



Test Monitoring Center

6555 Penn Avenue
Pittsburgh, PA 15206-4489
(412) 365-1000

MEMORANDUM: 04-006
DATE: January 30, 2004
TO: Sequence III Surveillance Panel
FROM: Michael T. Kasimirsky *Michael T. Kasimirsky*
SUBJECT: Sequence IIIG/IIIGA Reference Oil 438 Test Target Update

On January 20, 2004, the Sequence III Surveillance Panel the panel approved a motion to revise the Sequence IIIG and IIIGA test targets on reference oil 438 based upon all the data available to date in the LTMS. These revised targets, based upon the 24 data points available at this time, are shown in the following table:

Parameter	Mean	Standard Deviation
PVIS	4.5580	0.1931
WPD	3.27	0.38
ACLW*	17.57	4.598
MRV	9.8273	0.17198

*ACLW results for 438 are not transformed, unlike the results for other Sequence IIIG reference oils.

Any applicable severity adjustments were applied to the data prior to target generation. The data used to generate these targets is shown in Tables 1 & 2. Table 1 shows unadjusted data. Table 2 shows severity-adjusted data, with the adjusted parameters shown in red. The above test targets; as well as the severity-adjusted data used to generate them; the raw test targets, the initial test targets, and the preliminary targets from the matrix (which were never used in the IIIG LTMS) for reference oil 438 are shown in the following figures. Figure 1 shows the PVIS data in transformed units. Figure 2 shows the PVIS data in original units. Figure 3 shows the WPD data in original units. Figures 4 shows the ACLW data in original units. Figures 5 and 6 show the Sequence IIIGA MRV data in transformed and original units, respectively.

These targets are effective for all tests completed on or after February 1, 2004.

MTK/mtk

Attachments

c: John L. Zalar, TMC
<ftp://www.astmtmc.cmu.edu/docs/gas/sequenceiii/memos/mem04-006.pdf>

Distribution: Electronic Mail

Table 1 – Unadjusted Data

Testkey	LTMS Lab	LTMS App	Ind	Val	LTMS Date	LTMS Time	PVIS	PVISTI	ACLW	ACLWTI	WPD	MRV	MRVTI	OilCon
47950	E	1	438	AC	10/14/2003	1:06	106.1	4.664382	17.4	17.4	2.84	18147	9.8063	3.66
47910	G	2	438	AO	8/12/2003	0:16	132.6	4.887337	16.8	16.8	3.68	23700	10.0732	4.27
47911	G	2	438	AO	8/12/2003	0:21	143.2	4.964242	15.3	15.3	2.85	30400	10.3222	4.33
47913	G	3	438	OO	8/12/2003	0:26	91.7	4.518522	15.6	15.6	4.17	19000	9.8522	3.41
47914	G	5	438	AO	8/12/2003	0:36	120.6	4.792479	20.8	20.8	3	20500	9.9282	3.87
48577	G	3	438	AC	8/12/2003	5:13	138.5	4.93087	22.1	22.1	3.01	26800	10.1962	4.19
48578	G	4	438	AC	11/28/2003	3:53	101.1	4.61611	18.3	18.3	3.46	19900	9.8985	3.74
49513	G	5	438	OC	12/27/2003	16:44	76.2	4.333361	6.4	6.4	3.91	15400	9.6421	2.85
49514	G	5	438	OC	1/4/2004	5:34	90.3	4.503137	9	9	3.66	18800	9.8416	2.88
47941	D	1	438	AC	8/12/2003	0:52	70.7	4.258446	14.7	14.7	3.04	15435	9.6444	3.23
47921	B	1	438	AC	8/12/2003	0:29	81.9	4.405499	19.3	19.3	2.62	16300	9.6989	2.97
47922	B	3	438	AC	8/12/2003	0:46	74.5	4.310799	19	19	3.1	14800	9.6024	2.63
47923	B	2	438	OC	11/19/2003	6:36	77.7	4.352855	30.8	30.8	3.18	16100	9.6866	2.78
49069	B	2	438	AC	11/26/2003	7:03	92.9	4.531524	17.1	17.1	3.24	16400	9.705	3.12
47930	F	1	438	AC	8/12/2003	0:41	96.6	4.570579	17.6	17.6	3.72	18620	9.832	3.66
47932	F	1	438	AC	1/13/2004	5:55	77	4.343805	19.7	19.7	3.85	16449	9.708	.
47893	A	1	438	AO	8/12/2003	0:13	102.3	4.62791	14.4	14.4	3.04	19300	9.8679	3.62
47894	A	3	438	AO	8/12/2003	0:18	111.7	4.715817	21.2	21.2	3.14	20500	9.9282	3.47
47895	A	2	438	AO	8/12/2003	0:32	88.6	4.484132	22	22	3.08	16700	9.7232	3.32
47896	A	1	438	AO	8/12/2003	0:34	90.5	4.50535	21.4	21.4	3.26	18000	9.7981	3.28
47897	A	5	438	AC	8/12/2003	0:49	98.1	4.585987	14	14	2.88	18100	9.8037	3.61
48585	A	6	438	AC	8/14/2003	1:42	86.8	4.463607	17.2	17.2	3.25	16900	9.7351	3.06
48586	A	1	438	AC	11/1/2003	16:42	96.2	4.566429	17.6	17.6	3.17	18200	9.8092	3.55
49075	A	4	438	AC	12/30/2003	10:18	86.4	4.458988	13.5	13.5	3.26	17200	9.7527	2.98

Table 2 – Severity Adjusted Data

Testkey	LTMS Lab	LTMS App	Ind	Val	LTMS Date	LTMS Time	PVIS	PVISTI	ACLW	ACLWTI	WPD	MRV	MRVTI	OilCon
47950	E	1	438	AC	10/14/2003	1:06	106.1	4.664382	17.4	17.4	2.84	18147	9.8063	3.66
47910	G	2	438	AO	8/12/2003	0:16	132.6	4.887337	16.8	16.8	3.68	23700	10.0732	4.27
47911	G	2	438	AO	8/12/2003	0:21	143.2	4.964242	15.3	15.3	2.85	30400	10.3222	4.33
47913	G	3	438	OO	8/12/2003	0:26	91.7	4.518522	15.6	15.6	4.17	19000	9.8522	3.41
47914	G	5	438	AO	8/12/2003	0:36	120.6	4.792479	20.8	20.8	3	20500	9.9282	3.87
48577	G	3	438	AC	8/12/2003	5:13	138.5	4.93087	22.1	22.1	3.01	26800	10.1962	4.19
48578	G	4	438	AC	11/28/2003	3:53	101.1	4.61611	18.3	18.3	3.46	19900	9.8985	3.74
49513	G	5	438	OC	12/27/2003	16:44	76.2	4.333361	6.4	6.4	3.91	15400	9.6421	2.85
49514	G	5	438	OC	1/4/2004	5:34	90.3	4.503137	11.8	11.8417	3.66	18800	9.8416	2.88
47941	D	1	438	AC	8/12/2003	0:52	70.7	4.258446	14.7	14.7	3.04	15435	9.6444	3.23
47921	B	1	438	AC	8/12/2003	0:29	81.9	4.405499	19.3	19.3	2.62	16300	9.6989	2.97
47922	B	3	438	AC	8/12/2003	0:46	74.5	4.310799	19	19	3.1	14800	9.6024	2.63
47923	B	2	438	OC	11/19/2003	6:36	77.7	4.352855	30.8	30.8	3.18	16100	9.6866	2.78
49069	B	2	438	AC	11/26/2003	7:03	92.9	4.531524	14.8	14.8008	3.24	16400	9.705	3.12
47930	F	1	438	AC	8/12/2003	0:41	96.6	4.570579	17.6	17.6	3.72	18620	9.832	3.66
47932	F	1	438	AC	1/13/2004	5:55	77	4.343805	19.7	19.7	3.85	16449	9.708	.
47893	A	1	438	AO	8/12/2003	0:13	102.3	4.62791	14.4	14.4	3.04	19300	9.8679	3.62
47894	A	3	438	AO	8/12/2003	0:18	111.7	4.715817	21.2	21.2	3.14	20500	9.9282	3.47
47895	A	2	438	AO	8/12/2003	0:32	88.6	4.484132	22	22	3.08	16700	9.7232	3.32
47896	A	1	438	AO	8/12/2003	0:34	90.5	4.50535	21.4	21.4	3.26	18000	9.7981	3.28
47897	A	5	438	AC	8/12/2003	0:49	98.1	4.585987	14	14	2.88	18100	9.8037	3.61
48585	A	6	438	AC	8/14/2003	1:42	86.8	4.463607	17.2	17.2	3.25	16900	9.7351	3.06
48586	A	1	438	AC	11/1/2003	16:42	96.2	4.566429	17.6	17.6	3.17	18200	9.8092	3.55
49075	A	4	438	AC	12/30/2003	10:18	86.4	4.458988	13.5	13.5	3.26	17200	9.7527	2.98

Figure 2

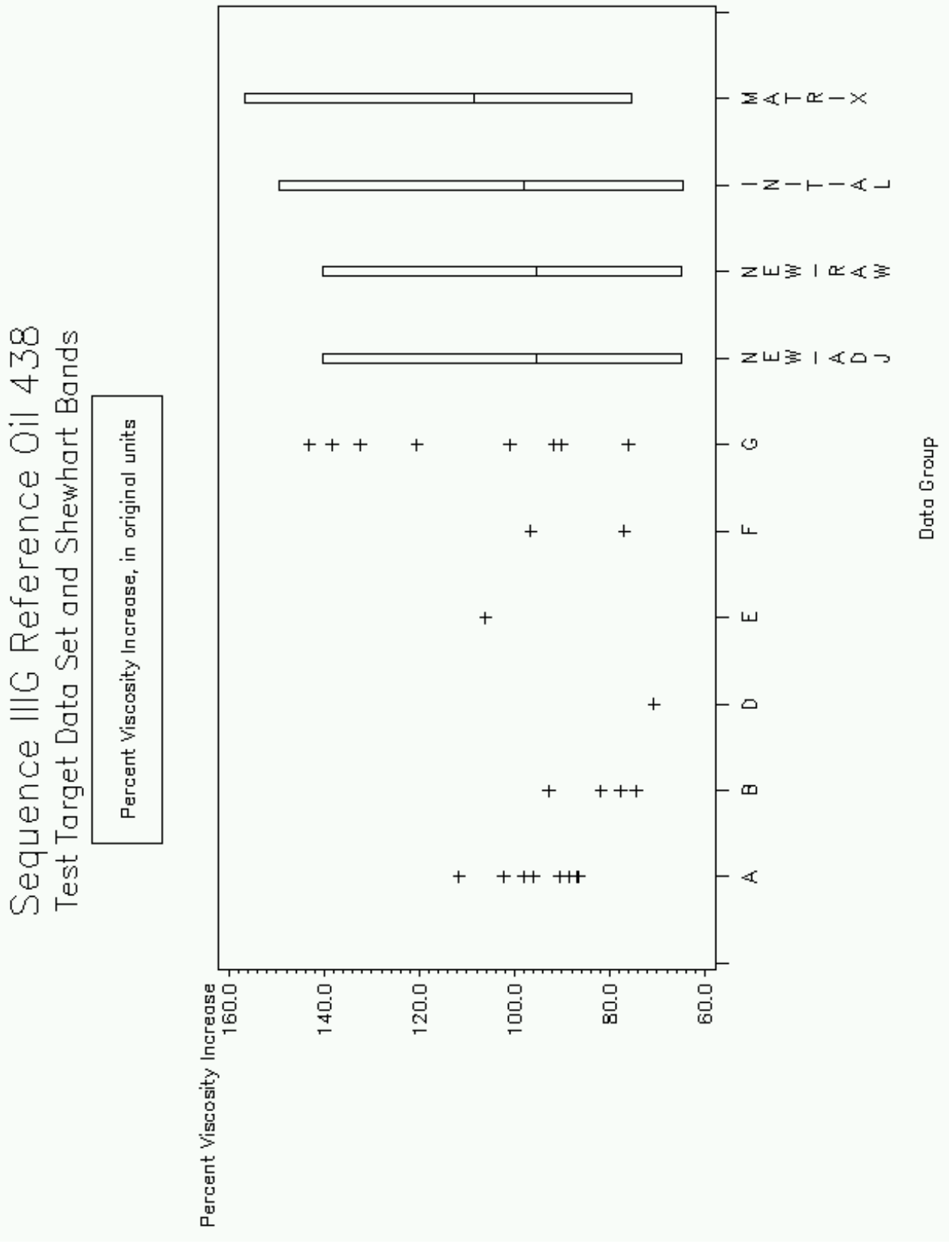


Figure 4

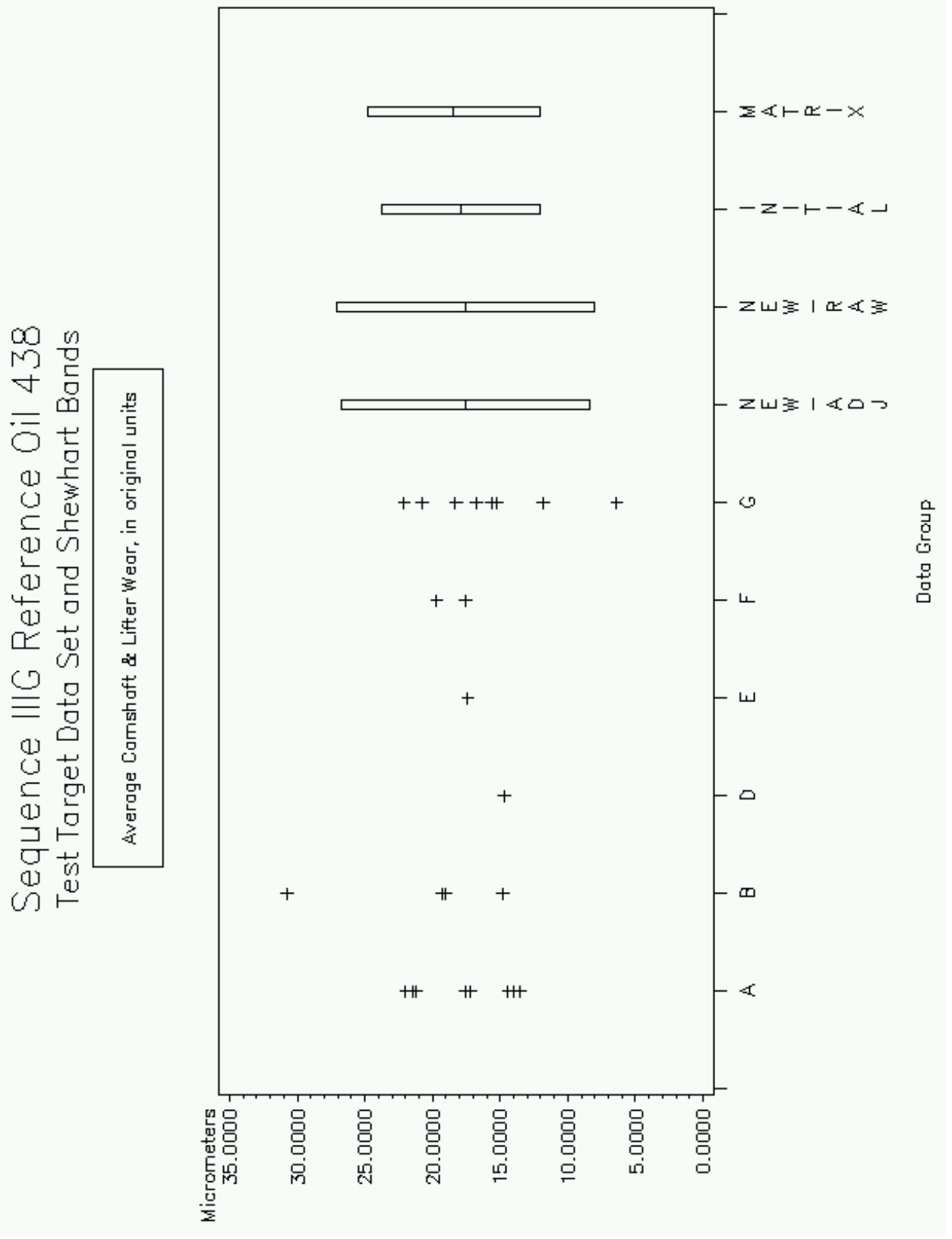


Figure 5

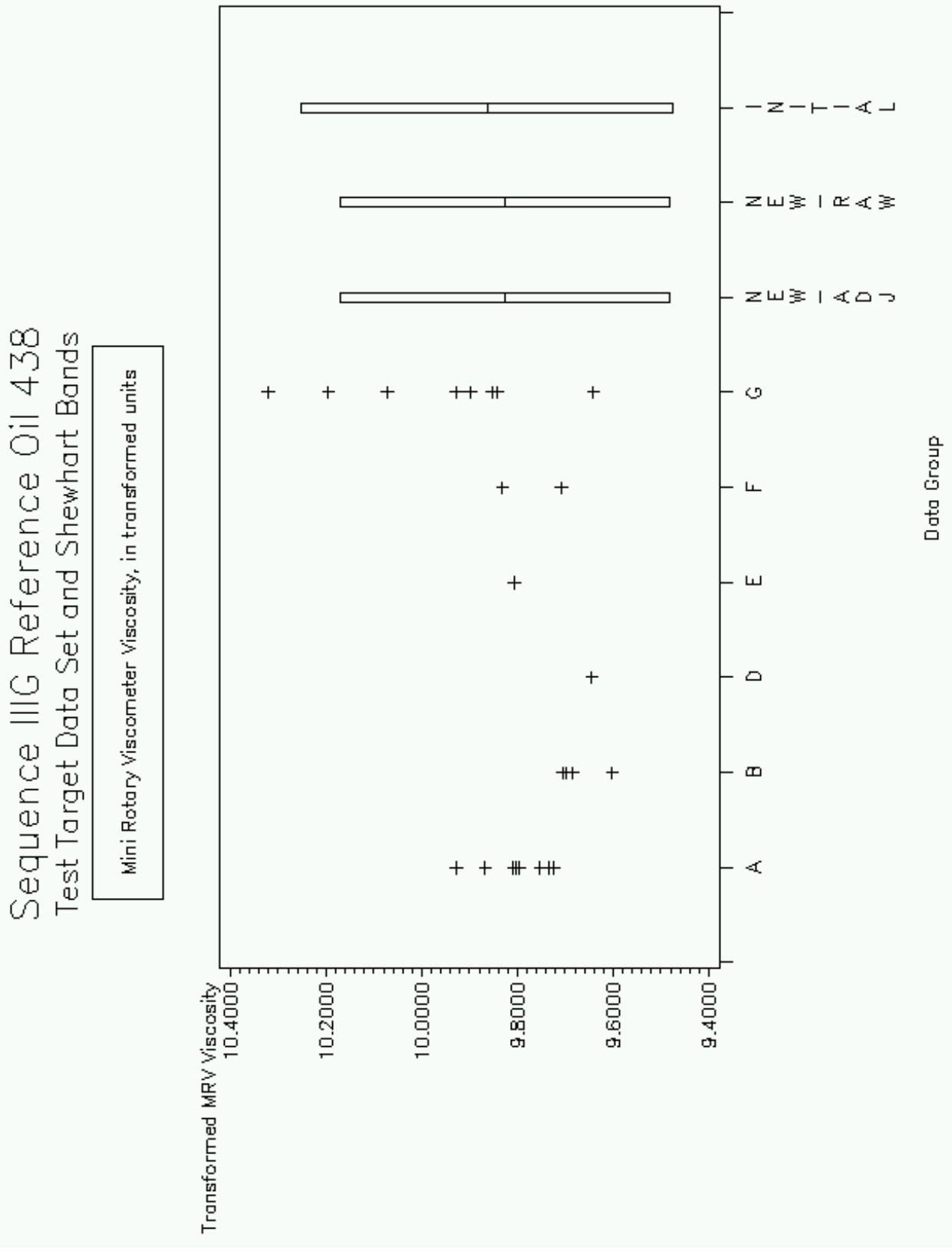


Figure 6

