

Area
MIXERS
Machine Id
[MIXERS] M223
Component
Diesel Engine
Fluid
KENDALL 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PCA0109794 | LP0001112 | LP0000106 |
| Sample Date | | Client Info | | 08 Apr 2024 | 16 Nov 2023 | 31 Jul 2023 |
| Machine Age | hrs | Client Info | | 3042 | 2392 | 1841 |
| Oil Age | hrs | Client Info | | 600 | 600 | 600 |
| Filter Age | hrs | Client Info | | 600 | 600 | 600 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 10 | 10 | 15 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 1 | 1 | 2 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >40 | <1 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >330 | <1 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >15 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

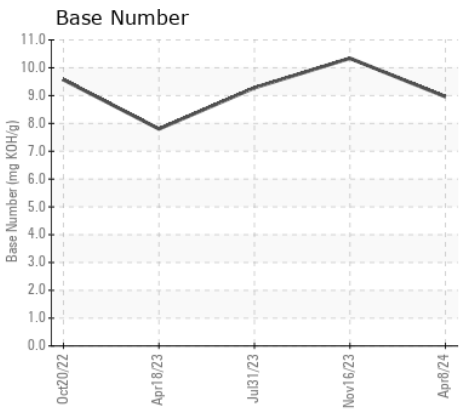
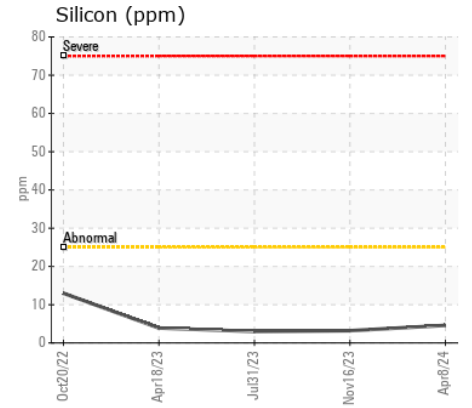
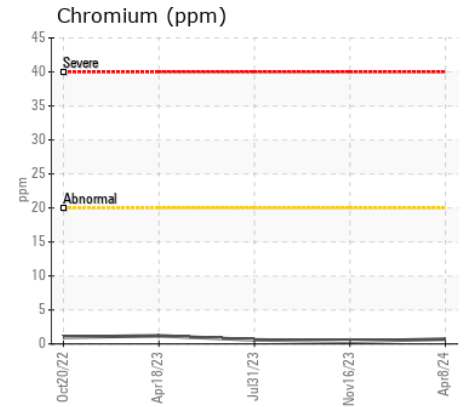
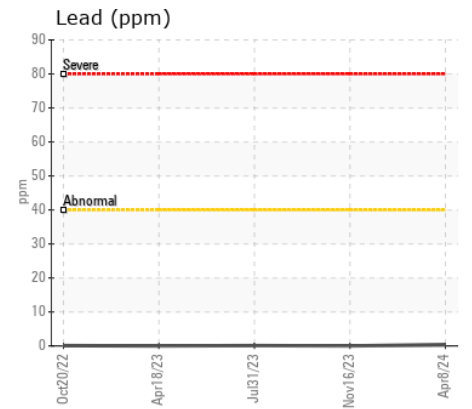
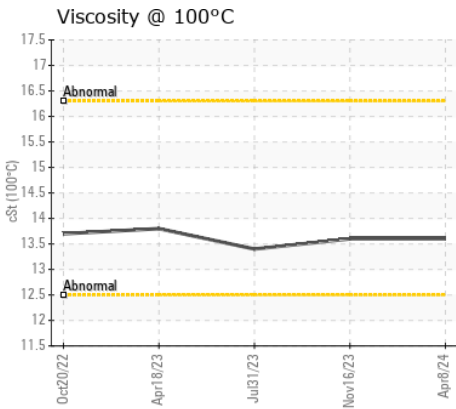
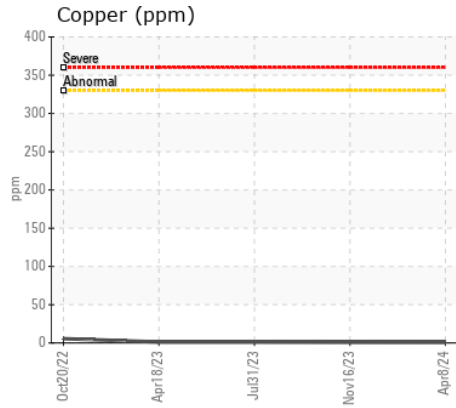
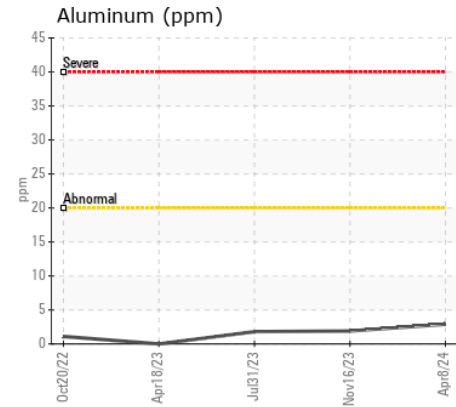
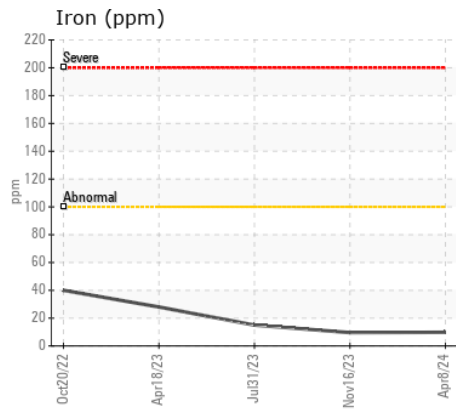
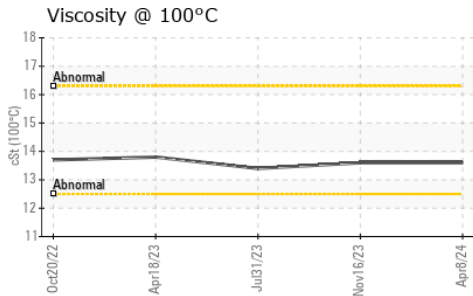
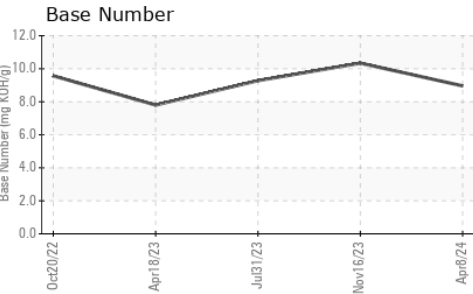
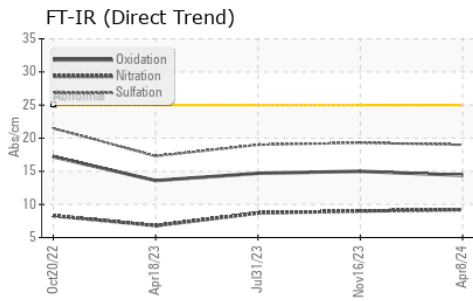
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 5 | 3 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | 2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.4 | 0.3 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.2 | 9.0 | 8.7 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.0 | 19.3 | 19.0 |
| 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 | >0.2 | 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 | | 1 | 4 | 4 |
| Boron | ppm | ASTM D5185m | 6.3 | 50 | 37 | 26 |
| Barium | ppm | ASTM D5185m | 0.6 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0.4 | 97 | 83 | 74 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 277 | 108 | 161 | 361 |
| Calcium | ppm | ASTM D5185m | 1514 | 2383 | 1992 | 1845 |
| Phosphorus | ppm | ASTM D5185m | 634 | 1127 | 993 | 980 |
| Zinc | ppm | ASTM D5185m | 743 | 1308 | 1291 | 1223 |
| Sulfur | ppm | ASTM D5185m | 2592 | 4202 | 3761 | 4017 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.4 | 15.0 | 14.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.96 | 10.34 | 9.28 |
| Visc @ 100°C | cSt | ASTM D445 | | 13.6 | 13.6 | 13.4 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109794
Lab Number : 06148170
Unique Number : 10978248
Test Package : MOB 2
Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 16 Apr 2024 - Sean Felton

CONSTRUCTION SERVICES
 2420 BOSTON RD
 WILBRAHAM, MA
 US 01095
 Contact: Michael Dupuis
 mdupuis@cs-ma.us
 T: (413)733-6331
 F:

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)