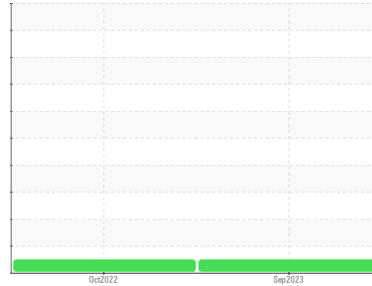




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(C-GNSB)**  
 Machine Id  
**[C-GNSB] EMBAREAR EMB-505 PCE-DG0185 (S/N 50500095)**  
 Component  
**Left Jet Turbine**  
 Fluid  
**ESSO EXXON TURBO OIL 2380 (--- LTR)**

## DIAGNOSIS

### 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 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>WC56838</b>	WC0735641	---
Sample Date	Client Info		<b>13 Sep 2023</b>	20 Oct 2022	---
TSN	kms Client Info		<b>4505</b>	3715	---
TSO	kms Client Info		<b>0</b>	3715	---
Oil Age	kms Client Info		<b>791</b>	3715	---
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	6.3	<b>&lt;1</b>	<1	---
Barium	ppm ASTM D5185(m)		<b>&lt;1</b>	0	---
Molybdenum	ppm ASTM D5185(m)	0.0	<b>0</b>	0	---
Manganese	ppm ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm ASTM D5185(m)	0.0	<b>0</b>	0	---
Calcium	ppm ASTM D5185(m)	0.1	<b>0</b>	0	---
Phosphorus	ppm ASTM D5185(m)	2931	<b>2688</b>	2728	---
Zinc	ppm ASTM D5185(m)	0.1	<b>&lt;1</b>	<1	---
Sulfur	ppm ASTM D5185(m)	0.0	<b>3</b>	4	---
Lithium	ppm ASTM D5185(m)		<b>&lt;1</b>	<1	---

## CONTAMINANTS

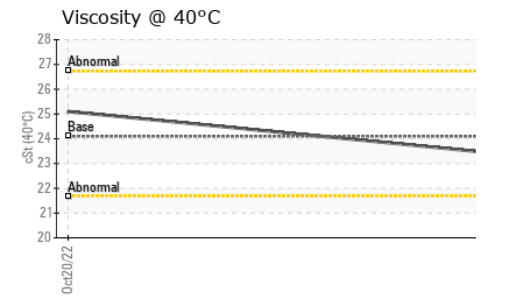
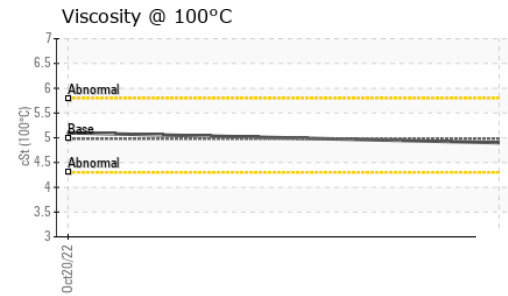
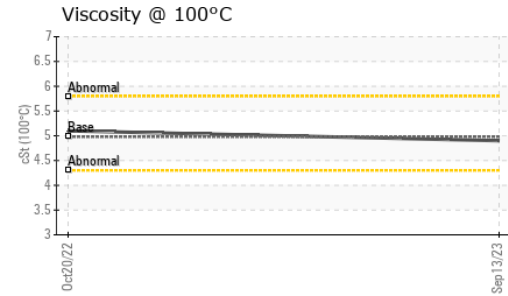
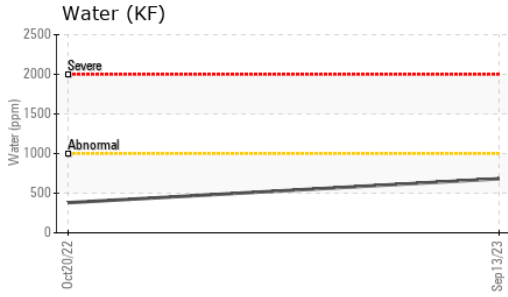
	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m)	>8	<b>&lt;1</b>	1	---
Sodium	ppm ASTM D5185(m)		<b>&lt;1</b>	1	---
Potassium	ppm ASTM D5185(m)	>20	<b>0</b>	<1	---
Water	% ASTM D6304*	>0.1	<b>0.068</b>	0.038	---
ppm Water	ppm ASTM D6304*	>1000	<b>682.1</b>	380.5	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	.38	<b>0.53</b>	0.57	---



# OIL ANALYSIS REPORT



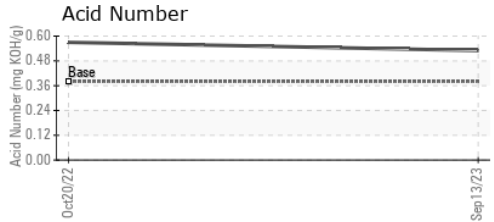
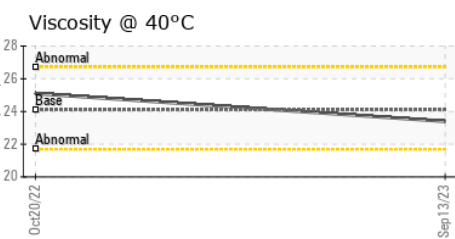
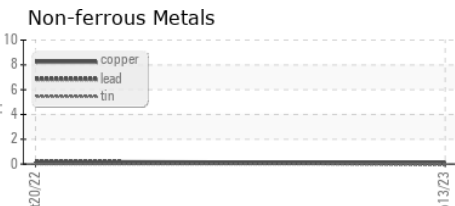
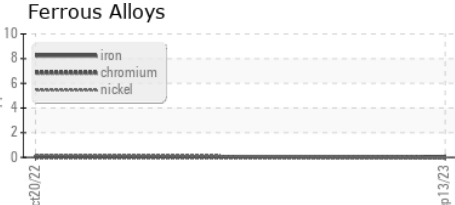
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	24.1	23.4	25.1
Visc @ 100°C	cSt	ASTM D7279(m)	4.98	4.9	5.1
Viscosity Index (VI)	Scale	ASTM D2270*		137	135

### SAMPLE IMAGES

	method	limit/base	current	history1	history2
Color					
Bottom					

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC56838 **Received** : 04 Oct 2023  
**Lab Number** : 02586735 **Diagnosed** : 10 Oct 2023  
**Unique Number** : 5655801 **Diagnostician** : Kevin Marson  
**Test Package** : AVI 3

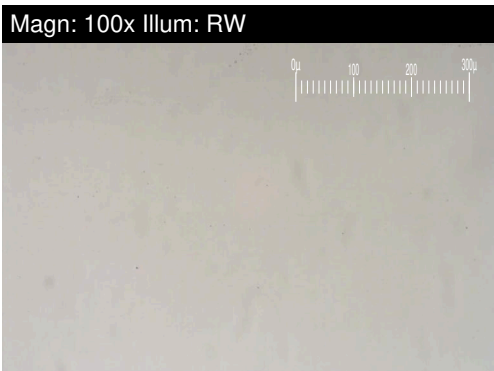
**FLYGTA Inc.**  
 2833 16TH AVE., HANGAR 3 & 4, BUTTONVILLE AIRPORT  
 MARKHAM, ON  
 CA L3R 0P8  
 Contact: Bill Bowmer  
 wbowmer1@gmail.com  
 T: (647)454-0457  
 F:

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-GNSB)**  
 Machine Id  
**[C-GNSB] EMBAREAR EMB-505 PCE-DG0185 (S/N 50500095)**  
 Component  
**Left Jet Turbine**  
 Fluid  
**ESSO EXXON TURBO OIL 2380 (--- LTR)**

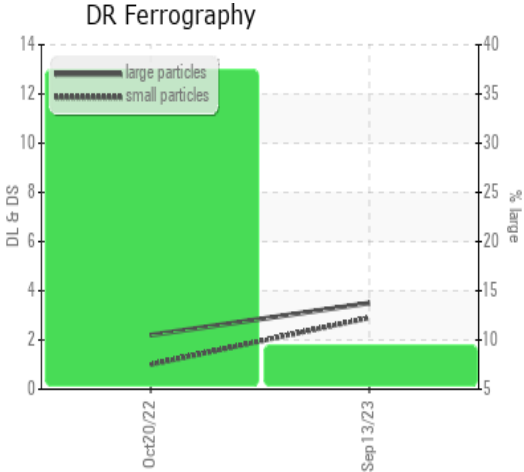


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		<b>3.5</b>	2.2	---
Small Particles		DR-Ferr*		<b>2.9</b>	1.0	---
Total Particles		DR-Ferr*	>---	<b>6.4</b>	3.2	---
Large Particles Percentage	%	DR-Ferr*		<b>9.4</b>	37.5	---
Severity Index		DR-Ferr*		<b>2</b>	3	---

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		<b>1</b>	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*				
Carbonaceous Material	Scale 0-10	ASTM D7684*				
Lubricant Degradation	Scale 0-10	ASTM D7684*				
Sand/Dirt	Scale 0-10	ASTM D7684*		<b>1</b>	1	
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*		<b>1</b>	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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