

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION SEVERE

Machine Id KENWORTH M-45 Component

Transmission (Manual)

{not provided} (4 GAL)

RECOMMENDATION

The fluid change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

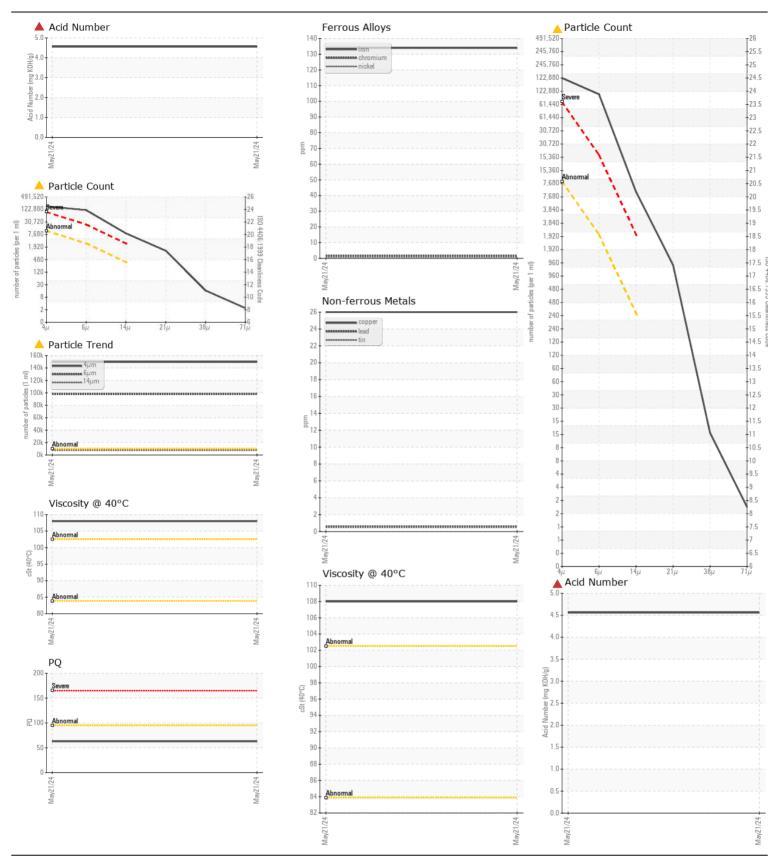
CONTAMINATION

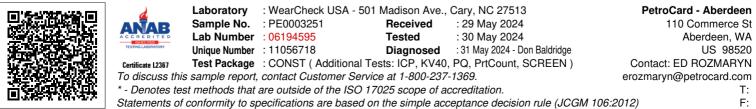
There is a high amount of particulates present in the fluid.

FLUID CONDITION

The AN level is above the recommended limit. The fluid is no longer serviceable.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|------------------|----------|--------------|-----------|----------------|----------|----------|
| Sample Number | | Client Info | | PE0003251 | | |
| Sample Date | | Client Info | | 21 May 2024 | | |
| Machine Age | mls | Client Info | | 240500 | | |
| Oil Age | mls | Client Info | | 240500 | | |
| Filter Age | mls | Client Info | | 240500 | | |
| Oil Changed | | Client Info | | Changed | | |
| Filter Changed | | Client Info | | N/A | | |
| Sample Status | | | | SEVERE | | |
| | | | | | | |
| PQ | | ASTM D8184 | >95 | 63 | | |
| Iron | ppm | ASTM D5185m | >200 | 134 | | |
| Chromium | ppm | ASTM D5185m | >5 | 2 | | |
| Nickel | ppm | ASTM D5185m | >5 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 2 | | |
| Silver | ppm | ASTM D5185m | >7 | 1 | | |
| Aluminum | ppm | ASTM D5185m | >25 | 15 | | |
| Lead | ppm | ASTM D5185m | >45 | <1 | | |
| Copper | ppm | ASTM D5185m | >225 | 26 | | |
| Tin | ppm | ASTM D5185m | >10 | <1 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| White Metal | scalar | *Visual | NONE | NONE | | |
| Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | |
| Silicon | ppm | ASTM D5185m | >125 | 49 | | |
| Potassium | ppm | ASTM D5185m | >20 | 6 | | |
| Water | | WC Method | >0.1 | NEG | | |
| Particles >4µm | | ASTM D7647 | >10000 | <u> </u> | | |
| Particles >6µm | | ASTM D7647 | >2500 | A 97936 | | |
| Particles >14µm | | ASTM D7647 | >320 | <u> </u> | | |
| Particles >21µm | | ASTM D7647 | >80 | 🔺 1132 | | |
| Particles >38µm | | ASTM D7647 | >20 | 14 | | |
| Particles >71µm | | ASTM D7647 | >4 | 2 | | |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | <u> </u> | | |
| 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 | >0.1 | NEG | | |
| Sodium | 0000 | ASTM D5185m | | 7 | | |
| | ppm | | | 7 | | |
| Boron | ppm | ASTM D5185m | | 529 | | |
| Barium | ppm | ASTM D5185m | | 150 | | |
| Molybdenum | ppm | ASTM D5185m | | 2 | | |
| Manganese | ppm | ASTM D5185m | | 4 | | |
| Magnesium | ppm | ASTM D5185m | | 8 | | |
| Calcium | ppm | ASTM D5185m | | 98 | | |
| Phosphorus | ppm | ASTM D5185m | | 2081 | | |
| Zinc | ppm | ASTM D5185m | | 31 | | |
| Sulfur | ppm | ASTM D5185m | | 887 | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 4.56 | | |
| Visc @ 40°C | cSt | ASTM D445 | | 108 | | |





Submitted By: ED ROZMARYN Page 2 of 2