



OIL ANALYSIS REPORT

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

Machine Id
1825
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0895821 | WC0883003 | WC0858506 |
| Sample Date | | Client Info | | 18 Jan 2024 | 24 Nov 2023 | 26 Sep 2023 |
| Machine Age | hrs | Client Info | | 21370 | 20811 | 20289 |
| Oil Age | hrs | Client Info | | 559 | 500 | 839 |
| Filter Age | hrs | Client Info | | 559 | 500 | 839 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|----------|-----|---------------|------|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >100 | 8 | 5 | 13 |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | 0 | <1 |
| Nickel | ppm | ASTM D5185(m) | >4 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 1 | 1 | 1 |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >330 | 2 | 2 | 7 |
| Tin | ppm | ASTM D5185(m) | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

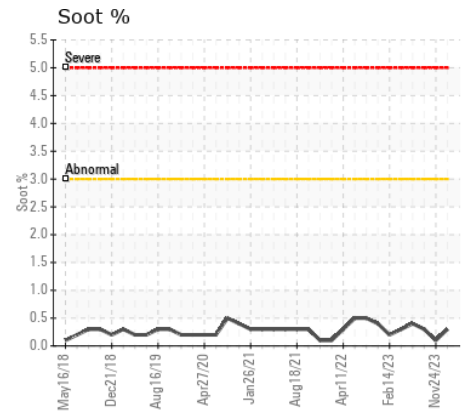
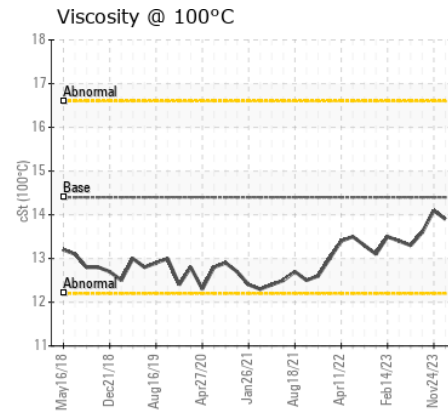
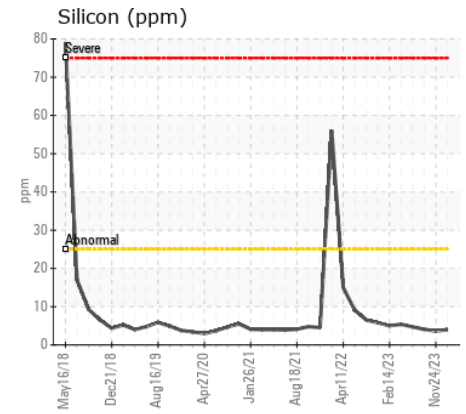
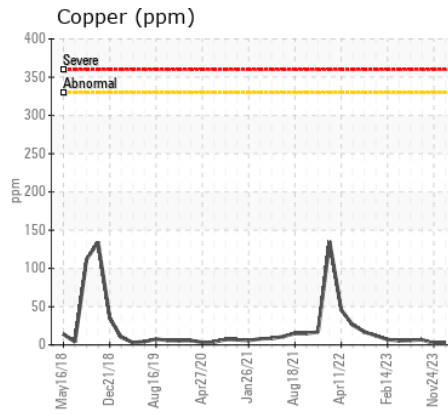
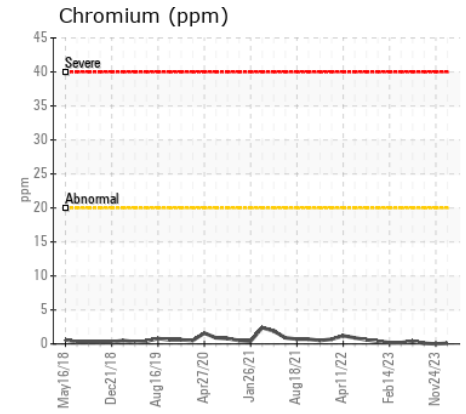
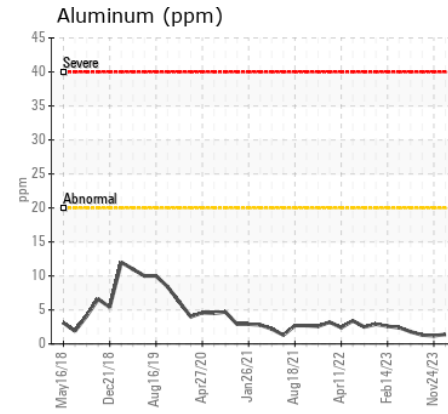
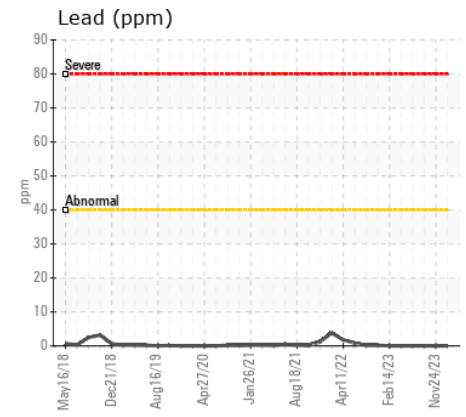
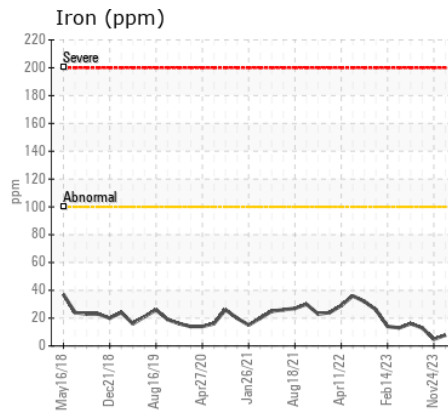
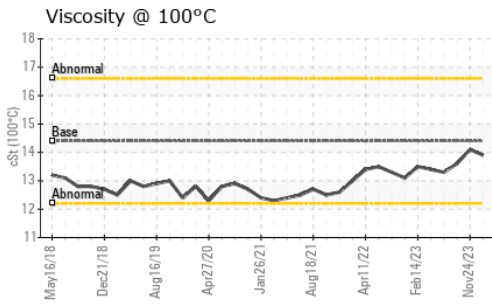
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | 4 | 4 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 0 | 0 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | ASTM D7844* | >3 | 0.3 | 0.1 | 0.3 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 8.7 | 6.3 | 8.1 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 21.2 | 20.4 | 23.9 |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | >158 | 1 | 1 | 2 |
| Boron | ppm | ASTM D5185(m) | 250 | 2 | 3 | 2 |
| Barium | ppm | ASTM D5185(m) | 10 | 0 | <1 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 100 | 58 | 58 | 58 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 450 | 951 | 950 | 956 |
| Calcium | ppm | ASTM D5185(m) | 3000 | 1036 | 1034 | 1037 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 983 | 969 | 999 |
| Zinc | ppm | ASTM D5185(m) | 1350 | 1159 | 1169 | 1187 |
| Sulfur | ppm | ASTM D5185(m) | 4250 | 2666 | 2525 | 2463 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 18.5 | 17.9 | 22.7 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.4 | 13.9 | 14.1 | 13.6 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0895821 **Received** : 22 Jan 2024
Lab Number : 02610131 **Diagnosed** : 22 Jan 2024
Unique Number : 5711217 **Diagnostician** : Wes Davis
Test Package : MOB 1

KINGSTON TRANSIT
 1181 JOHN COUNTER BLVD
 KINGSTON, ON
 CA K7K 6C7
 Contact: Brent Gunter
 bgunter@cityofkingston.ca
 T: (613)546-4291
 F: (613)542-1504

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.