OSCT Task Force Teleconference Meeting

Meeting Minutes from Teleconference Conducted on 5/5/06

Don Bell (OSCT Chairperson)

5/5/06

Attendees:

Don Lind (TMC)
Diane Korpi-Misich (Lz)
Don Bell (Afton)
Becky Grinfield (SWRI)
Jerry Gropp (Lz)
Jennifer K. (Lz)

Three new lots of elastomers consisting of polyacrylate (PA 336), fluoroelastomer (FL 368), and nitrile (NI 331) were sent from the Test Engineering Inc. (TEI) to SWRI and Lz for initial elastomer testing as per the March 1, 2006 approved protocol for qualifying new elastomer batches.

A teleconference was held with OSCT Task Force members on 5/5/06 to review the recent initial volume in water and air, as well as hardness values generated at Lz and SWRI on each new lot of elastomers. Table I below shows the data set from both labs. The mean hardness and volume values for each elastomer match very well with those values from the previous 5 lots of each elastomer as shown in Table II below.

The OSCT Task Force agreed to approve the initial data set and thus both test labs were instructed to proceed with reference oil testing each new batch of elastomer as per ASTM D5662 using only 6 coupons and 6 dumbells run in 2 test tubes per reference oils noted below:

	Reference Oil
Polyacrylate PA 336	TMC 160 & 161
Fluoroelastomer FL 368	TMC 160 & 161
Nitrile NI331	TMC 161 & 168

Upon completion of this testing in about 2 weeks or so, data will be sent to the TMC for compiling and plotting the data for comparison to the existing elastomer batches. An OSCT Surveillance Panel teleconference will be coordinated by the Chairperson to obtain approval for these new elastomer batches.

Table I

	PA 336 (LZ)			
	dry wt (l)	H2O wt (l)	duro (l)	volume
	3.4669	0.9945	78	2.47
	3.5344	1.0161	79	2.52
	3.4753	0.9983	78	2.48
	3.565	1.0236	79	2.54
	3.5462	1.0181	79	2.53
	3.4996	1.0049	79	2.49
AVG	3.51	1.01	78.67	2.51

	PA 336 (SR)		
	dry wt (l)	H2O wt (l)	duro (l)
	3.5189	1.0081	79
	3.5023	1.0015	79
	3.6382	1.0403	79
	3.5477	1.0162	79
	3.4098	0.9744	79
	3.5356	1.0103	79
AVG	3.53	1.01	79.00

	FL 368 (LZ)			
	dry wt (l)	H2O wt (l)	duro (l)	volume
	5.0742	2.6821	76	2.39
	5.0763	2.6755	76	2.4
	5.1166	2.7042	75	2.41
	5.2691	2.7779	77	2.49
	5.0032	2.6386	77	2.36
	4.9663	2.6237	76	2.34
AVG	5.08	2.68	76.17	2.40

	FL 368 (SR)		
	dry wt (l)	H2O wt (l)	duro (l)
	5.0952	2.6895	77
	5.1104	2.6973	77
	5.1608	2.7265	78
	5.2165	2.7545	77
	5.2252	2.7591	78
	5.2592	2.7768	77
AVG	5.18	2.73	77.33

	NI 331 (LZ)			
	dry wt (l)	H2O wt (l)	duro (l)	volume
	3.7215	1.2553	73	2.47
	3.7165	1.2533	73	2.46
	3.6957	1.245	73	2.45
	3.743	1.2614	74	2.48
	3.7119	1.2512	74	2.46
	3.6821	1.2414	73	2.44
AVG	3.71	1.25	73.33	2.46

	NI 331 (SR)		
	dry wt (l)	H2O wt (l)	duro (l)
	3.7228	1.2528	75
	3.7299	1.2530	74
	3.7535	1.2598	75
	3.7355	1.2553	74
	3.7285	1.2536	75
	3.7594	1.2657	75
AVG	3.74	1.26	74.67

Table II

FL362

Variable	N	Mean	Std Dev	Minimum	Maximum
Hardness	15	77.5333333	0.8338094	76.0000000	79.0000000

Volume	15	2.4441333	0.0243541	2.3950000
2.4670000				

FL363

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	18	76.2222222	0.6467617	75.0000000
77.0000000				
Volume	18	2.4167222	0.0159809	2.3780000
2.4430000				

FL364

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	12	78.0000000	0	78.0000000
78.0000000				
Volume	12	2.4375833	0.0172914	2.4040000
2.4700000				

FL365

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	10	77.4000000	0.8432740	76.0000000
78.0000000				
Volume	10	2.4703000	0.0170558	2.4430000
2.4890000				

FL366

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	12	76.5833333	1.2401124	75.0000000
79.0000000				
Volume	12	2.4299167	0.0137342	2.4020000
2.4480000				

NI306

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	2	72.0000000	0	72.0000000
72.0000000				
Volume	2	1.5150000	0	1.5150000
1.5150000				

NI315

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	2	73.0000000	0	73.0000000
73.0000000				

Volume	2	2.3660000	0.0070711	2.3610000
2.3710000				

NI328

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	2	74.5000000	0.7071068	74.0000000
75.0000000				
Volume	2	2.4980000	0.0028284	2.4960000
2.5000000				

NI329

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	32	74.0312500	0.7398507	73.0000000
75.0000000				
Volume	32	2.4649375	0.0207752	2.4280000
2.4940000				

NI330

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	13	74.6923077	1.1094004	73.0000000
76.0000000				
Volume	13	2.4713846	0.0159976	2.4420000
2.4910000				

PA331

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	12	76.6666667	1.1547005	75.0000000
78.0000000				
Volume	12	2.4235000	0.0408445	2.3470000
2.4700000				

PA332

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	32	76.3125000	1.2296734	74.0000000
78.0000000				
Volume	32	2.4246250	0.0351538	2.3600000
2.5010000				

PA333

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	52	76.3653846	0.9503115	75.0000000
78.0000000				

Volume	52	2.4097692	0.0279745	2.3540000
2.4860000				

PA334

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	54	77.6851852	0.9074965	76.0000000
79.0000000				
Volume	54	2.4373519	0.0322871	2.3450000
2.5270000				

PA335

Variable	N	Mean	Std Dev	Minimum
Maximum				
Hardness	52	78.3846154	1.1402416	77.0000000
80.0000000				
Volume	52	2.3903269	0.2477860	1.1790000
2.5090000				