



OIL ANALYSIS REPORT

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

Area
DE Samples - CAT LAB
 Machine Id
KOMATSU 605 HAUL TRUCK 6555 (S/N 10571)
 Component
Hydraulic System
 Fluid
TULCO LUBSOIL SUPER HYDRAULIC HZ 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | TO10003140 | TO10002904 | TO10002430 |
| Sample Date | | Client Info | | 20 Feb 2024 | 06 Nov 2023 | 07 Aug 2023 |
| Machine Age | hrs | Client Info | | 30863 | 30346 | 29827 |
| Oil Age | hrs | Client Info | | 3063 | 2546 | 2027 |
| Filter Age | hrs | Client Info | | 517 | 519 | 545 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

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

CONTAMINATION

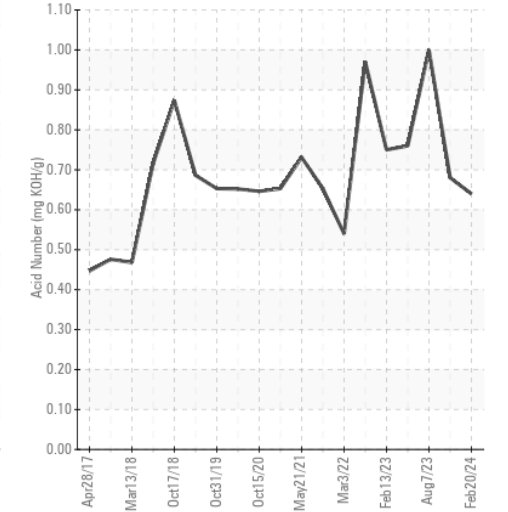
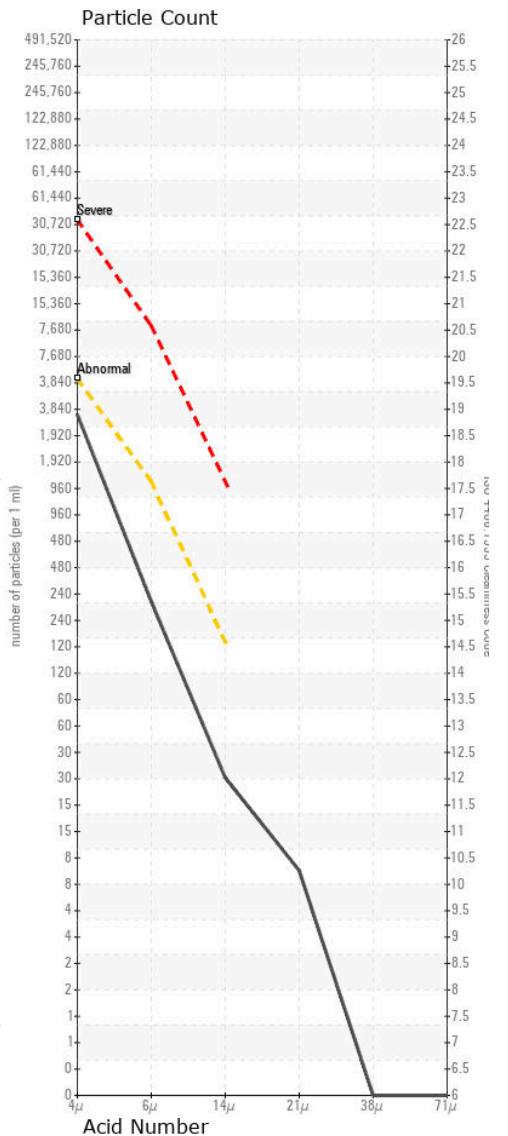
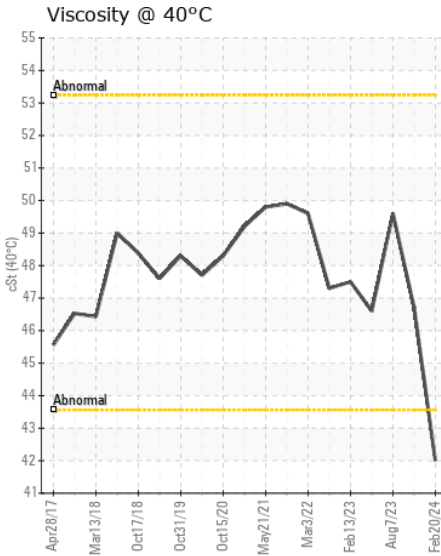
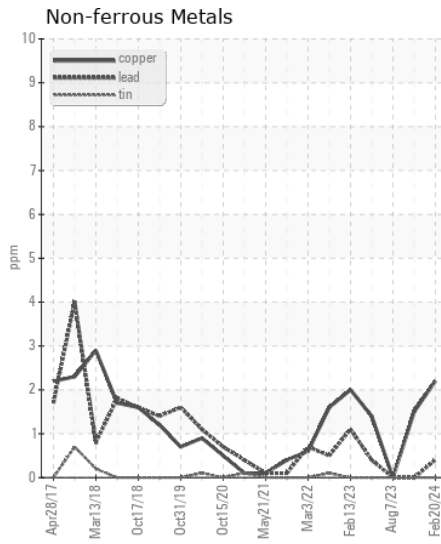
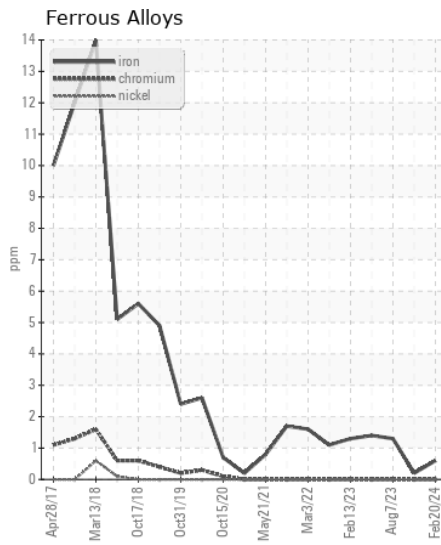
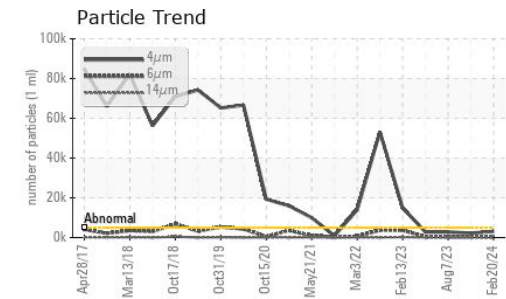
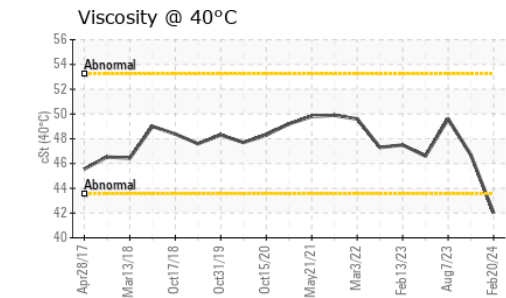
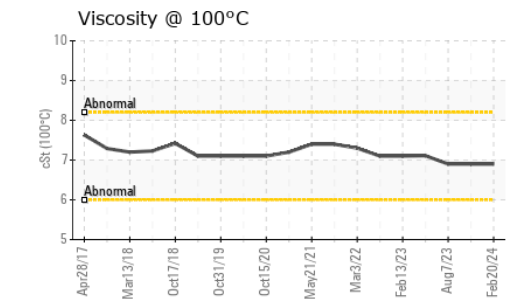
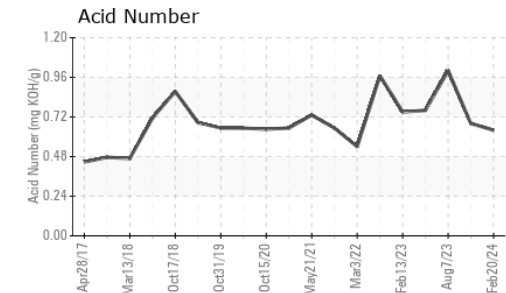
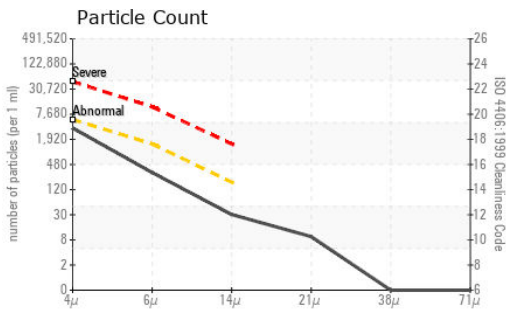
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | 1 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Water | % | ASTM D6304 | >0.05 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | 3133 | 2235 | 2797 |
| Particles >6µm | | ASTM D7647 | >1300 | 271 | 400 | 361 |
| Particles >14µm | | ASTM D7647 | >160 | 27 | 29 | 15 |
| Particles >21µm | | ASTM D7647 | >40 | 8 | 10 | 5 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 1 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 19/15/12 | 18/16/12 | 19/16/11 |
| 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 | >0.05 | NEG | NEG | NEG |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|----------------------|----------|-------------|--|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 4 | 1 | <1 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | 122 | 141 | 149 |
| Calcium | ppm | ASTM D5185m | | 129 | 135 | 147 |
| Phosphorus | ppm | ASTM D5185m | | 700 | 844 | 882 |
| Zinc | ppm | ASTM D5185m | | 905 | 1092 | 1158 |
| Sulfur | ppm | ASTM D5185m | | 2548 | 3154 | 3885 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.64 | 0.68 | 1.00 |
| Visc @ 40°C | cSt | ASTM D445 | | 42.0 | 46.7 | 49.6 |
| Visc @ 100°C | cSt | ASTM D445 | | 6.9 | 6.9 | 6.9 |
| Viscosity Index (VI) | Scale | ASTM D2270 | | 122 | 102 | 92 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10003140 **Received** : 29 Feb 2024
Lab Number : 06105195 **Tested** : 04 Mar 2024
Unique Number : 10903425 **Diagnosed** : 04 Mar 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KF, KV100, VI)

ANCHOR STONE TULSA ROCK
 TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE
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 US 74137

Contact: MIKE SNYDER
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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)

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