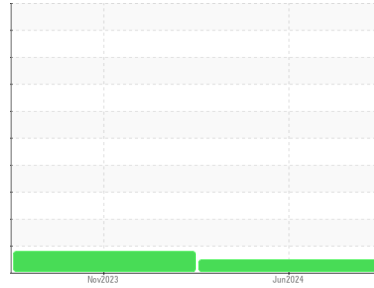




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[69430]
 Machine Id
VOLVO VNR 4623
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number | Client Info | | | WC0948203 | WC0869668 | --- |
| Sample Date | Client Info | | | 28 Jun 2024 | 15 Nov 2023 | --- |
| Machine Age | kms | Client Info | | 30 | 280260 | --- |
| Oil Age | kms | Client Info | | 7 | 0 | --- |
| Oil Changed | Client Info | | | Changed | Changed | --- |
| Sample Status | | | | NORMAL | ABNORMAL | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel | WC Method | >6.0 | | <1.0 | <1.0 | --- |
| Water | WC Method | >0.2 | | NEG | NEG | --- |
| Glycol | WC Method | | | NEG | NEG | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >100 | 35 | 64 | --- |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | 1 | --- |
| Nickel | ppm | ASTM D5185(m) | >2 | 3 | ▲ 3 | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185(m) | >2 | <1 | <1 | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | 5 | 12 | --- |
| Lead | ppm | ASTM D5185(m) | >40 | 2 | 4 | --- |
| Copper | ppm | ASTM D5185(m) | >330 | 19 | 40 | --- |
| Tin | ppm | ASTM D5185(m) | >15 | 2 | 3 | --- |
| Antimony | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | --- |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | --- |

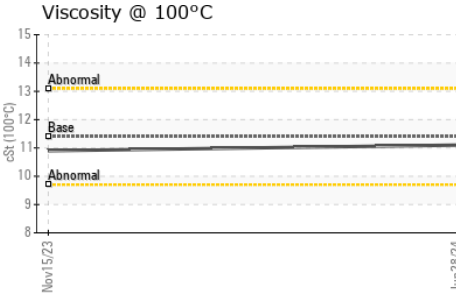
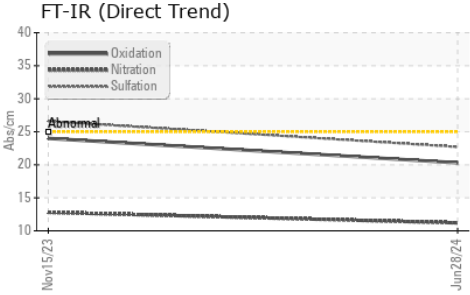
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | 1 | 4 | 6 | --- |
| Barium | ppm | ASTM D5185(m) | 1 | <1 | <1 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 1 | 57 | 60 | --- |
| Manganese | ppm | ASTM D5185(m) | 1 | <1 | 1 | --- |
| Magnesium | ppm | ASTM D5185(m) | 10 | 839 | 783 | --- |
| Calcium | ppm | ASTM D5185(m) | 2942 | 1251 | 1354 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1102 | 818 | 849 | --- |
| Zinc | ppm | ASTM D5185(m) | 1351 | 1108 | 1074 | --- |
| Sulfur | ppm | ASTM D5185(m) | 3903 | 2110 | 1962 | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >25 | 5 | 8 | --- |
| Sodium | ppm | ASTM D5185(m) | | 3 | 4 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 7 | 25 | --- |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* | >3 | 0.7 | 0.9 | --- |
| Nitration | Abs/cm | ASTM D7624* | >20 | 11.2 | 12.8 | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 22.7 | 26.6 | --- |



OIL ANALYSIS REPORT

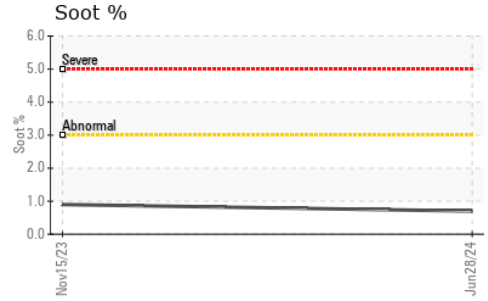
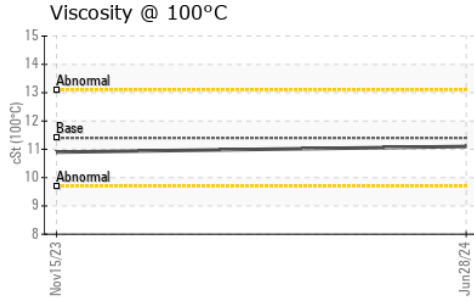
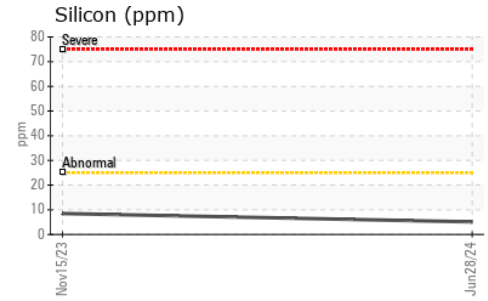
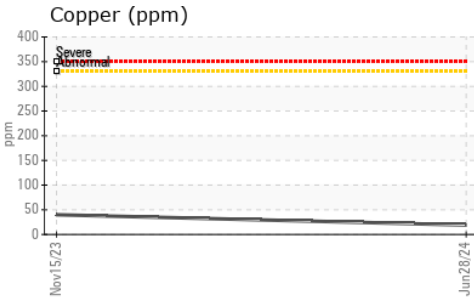
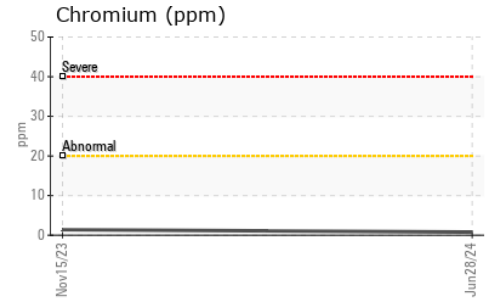
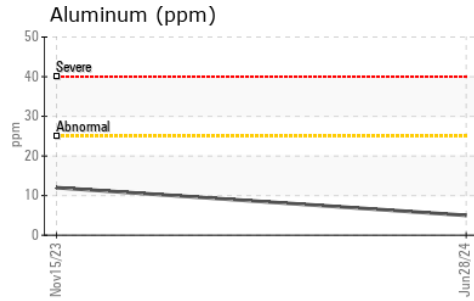
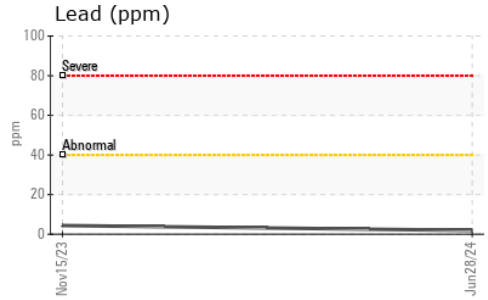
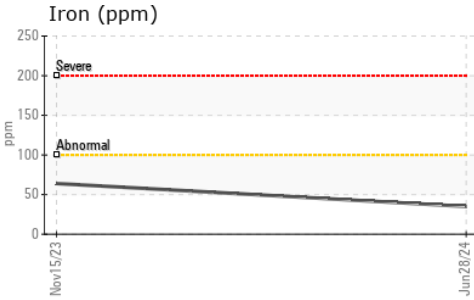


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs./1mm | ASTM D7414* | >25 | 20.3 | 24.0 | --- |

| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|------------|----------|----------|
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | --- |
| Free Water | scalar | Visual* | | NEG | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|---------------|------------|-------------|----------|----------|
| Visc @ 100°C | cSt | ASTM D7279(m) | 11.4 | 11.1 | 10.9 | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **PERFORMANCE EQUIPMENT - VISION TRUCK**
Sample No. : WC0948203 **Received** : 03 Jul 2024 **415 EVANS AVENUE**
Lab Number : **02645220** **Tested** : 03 Jul 2024 **ETOBICOKE, ON**
Unique Number : 5802759 **Diagnosed** : 03 Jul 2024 - Wes Davis **CA M8W 0B3**
Test Package : MOB 1 **Contact:** Service **etobservice@visiontruckgroup.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.