

### FUEL REPORT

Sample Rating Trend

# CONTAMINANT

Machine Id

## Dehavlliand Q400 816 left fuel tank

Tank Jet Fuel Fluid JET FUEL Type A (3379 LTR)

#### DIAGNOSIS

#### A Recommendation

We advise that you inspect the fuel tank for signs of corrosion and remove any heavy microbiological contamination manually. We recommend you service and check the fuel filters for mucous-like deposits. Check with fuel supplier for biocides available to destroy the microorganisms in the fuel system. Recommend resampling in 10 days. Resample at the next service interval to monitor. ( Customer Sample Comment: Please check for water and bacterial growth )

#### Contamination

The water content is negligible. The fuel phase was tested for microbes, as there was no separate water phase present in the sample. The MicrobMonitor2 test kit was used to test for microbiological contamination in the sample. Excessively high bacteria counts.

#### Fluid Condition

The fuel is no longer serviceable due to the presence of contaminants.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0653006	WC0653007	
Sample Date		Client Info		20 Jun 2024	20 Jun 2024	
Machine Age	mths	Client Info		0	0	
Oil Age	mths	Client Info		6	0	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				SEVERE	NORMAL	
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*		0.805	0.805	
Fuel Color	text	Visual Screen*		Clear	Clear	
Visc @ 40°C	cSt	ASTM D7279(m)	<8.0	7	4.1	
Pensky-Martens Flash Point	°C	ASTM D7215*	38	43.8	43.6	
Pour Point	°C	ASTM D97*	-45	-60	-60	
SULFUR CONTER	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185(m)	<3000	496	493	
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*		152	152	
5% Distillation Point	°C	ASTM D2887*		166	166	
10% Distill Point	°C	ASTM D2887*	205	172	172	
15% Distillation Point	°C	ASTM D2887*		176	176	
20% Distill Point	°C	ASTM D2887*		180	180	
30% Distill Point	°C	ASTM D2887*		188	189	
40% Distill Point	°C	ASTM D2887*		197	198	
50% Distill Point	°C	ASTM D2887*		206	207	
60% Distill Point	°C	ASTM D2887*		216	216	
70% Distill Point	°C	ASTM D2887*		225	226	
80% Distill Point	°C	ASTM D2887*		238	239	
85% Distillation Point	°C	ASTM D2887*		248	250	
90% Distill Point	°C	ASTM D2887*		258	260	
95% Distillation Point	°C	ASTM D2887*		275	280	
Final Boiling Point	°C	ASTM D2887*	300	324	327	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	0	0	
Sodium	ppm	ASTM D5185(m)	<0.1	0	0	
Potassium	ppm	ASTM D5185(m)	<0.1	0	0	
Water	%	ASTM D6304*	<0.05	0.003	0.003	
ppm Water	ppm	ASTM D6304*	<500	36	34	
MICROBIAL		method	limit/base	current	history1	history2
Microbes	CFU/L	ASTM D6469*	>=100000	<b>20000</b>	0	



Water (KF)

Viscosity @ 40°C

Gas Chromatography (GCD)

Gas Chromatography (GCD)

GCD 10%

GCD 90%

GCD 10%

GCD 90%

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300

280

260

240

220

200

180

160

140

300

280

260

240

220

200

180

160

140

ABR8FR

### **FUEL REPORT**

HEAVY METALS		method	limit/base	current	history1
Aluminum ppm		ASTM D5185(m)	<0.1	0	0
Nickel	ppm	ASTM D5185(m)	<0.1	0	0
Lead	ppm	ASTM D5185(m)	<0.1	0	0
Vanadium	ppm	ASTM D5185(m)	<0.1	0	0
Iron	ppm	ASTM D5185(m)	<0.1	0	0
Calcium	ppm	ASTM D5185(m)	<0.1	0	0
Magnesium	ppm	ASTM D5185(m)	<0.1	0	0
Phosphorus	ppm	ASTM D5185(m)	<0.1	<1	<1
Zinc	ppm	ASTM D5185(m)	<0.1	0	0

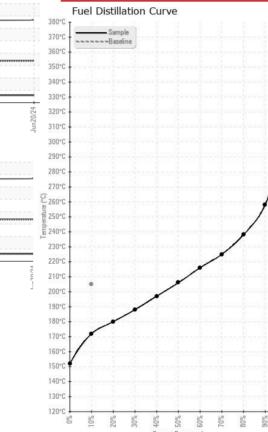
SAMPLE IMAGES

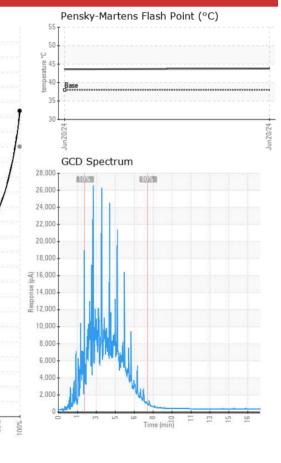
Color

Bottom









Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : WC0653006 Received : 21 Jun 2024 Lab Number : 02643549 Tested : 25 Jun 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5801088 Diagnosed : 25 Jun 2024 - Bill Quesnel Test Package : FUEL (Additional Tests: CC Flash) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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PORTER AIRLINES INC



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