Operations Group Chairman Factual Report

Attachment 8 – Fuel Testing Documentation

WPR09MA159

AFPET LABORATORY REPORT
HQ AFPET/PTPLA
2430 C Street
Building 70, Area B
Wright-Patterson AFB, OH 45433-7632

Lab Report No: 2009LA19980001 Protocol: FU-AVI-0031 Cust Sample No: Not Specified
Date Sampled: 08/12/2009 Date Received: 08/12/2009 Date Reported: 08/13/2009

Sample Submitter:
NTSB
19518 Pacific Highway South #201
Seattle, WA 98188

Reason for Submission: Aircraft Crash/Incident IAW T.O. 42B-1-1
Product: Aviation Turbine Fuel, Kerosene
Specification: ASTM D 1655 - 08a Grade:Jet A

Qty Submitted: 2 gal

Method	Test	Min	Max	Result	Fail
ASTM D 5452 - 08	Particulate Matter (mg/L)			0.5	
MIL-STD-3004A(1)	Appearance			Pass	
ASTM D 3242 - 08	Total Acid Number (mg KOH/g)		0.10	0.000	
ASTM D 1319 - 08	Aromatics (% vol)		25	23.0	
ASTM D 3227 - 04a	Mercaptan Sulfur (% mass)		0.003	0.001	
ASTM D 4294 - 08a	Total Sulfur (% mass)		0.30	0.07	
ASTM D 86 - 09	Distillation				
	10% Recovered (°C)		205	171	
	20% Recovered (°C)			181	
	50% Recovered (°C)			208	
	90% Recovered (°C)			254	
	End Point (°C)		300	280	
	Residue (% vol)		1.5	1.4	
	Loss (% vol)		1.5	0.4	
ASTM D 56 - 05	Flash Point (°C)	38		42	
ASTM D 4052 - 96	Density @ 15°C (kg/m³)	775	840	807	
ASTM D 5972 - 05e1	Freezing Point (°C)		-40	-44	
ASTM D 445 - 06	Viscosity @ -20°C (mm²/s)		8.0	4.7	
ASTM D 3338 - 08	Net Heat of Combustion (MJ/kg)	42.8		43.2	
ASTM D 1322 - 08	Smoke Point				
	Smoke Point (w/allowable Naphthalenes) (mm)	18.0		22.0	
ASTM D 1840 - 07	Naphthalenes (% vol)		3.0	1.6	
ASTM D 130 - 04	Copper Strip Corrosion (2 h @ 100°C)	1 (Max)		1a	
ASTM D 3241 - 09	Thermal Stability @ 260°C				
	Change in Pressure (mmHg)		25	0	
	Tube Deposit Rating, Visual	<3 (Max)		1	
ASTM D 381 - 04	Existent Gum (mg/100 mL)		7	1.0	
ASTM D 1094 - 07	Water Reaction Interface Rating	1b (Max)		1	
ASTM D 3948 - 08	WSIM	70		99	
ASTM D 5006 - 03	FSII (% vol)	0.10	0.15	0.00	X
ASTM D 2624 - 07	Conductivity (pS/m)	50	450	0	X
GC	Gas Chromatographic Analysis			See Below	

Dispositions:
For information purposes only.
Coordinated with Gordon Walker (PTOT),----------
GC is that of a typical Jet A.

Approved By	**Date**
Miguel Acevedo, Chief	08/13/2009
\\SIGNED\\	

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