AVI III

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINANTS	NORMAL
OIL CONDITION	NORMAL

Area
(CGTLS)

Machine Id
[CGTLS] KING AIR K100 PCE51790

Component
Left Jet Turbine

Fluid
BP TURBO OIL 2380 (--- GAL)

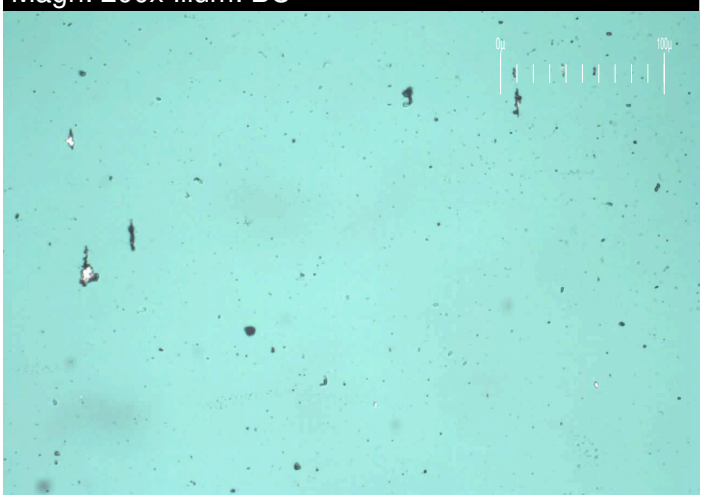
RECOMMENDATION

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

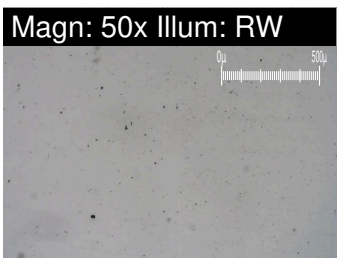
WEAR

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

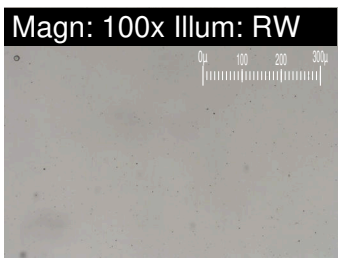
Magn: 200x Illum: BC



Magn: 50x Illum: RW



Magn: 100x Illum: RW



Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0859482	---	---
Sample Date		Client Info		06 Jun 2024	---	---
TSN	hrs	Client Info		1038	---	---
TSO	hrs	Client Info		281	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		281	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---
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	0	---	---
Lead	ppm	ASTM D5185(m)	>3	0	---	---
Copper	ppm	ASTM D5185(m)	>3	<1	---	---
Tin	ppm	ASTM D5185(m)	>2	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Large Particles		DR-Ferr*		1.3	---	---
Small Particles		DR-Ferr*		1.4	---	---
Total Particles		DR-Ferr*	>---	2.7	---	---
Large Particles Percentage	%	DR-Ferr*		0	---	---
Severity Index		DR-Ferr*		0	---	---
Ferrous Rubbing	Scale 0-10	ASTM D7684*		2		
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*				

CONTAMINANTS

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

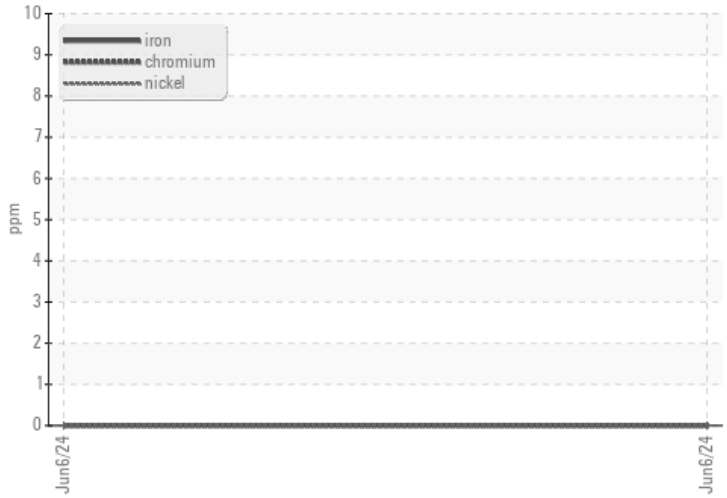
Silicon	ppm	ASTM D5185(m)	>8	**0**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**0**	---	---
Water	%	ASTM D6304*	>0.1	**0.048**	---	---
ppm Water	ppm	ASTM D6304*	>1000	**484**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	---	---
Appearance	scalar	Visual*	NORML	**NORML**	---	---
Odor	scalar	Visual*	NORML	**NORML**	---	---
Emulsified Water	scalar	Visual*	>0.1	**NEG**	---	---
Carbonaceous Material	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**		

OIL CONDITION

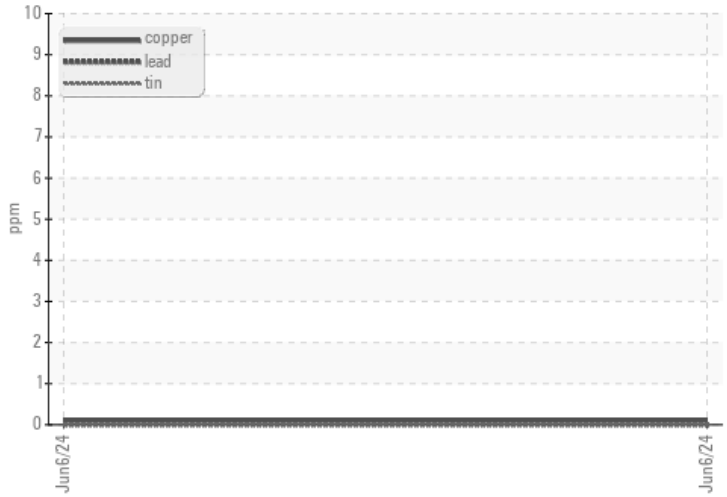
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		**<1**	---	---
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	**2**	---	---
Phosphorus	ppm	ASTM D5185(m)	2500	**2620**	---	---
Zinc	ppm	ASTM D5185(m)	0	**3**	---	---
Sulfur	ppm	ASTM D5185(m)	0	**8**	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.43	**0.26**	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	24.2	**24.6**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	**5.0**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	134	**132**	---	---
Lubricant Degradation	Scale 0-10	ASTM D7684*				

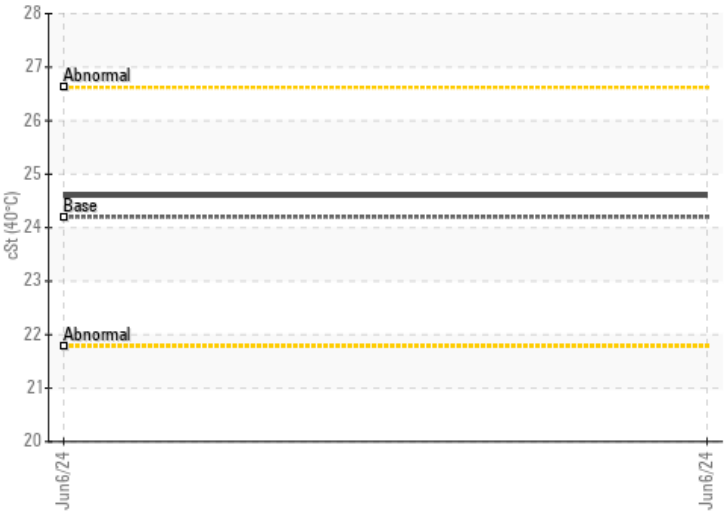
Ferrous Alloys



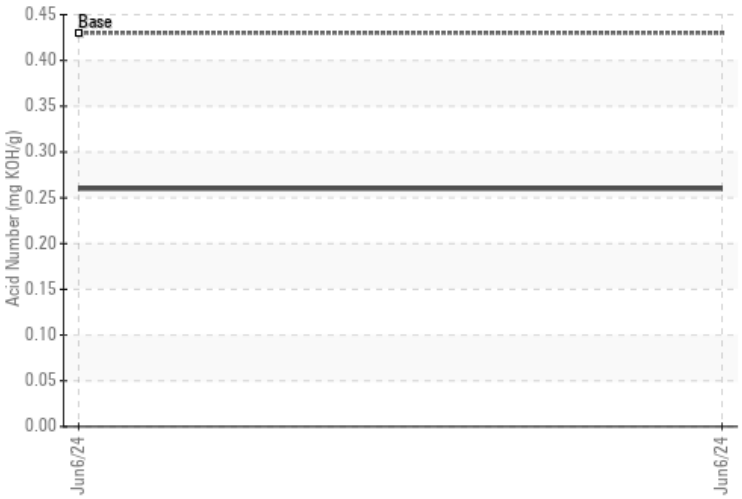
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0859482
Lab Number : 02640488
Unique Number : 5789650
Test Package : AVI 3

Received : 07 Jun 2024
Tested : 11 Jun 2024
Diagnosed : 11 Jun 2024 - Kevin Marson

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.

Wings Over Kississing
708 South Gate Rd
St. Andrews, MB
CA R1A 3P8
Contact: Menno Bergen
mbaero.menno@gmail.com
T: (204)338-1114
F: (204)338-0011

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