



OIL ANALYSIS REPORT

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

Machine Id
KUBOTA KX40 KX3 (S/N 31539)

Component
Right Final Drive

Fluid
TOTAL FINA TOTAL TRANSMISSION SYN NA 75W90 (--- LTR)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

WEAR

Chromium and iron ppm levels are abnormal. Aluminum ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

FLUID CONDITION

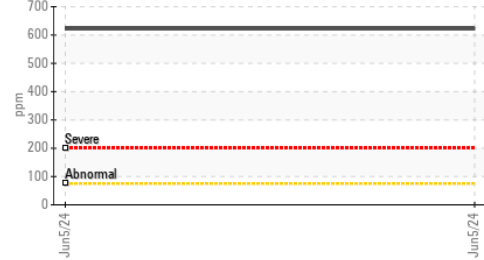
Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|--------|---------------|-----------|--------------------|----------|----------|
| Sample Number | | Client Info | | WC796259 | --- | --- |
| Sample Date | | Client Info | | 05 Jun 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 0 | --- | --- |
| Oil Age | hrs | Client Info | | 250 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |
| PQ | | ASTM D8184* | | 289 | --- | --- |
| Iron | ppm | ASTM D5185(m) | >500 | ▲ 1889 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >10 | ▲ 23 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >10 | 4 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 11 | --- | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | ● 160 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >25 | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >50 | 2 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| White Metal | scalar | Visual* | NONE | VLITE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Silicon | ppm | ASTM D5185(m) | >75 | ▲ 622 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 60 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Silt | scalar | Visual* | NONE | LIGHT | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | 26 | --- | --- |
| Boron | ppm | ASTM D5185(m) | | 132 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 2 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 14 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | 46 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | 182 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 1045 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | 22 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | 21830 | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | | 98.8 | --- | --- |

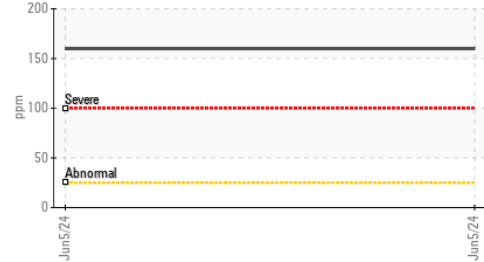
▲ Ferrous Alloys



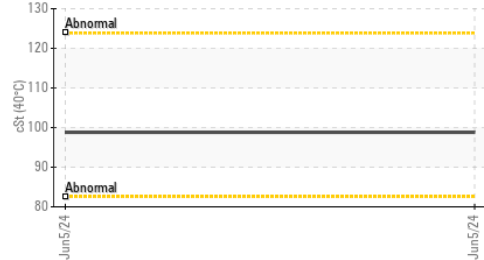
▲ Silicon (ppm)



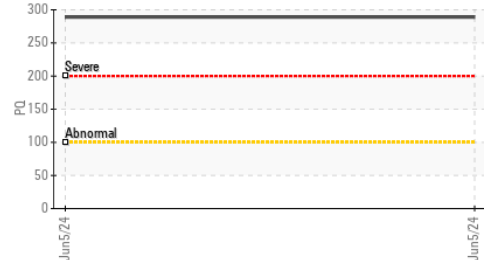
● Aluminum (ppm)



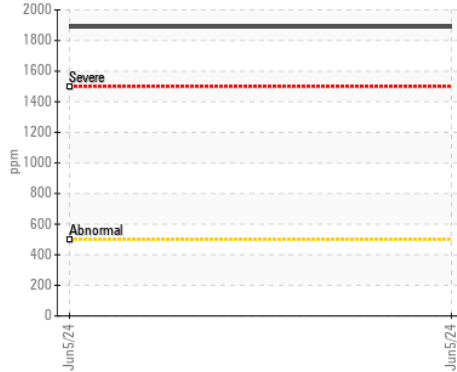
Viscosity @ 40°C



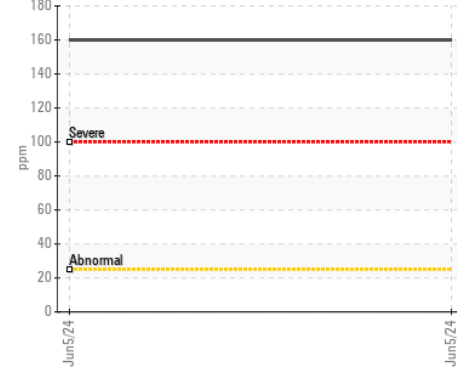
PQ



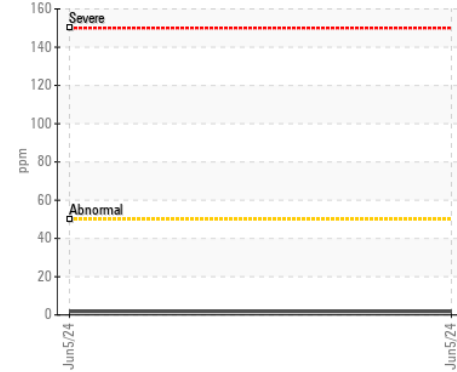
▲ Iron (ppm)



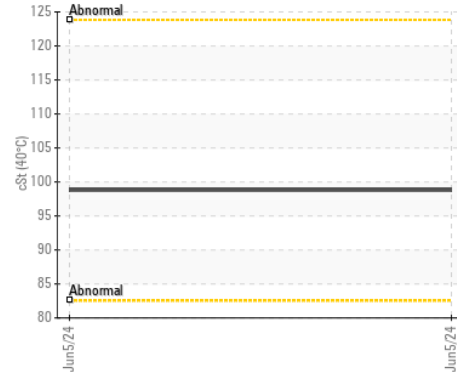
● Aluminum (ppm)



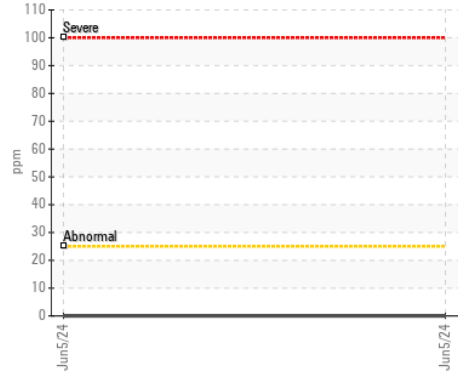
Copper (ppm)



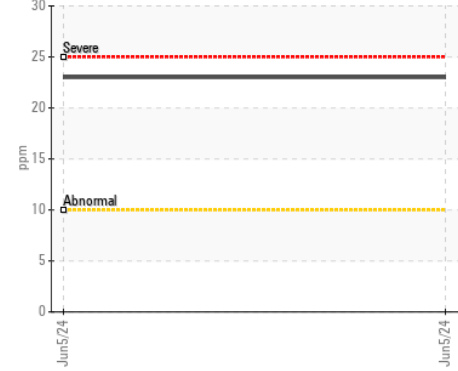
Viscosity @ 40°C



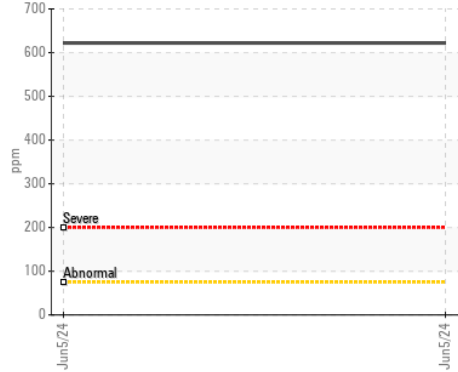
Lead (ppm)



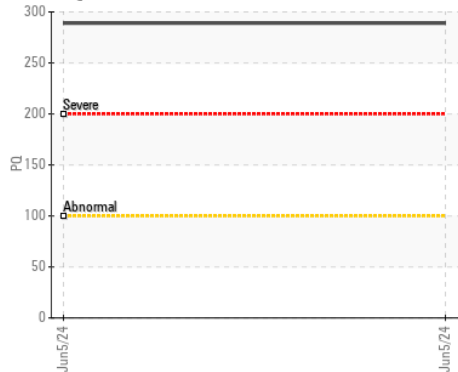
▲ Chromium (ppm)



▲ Silicon (ppm)



PQ



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : WC796259

Lab Number : 02640318

Unique Number : 5789480

Test Package : MOB 1 (Additional Tests: PQ)

Received : 06 Jun 2024

Tested : 07 Jun 2024

Diagnosed : 07 Jun 2024 - Kevin Marson

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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.