



OIL ANALYSIS REPORT

WEAR	MARGINAL
CONTAMINANTS	NORMAL
OIL CONDITION	NORMAL

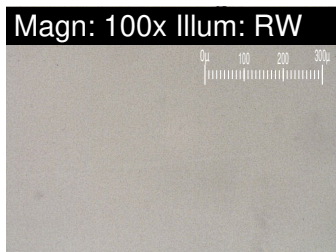
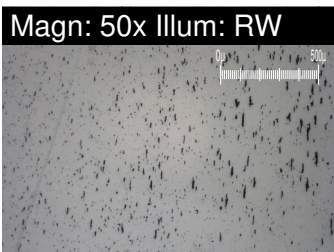
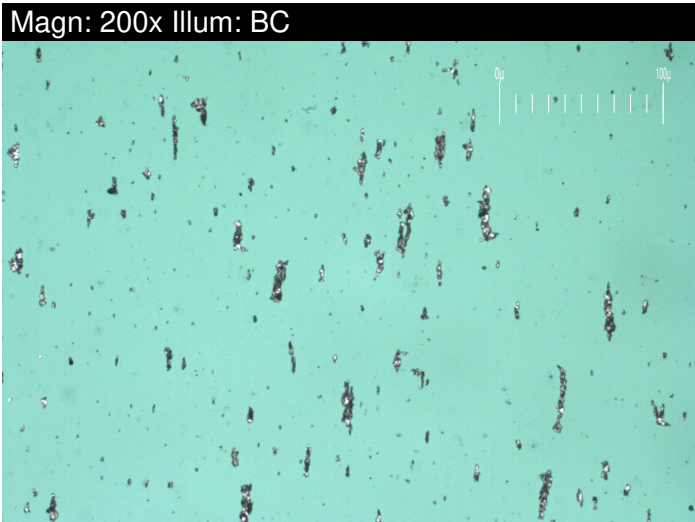
Area
(C-GCFF)
Machine Id
BEECHCRAFT PWV-79161
Component
Left Jet Turbine
Fluid
EASTMAN TURBO OIL 2380 (10 LTR)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

WEAR

Wear particle analysis indicates that the ferrous rubbing particles are marginal. All other component wear rates are normal.



Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0875118	WC0854721	WC0835988
Sample Date		Client Info		19 Dec 2023	18 Oct 2023	24 Aug 2023
TSN	hrs	Client Info		18129	17951	17742
TSO	hrs	Client Info		1679	1500	1292
Oil Age	hrs	Client Info		1679	1500	1292
Filter Age	hrs	Client Info		714	535	327
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	NORMAL	NORMAL

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	<1	0
Aluminum	ppm	ASTM D5185(m)	>2	<1	0	<1
Lead	ppm	ASTM D5185(m)	>3	0	0	0
Copper	ppm	ASTM D5185(m)	>3	0	<1	0
Tin	ppm	ASTM D5185(m)	>2	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Large Particles		DR-Ferr*		1.4	4.4	0.9
Small Particles		DR-Ferr*		0.9	0.8	0.8
Total Particles		DR-Ferr*	>---	2.3	5.2	1.7
Large Particles Percentage	%	DR-Ferr*		21.7	69.2	5.9
Severity Index		DR-Ferr*		1	16	0
Ferrous Rubbing	Scale 0-10	ASTM D7684*		3	1	1
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.

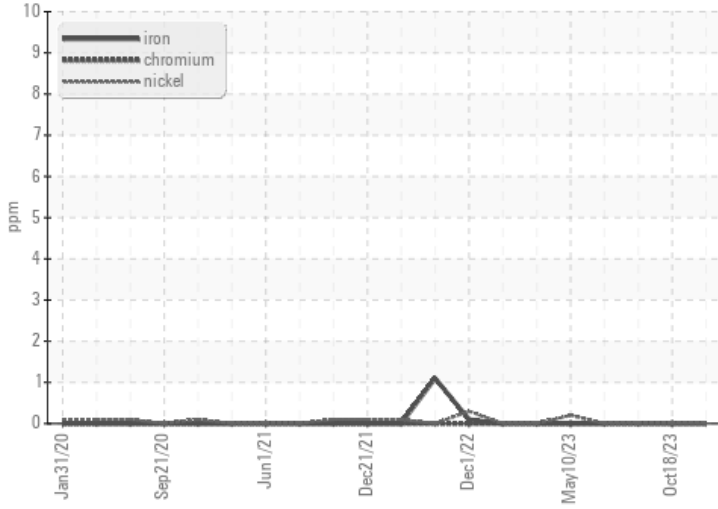
Silicon	ppm	ASTM D5185(m)	>8	3	2	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water	%	ASTM D6304*	>0.1	0.025	0.065	0.075
ppm Water	ppm	ASTM D6304*	>1000	258	656.2	750.2
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	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	1	1

OIL CONDITION

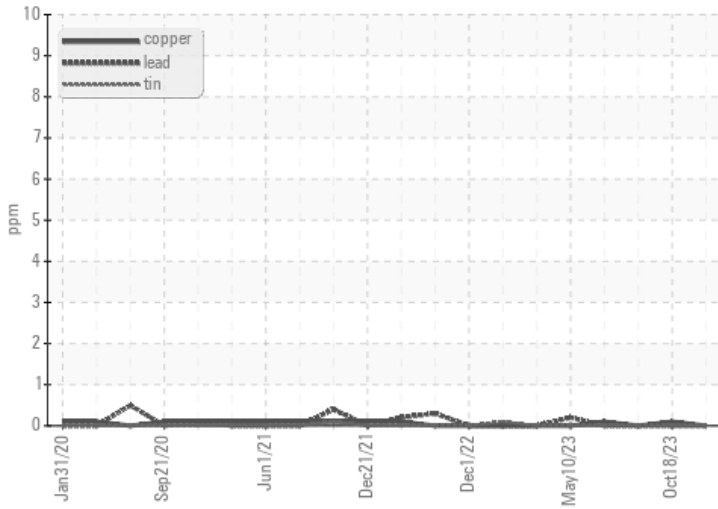
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		0	<1	<1
Boron	ppm	ASTM D5185(m)	0	0	<1	<1
Barium	ppm	ASTM D5185(m)	0	0	<1	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	0	<1
Calcium	ppm	ASTM D5185(m)	0	0	0	<1
Phosphorus	ppm	ASTM D5185(m)	2500	2761	2696	2739
Zinc	ppm	ASTM D5185(m)	0	<1	<1	2
Sulfur	ppm	ASTM D5185(m)	0	0	6	5
Acid Number (AN)	mg KOH/g	ASTM D974*	0.43	0.37	0.31	0.25
Visc @ 40°C	cSt	ASTM D7279(m)	24.2	24.6	23.9	24.4
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	4.9	5.1	4.9
Viscosity Index (VI)	Scale	ASTM D2270*	134	124	148	126
Lubricant Degradation	Scale 0-10	ASTM D7684*				

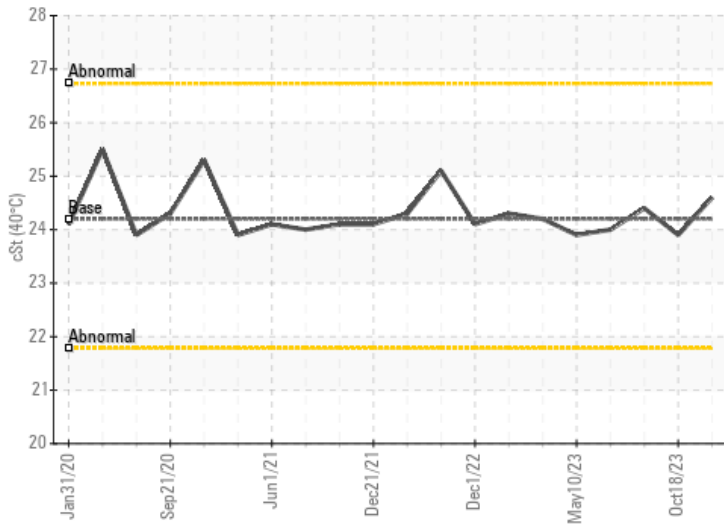
Ferrous Alloys



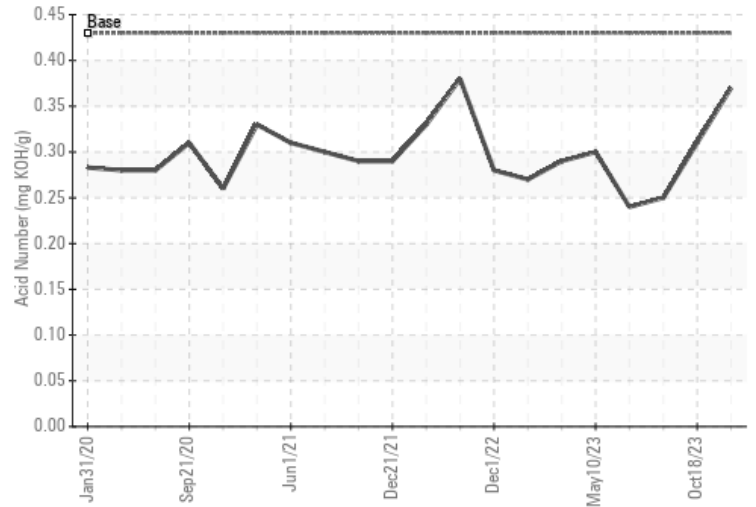
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0875118 **Received** : 22 Dec 2023
Lab Number : 02604946 **Diagnosed** : 04 Jan 2024
Unique Number : 5698031 **Diagnostician** : Kevin Marson
Test Package : AVI 3

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.

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