



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

Area

[05W46692]

Machine Id

JOHN DEERE 325G 1T0325GKTMJ408392

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 0W40 (3 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0217671 | JR0192184 | JR0163175 |
| Sample Date | | Client Info | | 21 May 2024 | 14 Nov 2023 | 01 Mar 2023 |
| Machine Age | hrs | Client Info | | 2442 | 1943 | 1437 |
| Oil Age | hrs | Client Info | | 499 | 506 | 444 |
| Filter Age | hrs | Client Info | | 499 | 506 | 444 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >51 | 32 | 35 | 24 |
| Chromium | ppm | ASTM D5185m | >11 | 1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >31 | 7 | 7 | 6 |
| Lead | ppm | ASTM D5185m | >26 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >26 | 3 | 4 | 8 |
| Tin | ppm | ASTM D5185m | >4 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

There is no indication of any contamination in the oil.

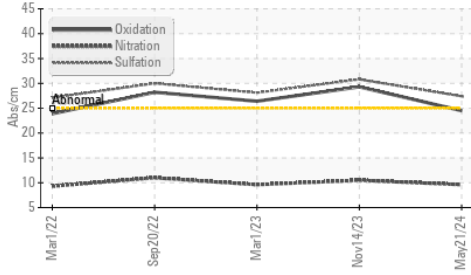
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 17 | ▲ 23 | 16 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 1 | 3 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.9 | 1 | 0.6 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.6 | 10.5 | 9.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 27.4 | 30.8 | 28.1 |
| 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 |

FLUID CONDITION

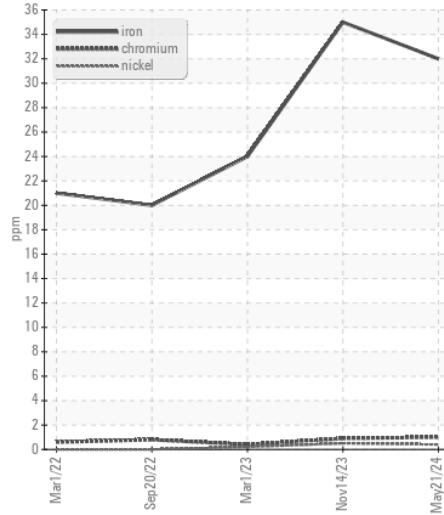
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >31 | 14 | 5 | <1 |
| Boron | ppm | ASTM D5185m | | 211 | 169 | 189 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 212 | 304 | 280 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 645 | 866 | 775 |
| Calcium | ppm | ASTM D5185m | | 1414 | 1676 | 1453 |
| Phosphorus | ppm | ASTM D5185m | | 843 | 926 | 813 |
| Zinc | ppm | ASTM D5185m | | 1104 | 1116 | 1070 |
| Sulfur | ppm | ASTM D5185m | | 2914 | 2401 | 3102 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 24.5 | 29.3 | 26.4 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.5 | 6.8 | 7.4 | 6.7 |
| Visc @ 100°C | cSt | ASTM D445 | 14 | 13.5 | 14.1 | 12.7 |

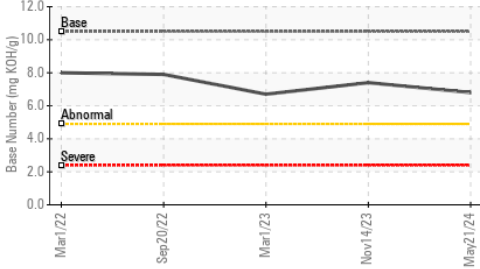
FT-IR (Direct Trend)



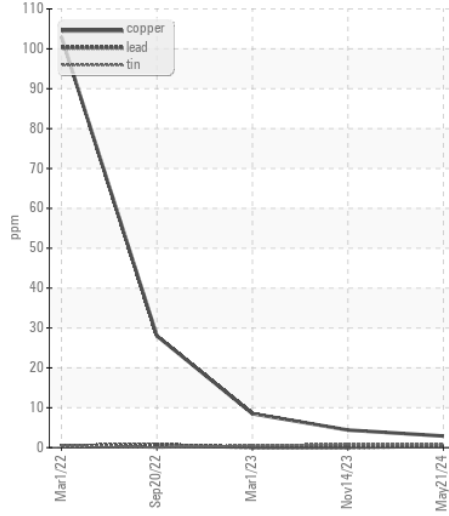
Ferrous Alloys



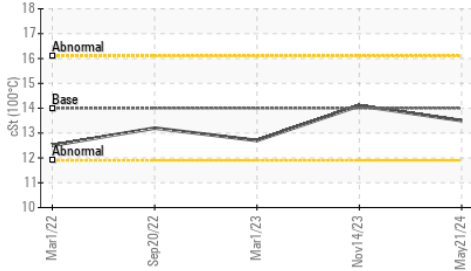
Base Number



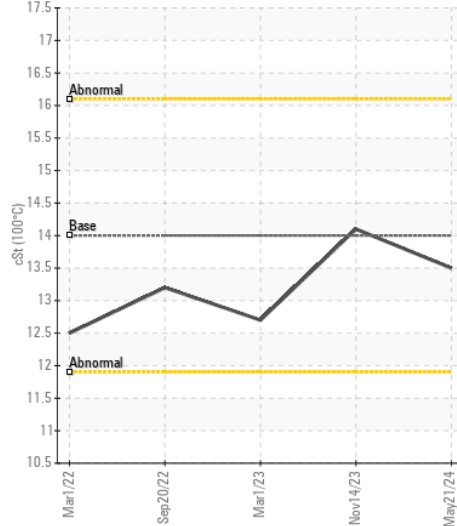
Non-ferrous Metals



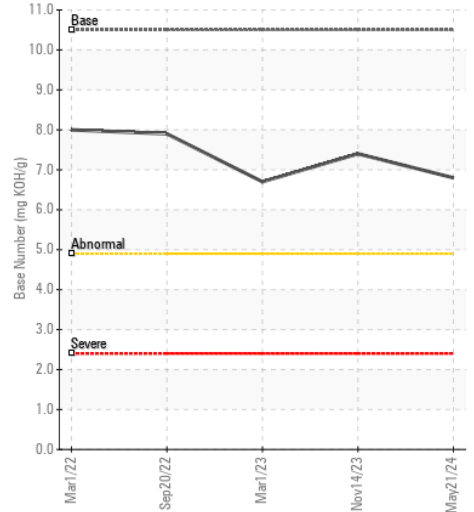
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217671 **Received** : 22 May 2024
Lab Number : 06188491 **Tested** : 24 May 2024
Unique Number : 11045243 **Diagnosed** : 24 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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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)