MOBIL LUBE 360 OIL DIAGNOSTICS

# OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE 38-20
Component
## Rear Diesel Engine
Fluid
## DIESEL ENGINE OIL SAE 15W40 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

## CONTAMINATION

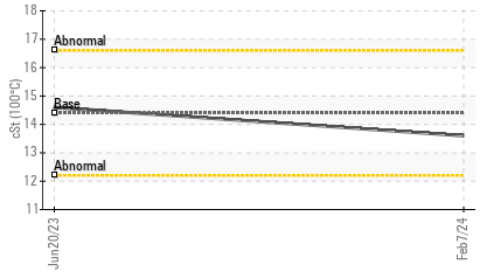
There is no indication of any contamination in the oil.

## FLUID CONDITION

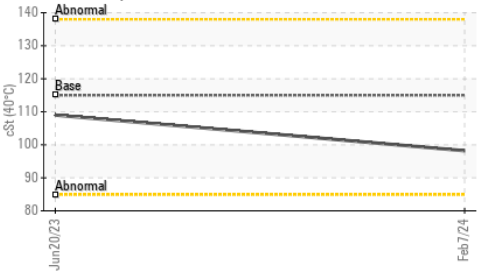
The condition of the oil is acceptable for the time in service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PC0067890** | PC0075735 | --- |
| Sample Date | | Client Info | | **07 Feb 2024** | 20 Jun 2023 | --- |
| Machine Age | hrs | Client Info | | **5265** | 4343 | --- |
| Oil Age | hrs | Client Info | | **0** | 0 | --- |
| Filter Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Changed | | Client Info | | **Changed** | Changed | --- |
| Filter Changed | | Client Info | | **Changed** | Changed | --- |
| Sample Status | | | | **NORMAL** | NORMAL | --- |
| Iron | ppm | ASTM D5185(m) | >51 | **9** | 7 | --- |
| Chromium | ppm | ASTM D5185(m) | >11 | **<1** | <1 | --- |
| Nickel | ppm | ASTM D5185(m) | >5 | **<1** | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | | **0** | <1 | --- |
| Silver | ppm | ASTM D5185(m) | >3 | **0** | <1 | --- |
| Aluminum | ppm | ASTM D5185(m) | >31 | **1** | <1 | --- |
| Lead | ppm | ASTM D5185(m) | >26 | **<1** | 0 | --- |
| Copper | ppm | ASTM D5185(m) | >26 | **2** | 1 | --- |
| Tin | ppm | ASTM D5185(m) | >4 | **0** | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | --- |
| White Metal | scalar | Visual* | NONE | **NONE** | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | --- | --- |
| Silicon | ppm | ASTM D5185(m) | >22 | **4** | 6 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | 2 | --- |
| Fuel | | WC Method | >2.1 | **<1.0** | <1.0 | --- |
| Water | | WC Method | >0.21 | **NEG** | NEG | --- |
| Glycol | | WC Method | | **NEG** | NEG | --- |
| Soot % | % | ASTM D7844* | >3 | **0.2** | 0.1 | --- |
| Nitration | Abs/cm | ASTM D7624* | >20 | **6.6** | 6.3 | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | **18.9** | 19.0 | --- |
| Silt | scalar | Visual* | NONE | **NONE** | --- | --- |
| Debris | scalar | Visual* | NONE | **NONE** | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | **NONE** | --- | --- |
| Appearance | scalar | Visual* | NORML | **NORML** | --- | --- |
| Odor | scalar | Visual* | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | Visual* | >0.21 | **NEG** | NEG | --- |
| Sodium | ppm | ASTM D5185(m) | >158 | **2** | 2 | --- |
| Boron | ppm | ASTM D5185(m) | 250 | **2** | 27 | --- |
| Barium | ppm | ASTM D5185(m) | 10 | **0** | 0 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 100 | **59** | 58 | --- |
| Manganese | ppm | ASTM D5185(m) | | **0** | <1 | --- |
| Magnesium | ppm | ASTM D5185(m) | 450 | **939** | 839 | --- |
| Calcium | ppm | ASTM D5185(m) | 3000 | **1048** | 1192 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | **999** | 1039 | --- |
| Zinc | ppm | ASTM D5185(m) | 1350 | **1159** | 1159 | --- |
| Sulfur | ppm | ASTM D5185(m) | 4250 | **2685** | 2644 | --- |
| Oxidation | Abs/.1mm | ASTM D7414* | >25 | **14.2** | 14.1 | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 115 | **98.2** | 109 | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.4 | **13.6** | 14.6 | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 126 | **138** | 137 | --- |

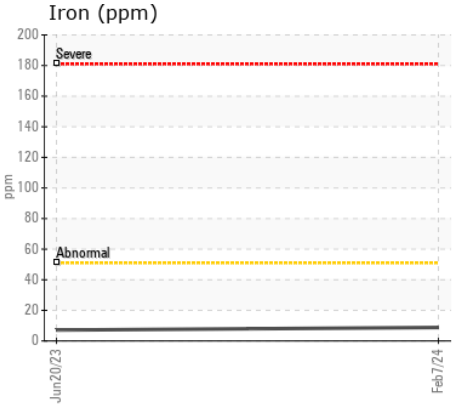
Viscosity @ 100°C



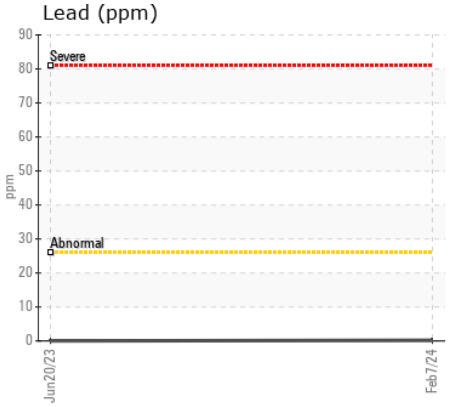

Viscosity @ 40°C



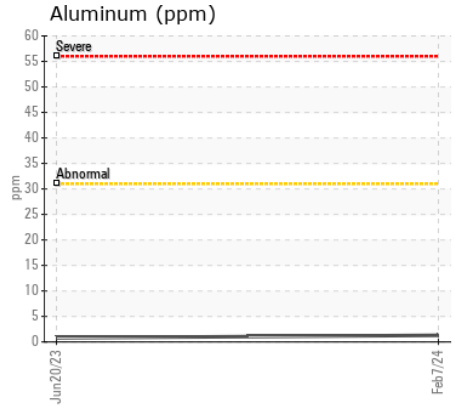

Iron (ppm)



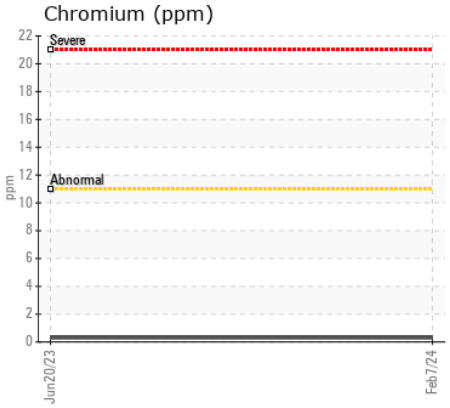

Lead (ppm)



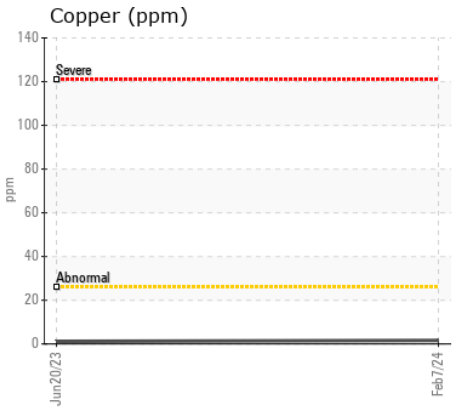

Aluminum (ppm)



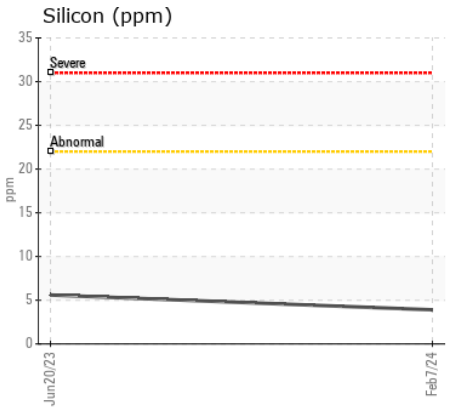

Chromium (ppm)



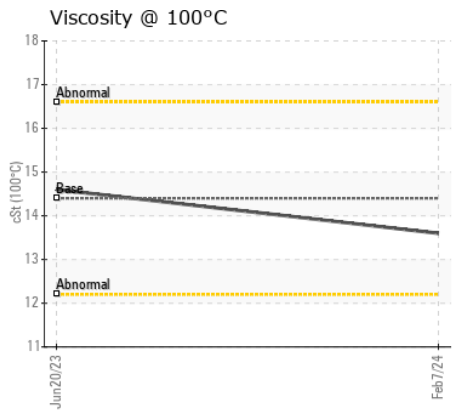

Copper (ppm)



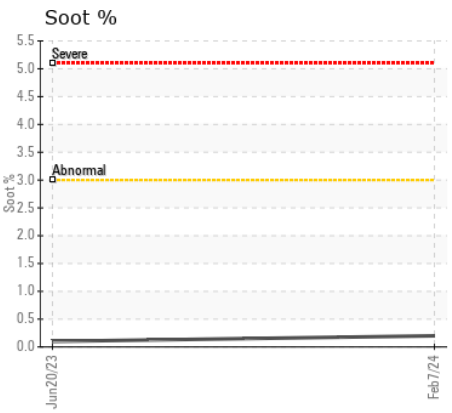

Silicon (ppm)




Viscosity @ 100°C




Soot %




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : PC0067890
**Lab Number** : 02616604
**Unique Number** : 5733714
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

**Received** : 20 Feb 2024
**Tested** : 20 Feb 2024
**Diagnosed** : 20 Feb 2024 - Wes Davis

*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.*

**TRUCK AND EQUIPMENT SOLUTION**
2 BERTRAM INDUSTRIAL PKWY.
MIDHURST, ON
CA L9X 1L2
Contact: John Irwin
jirwin@arnottgroup.com
T: (705)792-7620
F: (705)725-5425