

Eastern Aviation Fuels, Inc.

Incident / Accident Report

Nature of Accident / Aircraft – Incident Information					
Account Name: <i>Elizabeth City Regional Airport</i>		Incident Type (Crash or *Spill): <i>CRASH</i>		Date of Incident: <i>9-8</i>	
Aircraft Type: <i>HELICOPTER HBB-BK117C-2</i>		Number of Injuries: <i>0</i>		Number of Fatalities: <i>4</i>	
Gallons Fueled: <i>70</i>		Fueling Date: <i>9-8</i>		Dispensed from: <i>JET TRUCK 1</i>	
Product Type: <i>JET A</i>		Date of last load: <i>2 Sept 2017</i>		API at Receipt (Observed): <i>43.7 60°</i> (API/Temp and corrected) <i>43.7 60°</i>	
API Gravity and Sump Results after incident (self-serve/storage tank/truck)					
Self-Serve: Observed (API / Temp)	Corrected	Storage Tank: Observed (API / Temp)	Corrected	Truck: Observed (API / Temp)	Corrected
				<i>45/78</i>	<i>43.4</i>
Sump Self-Serve: Tank	Filter Sump	Storage Tank Sump:	Filter Sump:	Truck Tank Sump	Filter
		<i>1A</i>	<i>1A</i>	<i>1A</i>	<i>1A</i>
Aircraft Fueled before Incident / after incident / Total number Fuels from Last Load received					
No. of A/C fueled Prior: <i>0</i>		No. of A/C After: <i>1</i>		Total # A/C Fueled from last load: <i>8</i>	
Results Brown Paper Bag:			Equipment in Quarantine Status (Type): <i>All Jet Fuel Equipment</i>		
Retain Sample Taken Date: <i>9-8-17</i>			Maintained On Site / Shipped to Lab: <i>TRUCK SAMPLE SENT MAINTAINED STRIPPED NEW BEEN TO LAB</i>		
Description of Incident-Accident: <i>Duke Life Flight Helicopter Refueled at Elizabeth city AIRPORT. Taking 70 gallons of Jet A. Helicopter then Departed and landed at SENTARA Albemarle Hospital FOR Patient PICK UP. Sometime AFTER Departing Sentara Albemarle the Helicopter CRASHED IN PERQUIMANS county</i>					
Fueling Equipment					
Type: <i>JET TRUCK 1</i>		Capacity: <i>3K</i>		Elements last installed: <i>NOV 2016</i>	
Date hose last checked: <i>9-8-17</i>		Filter Vessel Last sumped & results: <i>9-8-17 1A</i>		Tank last topped off date: <i>9-7-17</i>	
Quantity and Grade loaded: <i>JET A 2,778.4gals</i>		Settling time after loading: <i>12 Plus Hours</i>		Results, water checks after loading: <i>SAT</i>	
Name of operator who loaded vehicle / or self-serve (if applicable): [REDACTED]					
Equipment last checked for water prior to incident, date, time, method, results (Tank – Filter): <i>9-8-17 0730 Sumps Visual SAT</i>					
Name of operator who performed water checks prior to incident: [REDACTED]					
Results and date of last Millipore test (JetA product ONLY): <i>AD 31 Aug 2017</i>					

*If Spill please indicate number of gallons of spillage here: _____

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Receipts into Storage Tank Used (last 3)			
Information Needed	Load 1	Load 2	Load 3
Date Received	2 Sep 17	Attached	Attached
Supplying Terminal	RICHMOND		
Transport Company /Trailer Number	MARLIN 301		
Grade Received	Jet A		
Number of Gallons Received	7424		
Batch Clearance Cert, Release Cert, and or Bill of Lading Number	326093		
Seals – State whether intact and quote no. (If Fit)	N/A		
Fuel Color (sump sample from Transport)	Clear		
Tank compartment water checks-attach a copy of the aviation fuel receipt record			
Main Batch			
Test Report Number			
Time Load Introduced into Storage			
Fuel Receipt Checks performed by (Name)			
Retention Samples Drawn in Approved Epoxy Container (1 Gallon JetA / 5 Gallon Avgas)			
Storage Tank: <input checked="" type="checkbox"/> Yes / No	Truck: 1 <input checked="" type="checkbox"/> Yes / No	Cabinet / Self – Serve: Yes / No	
Name of operator who drew samples: [REDACTED]			
Reporting Official's Information for Incident			
Report completed by (Name): [REDACTED]		Job Title: OPERATIONS SUPERVISOR	
Contact Telephone: [REDACTED]	FAX: [REDACTED]	Email: [REDACTED]	
Date Report Completed and Faxed: 9-8-17			
Signature of Reporter: [REDACTED]			

Report of Analysis

Client: Eastern Aviation Fuels, Inc.
Job Location: Submitted Sample
Vessel/Tank: New Bern, NC
Lab Reference Number: 2017-CHGO-003104
Batch No.:
Sample Designated As: Jet Fuel
Representing: Elizabeth City NC Truck Submitted Sample

Date Taken: 11-Sep-2017
Date Submitted: 12-Sep-2017
Date Tested: 12-Sep-2017
Drawn By: Client
Recert. No.: EA17-033
Client Reference Number: None

PROPERTY	Method	Spec Limits	Results	Units	Spec Results
Appearance					
Appearance (SUBMIT_SMP)	ASTM D4176	Clear and free of undissolved water sediment and unsuspended matter	Clear, Bright & Free of Entrained Matter		Pass
Saybolt Color	ASTM D6045		24		
Composition					
Acid Number	ASTM D3242	Max 0.10	0.001	mg KOH/g	Pass
Aromatics	ASTM D1319	Max 25	16.9	Vol %	Pass
Sulfur Content	ASTM D4294	Max 0.30	0.153	Wt %	Pass
Mercaptan Sulfur	ASTM D3227	Max 0.003	0.0012	%(m/m)	Pass
Volatility					
Initial Boiling Point	ASTM D86		146.6	°C	
10% Recovery	ASTM D86	Max 205	173.1	°C	Pass
20% Recovery	ASTM D86		181.0	°C	
50% Recovery	ASTM D86		206.4	°C	
90% Recovery	ASTM D86		254.9	°C	
Final Boiling Point	ASTM D86	Max 300	280.7	°C	Pass
Residue	ASTM D86	Max 1.5	1.2	Vol %	Pass
Corrected Loss	ASTM D86	Max 1.5	0.4	Vol %	Pass
Corrected Recovery	ASTM D86		98.4	Vol %	
Corrected Total Recovery	ASTM D86		99.6	Vol %	
Corrected Flash Point	ASTM D56	Min 38	44.5	°C	Pass
API Gravity @ 60°F (SUBMIT_SMP)	ASTM D4052		43.8	°API	
Density @ 15°C (SUBMIT_SMP)	ASTM D4052	775 - 840	807.0	kg/m ³	Pass
Fluidity					
Freezing Point	ASTM D5972	Max -40	-46.5	°C	Pass
Kinematic Viscosity @ -4 °F/ -20 °C	ASTM D445	Max 8.0	4.746	mm ² /s	Pass
Combustion					
Net Heat of Combustion - Sulfur-Corrected	ASTM D3338/D3338M	Min 42.8	43.203	MJ/kg	Pass
Smoke Point (Manual Procedure)	ASTM D1322	Min 18	23.0	mm	Pass
Naphthalenes	ASTM D1840	Max 3.0	1.29	Vol %	Pass
Corrosion					
Copper Corrosion @ 100°C (212°F)/2 hr	ASTM D130	Max No. 1	1a		Pass
Stability					
Instrumentation Used for Evaluating Heater Tube	ASTM D3241		Interferometer		
Test Temperature of Fuel	ASTM D3241		260	°C	
Heater Tube Deposit Thickness	ASTM D3241	Max 85	16	nm	Pass
Heater Tube Deposit Volume	ASTM D3241		0.00450	mm ³	
Maximum Pressure Drop Across Filter	ASTM D3241	Max 25	<1	mm Hg	Pass
Spent Fuel Volume	ASTM D3241		427	ml	
Contaminants					
Existent Gum Content	ASTM D381	Max 7	< 1	mg/100ml	Pass
Additional Parameters					
MSEP Rating	ASTM D7224	Min 85	86		Pass

The above referenced sample as tested meets the relevant specification with respect to the tests performed and complies with ASTM D1655 for Jet A.

Report of Analysis

Signed:



Thomas Bush, Laboratory Supervisor

Date: 12-Sep-2017