# PROBLEM SUMMARY

Area
**(5H-PWB)**
Machine Id
**[5H-PWB] ED1046**
Component
**2 Jet Turbine**
Fluid
**MOBIL JET OIL II (--- GAL)**

**Sample Rating Trend**


**WEAR PARTICLES**

## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

## PROBLEMATIC TEST RESULTS

| | | | | | |
|---|---|---|---|---|---|
| Sample Status | | | **MARGINAL** | --- | --- |
| Ferrous Spheres | Scale 0-10 | ASTM D7684* | **2** | | |

**Customer Id:** PREDAR
**Sample No.:** PP
**Lab Number:** 02558772
**Test Package:** AVI 3

*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

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

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

# OIL ANALYSIS REPORT

Sample Rating Trend


WEAR PARTICLES

Area
**(5H-PWB)**
Machine Id
**[5H-PWB] ED1046**
Component
**2 Jet Turbine**
Fluid
**MOBIL JET OIL II (--- GAL)**

## DIAGNOSIS

**Recommendation**

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 spheres particles are marginal. Bearing wear is indicated. All other component wear rates are normal.

**Contaminants**

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 | | **PP** | --- | --- |
| Sample Date | | Client Info | | **04 May 2023** | --- | --- |
| TSN | hrs | Client Info | | **0** | --- | --- |
| TSO | hrs | Client Info | | **0** | --- | --- |
| Oil Age | hrs | Client Info | | **0** | --- | --- |
| Oil Changed | | Client Info | | **N/A** | --- | --- |
| Sample Status | | | | **MARGINAL** | --- | --- |

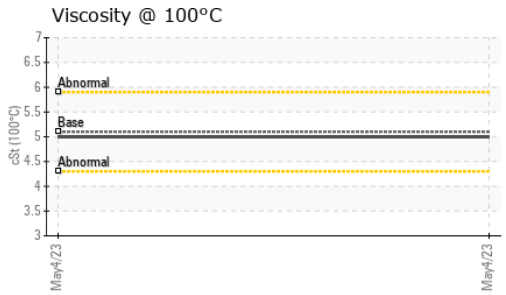
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184* | | **0** | --- | --- |
| Iron | ppm | ASTM D5185(m) | >8 | **2** | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >2 | **0** | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >2 | **<1** | --- | --- |
| Titanium | ppm | ASTM D5185(m) | >2 | **0** | --- | --- |
| Silver | ppm | ASTM D5185(m) | >2 | **0** | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >2 | **1** | --- | --- |
| 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) | | **0** | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | **0** | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | | **0** | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | | **0** | --- | --- |

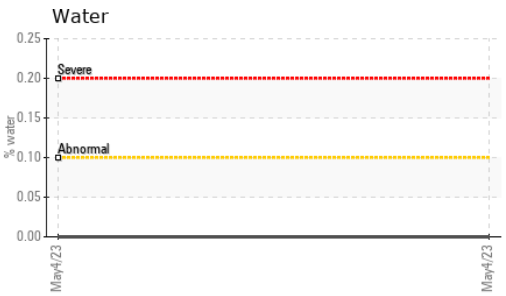
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185(m) | | **<1** | --- | --- |
| Barium | ppm | ASTM D5185(m) | | **0** | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | **<1** | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | **0** | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | **<1** | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | **0** | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | **2728** | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | **<1** | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | **6** | --- | --- |
| Lithium | ppm | ASTM D5185(m) | | **<1** | --- | --- |

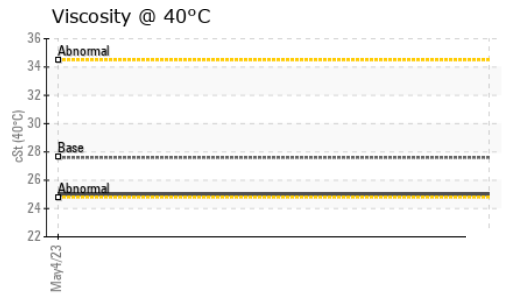
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >8 | **<1** | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | **<1** | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | --- | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.03 | **0.13** | --- | --- |

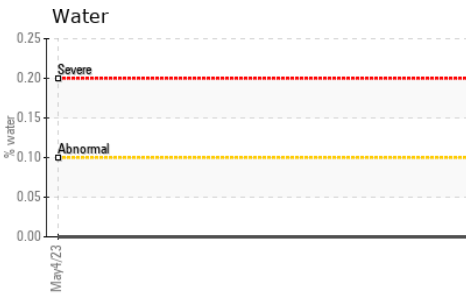
# OIL ANALYSIS REPORT



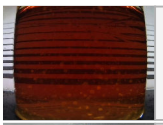





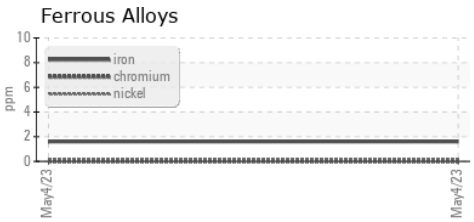


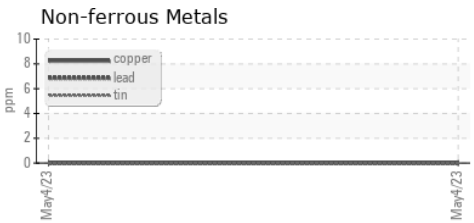

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | Visual* | NONE | **NONE** | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | --- | --- |
| Precipitate | scalar | Visual* | NONE | **NONE** | --- | --- |
| Silt | 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* | >.1 | **NEG** | --- | --- |
| Free Water | scalar | Visual* | | **NEG** | --- | --- |

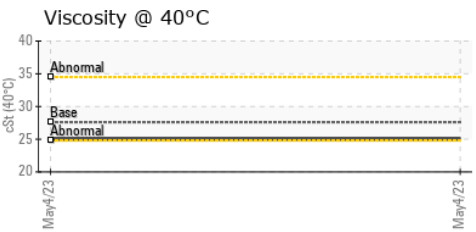
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 27.6 | **25.0** | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 5.1 | **5** | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | | **128** | --- | --- |

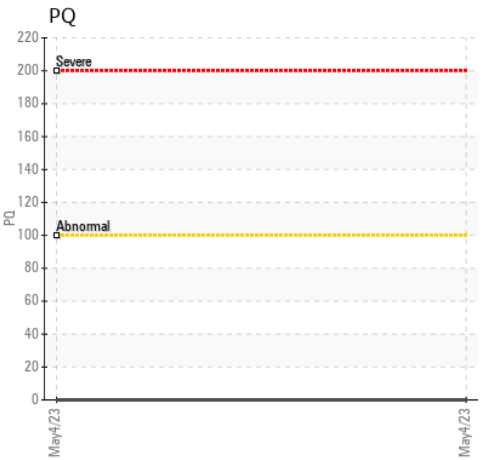
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | *no image* | *no image* |
| Bottom | | |  | *no image* | *no image* |

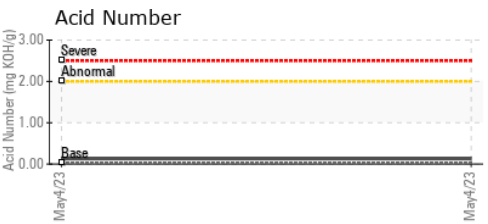
## GRAPHS




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : PP
**Lab Number** : 02558772
**Unique Number** : 5579812
**Test Package** : AVI 3 ( Additional Tests: PQ )

**Received** : 19 May 2023
**Diagnosed** : 19 May 2023
**Diagnostician** : Bill Quesnel

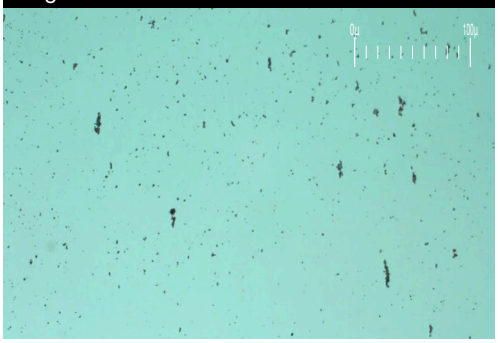
*To discuss this sample report, contact Customer Service at 1-800-268-2131.*
*Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.*
*Validity of results and interpretation are based on the sample and information as supplied.*


**PRECISION AIR SERVICES PLC**
P.O. BOX 70770 DIAMOND PLAZA 1ST FL, MIRAMBO ST/SAMORA AVE
DAR ES SALAAM,
TZ
Contact: Huri Monyo
hmonyo@precisionairtz.com
T:
F:

# FERROGRAPHY REPORT

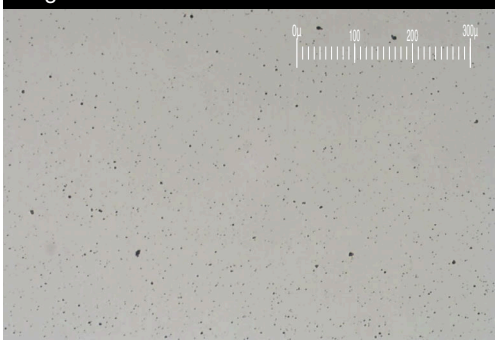
Area
**(5H-PWB)**
Machine Id
**[5H-PWB] ED1046**
Component
**2 Jet Turbine**
Fluid
**MOBIL JET OIL II (--- GAL)**

Magn: 200x Illum: BC



Magn: 50x Illum: RW

Magn: 100x Illum: RW

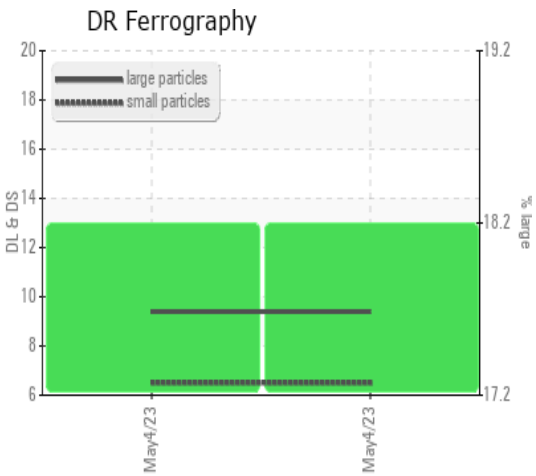


| DR-FERROGRAPHY | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Large Particles | | DR-Ferr* | | **9.4** | --- | --- |
| Small Particles | | DR-Ferr* | | **6.5** | --- | --- |
| Total Particles | | DR-Ferr* | >--- | **15.9** | --- | --- |
| Large Particles Percentage | % | DR-Ferr* | | **18.2** | --- | --- |
| Severity Index | | DR-Ferr* | | **27** | --- | --- |

| 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* | | **2** | | |
| Ferrous Break-in | Scale 0-10 | ASTM D7684* | | | | |
| Ferrous Spheres | Scale 0-10 | ASTM D7684* | | **2** | | |
| 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* | | **2** | | |
| Lubricant Degradation | Scale 0-10 | ASTM D7684* | | | | |
| Sand/Dirt | Scale 0-10 | ASTM D7684* | | **2** | | |
| Fibres | Scale 0-10 | ASTM D7684* | | | | |
| Spheres | Scale 0-10 | ASTM D7684* | | | | |
| Other | Scale 0-10 | ASTM D7684* | | | | |

## WEAR

Wear particle analysis indicates that the ferrous spheres particles are marginal. Bearing wear is indicated. All other component wear rates are normal.



*This page left intentionally blank*