MOB II

WEAR CHECK

OIL ANALYSIS REPORT

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

Machine Id
**379**
Component
**Diesel Engine**
Fluid
**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## RECOMMENDATION

Nous avons pris note que la vidange d`huile a été effectuée au moment de l`échantillonnage. Nous vous recommandons d`échantillonner de nouveau dès que possible afin de contrôler la situation.

## WEAR

Usure de segment. Usure de piston.

## CONTAMINATION

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

## FLUID CONDITION

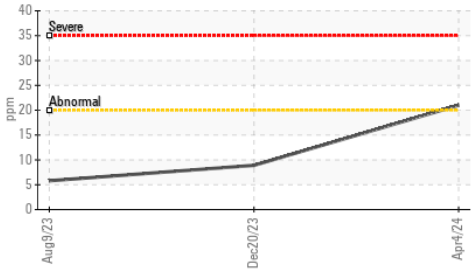
Le résultat pour le BN indique que la réserve d'alcalinité est acceptable pour l`huile. l`huile n'est plus en état de service en raison d'une usure anomale et/ou sévère.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0928215** | WC0874987 | WC0846891 |
| Sample Date | | Client Info | | **04 Apr 2024** | 20 Dec 2023 | 09 Aug 2023 |
| Machine Age | kms | Client Info | | **741371** | 708835 | 686620 |
| Oil Age | kms | Client Info | | **32536** | 22215 | 16514 |
| Filter Age | kms | Client Info | | **32536** | 22215 | 16514 |
| Oil Changed | | Client Info | | **Changed** | Changed | Changed |
| Filter Changed | | Client Info | | **Changed** | Changed | Changed |
| Sample Status | | | | **ABNORMAL** | NORMAL | NORMAL |
| Iron | ppm | ASTM D5185(m) | >165 | **38** | 23 | 18 |
| Chromium | ppm | ASTM D5185(m) | >5 | ▲ **5** | 2 | 2 |
| Nickel | ppm | ASTM D5185(m) | >4 | **<1** | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | >2 | **0** | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | >2 | **0** | <1 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >20 | ▲ **21** | 9 | 6 |
| Lead | ppm | ASTM D5185(m) | >150 | **6** | 12 | 8 |
| Copper | ppm | ASTM D5185(m) | >90 | **245** | 570 | 318 |
| Tin | ppm | ASTM D5185(m) | >5 | **1** | 2 | 2 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silicon | ppm | ASTM D5185(m) | >35 | **2** | 4 | 7 |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | 1 | 1 |
| Fuel | | WC Method | >3.0 | **<1.0** | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | **NEG** | NEG | NEG |
| Glycol | | WC Method | | **NEG** | 0.0 | 0.0 |
| Soot % | % | ASTM D7844* | >7.5 | **0.5** | 0.3 | 0.3 |
| Nitration | Abs/cm | ASTM D7624* | >20 | **9.1** | 9.0 | 9.4 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | **20.4** | 20.0 | 23.5 |
| Emulsified Water | scalar | Visual* | >0.2 | **NEG** | NEG | NEG |
| Sodium | ppm | ASTM D5185(m) | | **2** | 2 | 4 |
| Boron | ppm | ASTM D5185(m) | 2 | **2** | 7 | 34 |
| Barium | ppm | ASTM D5185(m) | 0 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 50 | **60** | 59 | 45 |
| Manganese | ppm | ASTM D5185(m) | 0 | **<1** | <1 | 1 |
| Magnesium | ppm | ASTM D5185(m) | 950 | **989** | 962 | 642 |
| Calcium | ppm | ASTM D5185(m) | 1050 | **1095** | 1122 | 1591 |
| Phosphorus | ppm | ASTM D5185(m) | 995 | **936** | 992 | 1047 |
| Zinc | ppm | ASTM D5185(m) | 1180 | **1144** | 1163 | 1171 |
| Sulfur | ppm | ASTM D5185(m) | 2600 | **1927** | 2398 | 2503 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | **16.4** | 16.6 | 19.6 |
| Base Number (BN) | mg KOH/g | ASTM D2896* | | **9.20** | 10.54 | 9.07 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 12.00 | **11.6** | 11.6 | 11.7 |

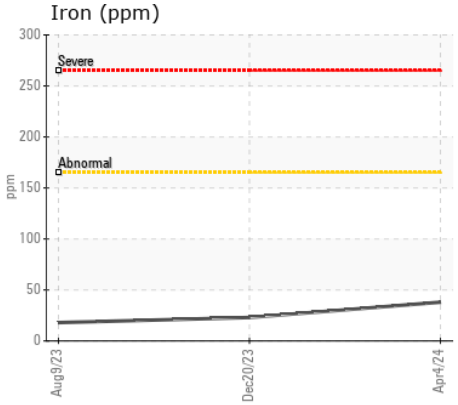
Report Id: TRA435LAC [WCAMIS] 02628141 (Generated: 04/15/2024 08:16:43) Rev: 1

Submitted By: Stephane Godbout

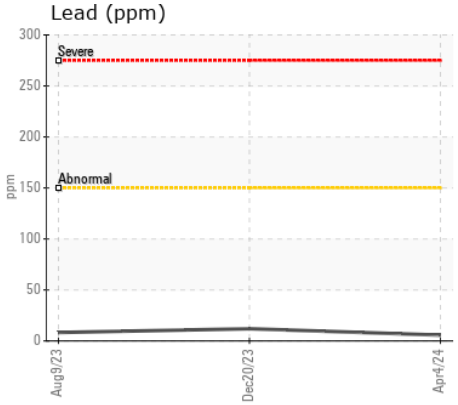
Aluminum (ppm)



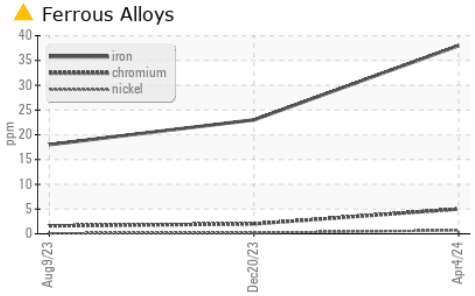

Iron (ppm)



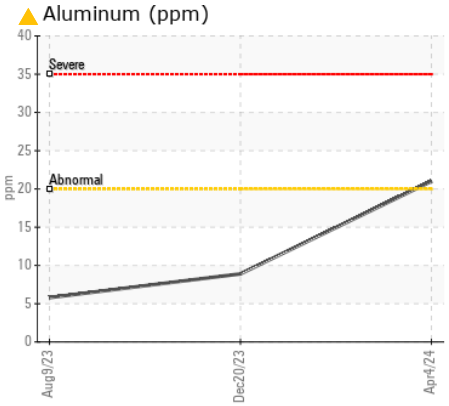

Lead (ppm)



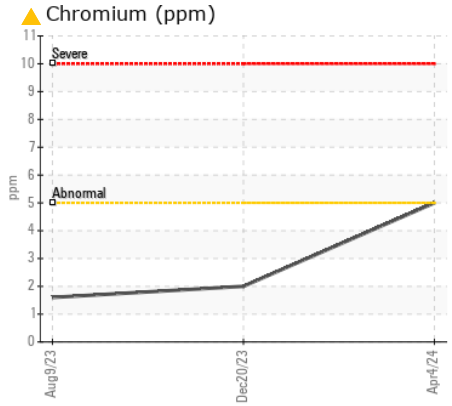

Ferrous Alloys



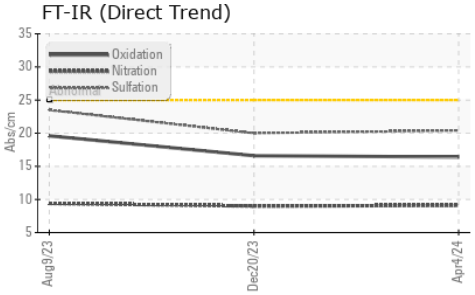

Aluminum (ppm)



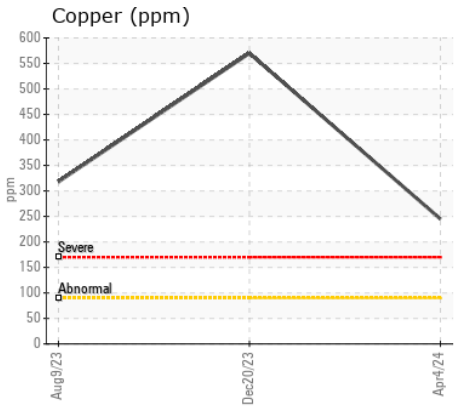

Chromium (ppm)



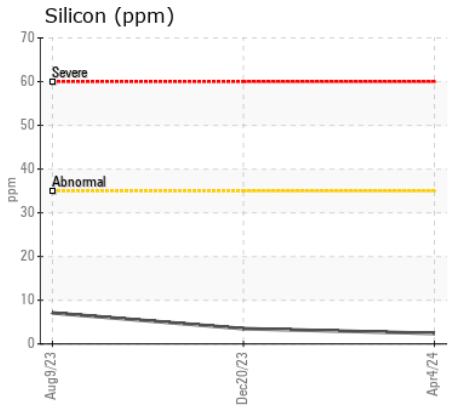

FT-IR (Direct Trend)



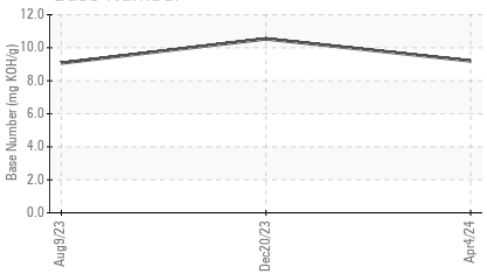

Copper (ppm)



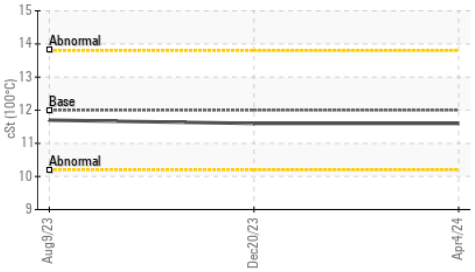

Silicon (ppm)



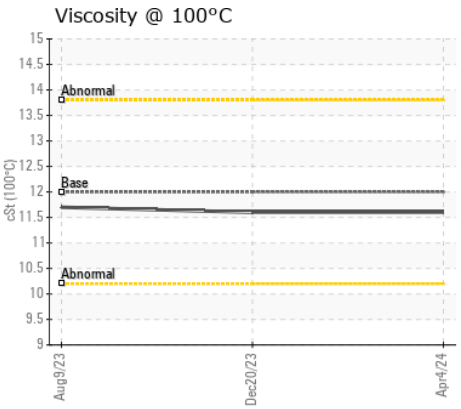

Base Number



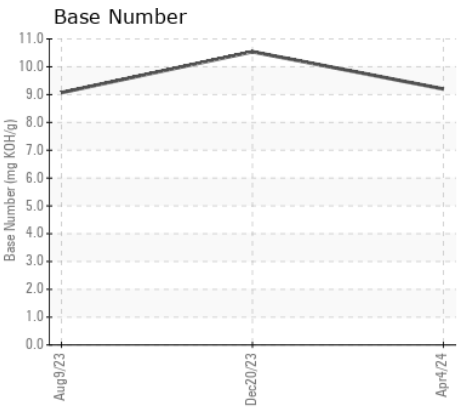

Viscosity @ 100°C




Viscosity @ 100°C




Base Number




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : WC0928215
**Lab Number** : 02628141
**Unique Number** : 5761273
**Test Package** : MOB 2

**Received** : 11 Apr 2024
**Tested** : 11 Apr 2024
**Diagnosed** : 11 Apr 2024 - Kevin Marson

**Lachine - Transport Laberge**
435 rue Norman
Lachine, QC
CA H8S 1A5
Contact: Service Manager

T:
F:

*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.*