



OIL ANALYSIS REPORT

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

Area

T.M.B.
Machine Id

5502-CVD-004 r87
Component

Digester Gearbox
Fluid

MOBIL MOBILGEAR 600 XP 220 (--- LTR)

RECOMMENDATION

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0842807 | WC0828822 | WC0767671 |
| Sample Date | | Client Info | | 16 Apr 2024 | 26 Jul 2023 | 24 Jan 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | ABNORMAL | SEVERE |

WEAR

Les taux d'usure de tous les composants sont normaux.

| | | | | | | |
|--------------|--------|---------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185(m) | >200 | 87 | 27 | 48 |
| Chromium | ppm | ASTM D5185(m) | >15 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >15 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | 7 | 19 | 4 |
| Lead | ppm | ASTM D5185(m) | >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >200 | <1 | <1 | 0 |
| Tin | ppm | ASTM D5185(m) | >25 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |

CONTAMINATION

Il n'y a aucun indice de contamination dans l'huile.

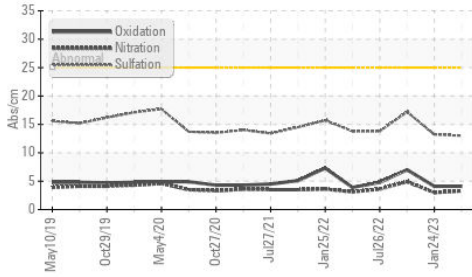
| | | | | | | |
|------------------|----------|---------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >50 | 17 | ▲ 68 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 1 | <1 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | | 0 | --- | 0 |
| Nitration | Abs/cm | ASTM D7624* | | 3.3 | --- | 3.0 |
| Sulfation | Abs/.1mm | ASTM D7415* | | 13.0 | --- | 13.2 |
| Silt | scalar | Visual* | NONE | NONE | LIGHT | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE | VLITE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

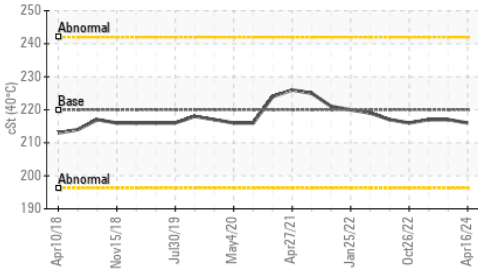
L'état de l'huile est acceptable pour la durée de service.

| | | | | | | |
|-------------|----------|---------------|-----|--------------|-------|-------|
| Sodium | ppm | ASTM D5185(m) | | 4 | 15 | 2 |
| Boron | ppm | ASTM D5185(m) | | 33 | 27 | 31 |
| Barium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | | 11 | 39 | 0 |
| Calcium | ppm | ASTM D5185(m) | | 3 | 8 | 0 |
| Phosphorus | ppm | ASTM D5185(m) | | 327 | 332 | 351 |
| Zinc | ppm | ASTM D5185(m) | | 3 | 6 | 1 |
| Sulfur | ppm | ASTM D5185(m) | | 14445 | 14596 | 15037 |
| Oxidation | Abs/.1mm | ASTM D7414* | | 4.1 | --- | 4.1 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 220 | 216 | 217 | 217 |

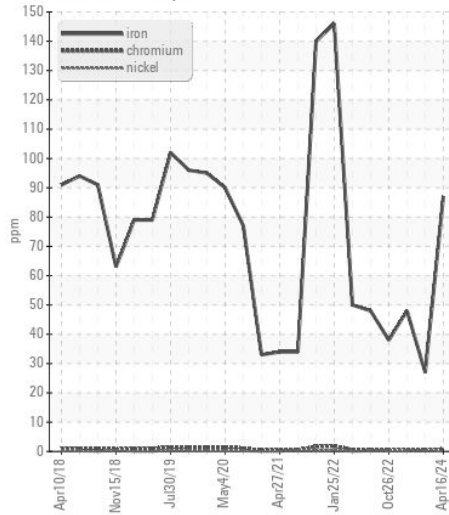
FT-IR (Direct Trend)



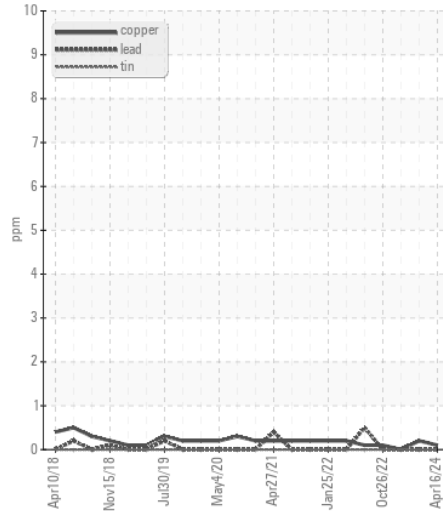
Viscosity @ 40°C



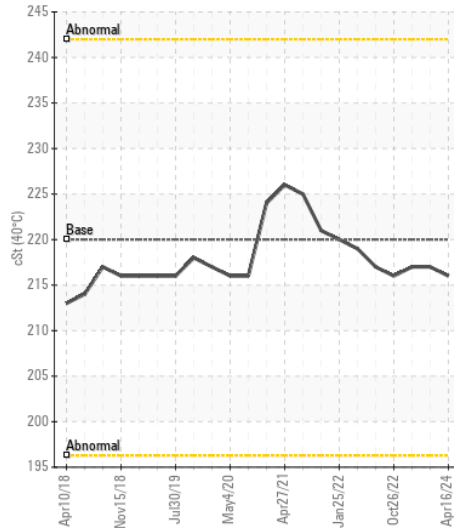
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0842807
Lab Number : 02632942
Unique Number : 5774095
Test Package : IND 1 (Additional Tests: FT-IR)

RTA - ALMA
 3000 RUE DES PINS OUEST, BATISSE 7103 MEZZALINE
 ALMA, QC
 CA G8B 6T3
 Contact: Guy Dufour
 guy.dufour-almacou@riotinto.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.

T:
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