



Test Monitoring Center

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MEMORANDUM: 01-015
DATE: February 7, 2001
TO: Gordon Farnsworth, Chairman, Sequence V Surveillance Panel
FROM: Richard E. Grundza
SUBJECT: Sequence VG Reference Oil Status Report for January, 2001

Three operationally valid Sequence VG tests were completed during the month of January, 2001. These tests are tabulated below. Table 1 summarizes all operationally valid calibration tests completed during January. Table 2 summarizes all operationally valid data completed between August 1, 2000 and January 31, 2001. Table 3 lists the Average Δ 's by Laboratory and Industry of tests completed during January. Table 4 lists the industry action alarms observed during the months of January.

Remarks:	No. of Tests
Operationally Valid and Statistically Acceptable	2
Operationally Valid, Failed Acceptance Criteria	<u>1</u>
TOTAL	3

Figures 1 through 5 show the Industry Control Charts and plots of summation Δ 's for AES, AEV, APV, OSCR and RAC for all operationally valid reference tests completed through January 31, 2001.

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Attachments

c: Sequence V Surveillance Panel
Sequence V Test Engineers
<ftp://www.tmc.astm.cmri.cmu.edu/docs/gas/sequencev/memos/memo01-015>

TABLE 1
SEQUENCE VG
OPERATIONALLY VALID DATA
TEST DATA COMPLETED FROM JANUARY 1, 2001 THROUGH JANUARY 31, 2001

OIL CODE	DATE COMPLETED	SLUDGE		VARNISH		OTHER	
		RAC	AES	APV	AEV	OSCR	HSTR
1007	20010122	8.48	8.77	8.60	9.31	0.00	0.00
	20010120	7.26*	7.60*	8.10*	9.01*	14.00*	0.00
925-3	20010120	7.02	5.68	7.30	8.70	80.00	0.00

* = FAILED ACCEPTANCE CRITERIA

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TABLE 2
SEQUENCE VG
OPERATIONALLY VALID DATA
DATA FROM AUGUST 1, 2000 THROUGH JANUARY 31, 2001

OIL CODE	TEST PARAMETER	N	MEAN	s	REPORTED	RANGE
1006	RAC (MERITS*)	8	9.255	0.204	8.870	TO 9.560
	AES (MERITS*)		8.514	0.423	7.920	TO 9.060
	Avg. Pist. Varnish		8.518	0.167	8.320	TO 8.710
	Avg. Eng. Varnish		9.294	0.084	9.170	TO 9.410
	OSCR (ln(OSCR+1))		1.611	0.802	0.693	TO 3.045
	OSCR (% Area)		4.007		1.000	TO 20.01
1007	RAC (MERITS*)	7	8.636	0.647	7.260	TO 9.120
	AES (MERITS*)		8.626	0.495	7.600	TO 9.170
	Avg. Pist. Varnish		8.483	0.200	8.100	TO 8.720
	Avg. Eng. Varnish		9.210	0.127	9.010	TO 9.330
	OSCR (ln(OSCR+1))		0.940	0.934	0.000	TO 2.708
	OSCR (% Area)		1.560		0.000	TO 14.00
925-3	RAC (MERITS*)	6	7.307	0.467	6.650	TO 7.920
	AES (MERITS*)		6.150	0.786	5.450	TO 7.460
	Avg. Pist. Varnish		7.365	0.316	6.980	TO 7.850
	Avg. Eng. Varnish		8.567	0.269	8.060	TO 8.830
	OSCR (ln(OSCR+1))		4.154	0.829	2.485	TO 4.615
	OSCR (% Area)		62.72		11.00	TO 100.0

02/07/01

Table 3
Sequence VG
Average Δ/s by Laboratory

Laboratory	N Size	AES	RAC	AEV	APV	OSCR
A	2	-0.725	-1.428	0.699	-0.016	-0.591
B	1	-4.433	-4.220	-2.556	-2.938	2.834
D	-	-	-	-	-	-
E	-	-	-	-	-	-
G	-	-	-	-	-	-
Industry	3	-1.961	-2.358	-0.386	-0.990	0.551

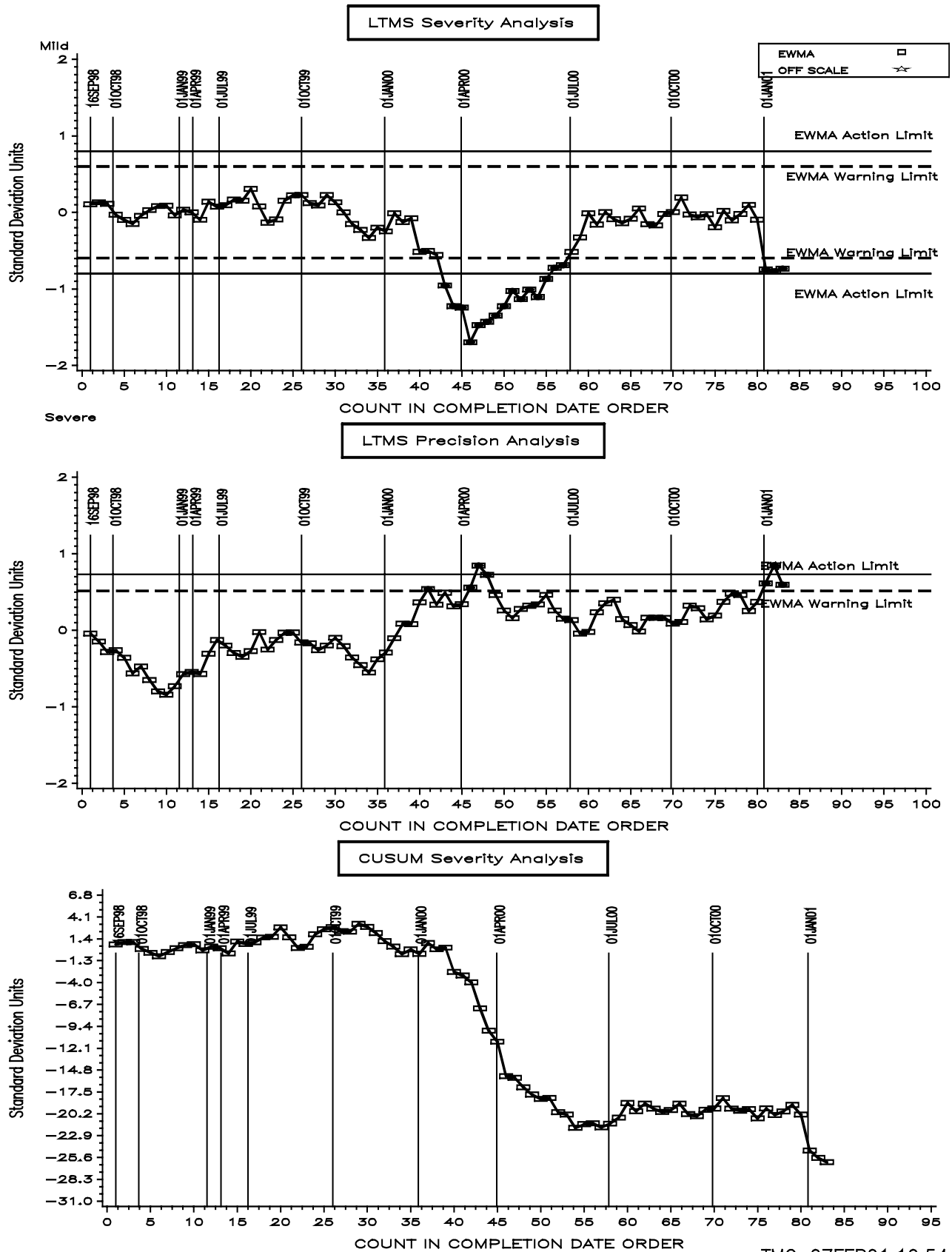
Table 4
Sequence VG
Summary of Industry Action Alarms, Month of January, 2001

Date	Oil Code	Parameter	Alarm Type	Alarm Value	Alarm Limit
20010120	1007	RAC	ZI ACTION	-1.069	±0.800
20010120	925-3	RAC	ZI ACTION	-1.150	±0.800
20010120	925-3	AEV	QI ACTION	0.747	+0.732
20010120	925-3	AES	QI ACTION	0.850	+0.732
20010122	1007	RAC	ZI ACTION	-1.164	±0.800

SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

AVERAGE ENGINE SLUDGE

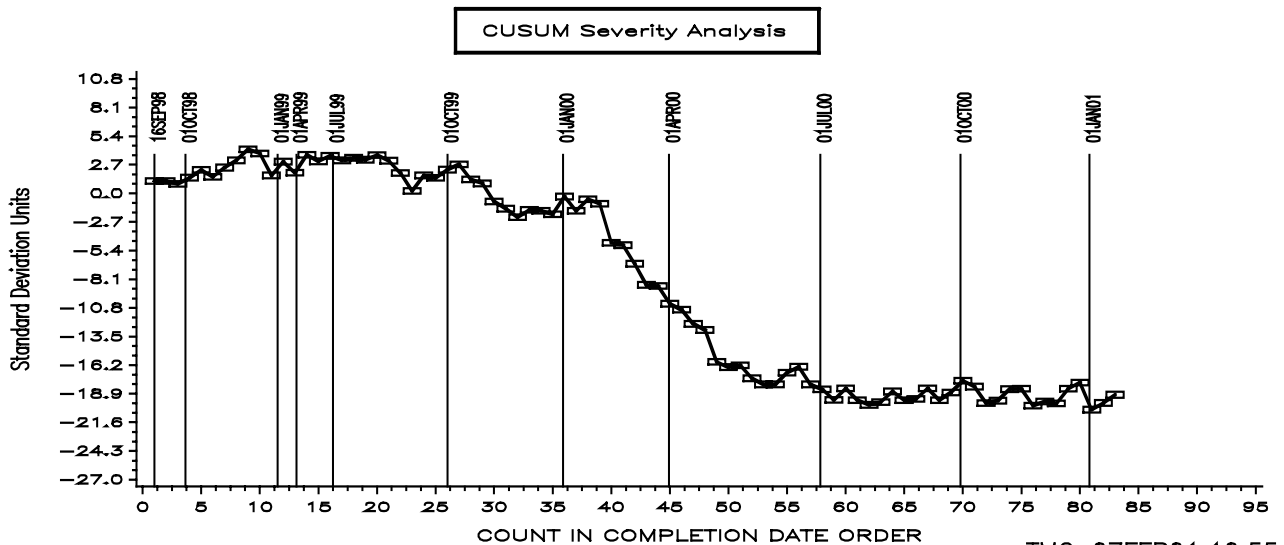
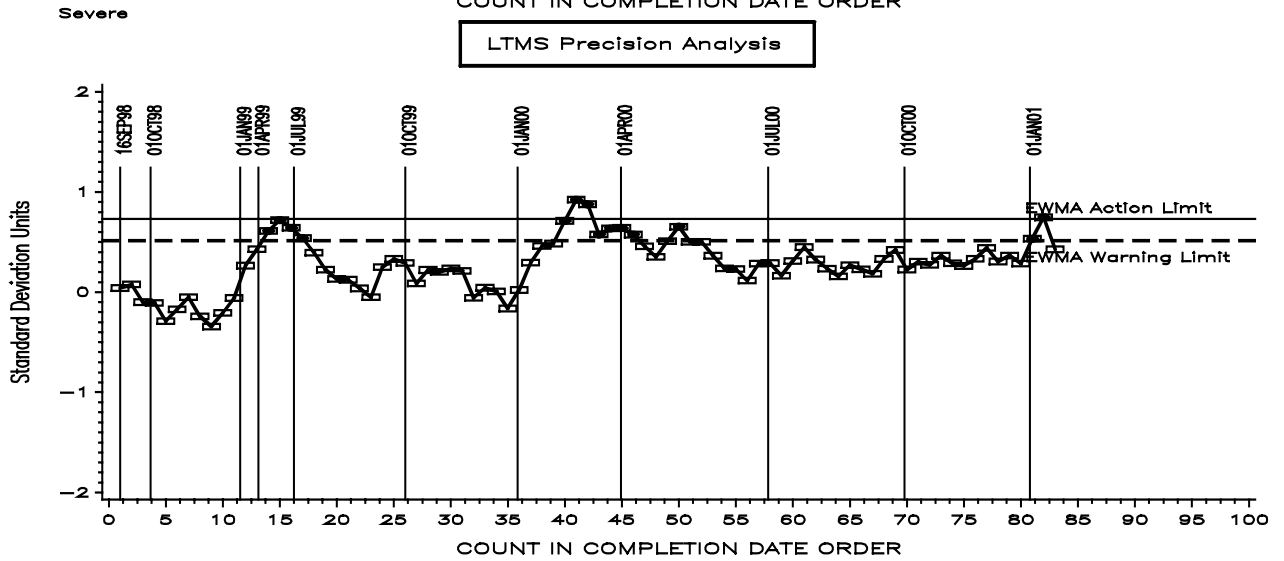
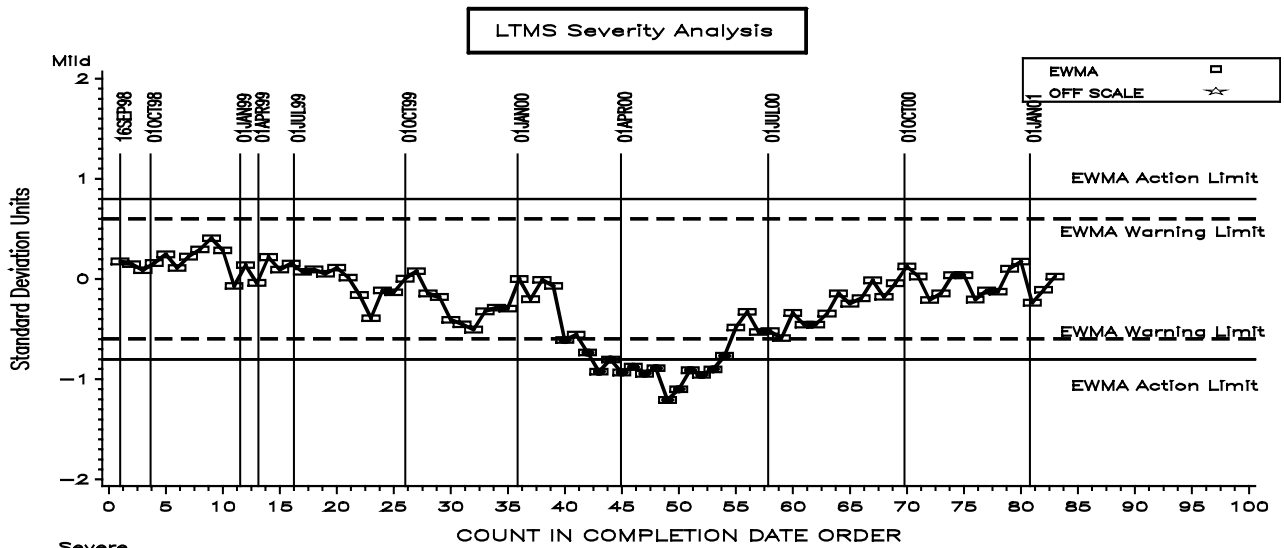
Figure 1



SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

AVERAGE ENGINE VARNISH 3-PART FINAL RESULT

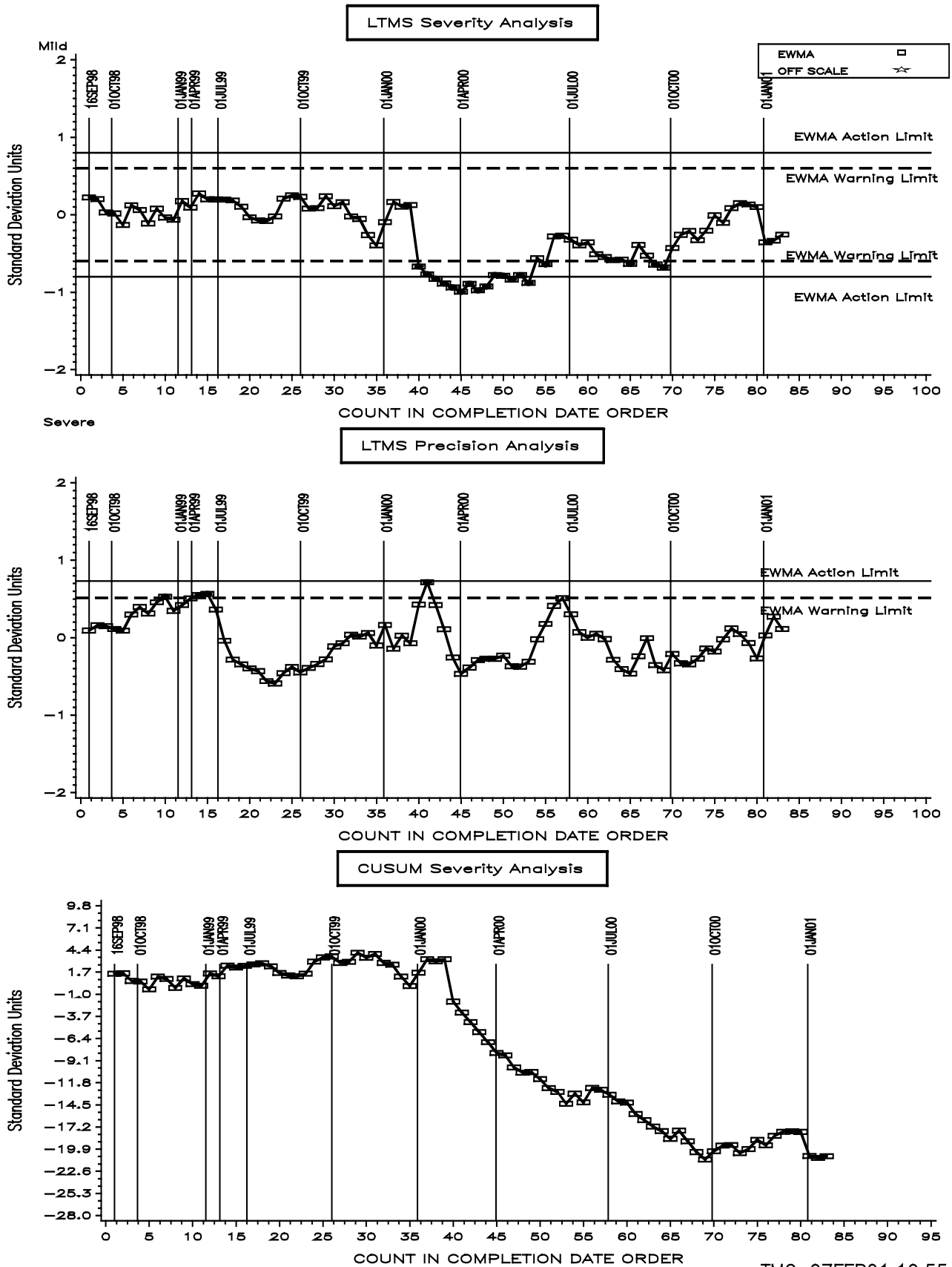
Figure 2



SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

AVG PISTON SKIRT RATING (MERITS)

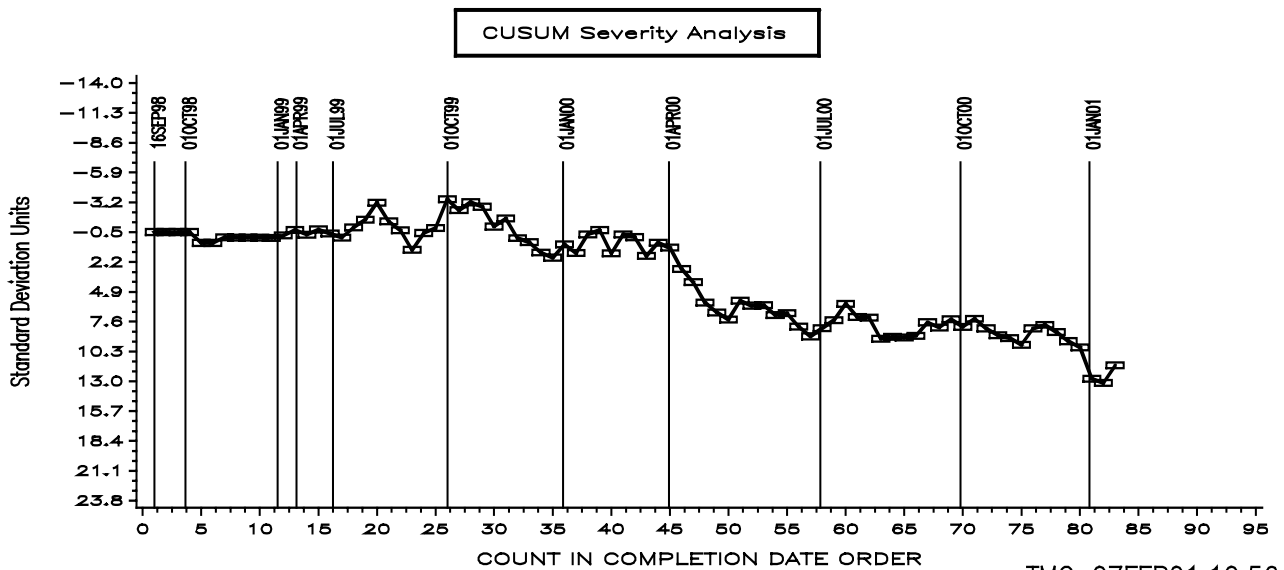
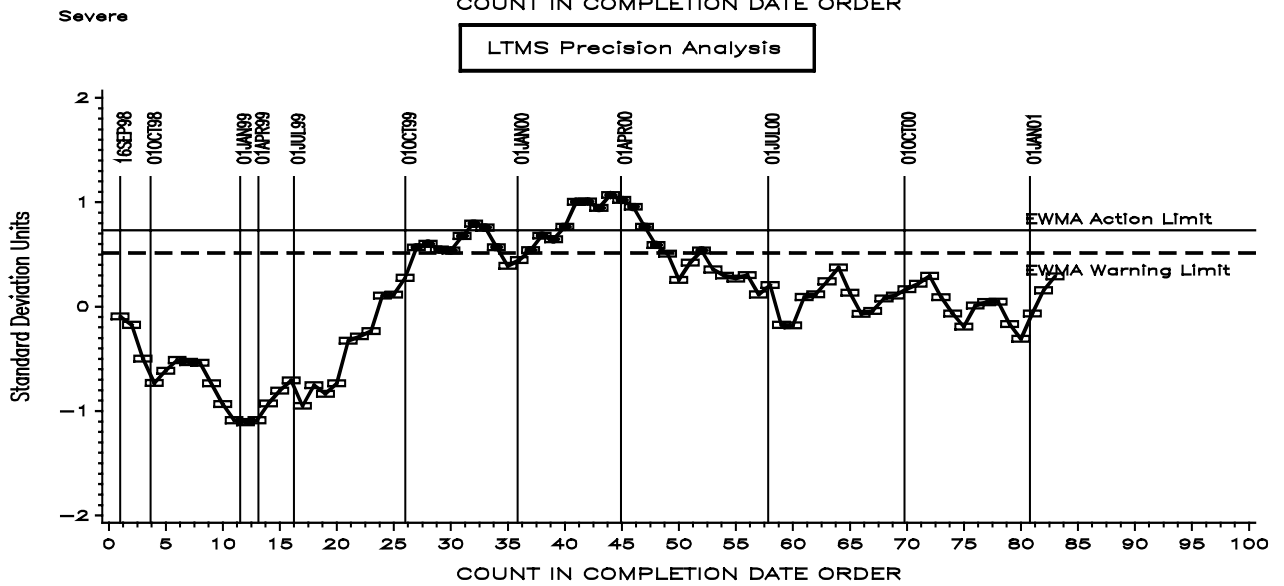
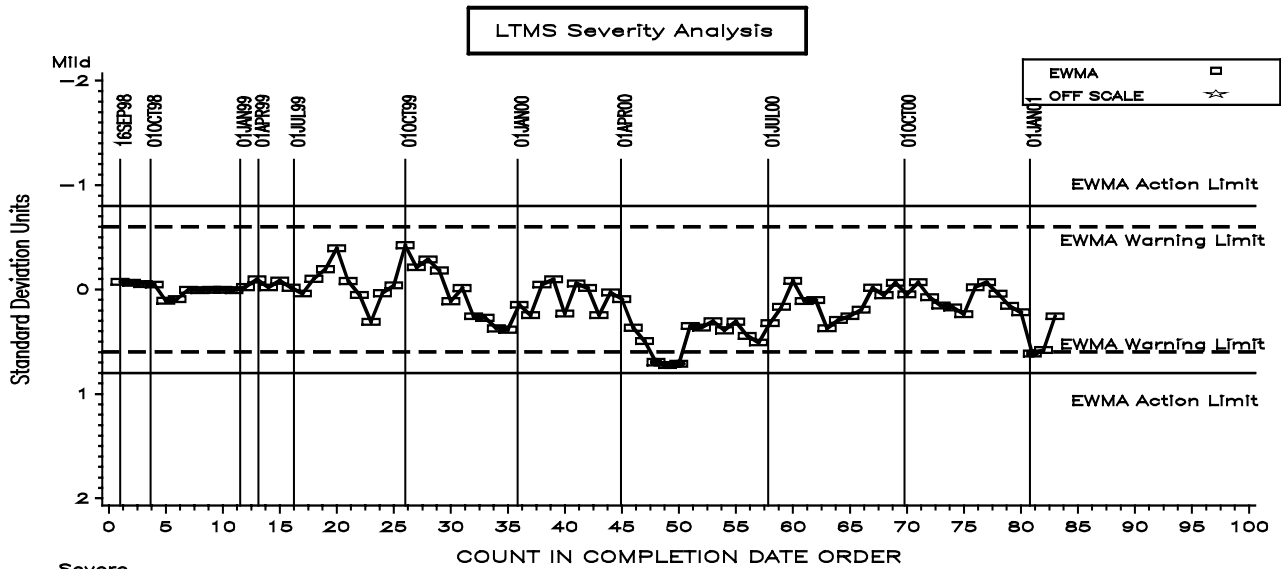
Figure 3



SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

OIL SCREEN SLUDGE

Figure 4



SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

AVERAGE ROCKER COVER SLUDGE

Figure 5

