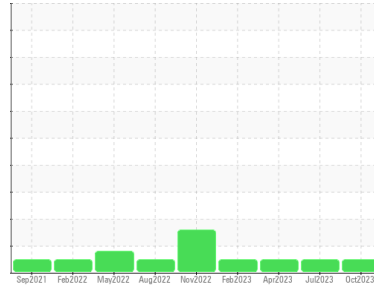




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(C-FFAP)
Machine Id
[C-FFAP] BEEHCRAFT KING AIR 200 PWV79199
Component
Right Jet Turbine
Fluid
EASTMAN TURBO OIL 2380 (12 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal. The direct-reading & analytical ferrographic 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		WC0852084	WC0827509	WC0808338
Sample Date	Client Info		05 Oct 2023	12 Jul 2023	26 Apr 2023
TSN	hrs Client Info		15114	14889	14889
TSO	hrs Client Info		3458	3234	3039
Oil Age	hrs Client Info		225	1771	1576
Oil Changed	Client Info		N/A	Changed	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	0	<1	<1	<1
Barium	ppm ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm ASTM D5185(m)	0	0	0	0
Manganese	ppm ASTM D5185(m)		0	0	0
Magnesium	ppm ASTM D5185(m)	0	0	<1	<1
Calcium	ppm ASTM D5185(m)	0	0	0	0
Phosphorus	ppm ASTM D5185(m)	2500	2682	2672	2617
Zinc	ppm ASTM D5185(m)	0	1	2	<1
Sulfur	ppm ASTM D5185(m)	0	3	2	2
Lithium	ppm ASTM D5185(m)		<1	<1	<1

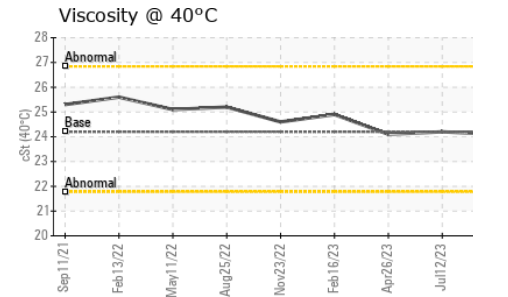
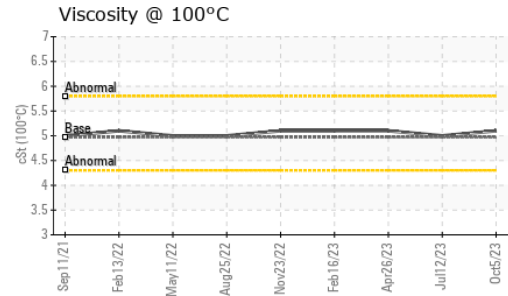
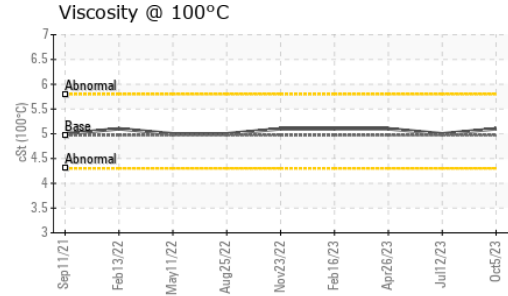
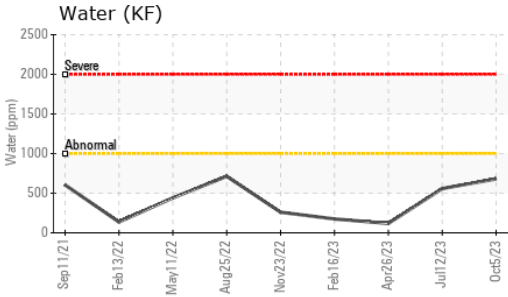
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>8	<1	2	1
Sodium	ppm ASTM D5185(m)		<1	<1	<1
Potassium	ppm ASTM D5185(m)	>20	0	<1	0
Water	% ASTM D6304*	>0.1	0.068	0.055	0.011
ppm Water	ppm ASTM D6304*	>1000	680.2	558.4	118.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	0.43	0.29	0.30	0.39

OIL ANALYSIS REPORT



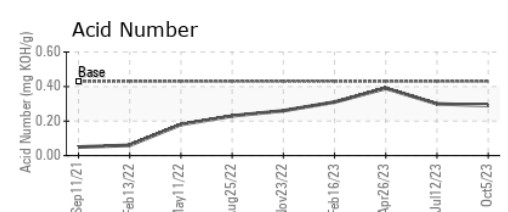
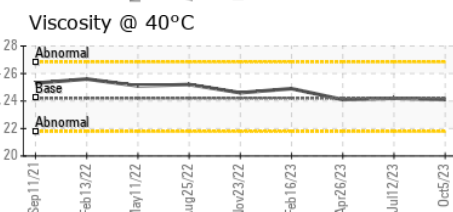
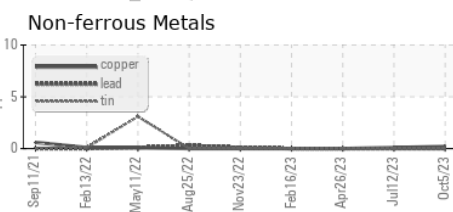
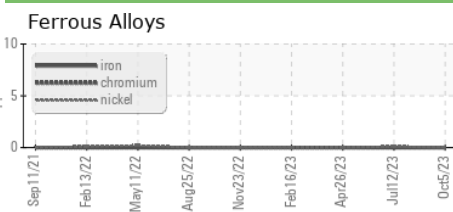
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	24.2	24.1	24.2	24.1
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	5.1	5	5.1
Viscosity Index (VI)	Scale	ASTM D2270*	134	145	136	145

SAMPLE IMAGES

	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0852084
Lab Number : 02589602 **Received** : 17 Oct 2023
Unique Number : 5658668 **Diagnosed** : 18 Oct 2023
Test Package : AVI 3 **Diagnostician** : Kevin Marson

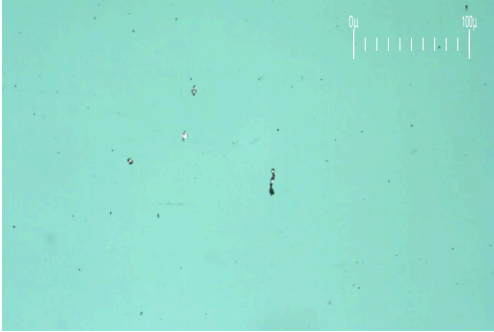
FAST AIR LTD
 80 HANGAR LINE ROAD
 WINNIPEG, MB
 CA R3J 3Y7
 Contact: Denis Bourgouin
 denis.bourgouin@flyfastair.com
 T: (204)772-7622
 F: (204)783-2483

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

Area
(C-FFAP)
 Machine Id
[C-FFAP] BEEHCRAFT KING AIR 200 PWV79199
 Component
Right Jet Turbine
 Fluid
EASTMAN TURBO OIL 2380 (12 QTS)

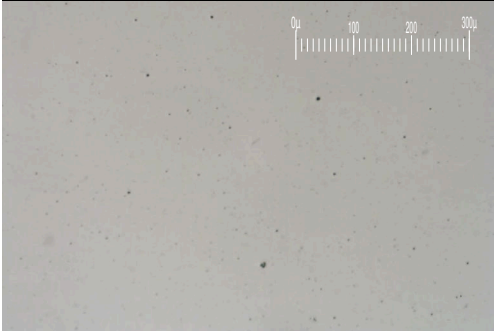
Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW

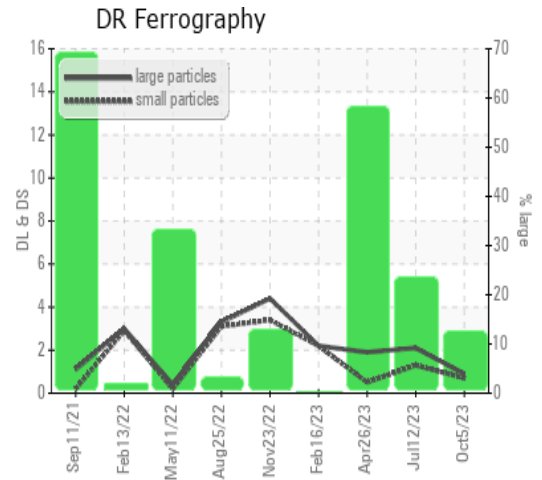


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		0.9	2.1	1.9
Small Particles		DR-Ferr*		0.7	1.3	0.5
Total Particles		DR-Ferr*	>---	1.6	3.4	2.4
Large Particles Percentage	%	DR-Ferr*		12.5	23.5	58.3
Severity Index		DR-Ferr*		0	2	3

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		1	1	1
Ferrous Sliding	Scale 0-10	ASTM D7684*				
Ferrous Cutting	Scale 0-10	ASTM D7684*				
Ferrous Rolling	Scale 0-10	ASTM D7684*		1	1	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	1	1
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*		1	1	1

WEAR

All component wear rates are normal. The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system.



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