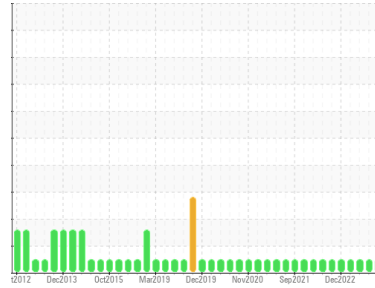




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(C-FDEB)**  
Machine Id  
**[C-FDEB] BEEHCRAFT KING AIR 200 PCE-81088**  
Component  
**Left Jet Turbine**  
Fluid  
**EASTMAN TURBO OIL 2380 (14 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		<b>WC0844512</b>	WC0827506	WC0817298
Sample Date	Client Info		<b>10 Oct 2023</b>	19 Jul 2023	23 May 2023
TSN	hrs	Client Info	<b>16287</b>	21470	13954
TSO	hrs	Client Info	<b>5732</b>	5525	5326
Oil Age	hrs	Client Info	<b>836</b>	630	1925
Oil Changed		Client Info	<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185(m) 2500	<b>2641</b>	2738	2794
Zinc	ppm	ASTM D5185(m) 0	<b>1</b>	2	<1
Sulfur	ppm	ASTM D5185(m) 0	<b>2</b>	2	4
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

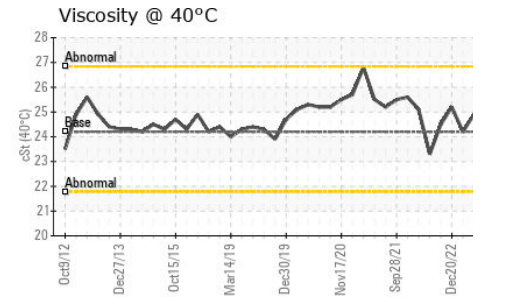
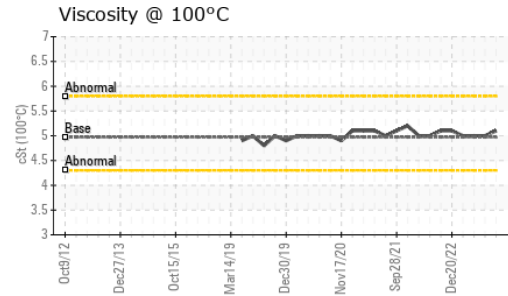
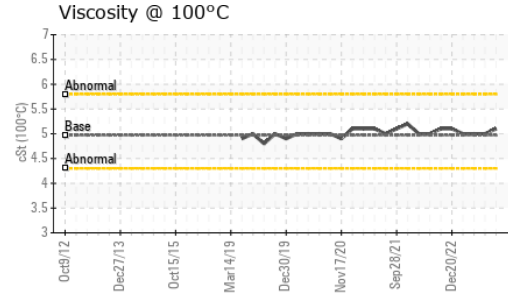
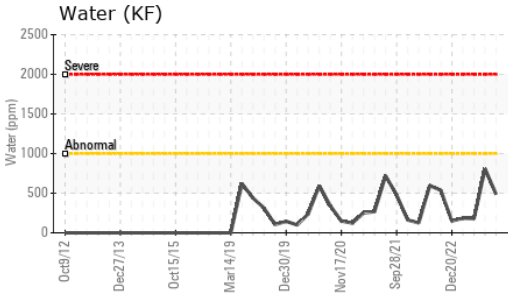
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >8	<b>2</b>	6	6
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Water	%	ASTM D6304* >0.1	<b>0.048</b>	0.080	0.017
ppm Water	ppm	ASTM D6304* >1000	<b>487.3</b>	807.8	178.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.43	<b>0.27</b>	0.27	0.34

# OIL ANALYSIS REPORT

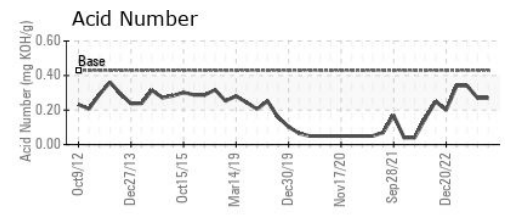
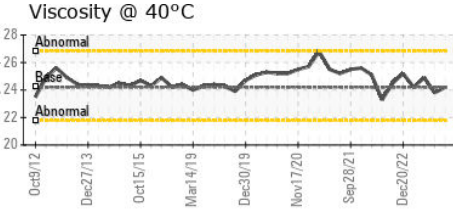
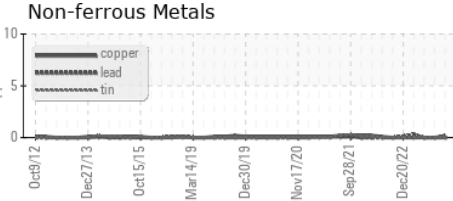
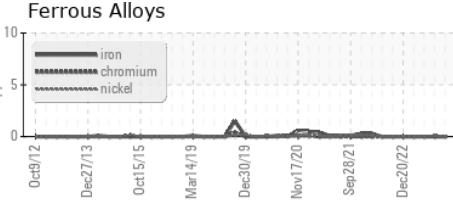


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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	23.8	24.9
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	5	5
Viscosity Index (VI)	Scale	ASTM D2270*	134	141	129

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0844512 **Received** : 17 Oct 2023  
**Lab Number** : 02589599 **Diagnosed** : 18 Oct 2023  
**Unique Number** : 5658665 **Diagnostician** : Kevin Marson  
**Test Package** : AVI 3

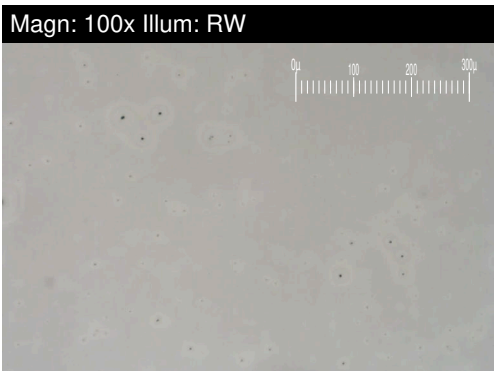
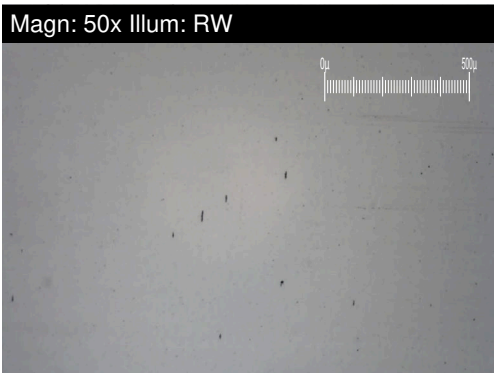
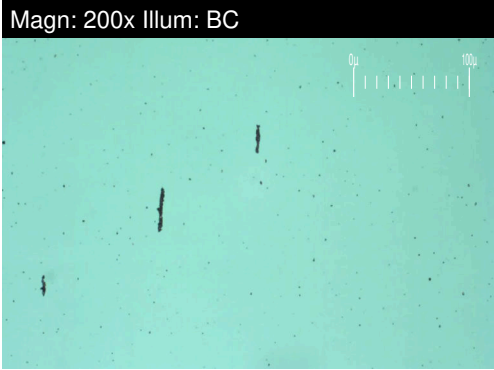
**FAST AIR LTD**  
 80 HANGAR LINE ROAD  
 WINNIPEG, MB  
 CA R3J 3Y7  
 Contact: Denis Bourgouin  
 denis.bourgouin@flyfastair.com  
 T: (204)772-7622  
 F: (204)783-2483

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-FDEB)**  
 Machine Id  
**[C-FDEB] BEEHCRAFT KING AIR 200 PCE-81088**  
 Component  
**Left Jet Turbine**  
 Fluid  
**EASTMAN TURBO OIL 2380 (14 QTS)**

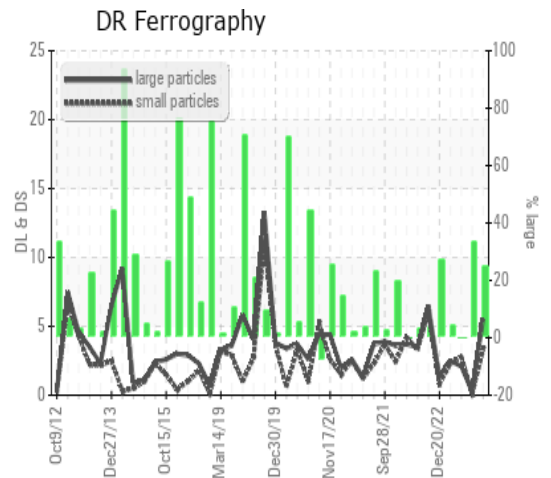


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		<b>5.5</b>	0.2	2.1
Small Particles		DR-Ferr*		<b>3.3</b>	0.1	2.8
Total Particles		DR-Ferr*	>---	<b>8.8</b>	0.3	4.9
Large Particles Percentage	%	DR-Ferr*		<b>25</b>	33.3	0
Severity Index		DR-Ferr*		<b>12</b>	0	1

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		1	1	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*				
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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