FLEET WEAR CHECK

OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE PACIFIC CHALLENGER
Component
## Front Diesel Engine
Fluid
## MOBIL 15W40 (11 GAL)

## RECOMMENDATION

Resample at the next service interval to monitor. ( Customer Sample Comment:
Top Up Amount: 1 GAL
Top Up Amount: 1 GAL )

## WEAR

All component wear rates are normal.

## CONTAMINATION

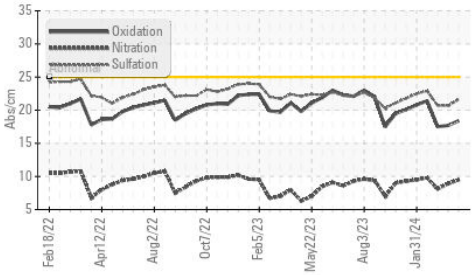
There is no indication of any contamination in the oil.

## FLUID CONDITION

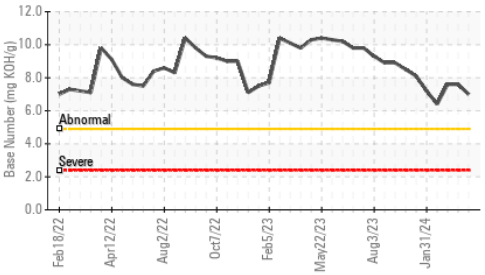
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | KL0011790 | KL0011788 | KL0011801 |
| Sample Date | | Client Info | | 12 Apr 2024 | 08 Mar 2024 | 23 Feb 2024 |
| Machine Age | hrs | Client Info | | 97000 | 98000 | 97750 |
| Oil Age | hrs | Client Info | | 500 | 500 | 1500 |
| Filter Age | hrs | Client Info | | 250 | 250 | 500 |
| Oil Changed | | Client Info | | Oil Added | Oil Added | Oil Added |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| Iron | ppm | ASTM D5185m | >51 | 13 | 14 | 8 |
| Chromium | ppm | ASTM D5185m | >11 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | 1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | <1 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 3 | 4 | 1 |
| Lead | ppm | ASTM D5185m | >26 | 1 | 4 | <1 |
| Copper | ppm | ASTM D5185m | >26 | 2 | 2 | 3 |
| Tin | ppm | ASTM D5185m | >4 | <1 | 2 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >22 | 7 | 12 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 6 | 2 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.6 | 0.5 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.5 | 8.9 | 8.1 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.6 | 20.7 | 20.7 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.21 | NEG | NEG | NEG |
| Sodium | ppm | ASTM D5185m | >118 | 0 | 0 | 1 |
| Boron | ppm | ASTM D5185m | | 52 | 75 | 68 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 13 | 13 | 12 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 544 | 564 | 515 |
| Calcium | ppm | ASTM D5185m | | 1656 | 1767 | 1595 |
| Phosphorus | ppm | ASTM D5185m | | 809 | 922 | 794 |
| Zinc | ppm | ASTM D5185m | | 931 | 972 | 902 |
| Sulfur | ppm | ASTM D5185m | | 3406 | 3729 | 3207 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.4 | 17.7 | 17.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.0 | 7.6 | 7.6 |
| Visc @ 100°C | cSt | ASTM D445 | | 14.7 | 14.2 | 14.3 |

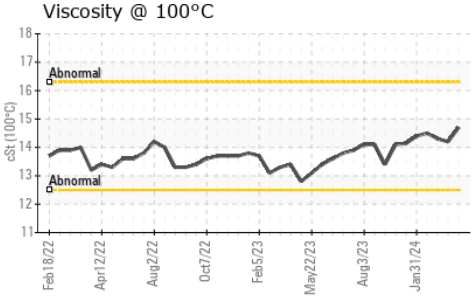
FT-IR (Direct Trend)



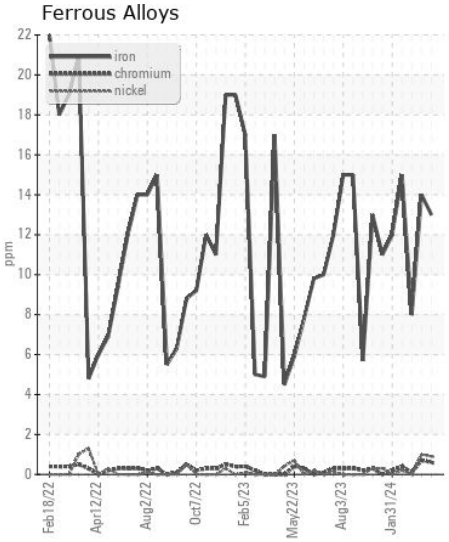

Base Number



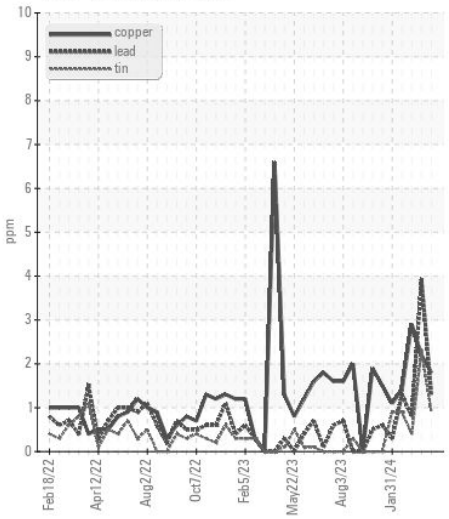

Viscosity @ 100°C



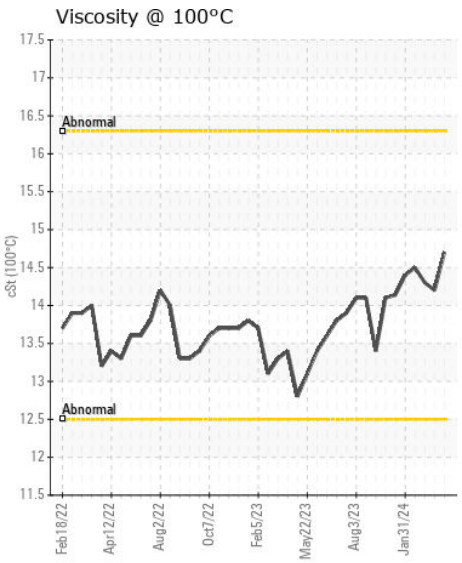

Ferrous Alloys



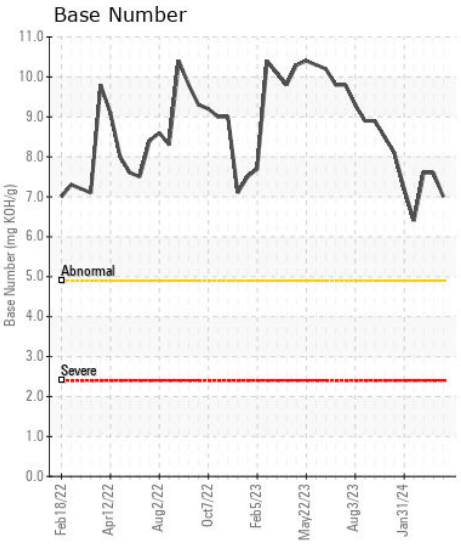

Non-ferrous Metals




Viscosity @ 100°C




Base Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : KL0011790
**Lab Number** : 06156671
**Unique Number** : 10992094
**Test Package** : FLEET

**Received** : 22 Apr 2024
**Tested** : 23 Apr 2024
**Diagnosed** : 24 Apr 2024 - Sean Felton

*To discuss this sample report, contact Customer Service at 1-800-237-1369.*
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
*Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)*

**PACIFIC DAWN LLC**
2324 NW 90TH ST
SEATTLE, WA
US 98117
Contact: BURT PARKER
icfish@teleport.com
T: (206)297-2737
F: (206)297-2949