



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

Area
BOSCOBEL
Machine Id
JOHN DEERE 844K M02-0866 1DW844KXCDE655156
Component
Diesel Engine
Fluid
CASTROL 15W40 (40 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0165941 | JR0148459 | JR0146855 |
| Sample Date | | Client Info | | 08 May 2024 | 27 Jul 2023 | 23 Feb 2023 |
| Machine Age | hrs | Client Info | | 12374 | 11547 | 11547 |
| Oil Age | hrs | Client Info | | 374 | 11770 | 500 |
| Filter Age | hrs | Client Info | | 374 | 11770 | 500 |
| Oil Changed | | Client Info | | Not Changd | Changed | Changed |
| Filter Changed | | Client Info | | Not Changd | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | MARGINAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >51 | 13 | 12 | 42 |
| Chromium | ppm | ASTM D5185m | >11 | 0 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >31 | 2 | 2 | 9 |
| Lead | ppm | ASTM D5185m | >26 | 1 | <1 | 3 |
| Copper | ppm | ASTM D5185m | >26 | 4 | 8 | 15 |
| Tin | ppm | ASTM D5185m | >4 | 1 | 1 | 2 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

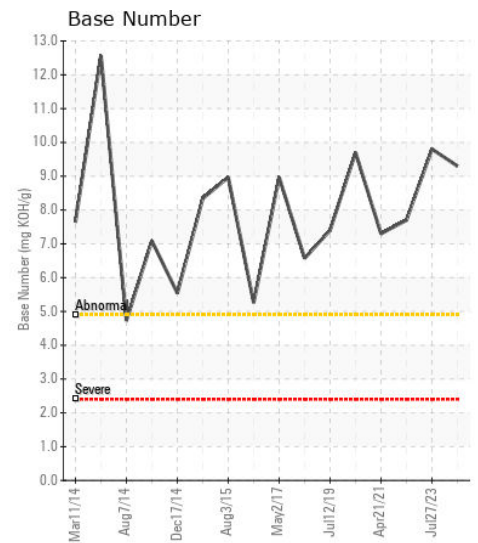
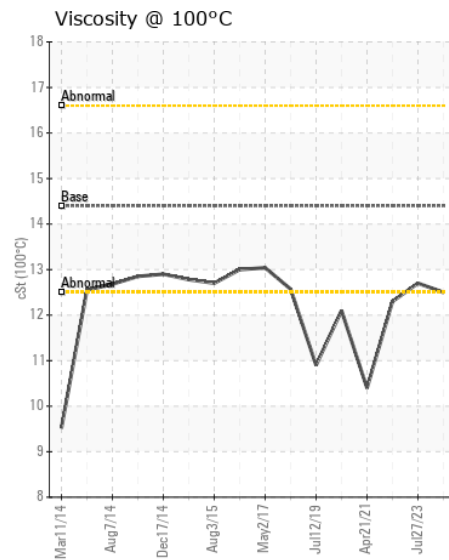
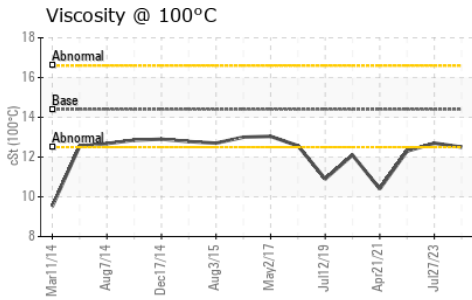
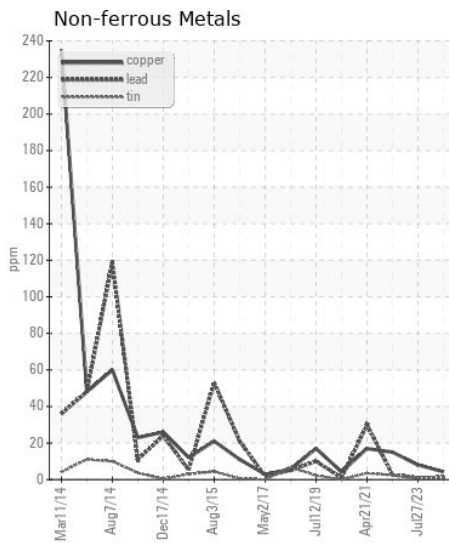
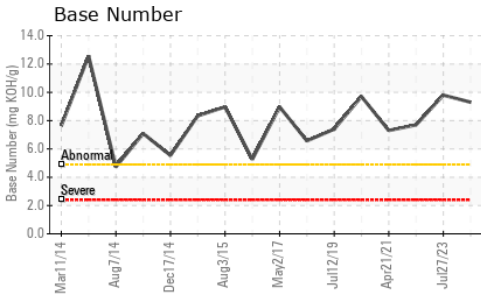
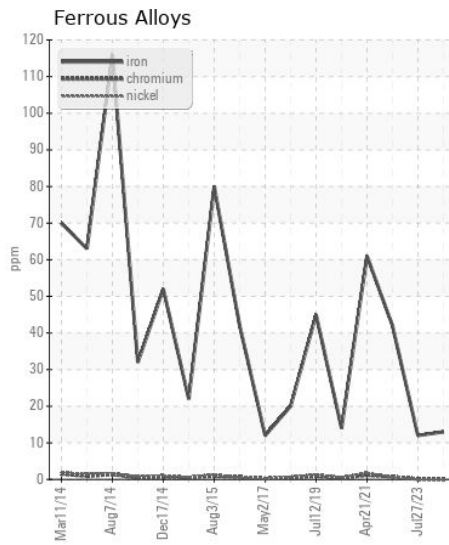
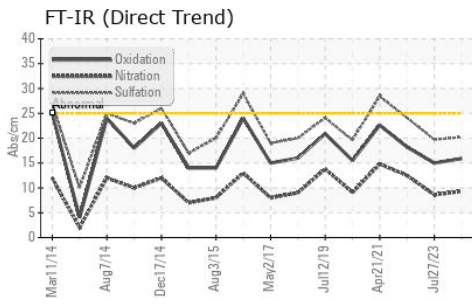
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >22 | 4 | 4 | 12 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 1 | 11 |
| Fuel | | WC Method | >2.1 | <1.0 | <1.0 | ▲ 2.5 |
| Water | | WC Method | >0.21 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | 0.0 |
| Soot % | % | *ASTM D7844 | >3 | 0.8 | 0.7 | 1.6 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.3 | 8.6 | 12.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.2 | 19.7 | 24.1 |
| 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 | >406 | 5 | 9 | 24 |
| Boron | ppm | ASTM D5185m | | 68 | 68 | 18 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 66 | 62 | 64 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 1069 | 1047 | 868 |
| Calcium | ppm | ASTM D5185m | | 1001 | 1033 | 1217 |
| Phosphorus | ppm | ASTM D5185m | | 1095 | 1004 | 966 |
| Zinc | ppm | ASTM D5185m | | 1258 | 1234 | 1250 |
| Sulfur | ppm | ASTM D5185m | | 3840 | 3745 | 3672 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.9 | 15.0 | 18.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 9.3 | 9.8 | 7.7 |
| Visc @ 100°C | cSt | ASTM D445 | 14.4 | 12.5 | 12.7 | 12.3 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0165941 **Received** : 10 May 2024
Lab Number : 06175241 **Tested** : 13 May 2024
Unique Number : 11021294 **Diagnosed** : 13 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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)

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