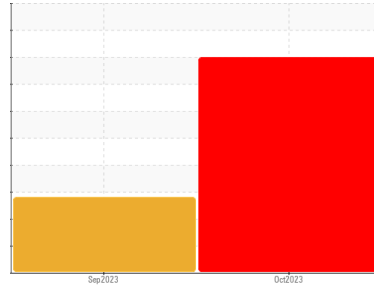




# PROBLEM SUMMARY

Area  
**(5H-PWG)**  
 Machine Id  
**[5H-PWG] PCE-ED0303/ED0196**  
 Component  
**Jet Turbine**  
 Fluid  
**MOBIL JET OIL II (--- GAL)**

Sample Rating Trend



WEAR PARTICLES



## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

We advise that you investigate.

## PROBLEMATIC TEST RESULTS

Sample Status	Scale 0-10	ASTM D7684*	SEVERE	ABNORMAL	---
Ferrous Rolling	Scale 0-10	ASTM D7684*	3	1	

Customer Id: PREDAR  
 Sample No.: PP  
 Lab Number: 02588456  
 Test Package: FLTRO



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Bill Quesnel CLS, OMA II, MLA-III, LLA-I +1  
 (289)291-4641 x4641  
[Bill.Quesnel@wearcheck.com](mailto:Bill.Quesnel@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 28 Sep 2023 Diag: Bill Quesnel

#### WATER



We advise that you check for the source of water entry. We advise that you check for visible metal particles in the oil. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Moderate concentration of visible metal present. Bearing and/or gear wear is indicated. The direct-reading & analytical ferrographic results are normal indicating no abnormal wear in the system. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

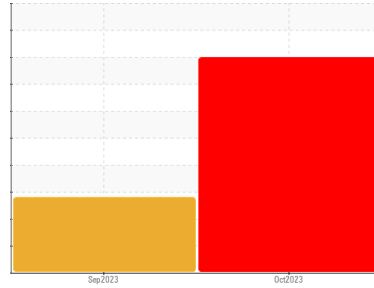
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR PARTICLES



Area  
**(5H-PWG)**  
 Machine Id  
**[5H-PWG] PCE-ED0303/ED0196**  
 Component  
**Jet Turbine**  
 Fluid  
**MOBIL JET OIL II (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you investigate.

### Wear

Several particles were submitted from a chip detector for analysis. There are approximately 7 particles, largest measure 2.24mm x 1.42 and smallest measures 0.69mm x 0.53mm. A suitable particle was digested and analysed by ICP Spectroscopy. The most likely alloy match is Tool Steel (M50). There is a possible bearing failure in progress.

### Contamination

{not applicable}

### Fluid Condition

{not applicable}

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PP</b>	PP	---
Sample Date	Client Info		<b>06 Oct 2023</b>	28 Sep 2023	---
Machine Age	hrs Client Info		<b>0</b>	0	---
Oil Age	hrs Client Info		<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>SEVERE</b>	ABNORMAL	---

## WEAR METALS

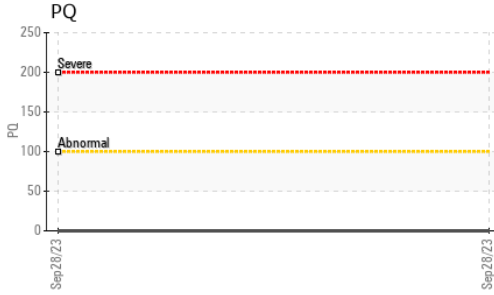
	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m)	>8	<b>1657</b>	5	---
Chromium	ppm ASTM D5185(m)	>2	<b>77</b>	0	---
Nickel	ppm ASTM D5185(m)	>2	<b>0</b>	<1	---
Titanium	ppm ASTM D5185(m)	>2	<b>0</b>	0	---
Silver	ppm ASTM D5185(m)	>2	<b>&lt;1</b>	<1	---
Aluminum	ppm ASTM D5185(m)	>2	<b>5</b>	<1	---
Lead	ppm ASTM D5185(m)	>3	<b>0</b>	0	---
Copper	ppm ASTM D5185(m)	>3	<b>0</b>	<1	---
Tin	ppm ASTM D5185(m)	>2	<b>4</b>	0	---
Antimony	ppm ASTM D5185(m)		<b>2</b>	0	---
Vanadium	ppm ASTM D5185(m)		<b>17</b>	0	---
Beryllium	ppm ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm ASTM D5185(m)		<b>0</b>	0	---

## FERROGRAPHY

	method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10 ASTM D7684*			3	
Ferrous Sliding	Scale 0-10 ASTM D7684*				
Ferrous Cutting	Scale 0-10 ASTM D7684*				
Ferrous Rolling	Scale 0-10 ASTM D7684*		<b>3</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*				
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	
Patch Weight	mg ASTM D7684*		<b>n/a</b>	---	---



# OIL ANALYSIS REPORT

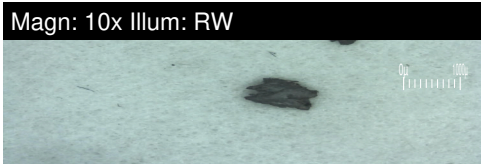
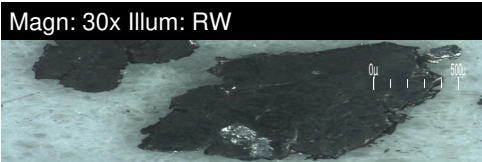
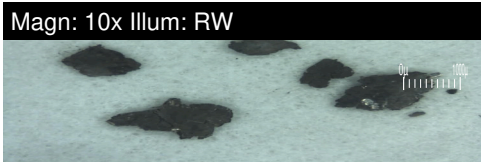


ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	---	1	---
Barium	ppm	ASTM D5185(m)	---	<1	---
Molybdenum	ppm	ASTM D5185(m)	<b>75</b>	<1	---
Manganese	ppm	ASTM D5185(m)	<b>4</b>	0	---
Magnesium	ppm	ASTM D5185(m)	<b>1</b>	<1	---
Calcium	ppm	ASTM D5185(m)	<b>42</b>	0	---
Phosphorus	ppm	ASTM D5185(m)	---	2710	---
Zinc	ppm	ASTM D5185(m)	<b>0</b>	<1	---
Sulfur	ppm	ASTM D5185(m)	<b>61</b>	2	---
Lithium	ppm	ASTM D5185(m)	<b>1</b>	<1	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >8	<b>13</b>	1	---
Sodium	ppm	ASTM D5185(m)	---	<1	---
Potassium	ppm	ASTM D5185(m) >20	---	0	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PP  
**Lab Number** : **02588456**  
**Unique Number** : 5657522  
**Test Package** : FLTRO ( Additional Tests: ICP, ICP-DIGEST, PQ )

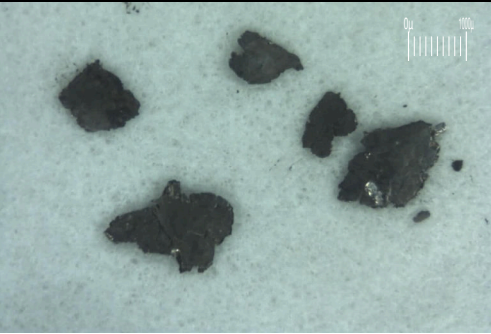
**PRECISION AIR SERVICES PLC**  
 P.O. BOX 70770 DIAMOND PLAZA 1ST FL, MIRAMBO ST/SAMORA AVE  
 DAR ES SALAAM,  
 TZ  
 Contact: Kelvin Swai  
 kswai@precisionairtz.com

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.

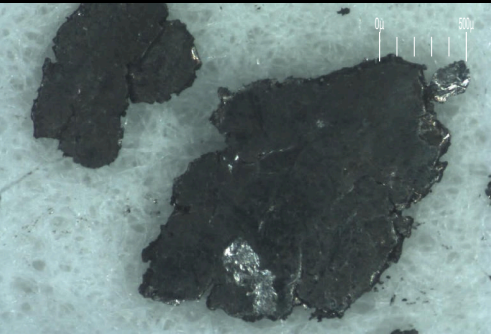
# FILTER REPORT

Area  
**(5H-PWG)**  
 Machine Id  
**[5H-PWG] PCE-ED0303/ED0196**  
 Component  
**Jet Turbine**  
 Fluid  
**MOBIL JET OIL II (--- GAL)**

Magn: 10x Illum: RW



Magn: 30x Illum: RW



Magn: 10x Illum: RW



FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*			3	
Ferrous Sliding	Scale 0-10	ASTM D7684*				
Ferrous Cutting	Scale 0-10	ASTM D7684*				
Ferrous Rolling	Scale 0-10	ASTM D7684*		3	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*				
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	
Patch Weight	mg	ASTM D7684*		n/a	---	---

## WEAR

Several particles were submitted from a chip detector for analysis. There are approximately 7 particles, largest measure 2.24mm x 1.42 and smallest measures 0.69mm x 0.53mm. A suitable particle was digested and analysed by ICP Spectroscopy. The most likely alloy match is Tool Steel (M50). There is a possible bearing failure in progress.

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