



OIL ANALYSIS REPORT

WEAR	NORMAL
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**

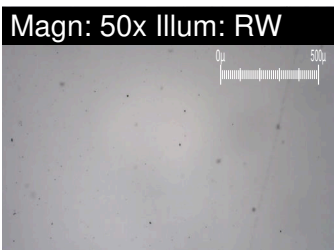
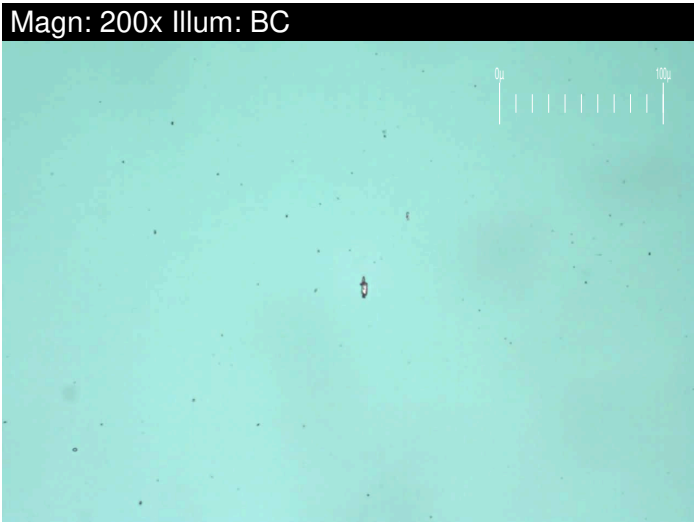
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0894703</b>	WC0875118	WC0854721
Sample Date		Client Info		<b>18 Jan 2024</b>	19 Dec 2023	18 Oct 2023
TSN	hrs	Client Info		<b>18217</b>	18129	17951
TSO	hrs	Client Info		<b>1767</b>	1679	1500
Oil Age	hrs	Client Info		<b>1767</b>	1679	1500
Filter Age	hrs	Client Info		<b>801</b>	714	535
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	MARGINAL	NORMAL

**WEAR**

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

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>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Tin	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Large Particles		DR-Ferr*		<b>1.0</b>	1.4	4.4
Small Particles		DR-Ferr*		<b>0.7</b>	0.9	0.8
Total Particles		DR-Ferr*	>---	<b>1.7</b>	2.3	5.2
Large Particles Percentage	%	DR-Ferr*		<b>17.6</b>	21.7	69.2
Severity Index		DR-Ferr*		<b>0</b>	1	16
Ferrous Rubbing	Scale 0-10	ASTM D7684*		<b>1</b>	3	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>	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.

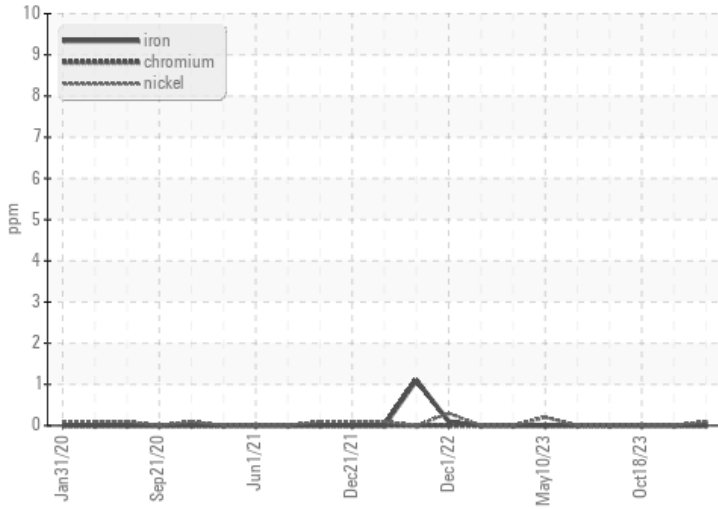
Silicon	ppm	ASTM D5185(m)	>8	<b>3</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Water	%	ASTM D6304*	>0.1	<b>0.008</b>	0.025	0.065
ppm Water	ppm	ASTM D6304*	>1000	<b>84</b>	258	656.2
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	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

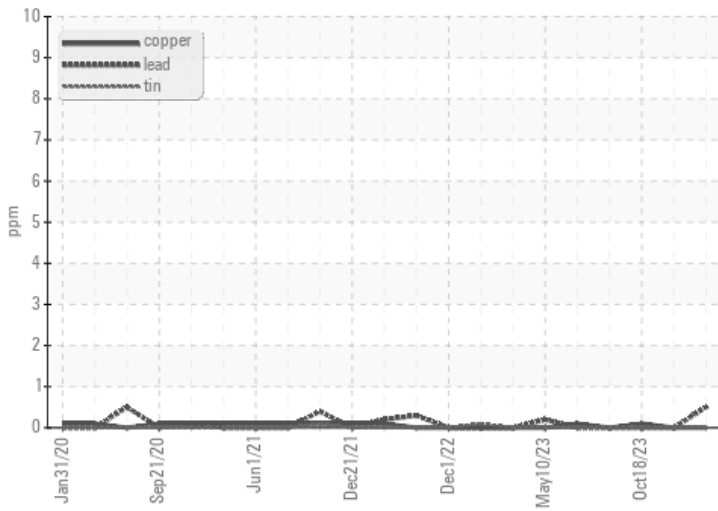
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	<1
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>2717</b>	2761	2696
Zinc	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Sulfur	ppm	ASTM D5185(m)	0	<b>0</b>	0	6
Acid Number (AN)	mg KOH/g	ASTM D974*	0.43	<b>0.32</b>	0.37	0.31
Visc @ 40°C	cSt	ASTM D7279(m)	24.2	<b>24.2</b>	24.6	23.9
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	<b>5</b>	4.9	5.1
Viscosity Index (VI)	Scale	ASTM D2270*	134	<b>136</b>	124	148
Lubricant Degradation	Scale 0-10	ASTM D7684*				

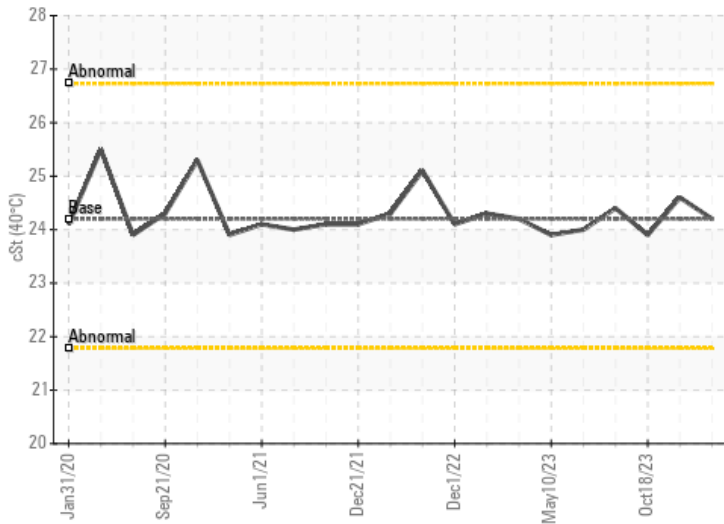
### Ferrous Alloys



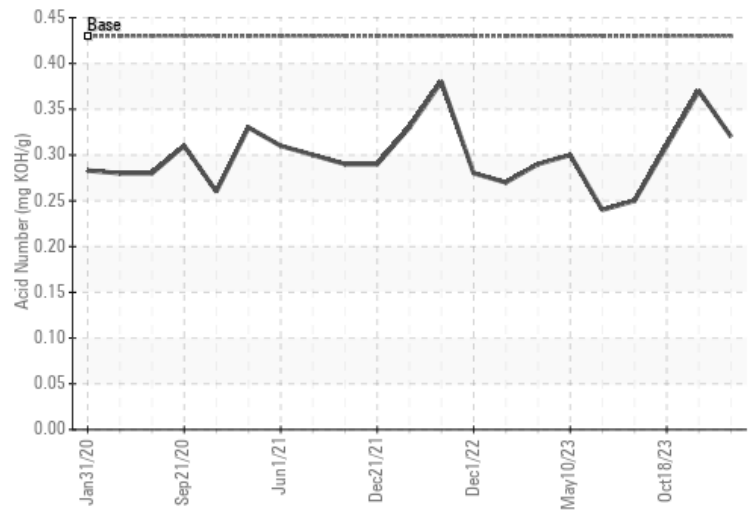
### Non-ferrous Metals



### Viscosity @ 40°C



### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0894703  
**Lab Number** : 02609956  
**Unique Number** : 5711042  
**Test Package** : AVI 3

**Received** : 19 Jan 2024  
**Diagnosed** : 23 Jan 2024  
**Diagnostician** : 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.

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