MOB I

WAJAX POWER SYSTEMS SYSTÈMES DE PUISSANCE

# OIL ANALYSIS REPORT

| | |
|---|---|
| WEAR | ABNORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Area
**JULIEN BOURGEIOUS**
Machine Id
**NO UNIT WA0021677**
Component
**Port Diesel Engine**
Fluid
**{not provided} (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

## WEAR

Aluminum ppm levels are abnormal. Piston wear is indicated. We have assumed that this component is not breaking in (age of component not reported).

## CONTAMINATION

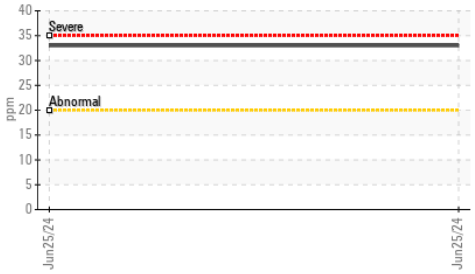
There is no indication of any contamination in the oil.

## FLUID CONDITION

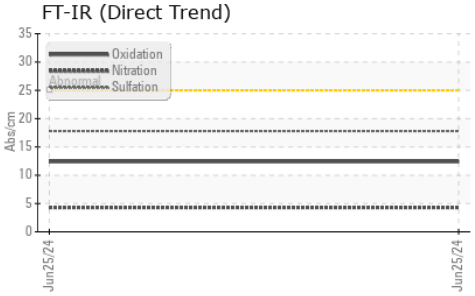
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | WA0021677 | --- | --- |
| Sample Date | | Client Info | | 25 Jun 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 0 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | N/A | --- | --- |
| Filter Changed | | Client Info | | N/A | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |
| Iron | ppm | ASTM D5185(m) | >80 | 24 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >6 | 1 | --- | --- |
| 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) | >20 | ▲ 33 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >95 | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >85 | <1 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >9 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Fuel | | WC Method | >4.0 | <1.0 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Glycol | | WC Method | | NEG | --- | --- |
| Soot % | % | ASTM D7844* | | 0 | --- | --- |
| Nitration | Abs/cm | ASTM D7624* | >20 | 4.3 | --- | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 17.8 | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | VLITE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | 12 | --- | --- |
| Boron | ppm | ASTM D5185(m) | | 2 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 56 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | 930 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | 998 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 959 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | 1156 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | 2642 | --- | --- |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 12.4 | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | | 102 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | | 13.7 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | | 134 | --- | --- |

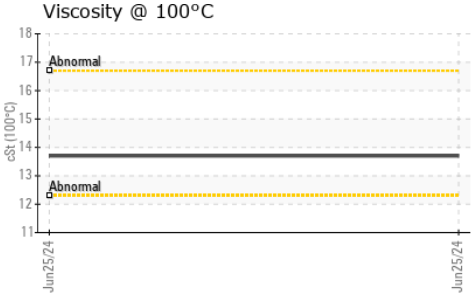
Aluminum (ppm)



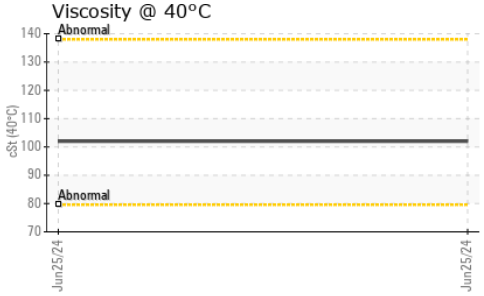

FT-IR (Direct Trend)



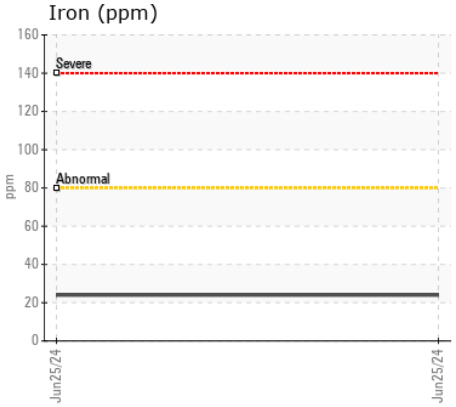

Viscosity @ 100°C



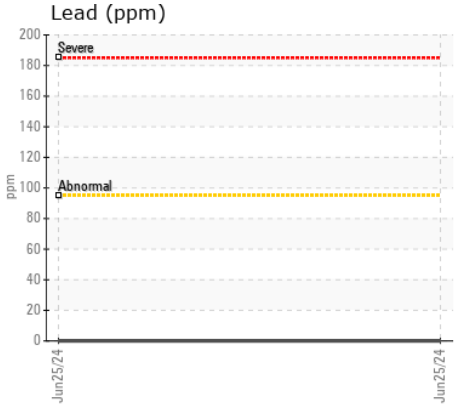

Viscosity @ 40°C



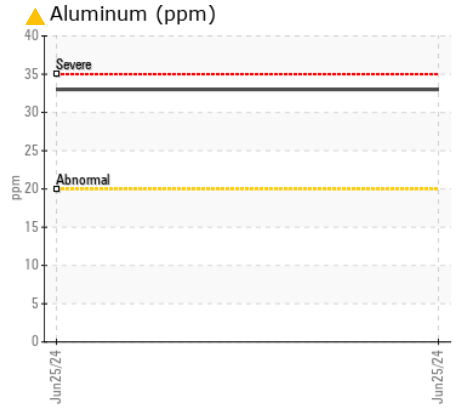

Iron (ppm)



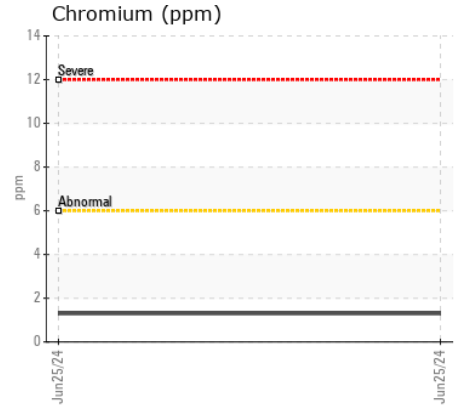

Lead (ppm)



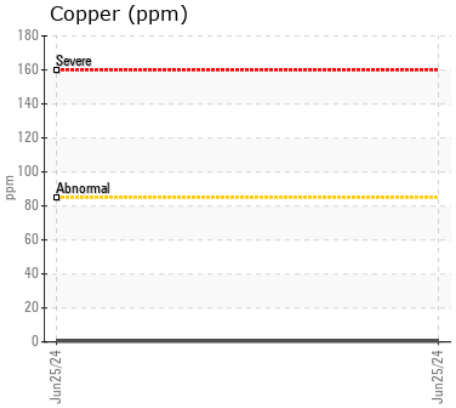

Aluminum (ppm)



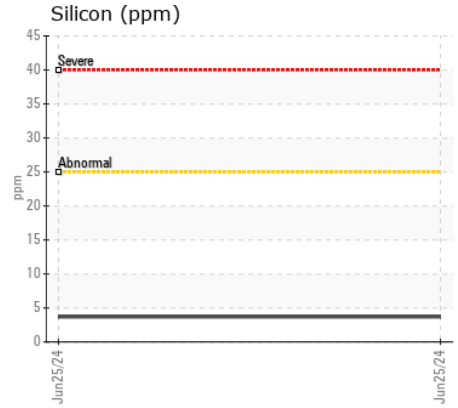

Chromium (ppm)



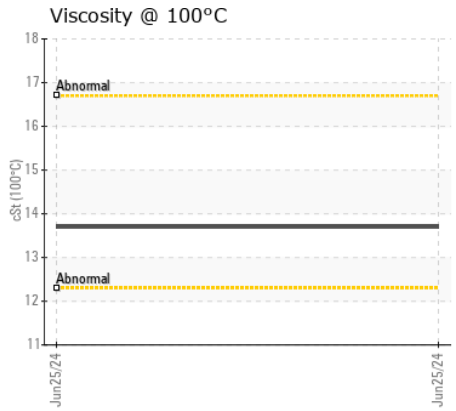

Copper (ppm)



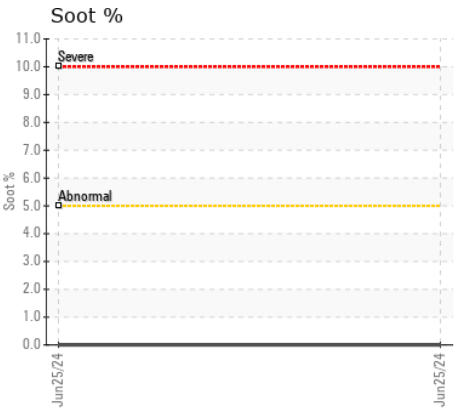

Silicon (ppm)




Viscosity @ 100°C




Soot %




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : WA0021677 **Received** : 26 Jun 2024
**Lab Number** : 02644088 **Tested** : 26 Jun 2024
**Unique Number** : 5801627 **Diagnosed** : 26 Jun 2024 - Kevin Marson
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

*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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