



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

[C-GHKA] DEHAVILLAND DHC-8-402 C-GHKA

Component

Left Jet Turbine

Fluid

BP TURBO OIL 2380 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal. The ferrography results are normal indicating no abnormal wear in the system.

Contaminants

The water content is negligible. There is no indication of any contamination in the oil.

Oil Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0954079	---	---
Sample Date	Client Info	13 Jun 2024	---	---
TSN	hrs Client Info	0	---	---
TSO	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >8	0	---	---
Chromium	ppm ASTM D5185(m) >2	0	---	---
Nickel	ppm ASTM D5185(m) >2	0	---	---
Titanium	ppm ASTM D5185(m) >2	0	---	---
Silver	ppm ASTM D5185(m) >2	0	---	---
Aluminum	ppm ASTM D5185(m) >2	<1	---	---
Lead	ppm ASTM D5185(m) >3	0	---	---
Copper	ppm ASTM D5185(m) >3	0	---	---
Tin	ppm ASTM D5185(m) >2	0	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<1	---	---
Barium	ppm ASTM D5185(m) 0	0	---	---
Molybdenum	ppm ASTM D5185(m) 0	0	---	---
Manganese	ppm ASTM D5185(m)	0	---	---
Magnesium	ppm ASTM D5185(m) 0	<1	---	---
Calcium	ppm ASTM D5185(m) 0	0	---	---
Phosphorus	ppm ASTM D5185(m) 2500	2645	---	---
Zinc	ppm ASTM D5185(m) 0	<1	---	---
Sulfur	ppm ASTM D5185(m) 0	5	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

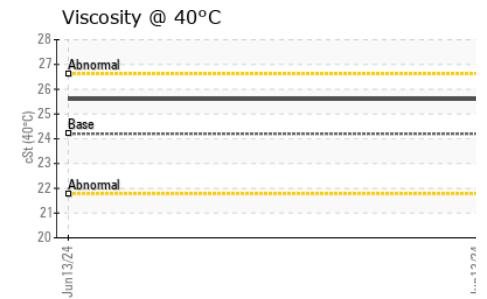
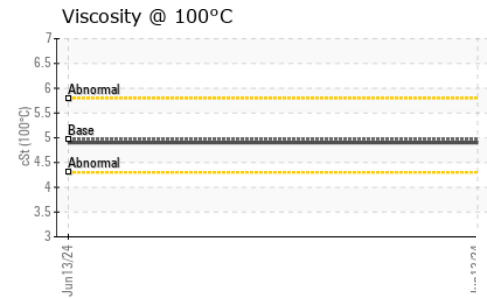
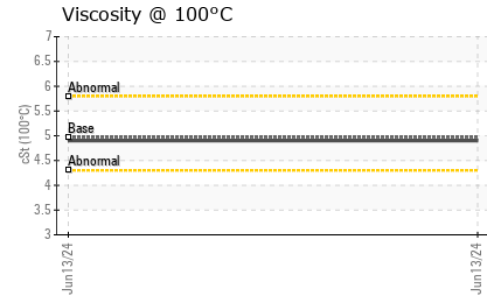
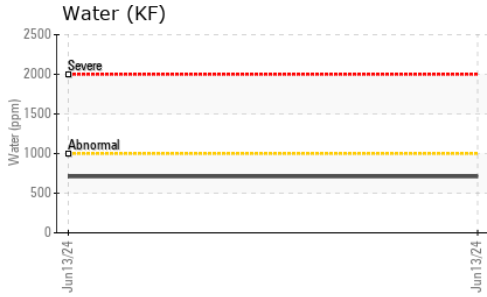
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >8	5	---	---
Sodium	ppm ASTM D5185(m)	<1	---	---
Potassium	ppm ASTM D5185(m) >20	<1	---	---
Water	% ASTM D6304* >0.1	0.071	---	---
ppm Water	ppm ASTM D6304* >1000	710	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.43	0.40	---	---



OIL ANALYSIS REPORT



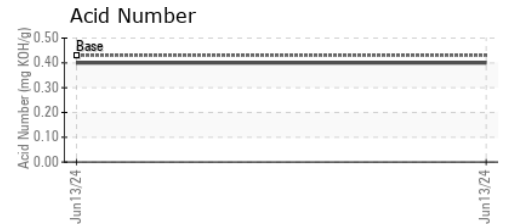
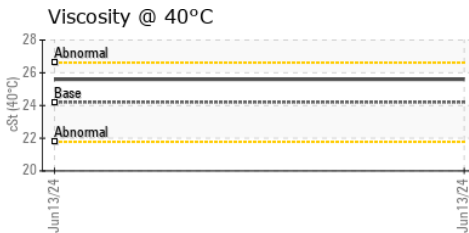
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	24.2	25.6	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	4.9	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	134	115	---	---

SAMPLE IMAGES

	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0954079
Lab Number : 02641960
Unique Number : 5799499
Test Package : AVI 3

Received : 14 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Kevin Marson

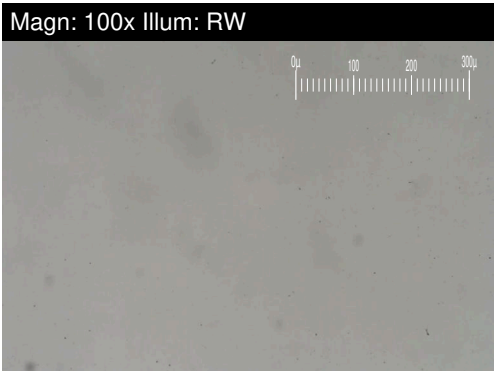
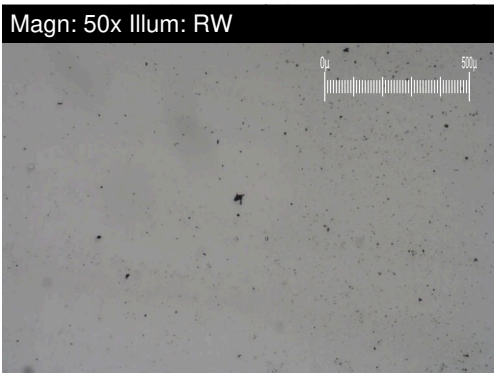
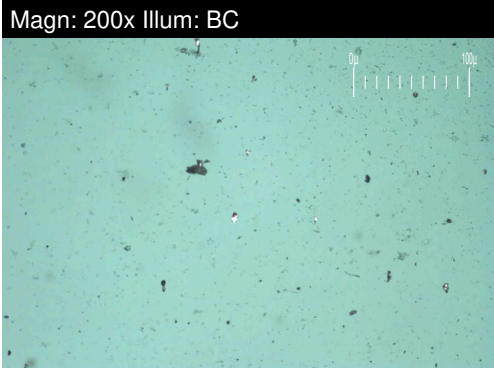
SMART AVIATION
 775 COUNTY ROAD 64
 BRIGHTON, ON
 CA K0K 1H0
 Contact: Mark Rinaldi
 mark.rinaldi@smartams.ca
 T: (343)645-4361
 F:

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.



FERROGRAPHY REPORT

Machine Id
[C-GHKA] DEHAVILLAND DHC-8-402 C-GHKA
 Component
Left Jet Turbine
 Fluid
BP TURBO OIL 2380 (--- GAL)

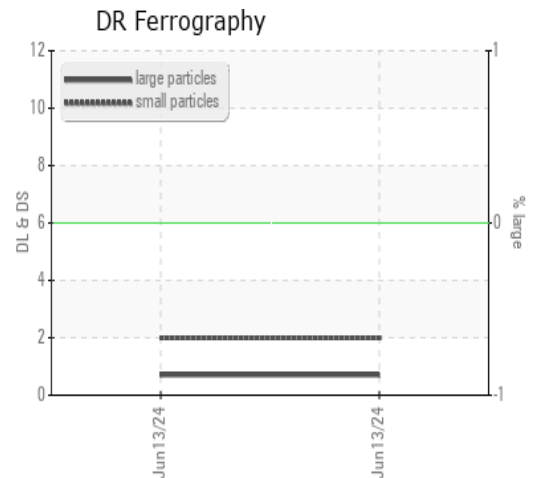


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		0.7	---	---
Small Particles		DR-Ferr*		2.0	---	---
Total Particles		DR-Ferr*	>---	2.7	---	---
Large Particles Percentage	%	DR-Ferr*		0	---	---
Severity Index		DR-Ferr*		1	---	---

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		1		
Ferrous Sliding	Scale 0-10	ASTM D7684*				
Ferrous Cutting	Scale 0-10	ASTM D7684*				
Ferrous Rolling	Scale 0-10	ASTM D7684*		1		
Ferrous Break-in	Scale 0-10	ASTM D7684*				
Ferrous Spheres	Scale 0-10	ASTM D7684*				
Ferrous Black Oxides	Scale 0-10	ASTM D7684*				
Ferrous Red Oxides	Scale 0-10	ASTM D7684*				
Ferrous Corrosive	Scale 0-10	ASTM D7684*				
Ferrous Other	Scale 0-10	ASTM D7684*				
Nonferrous Rubbing	Scale 0-10	ASTM D7684*				
Nonferrous Sliding	Scale 0-10	ASTM D7684*				
Nonferrous Cutting	Scale 0-10	ASTM D7684*				
Nonferrous Rolling	Scale 0-10	ASTM D7684*				
Nonferrous Other	Scale 0-10	ASTM D7684*				
Carbonaceous Material	Scale 0-10	ASTM D7684*				
Lubricant Degradation	Scale 0-10	ASTM D7684*				
Sand/Dirt	Scale 0-10	ASTM D7684*		1		
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*		1		

WEAR

All component wear rates are normal. The ferrography results are normal indicating no abnormal wear in the system.



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