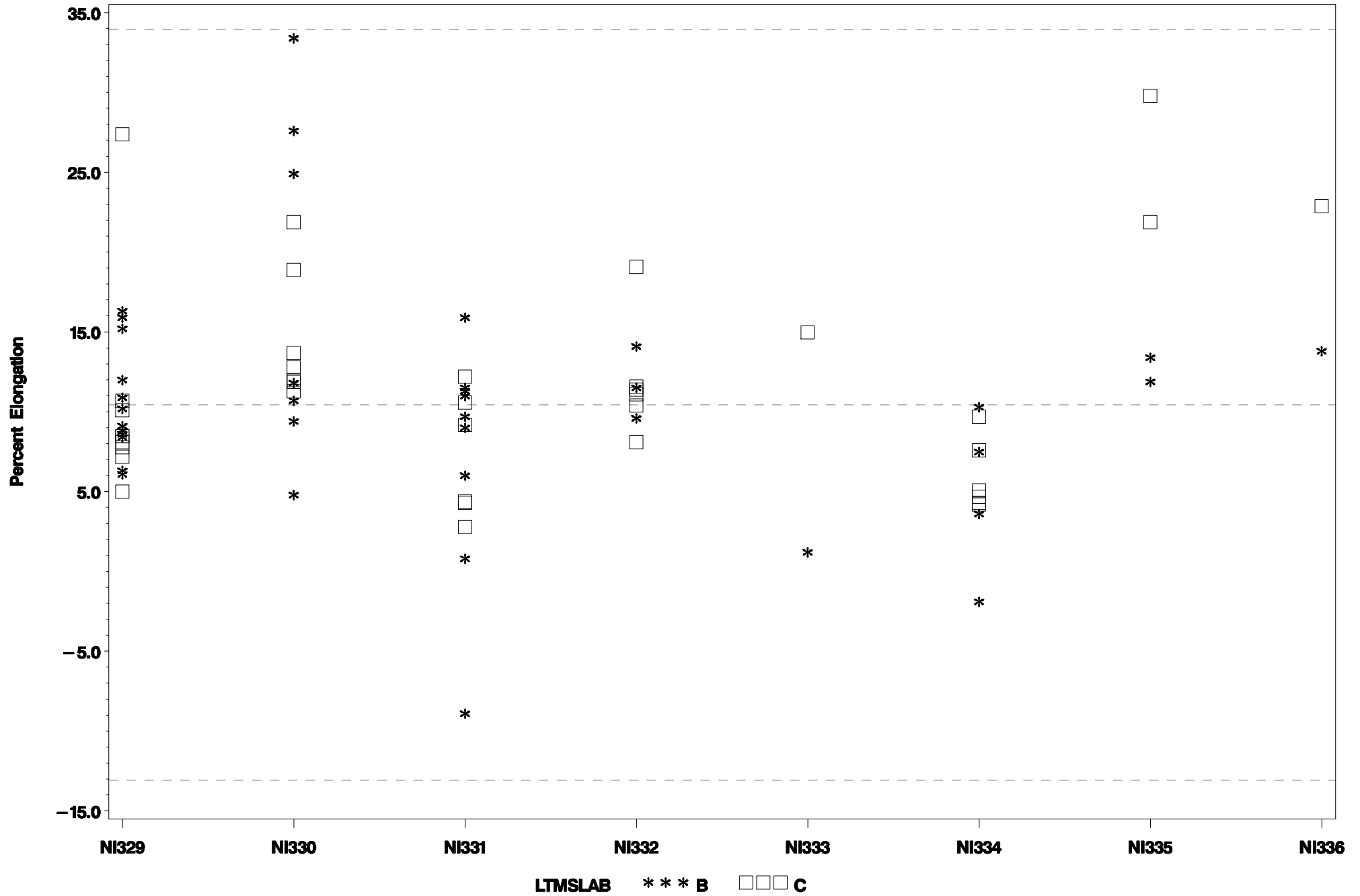
The qualification data from SWRI and Lubrizol was reviewed for the new lot of nitrile, NI336. The attached data included percent elongation, percent volume change, and shore hardness in both TMC reference oils 161-1 and 168 for NI336. All data was within the Shewhart acceptance bands and both lab values were very similar. A motion made by J. Gropp and 2nd by D. Bell to approve NI336 for use in ASTM D5662 effective immediately was passed unanimously (4 approved). Test Engineering Institute will be instructed to release NI336 for sale as orders are placed by the test labs.

For supply security, we would like to obtain an alternate supplier for elastomers. D. Bell sent out an inquiry to about 8 different potential elastomer suppliers to determine their interest in supplying seals similar to the limits shown below for D5662 testing. I only received two responses to the request that included BRUSS in Germany and Parker Hannifin in the US. Both asked numerous questions regarding the requirements. Since I could not answer all of the questions and the Surveillance Panel was not well represented, we decided it would be best to wait until the November 2, 2010 ASTM D5662 meeting in Detroit to further discuss the topic in more detail. This will allow us to outline more detailed requirements and provide more detailed information for feedback to the potential new seal suppliers. The Panel was asked to give some thought as to questions or specific requirements we would like the potential new seal suppliers to consider.

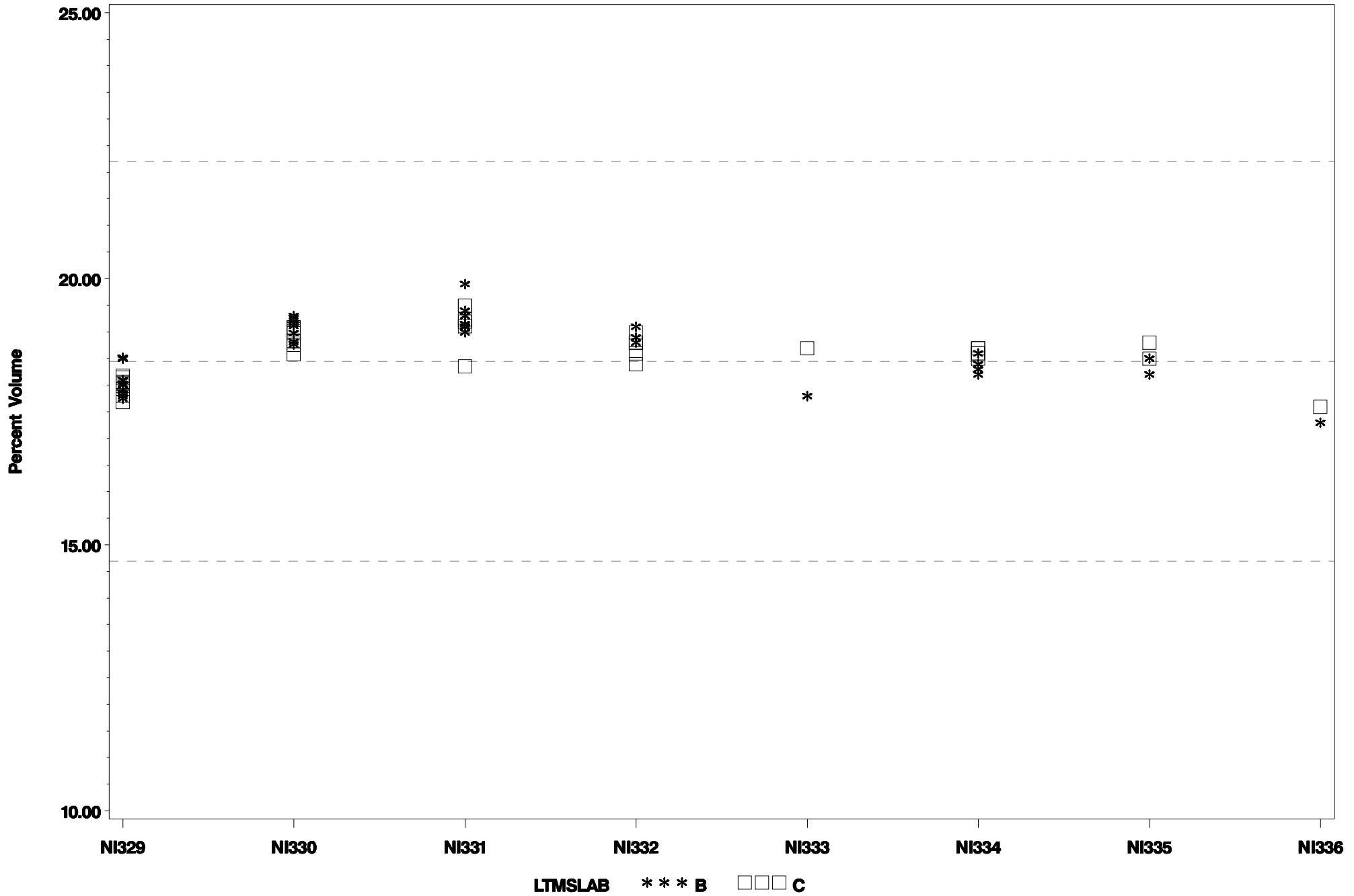
	Polyacrylate	Fluoroelastomer	Nitrile
Hardness Points	75-85	75-85	70-75
% Elongation	80-120	150 min., 200 typical	350-550
Tensile Strength, kg/cm ²	65-100	95 min., 106 typical	120-170
Sp gravity	1.385-1.405	2.09-2.12	1.490-1.510

The meeting was adjourned at 2:16 pm on 9/23/2010.

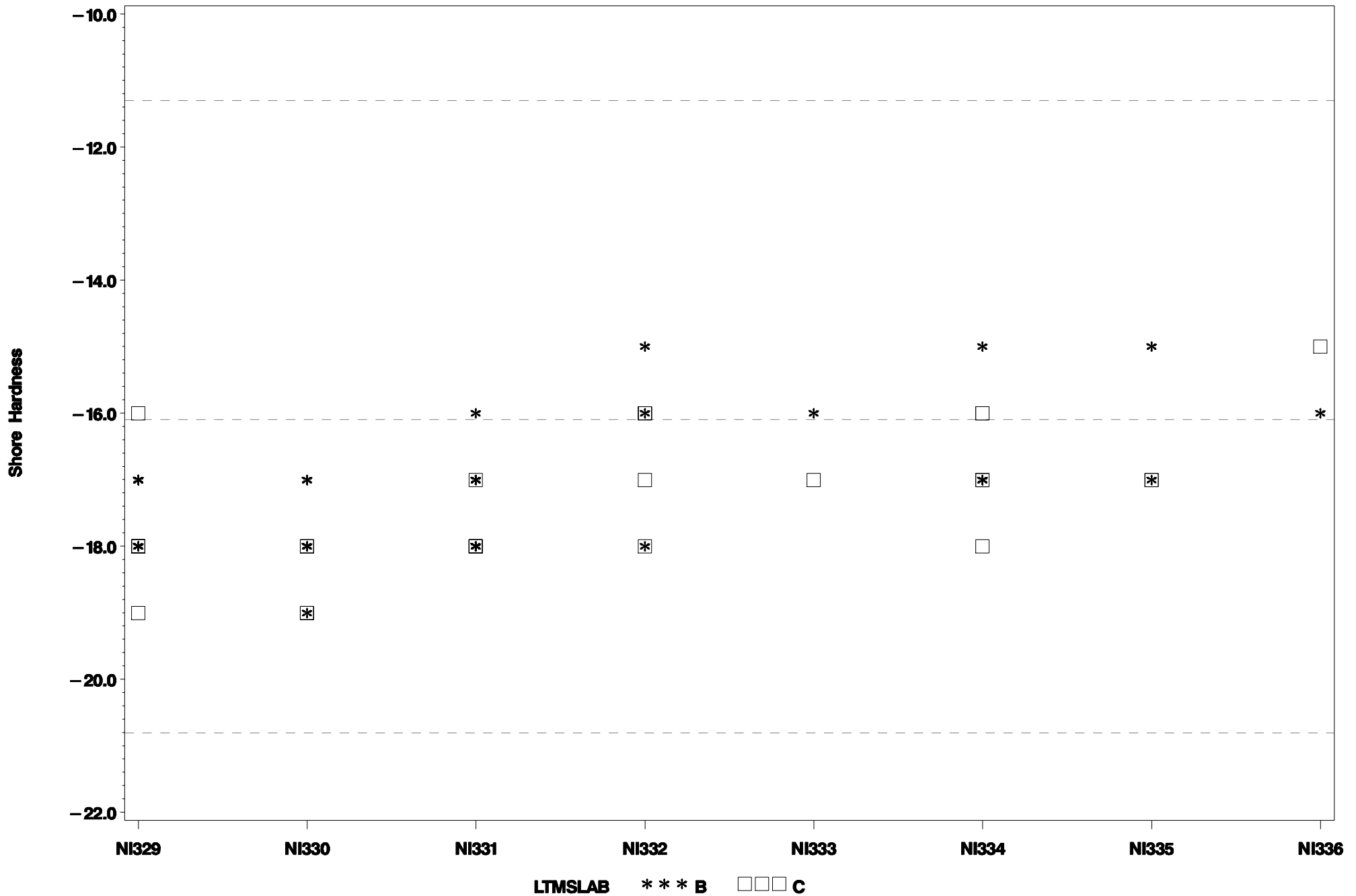
OSCT (NI)
Reference Oil 161-1 (Mean = 10.43)
Percent Elongation Results VS Shewhart Severity Limits



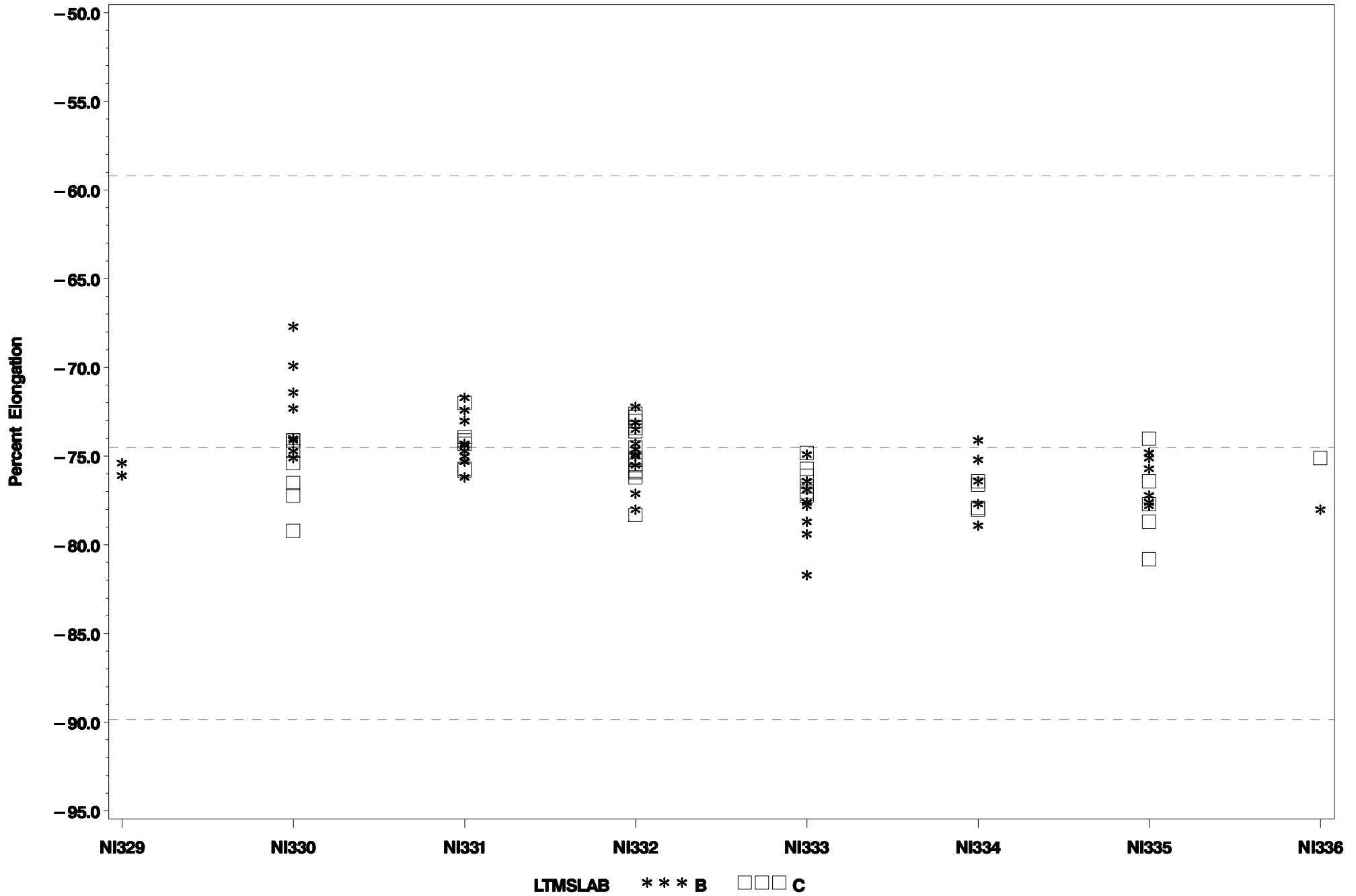
OSCT (NI)
Reference Oil 161-1 (Mean = 18.444)
Percent Volume Results VS Shewhart Severity Limits



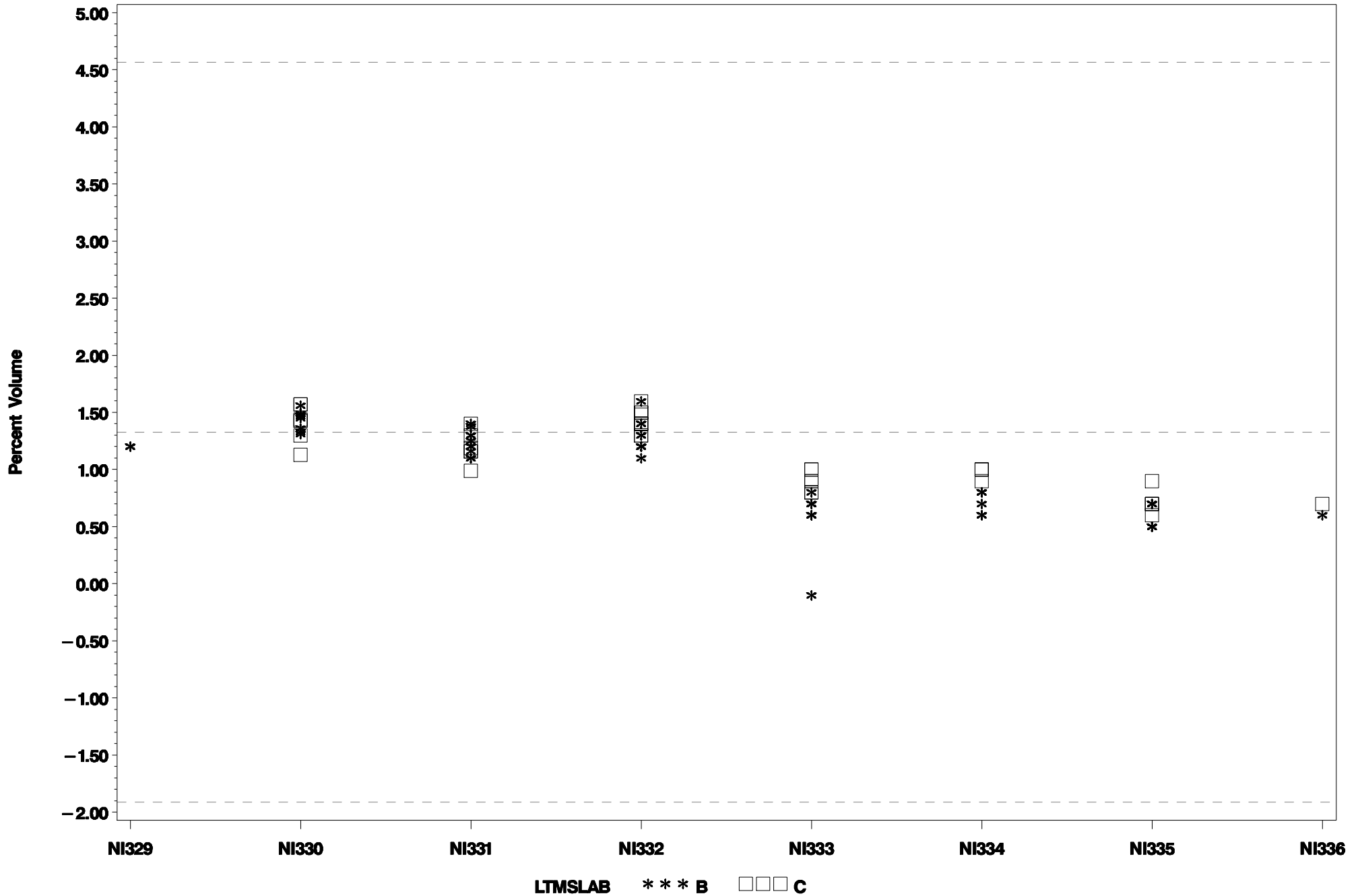
OSCT (NI)
Reference Oil 161-1 (Mean = -16.1)
Shore Hardness Results VS Shewhart Severity Limits



OSCT (NI)
Reference Oil 168 (Mean = -74.52)
Percent Elongation Results VS Shewhart Severity Limits



OSCT (NI)
Reference Oil 168 (Mean = 1.326)
Percent Volume Results VS Shewhart Severity Limits



OSCT (NI)
Reference Oil 168 (Mean = 3)
Shore Hardness Results VS Shewhart Severity Limits

