



Test Monitoring Center

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Sequence IIIF Information Letter 06-1

Sequence No. 20

April 4, 2006

ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Sequence III Mailing List

SUBJECT: Addition of Fuel Monitoring Requirements and
Revision of Aromatic Minimum and Maximum Limits

The Sequence III Surveillance Panel approved a requirement to analyze fuel in storage at laboratories, based on recommendations from the Sequence III Fuel Task Force. Section 7.1.3 has been added to Test Method D6984 and requires all storage tanks to be sampled and analyzed on a quarterly basis. The results of the analyses are to be forwarded to the Test Monitoring Center. Also, aromatic minimum and maximum percentages, shown in Annex A4, have been revised.

The attached changes to Test Method D6984 are effective April 3, 2006.

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Attachments

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiii/procedure_and_ils/IIIF/IL06-1.pdf

Distribution: Electronic Mail

- 7.1.3 Analyze quarterly the contents of each storage tank that contains fuel used for qualified Sequence IIIF tests to ensure the fuel has not deteriorated or been contaminated in storage. Analyze the fuel for Distillation, Gravity, RVP, Sulfur and Gums. Send the results from these analyses to the TMC for inclusion in the Sequence III Test Fuel data base.

A4. Sequence III Test Fuel Analysis (Haltermann HF003 Test Fuel)

TEST	METHOD	UNITS	HALTERMANN HF003 Specs		
			MIN	TARGET	MAX
Distillation - IBP	ASTM D86	°F	75		95
5%		°F			
10%		°F	120		135
20%		°F			
30%		°F			
40%		°F			
50%		°F	200		230
60%		°F			
70%		°F			
80%		°F			
90%		°F	305		325
95%		°F			
Distillation - EP		°F			415
Recovery		vol %		Report	
Residue		vol %		Report	
Loss		vol %		Report	
Gravity	ASTM D4052	°API	58.7		61.2
Density	ASTM D4052	kg/L	0.734		0.744
Reid Vapor Pressure	ASTM D323	psi	8.7		9.2
Reid Vapor Pressure	ASTM D5191	psi		Report	
Carbon	ASTM D3343	wt fraction		Report	
Carbon	ASTM E191	wt fraction		Report	
Hydrogen	ASTM E191	wt fraction		Report	
Hydrogen/Carbon ratio	ASTM E191	mole/mole		Report	
Oxygen	ASTM D4815	wt %			0.05
Sulfur	ASTM D5453	ppm	3		15
Lead	ASTM D3237	g/gal			0.01
Phosphorous	ASTM D3231	g/gal			0.005
Composition, aromatics	ASTM D1319	vol %	26.0		32.5
Composition, olefins	ASTM D1319	vol %			10.0
Composition, saturates	ASTM D1319	vol %		Report	
Particulate matter	ASTM D5452	mg/L			1
Oxidation Stability	ASTM D525	minutes	240		
Copper Corrosion	ASTM D130				1
Gum content, washed	ASTM D381	mg/100mL			5
Fuel Economy			2401		2441
Numerator/C Density	ASTM E191				
C Factor	ASTM E191			Report	
Research Octane Number	ASTM D2699		96.0		
Motor Octane Number	ASTM D2700			Report	
Sensitivity			7.5		
Net Heating Value, btu/lb	ASTM D3338	Btu/lb		Report	
Net Heating Value, btu/lb	ASTM D240	Btu/lb		Report	
Color	VISUAL	1.75 ptb		Red	