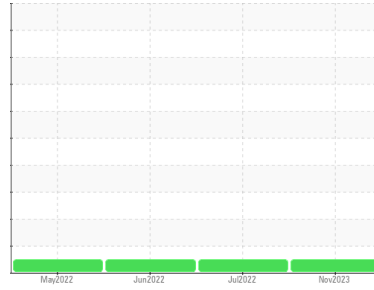




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(C-FGWR)**  
Machine Id  
**[C-FGWR] BEECHCRAFT KING AIR B200 PCE-PJ0404**  
Component  
**Right Jet Turbine**  
Fluid  
**EASTMAN TURBO OIL 2380 (2 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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	<b>WC0880034</b>	WC0701461	WC0701457
Sample Date	Client Info	<b>30 Nov 2023</b>	28 Jul 2022	10 Jun 2022
TSN	hrs Client Info	<b>8800</b>	8477	8266
TSO	hrs Client Info	<b>5230</b>	491	4696
Oil Age	hrs Client Info	<b>0</b>	0	0
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>&lt;1</b>	0	<1
Chromium	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Nickel	ppm ASTM D5185(m) >2	<b>&lt;1</b>	0	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>&lt;1</b>	0	0
Lead	ppm ASTM D5185(m) >3	<b>&lt;1</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	<1
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	0
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>	0	0
Phosphorus	ppm ASTM D5185(m) 2500	<b>2689</b>	2704	2632
Zinc	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Sulfur	ppm ASTM D5185(m) 0	<b>4</b>	3	<1
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

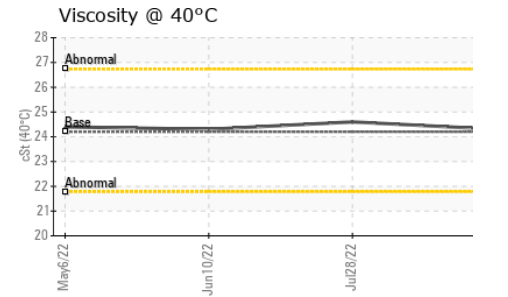
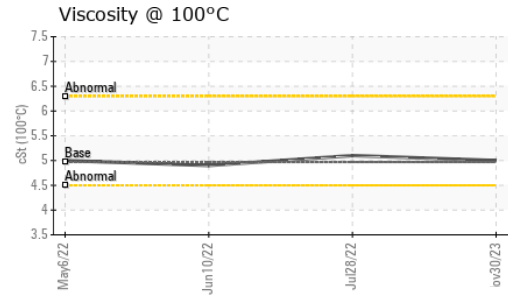
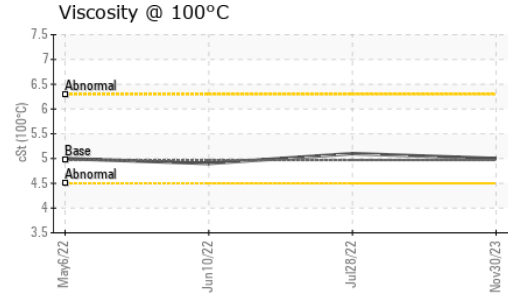
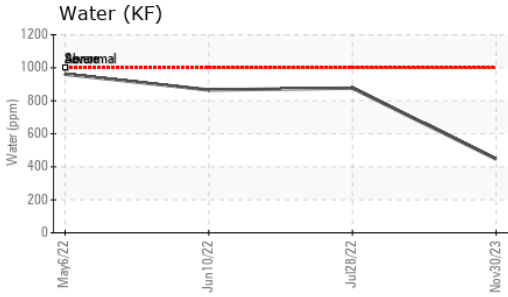
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >8	<b>2</b>	<1	1
Sodium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	0
Potassium	ppm ASTM D5185(m) >20	<b>0</b>	<1	<1
Water	% ASTM D6304* >.1001	<b>0.044</b>	0.087	0.086
ppm Water	ppm ASTM D6304* >1001	<b>447</b>	876.4	865.3

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974* 0.43	<b>0.38</b>	0.26	0.30



# OIL ANALYSIS REPORT

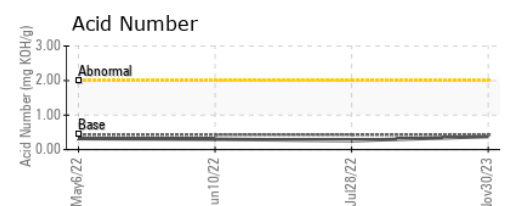
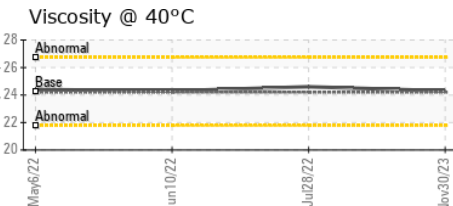
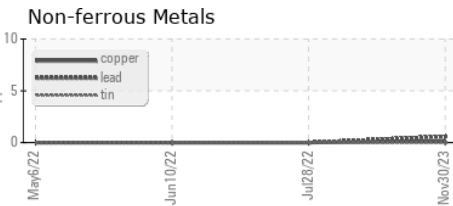
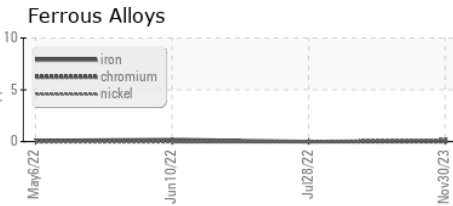


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>.1001	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	<b>24.3</b>	24.6	24.3
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	<b>5</b>	5.1	4.9
Viscosity Index (VI)	Scale	ASTM D2270*	134	<b>135</b>	140	127

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0880034 **Recieved** : 19 Dec 2023  
**Lab Number** : **02604129** **Diagnosed** : 21 Dec 2023  
**Unique Number** : 5697214 **Diagnostician** : Kevin Marson  
**Test Package** : AVI 3

**Keewatin Air LP**  
 50 Morberg Way  
 Winnipeg, MB  
 CA R3H 0A4  
 Contact: Rochelle Aranez  
 raranez@keewatinair.ca  
 T: (204)888-0100  
 F: (204)888-5791

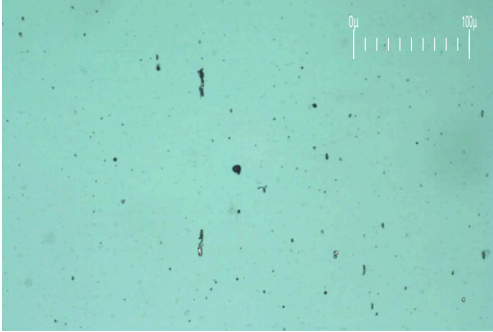
To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.



# FERROGRAPHY REPORT

Area  
**(C-FGWR)**  
 Machine Id  
**[C-FGWR] BEEHCRAFT KING AIR B200 PCE-PJ0404**  
 Component  
**Right Jet Turbine**  
 Fluid  
**EASTMAN TURBO OIL 2380 (2 GAL)**

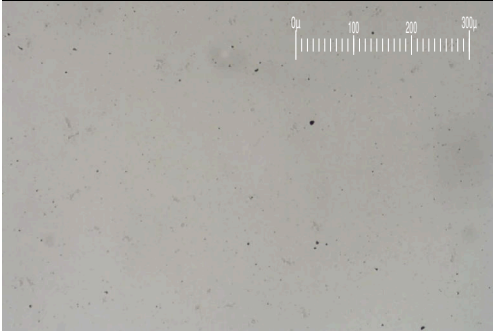
Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW

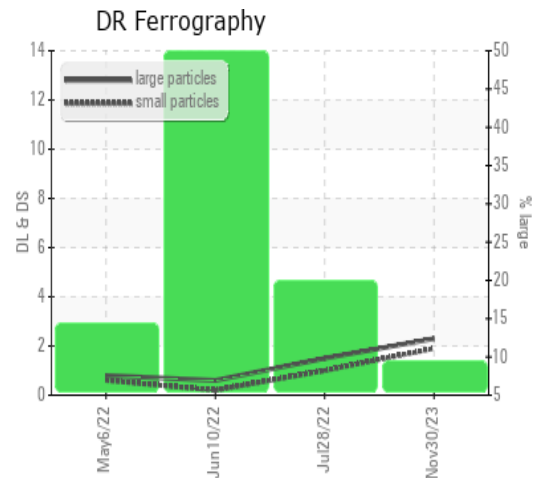


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		<b>2.3</b>	1.5	0.6
Small Particles		DR-Ferr*		<b>1.9</b>	1.0	0.2
Total Particles		DR-Ferr*	>---	<b>4.2</b>	2.5	0.8
Large Particles Percentage	%	DR-Ferr*		<b>9.5</b>	20	50
Severity Index		DR-Ferr*		<b>1</b>	1	0

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

### WEAR

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



*This page left intentionally blank*