



OIL ANALYSIS REPORT

Sample Rating Trend

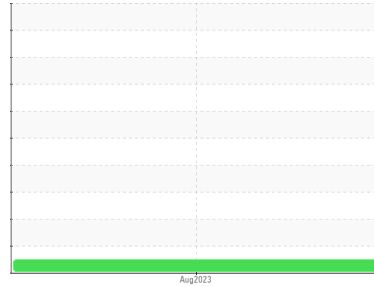
NORMAL



Machine Id
FA0876 DIAGNOSTIC LAYER (S/N 4391)

Component
Left Jet Turbine

Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

Recommendation

A particle from a chip detector was submitted for analysis. The particle was digested and analysed by ICP Spectroscopy.

Wear

Particle form is chunk. Particle size is 1000µm x 500µm. The most likely alloy match is Low alloy steel 92XX (92XX).

Contamination

{not applicable}

Fluid Condition

{not applicable}

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PP	---	---
Sample Date	Client Info		29 Aug 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >8	420	---	---
Chromium	ppm	ASTM D5185(m) >2	1	---	---
Nickel	ppm	ASTM D5185(m) >2	3	---	---
Titanium	ppm	ASTM D5185(m) >2	0	---	---
Silver	ppm	ASTM D5185(m) >2	<1	---	---
Aluminum	ppm	ASTM D5185(m) >2	2	---	---
Lead	ppm	ASTM D5185(m) >3	0	---	---
Copper	ppm	ASTM D5185(m) >3	0	---	---
Tin	ppm	ASTM D5185(m) >2	0	---	---
Antimony	ppm	ASTM D5185(m)	<1	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

FERROGRAPHY

	method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*			
Ferrous Sliding	Scale 0-10	ASTM D7684*			
Ferrous Cutting	Scale 0-10	ASTM D7684*			
Ferrous Rolling	Scale 0-10	ASTM D7684*			
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*			
Sand/Dirt	Scale 0-10	ASTM D7684*			
Fibres	Scale 0-10	ASTM D7684*			
Spheres	Scale 0-10	ASTM D7684*			
Other	Scale 0-10	ASTM D7684*			
Patch Weight	mg	ASTM D7684*	6.0	---	---

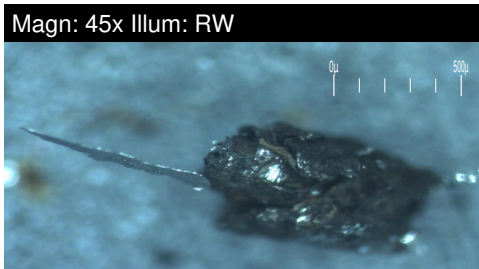
OIL ANALYSIS REPORT

ADDITIVES	method	limit/base	current	history1	history2
Molybdenum	ppm	ASTM D5185(m)	<1	---	---
Manganese	ppm	ASTM D5185(m)	3	---	---
Magnesium	ppm	ASTM D5185(m)	1	---	---
Calcium	ppm	ASTM D5185(m)	35	---	---
Zinc	ppm	ASTM D5185(m)	0	---	---
Sulfur	ppm	ASTM D5185(m)	63	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	6	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PP **Received** : 30 Aug 2023
Lab Number : **02579539** **Diagnosed** : 01 Sep 2023
Unique Number : 5632599 **Diagnostician** : Bill Quesnel
Test Package : FLTRO (Additional Tests: ICP, ICP-DIGEST, PQ)

PORTER AIRLINES INC
 BILLY BISHOP TORONTO CITY AIRPORT, HANGAR 5
 TORONTO, ON
 CA M5V 1A1
 Contact: Jennifer Wagner
 jennifer.wagner@flyporter.com
 T: (416)203-8100
 F: (416)203-9198

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.

FILTER REPORT

Machine Id
FA0876 DIAGNOSTIC LAYER (S/N 4391)

Component
Left Jet Turbine
 Fluid
NOT GIVEN (--- GAL)

Magn: 10x Illum: RW



Magn: 30x Illum: RW



Magn: 45x Illum: RW



FERROGRAPHY			method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*					
Ferrous Sliding	Scale 0-10	ASTM D7684*					
Ferrous Cutting	Scale 0-10	ASTM D7684*					
Ferrous Rolling	Scale 0-10	ASTM D7684*					
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*					
Sand/Dirt	Scale 0-10	ASTM D7684*					
Fibres	Scale 0-10	ASTM D7684*					
Spheres	Scale 0-10	ASTM D7684*					
Other	Scale 0-10	ASTM D7684*					
Patch Weight	mg	ASTM D7684*			6.0	---	---

WEAR

Particle form is chunk. Particle size is 1000µm x 500µm. The most likely alloy match is Low alloy steel 92XX (92XX).

This page left intentionally blank