



**Combined State Binder
Group**

Method of Acceptance for
Asphalt Binders

Round Robin 2004-2
Summary B

**COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B**

Supplier Number	Rotational Viscosity (Pa.s) @135°C	DSR Original (kPa) @64°C	DSR RTFO (kPa) @64°C	DSR PAV (kPa) @25°C	Mass Loss (%) @163°C	BBR S-value (MPa) @-12°C	BBR m-value @-12°C
IADOT	0.415	1.31	3.32	4,555	-0.266	215	0.313
MIDOT	0.398	1.27	3.24	4,601	-0.305	206	0.316
MNDOT	0.413	1.27	3.46	4,754	-0.360	202	0.308
NCSPC	0.363	1.35	3.03	3,111	-0.341	202	0.313
NDDOT	0.408	1.32	3.24	3,893	-0.323		
NEDOR		1.26	3.17	5,750	-0.186	191	0.319
OHDOT D2	0.390	1.30	3.36	4,381	-0.288	196	0.323
SDDOT	0.437	1.38	3.43	2,416	-0.300	198	0.326
UW	0.418	1.21	3.16		-0.288		
WISDOT	0.421	1.22	2.80	3,587	-0.262	198	0.339
A(3)	0.395	1.29	3.15	4,333	-0.286	216	0.328
B(3)	0.409	1.25	3.18	3,960	-0.214	194	0.318
C(4)	0.429	1.23	3.16	4,080	-0.321	203	0.320
E(2)	0.432	1.34	3.40	3,897	-0.344	200	0.322
F(6)	0.417	1.31	3.14	3,791	-0.039	191	0.330
G(2)	0.421	1.40	3.22	4,089	-0.281	207	0.325
I(4)	0.408	1.39	3.43	4,545	-0.239	206	0.325
J(10)	0.412	1.21	3.12	4,141	-0.266	190	0.317
L(2)	0.399	1.25	3.21	4,704	-0.265	195	0.325
M(6)	0.383	1.29	3.22	4,030	-0.242	183	0.326
N(2)	0.407	1.26	3.27	3,800	-0.279	202	0.330
O(2)	0.418	1.29	3.40	4,811	-0.331	211	0.322
P(2)	0.399	1.33	3.22	3,745	-0.430	203	0.326
Q(2)	0.410	1.32	2.98	3,973	-0.274	197	0.327
S(2)	0.394	1.20	2.95	4,451	-0.348	201	0.322
07	0.421	1.39	2.99	4,370	-0.304	202	0.326
12	0.400	1.24	3.08	4,206	-0.376	191	0.326
16	0.396	1.22	3.05	4,862	-0.199	193	0.324
18	0.400	1.25	3.52	3,727	-0.308	193	0.324
22	0.393	1.18	2.88	3,779	-0.390	209	0.319
24	0.430	1.37	3.26	4,274	-0.252	208	0.328
29	0.399	1.20	2.63	3,427	-0.355	193	0.320
35	0.400	1.29	3.59	3,558	-0.224	172	0.369
42	0.422	1.29	3.28	4,149	-0.365	212	0.320
46	0.418	1.25	3.17	3,920	-0.340	203	0.321
49	0.405	1.31	3.48	1,399	-0.349	208	0.313
61	0.415	1.25	3.21	1,399	-0.371	199	0.325
67	0.393	1.29	3.43	4,200	-0.324	181	0.342
69	0.425	1.30	3.05	4,235	-0.395	148	0.332
70	0.405	1.31	3.27	3,892	-0.340	187	0.326
77	0.400	1.25	3.34	4,013	-0.335	192	0.322
79	0.415	1.24	3.77	4,482	-0.363	211	0.318
87	0.398	1.24	3.29	3,708	-0.281	187	0.332
Average	0.4078	1.2814	3.2219	3,976.08	-0.3011	197.39	0.3245
Std. Dev.	0.0144	0.0550	0.2117	788.50	0.0683	12.32	0.0097
Coef. of Var.	3.543	4.290	6.571	19.831	22.686	6.241	2.981

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A(3)	Brookfield	ODSR	RTFO DSR	PAVDSR	Mass Loss	S-value	m-value
51	0.392	1.29	3.15	4,190	-0.295	222	0.329
97	0.392	1.28	3.15	4,497	-0.283	213	0.326
98	0.400	1.29	3.16	4,313	-0.281	212	0.329
Average	0.395	1.29	3.15	4,333	-0.286	216	0.328

B(3)							
01	0.410	1.27	3.19	3,968	-0.230	201	0.316
17	0.410	1.27	3.09	3,846	-0.186	191	0.323
45	0.407	1.21	3.26	4,067	-0.227	190	0.316
Average	0.409	1.25	3.18	3,960	-0.214	194	0.318

C(4)							
21	0.434	1.22	3.08	4,151	-0.316	202	0.323
28	0.423	1.21	3.16	3,978	-0.330	204	0.320
90	0.430	1.21	3.17	4,150	-0.327	202	0.316
99	0.428	1.27	3.24	4,040	-0.310	204	0.319
Average	0.429	1.23	3.16	4,080	-0.321	203	0.320

E(2)							
15	0.428	1.35	3.39	3876	-0.336	198	0.324
89	0.435	1.33	3.40	3917	-0.351	201	0.320
Average	0.432	1.34	3.40	3,897	-0.344	200	0.322

F(6)							
02	0.400	1.24	3.21	3,956	-0.013	193	0.327
11	0.430	1.33	3.24	4,281	-0.049	190	0.330
34	0.425	1.36	3.06	3,881	-0.042	189	0.324
48	0.433	1.32	3.18	3,464	-0.059	196	0.326
56	0.402	1.31	2.96	3,682	-0.046	191	0.332
62	0.410	1.28	3.20	3,483	-0.025	188	0.338
Average	0.417	1.31	3.14	3,791	-0.039	191	0.330

G(2)							
26	0.426	1.40	3.25	4,116	-0.280	208	0.323
36	0.416	1.39	3.18	4,062	-0.282	206	0.327
Average	0.421	1.40	3.22	4,089	-0.281	207	0.325

I(4)							
03	0.410	1.42	3.26	4,511	-0.244	195	0.329
09	0.410	1.41	3.64	4,258	-0.227	198	0.327
13	0.405	1.35	3.18	4,567	-0.241	203	0.325
33	0.405	1.38	3.63	4,842	-0.245	227	0.319
Average	0.408	1.39	3.43	4,545	-0.239	206	0.325

J(10)							
05	0.421	1.22	3.18	4,477	-0.224	192	0.316
08	0.411	1.20	3.14	4,235	-0.221	184	0.314
10	0.413	1.19	3.19	4,361	-0.329	186	0.316
31	0.417	1.25	3.04	3,062	-0.278	196	0.319
38	0.415	1.21	3.00	4,552	-0.310	198	0.318
41	0.406	1.19	3.06	4,213	-0.228	190	0.322
44	0.411	1.18	3.23	3,868	-0.226	188	0.318
52	0.413	1.23	3.11	4,097	-0.303	198	0.320
65	0.406	1.19	2.98	4,196	-0.305	186	0.314
74	0.406	1.25	3.31	4,351	-0.231	184	0.314
Average	0.412	1.21	3.12	4,141	-0.266	190	0.317

L(2)							
25	0.400	1.28	3.26	4,791	-0.240	194	0.321
59	0.398	1.22	3.16	4,616	-0.290	196	0.328
Average	0.399	1.25	3.21	4,704	-0.265	195	0.325

M(5)							
04	0.380	1.30	2.92	4,073	-0.223	189	0.326
37	0.390	1.31	3.77	4,073	-0.277	175	0.325
47	0.370	1.27	3.15	3,972	-0.297	181	0.330
57	0.390	1.29	3.05	4,001	-0.172	186	0.324
Average	0.383	1.29	3.22	4,030	-0.242	183	0.326

N(2)							
43	0.406	1.28	3.20	3,752	-0.262	202	0.332
95	0.408	1.24	3.34	3,847	-0.296	201	0.327
Average	0.407	1.26	3.27	3,800	-0.279	202	0.330

O(2)							
76	0.42	1.27	3.42	4800	-0.341	212	0.324
85	0.415	1.3	3.37	4821	-0.321	209	0.320
Average	0.418	1.29	3.40	4,811	-0.331	211	0.322

P(2)							
71	0.400	1.28	3.22	3,760	-0.410	198	0.326
73	0.397	1.37	3.21	3,730	-0.450	208	0.326
Average	0.399	1.33	3.22	3,745	-0.430	203	0.326

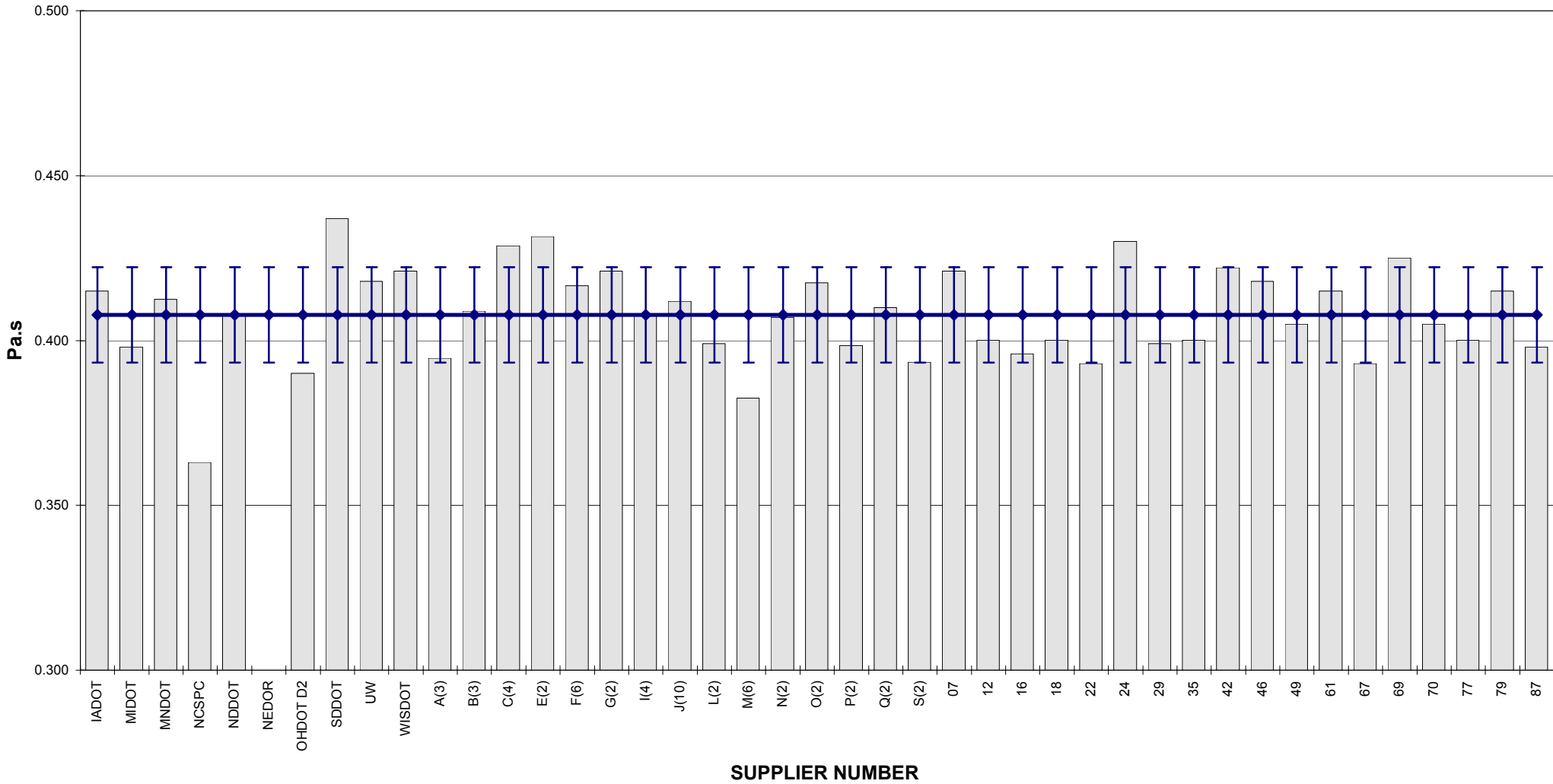
Q(2)							
54	0.410	1.33	2.96	4050	-0.274	198	0.327
88	0.410	1.30	3.00	3895	-0.273	196	0.327
Average	0.410	1.32	2.98	3973	-0.274	197	0.327

S(2)							
53	0.392	1.18	2.91	4450	-0.328	197	0.324
64	0.395	1.23	2.98	4452	-0.367	204	0.320
Average	0.394	1.20	2.95	4451	-0.348	201	0.322

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SUMMARY B

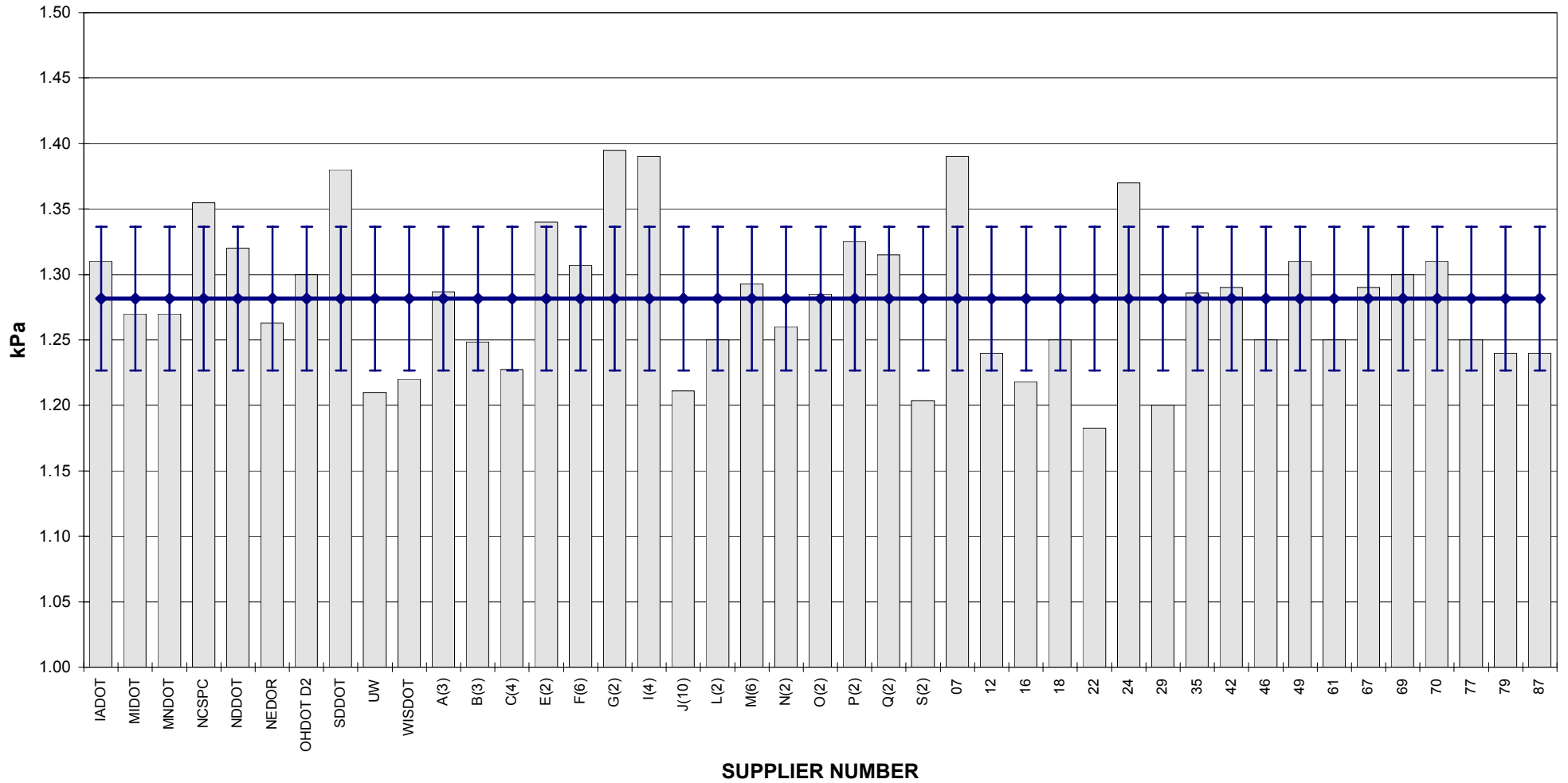
PG 64-22

ROTATIONAL VISCOSITY



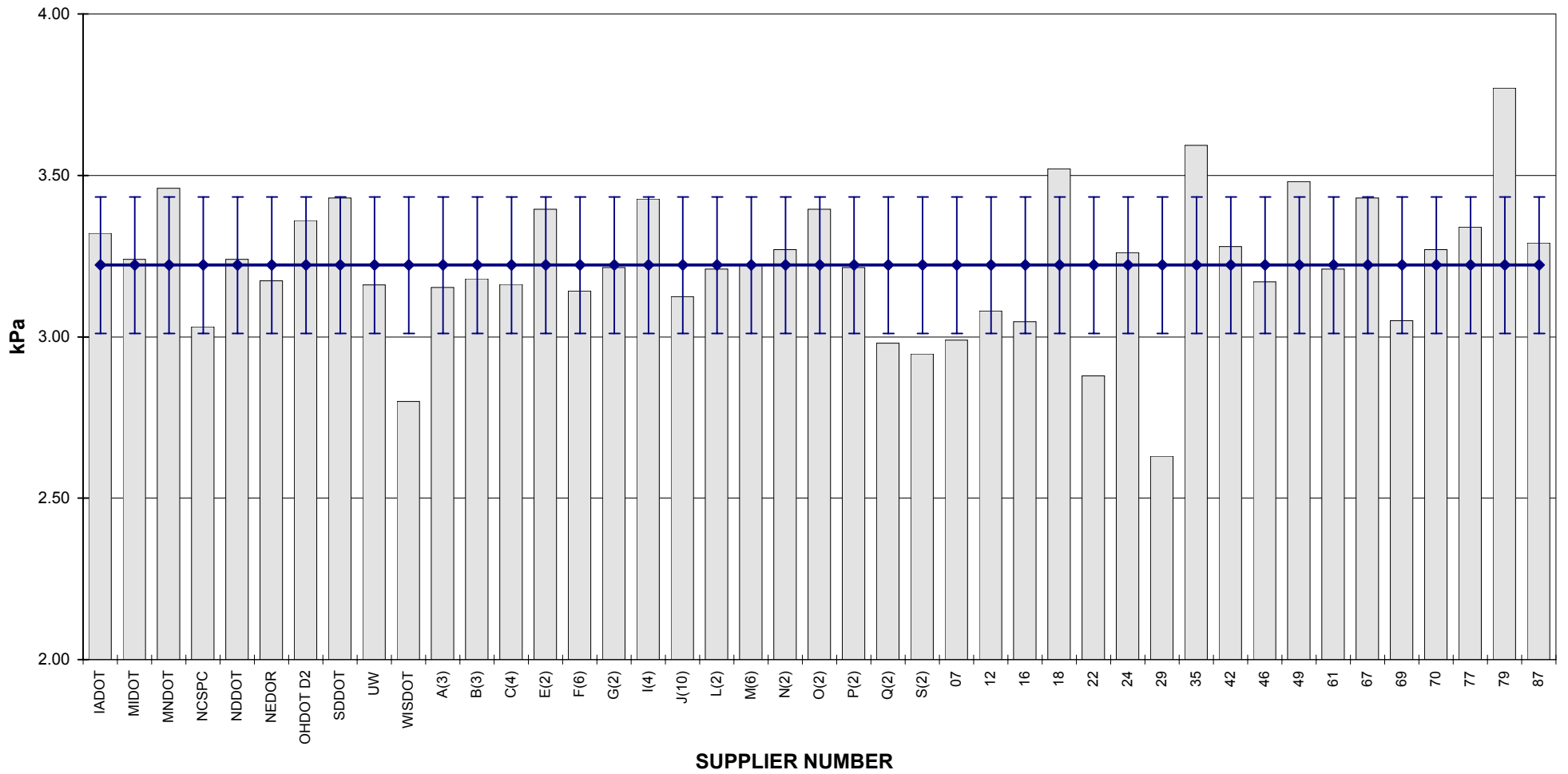
**COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B
PG 64-22**

DSR - ORIGINAL

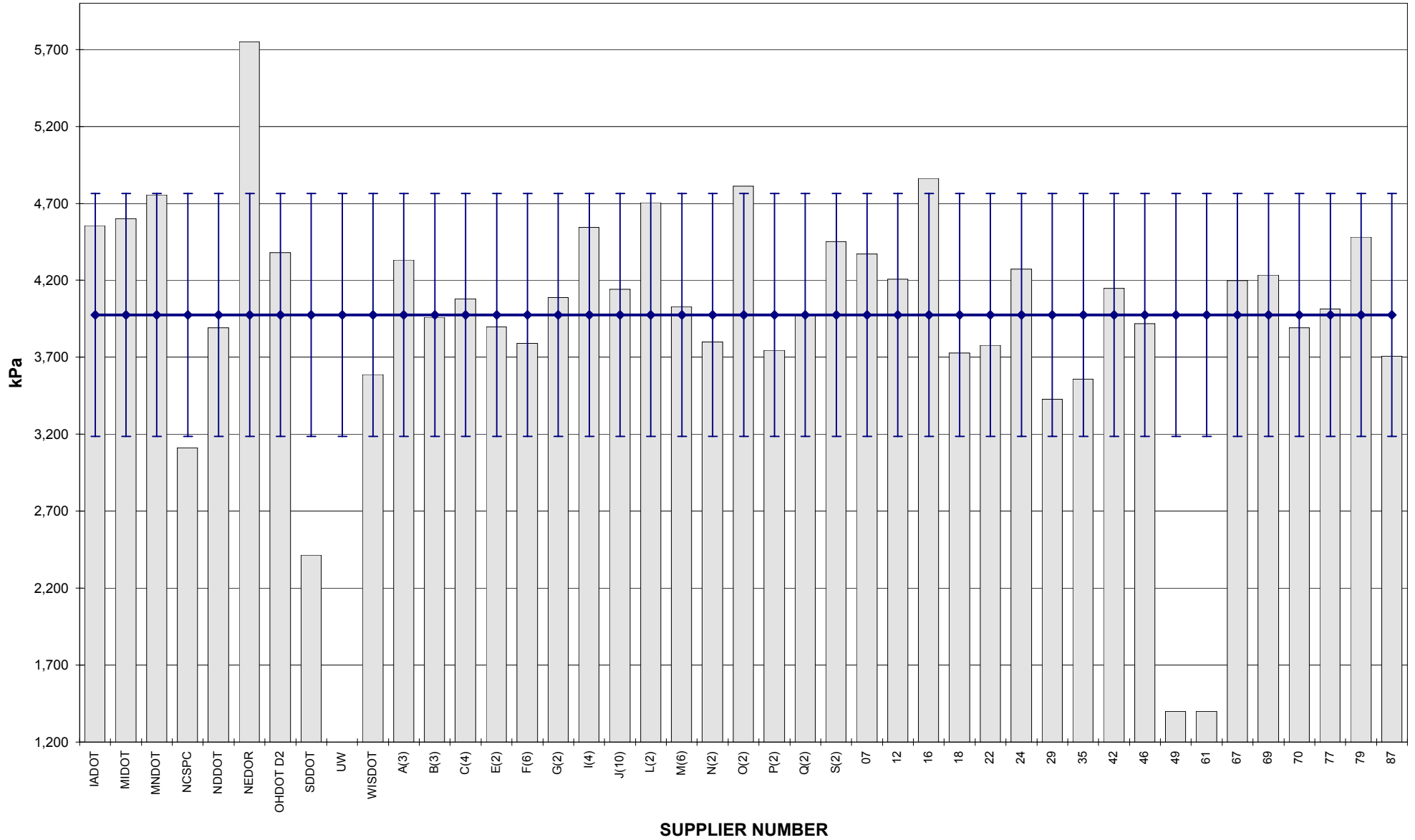


**COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B
PG 64-22**

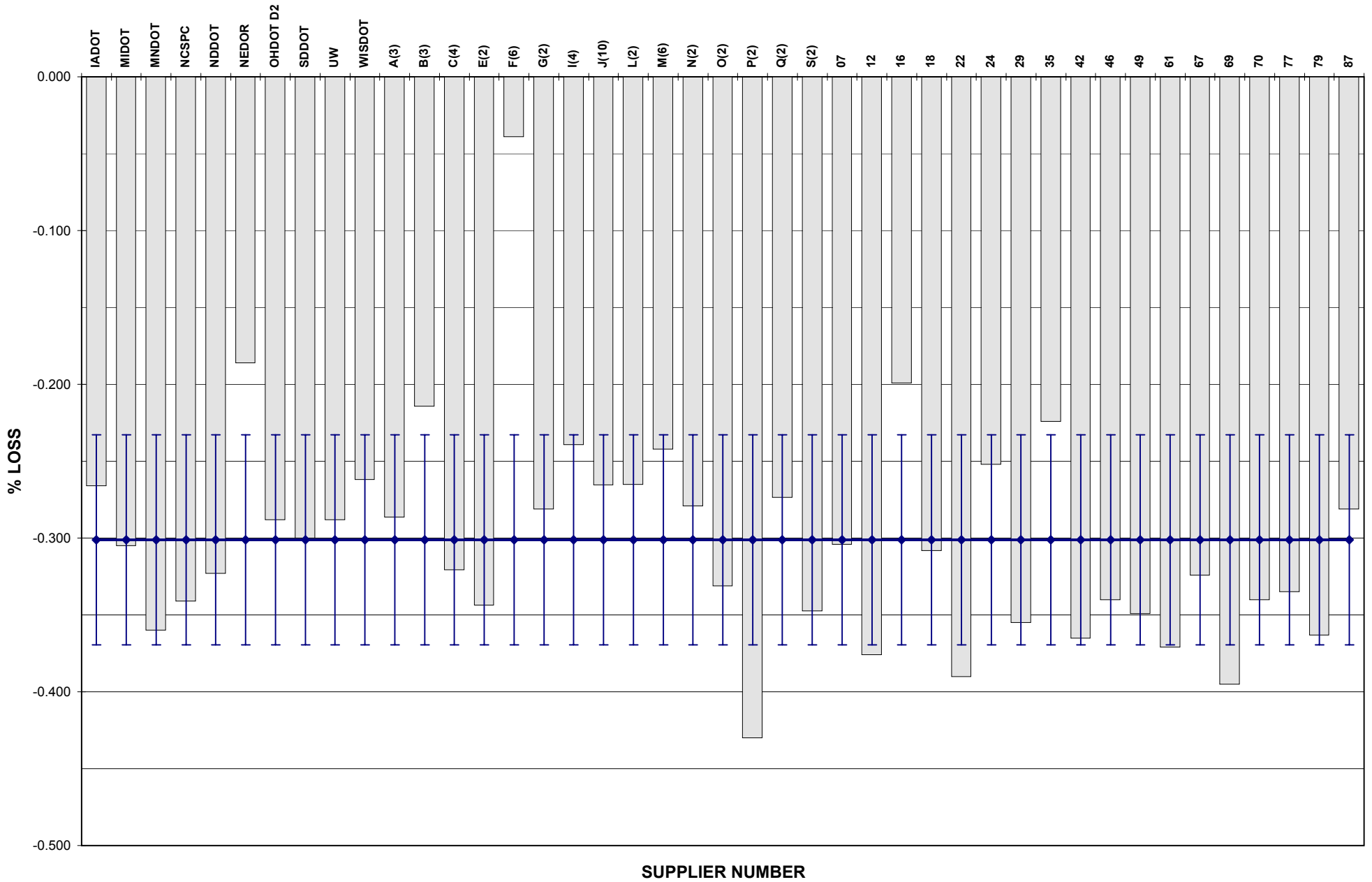
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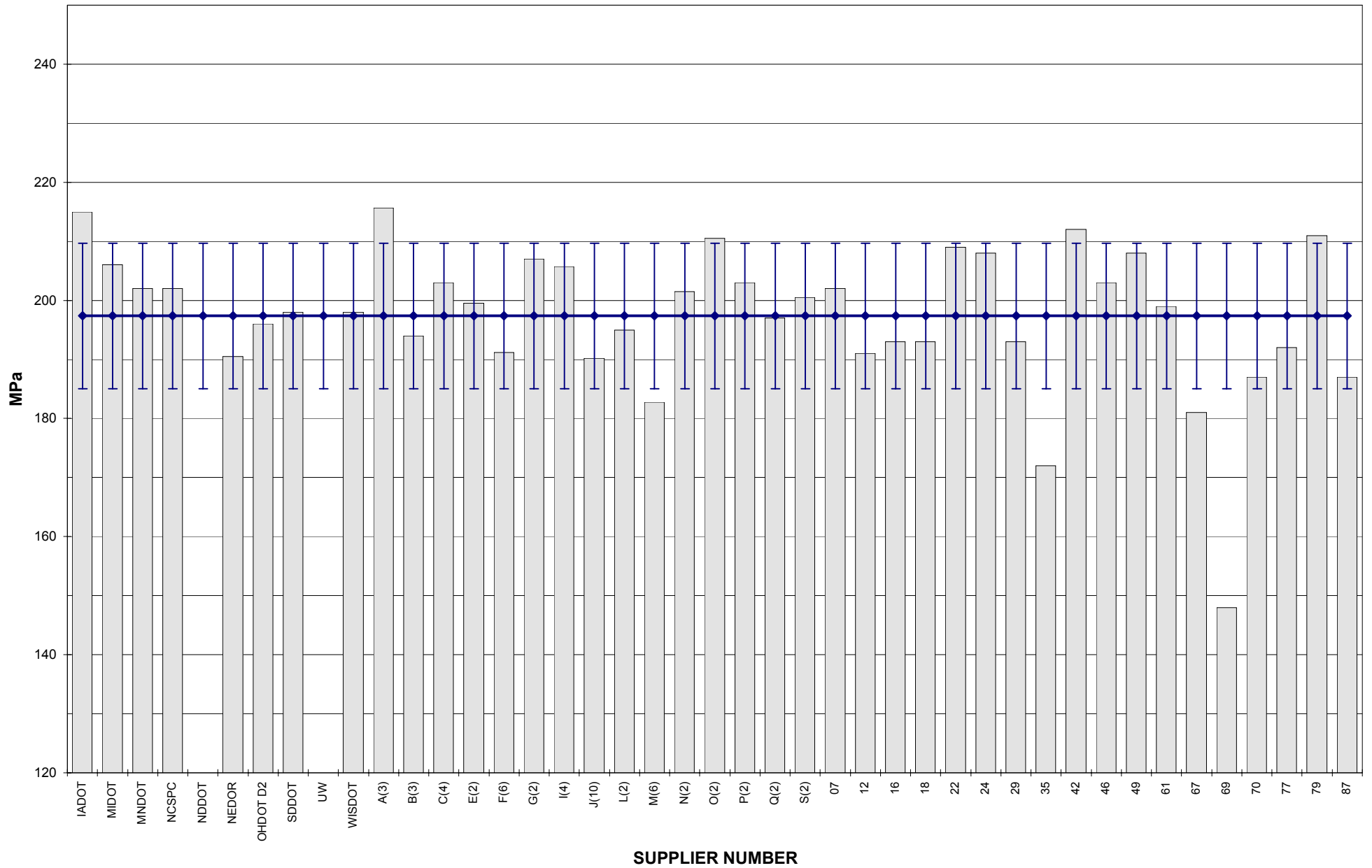
COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B
PG 64-22
DSR - PAV



COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B
PG 64-22
RTFO MASS LOSS



COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B
PG 64-22
BBR STIFFNESS



COMBINED STATE BINDER GROUP ROUND ROBIN 2004-2
SUMMARY B
PG 64-22
BBR m-VALUE

