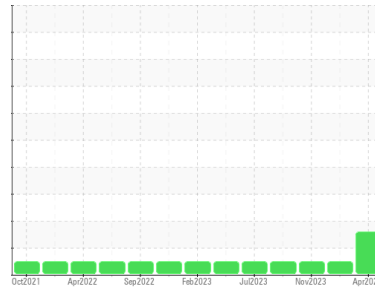




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area

(C-FKJI)

Machine Id

[C-FKJI] BEECHCRAFT KING AIR 200 PCE-80611

Component

Right Jet Turbine

Fluid

EASTMAN TURBO OIL 2380 (12 QTS)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

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

Contaminants

Elemental level of silicon (Si) above normal indicating ingress of seal material. The water content is negligible.

Oil Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0911750	WC0896745	WC0882229
Sample Date	Client Info		03 Apr 2024	02 Feb 2024	27 Nov 2023
TSN	hrs	Client Info	15873	15685	15453
TSO	hrs	Client Info	3746	3558	3326
Oil Age	hrs	Client Info	1279	408	176
Oil Changed		Client Info	Not Chngd	Not Chngd	N/A
Sample Status			ABNORMAL	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	0	0
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	0	<1
Aluminum	ppm	ASTM D5185(m) >2	0	<1	0
Lead	ppm	ASTM D5185(m) >3	0	0	<1
Copper	ppm	ASTM D5185(m) >3	0	0	<1
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	0	<1
Barium	ppm	ASTM D5185(m) 0	0	0	<1
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	<1	<1	0
Calcium	ppm	ASTM D5185(m) 0	0	0	0
Phosphorus	ppm	ASTM D5185(m) 2500	2699	2692	2555
Zinc	ppm	ASTM D5185(m) 0	1	<1	<1
Sulfur	ppm	ASTM D5185(m) 0	2	0	2
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

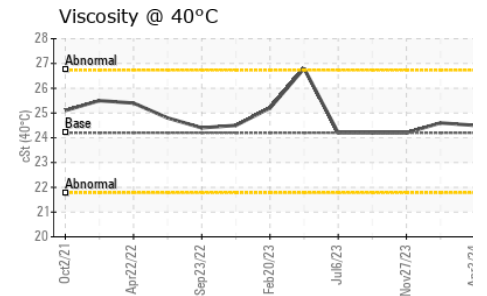
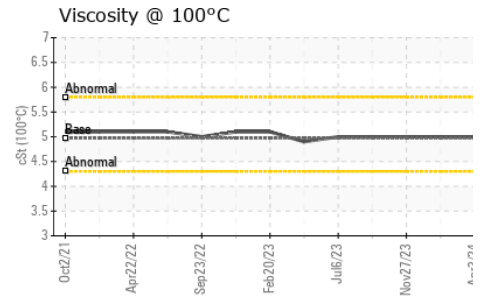
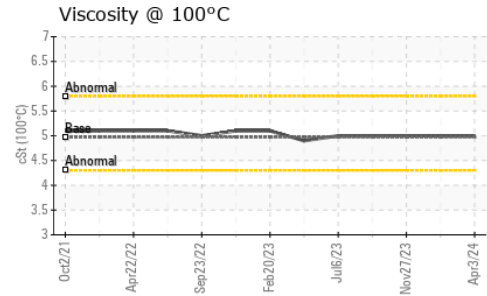
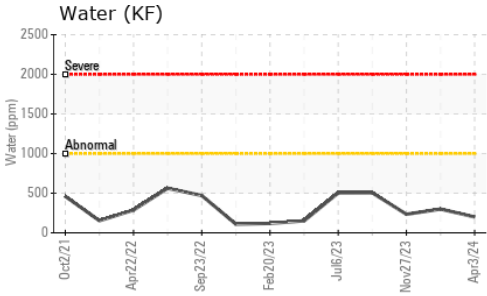
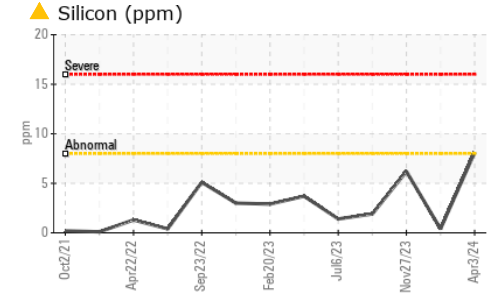
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >8	▲ 8	<1	6
Sodium	ppm	ASTM D5185(m)	0	0	<1
Potassium	ppm	ASTM D5185(m) >20	<1	<1	0
Water	%	ASTM D6304* >0.1	0.019	0.029	0.023
ppm Water	ppm	ASTM D6304* >1000	200	300	234

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.43	0.36	0.38	0.43



OIL ANALYSIS REPORT

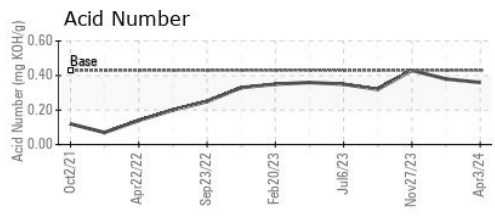
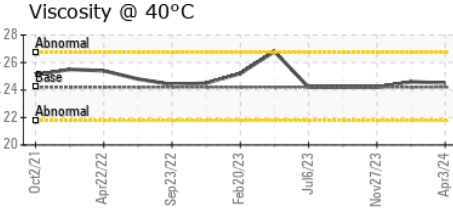
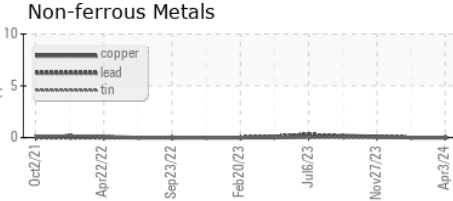
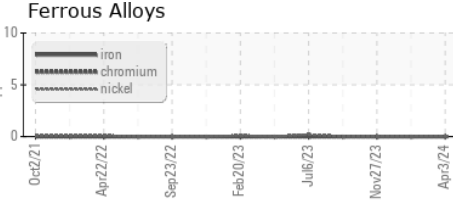


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	24.5	24.6
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	5.0	5
Viscosity Index (VI)	Scale	ASTM D2270*	134	133	132

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0911750
Lab Number : 02627857
Unique Number : 5760989
Test Package : AVI 3
Received : 10 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 16 Apr 2024 - 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

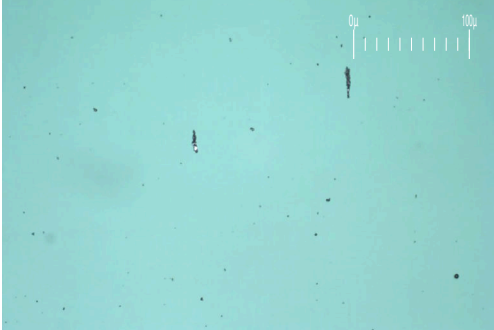
To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.



FERROGRAPHY REPORT

Area
(C-FKJI)
 Machine Id
[C-FKJI] BEEHCRAFT KING AIR 200 PCE-80611
 Component
Right Jet Turbine
 Fluid
EASTMAN TURBO OIL 2380 (12 QTS)

Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW

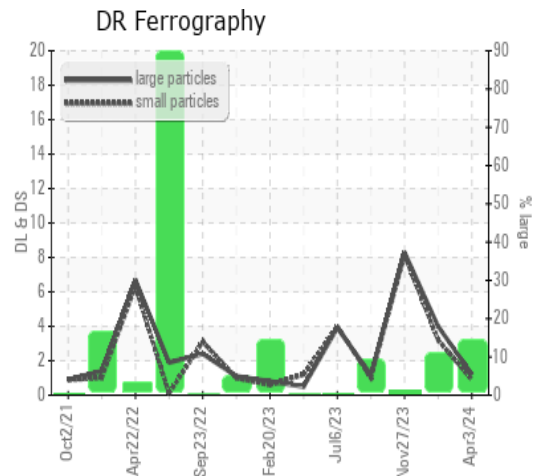


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		1.2	4.0	8.3
Small Particles		DR-Ferr*		0.9	3.2	8.1
Total Particles		DR-Ferr*	>---	2.1	7.2	16.4
Large Particles Percentage	%	DR-Ferr*		14.3	11.1	1.2
Severity Index		DR-Ferr*		0	3	2

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		1	2	2
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*				1
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
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 ferrography results are normal indicating no abnormal wear in the system.



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