



POWER SYSTEMS
SYSTÈMES DE PUISSANCE

OIL ANALYSIS REPORT

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

Area
HOME HARDWARE [6100233747]

Machine Id
JOHN DEERE 117513

Component
Diesel Engine

Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WA0020863 | WA0019017 | WA0017291 |
| Sample Date | | Client Info | | 19 Dec 2023 | 19 Dec 2022 | 06 Dec 2021 |
| Machine Age | hrs | Client Info | | 231 | 210 | 189 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

Metal levels are typical for a new component breaking in.

| | | | | | | |
|----------|-----|---------------|-----|--------------|----|----|
| Iron | ppm | ASTM D5185(m) | >51 | 8 | 10 | 7 |
| Chromium | ppm | ASTM D5185(m) | >11 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >5 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >31 | 2 | 1 | 1 |
| Lead | ppm | ASTM D5185(m) | >26 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185(m) | >26 | 6 | 3 | 4 |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

CONTAMINATION

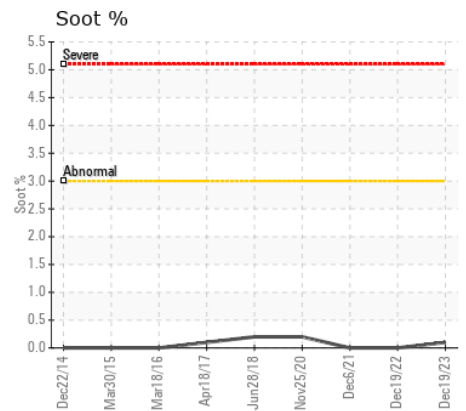
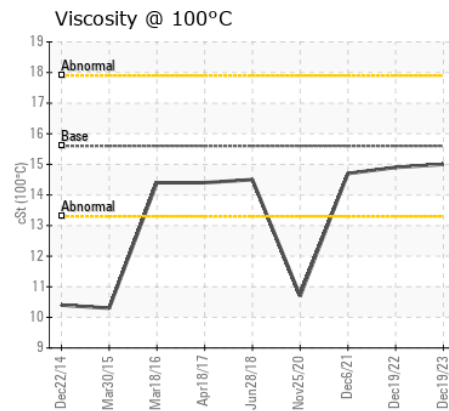
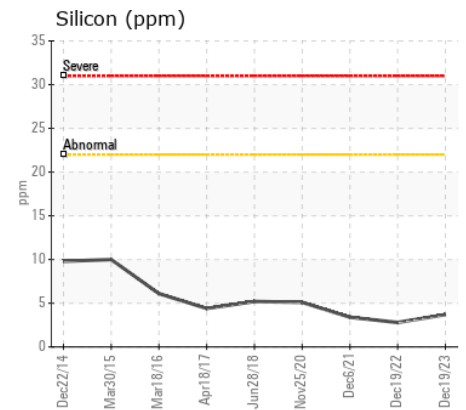
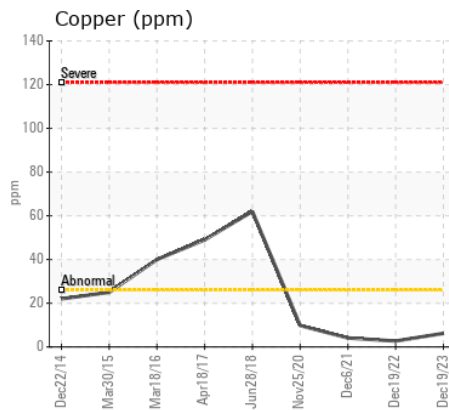
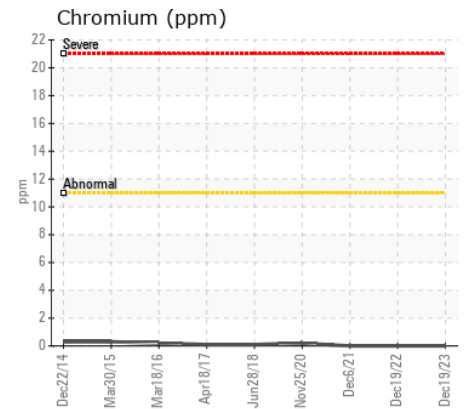
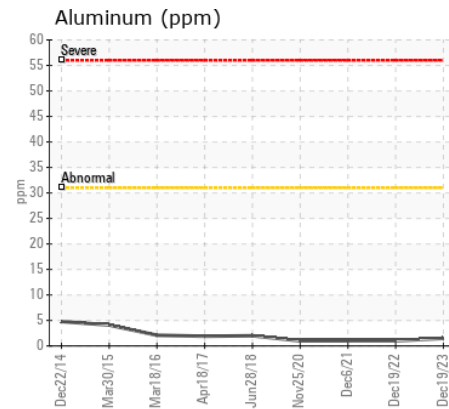
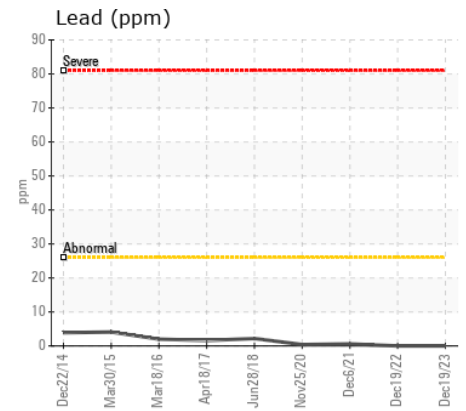
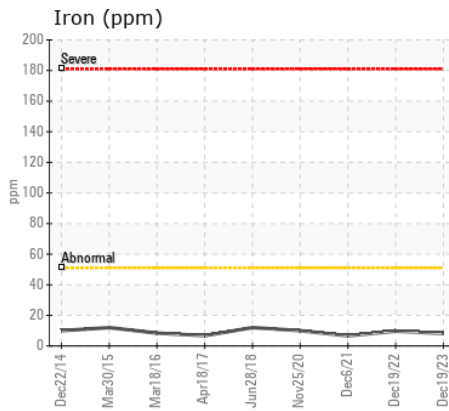
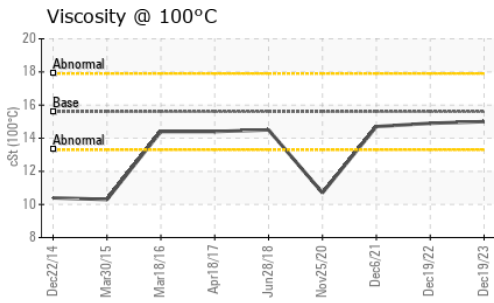
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|---------------|-------|----------------|------|------|
| Silicon | ppm | ASTM D5185(m) | >22 | 4 | 3 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | 7 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | 0.0 |
| Soot % | % | ASTM D7844* | >3 | 0.1 | 0 | 0 |
| Nitration | Abs/cm | ASTM D7624* | >20 | 5.3 | 3.8 | 3.5 |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 18.1 | 15.5 | 14.9 |
| Emulsified Water | scalar | Visual* | >0.21 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|--------------|----------|---------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185(m) | >31 | 1 | 2 | 2 |
| Boron | ppm | ASTM D5185(m) | 0 | 7 | 26 | 176 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 56 | 48 | <1 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 917 | 785 | 11 |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1075 | 1252 | 2081 |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 1010 | 1060 | 972 |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1154 | 1154 | 1101 |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2734 | 2683 | 2926 |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | 13.1 | 8.0 | 7.5 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.6 | 15.0 | 14.9 | 14.7 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WA0020863 **Received** : 09 Jan 2024
Lab Number : 02607387 **Diagnosed** : 09 Jan 2024
Unique Number : 5708473 **Diagnostician** : Wes Davis
Test Package : MOB 1

Wajax Power Systems
 70 Raddall Avenue
 Dartmouth, NS
 CA B3B 1T7
 Contact: Danelle Hoffman
 dhoffman@wajax.com
 T: (902)468-6200
 F: (902)468-3325

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.