



OIL ANALYSIS REPORT

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

Area  
**PCS - PORTABLE CRUSHING SERVICES**

Machine Id  
**KOMATSU TH04 - PCS**

Component  
**Hydraulic System**

Fluid  
**STP HYDRO ISO AW 46 (38 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>KL0014081</b>   | KL0013082   | KL0009683   |
| Sample Date    |     | Client Info |           | <b>10 Jan 2024</b> | 03 Oct 2023 | 29 Jun 2023 |
| Machine Age    | hrs | Client Info |           | <b>11104</b>       | 10735       | 10352       |
| Oil Age        | hrs | Client Info |           | <b>4948</b>        | 4579        | 4196        |
| Filter Age     | hrs | Client Info |           | <b>4948</b>        | 4579        | 4196        |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Not Changd  | Not Changd  |
| Filter Changed |     | Client Info |           | <b>Not Changd</b>  | Not Changd  | Not Changd  |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

**WEAR**

All component wear rates are normal.

|              |        |             |      |             |      |      |
|--------------|--------|-------------|------|-------------|------|------|
| Iron         | ppm    | ASTM D5185m | >20  | <b>2</b>    | 1    | 4    |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>0</b>    | 0    | 0    |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>0</b>    | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>    | 0    | 0    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>    | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >10  | <b>0</b>    | 0    | <1   |
| Lead         | ppm    | ASTM D5185m | >10  | <b>0</b>    | <1   | 0    |
| Copper       | ppm    | ASTM D5185m | >75  | <b>3</b>    | 3    | 4    |
| Tin          | ppm    | ASTM D5185m | >10  | <b>0</b>    | <1   | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>    | 0    | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b> | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b> | NONE | NONE |

**CONTAMINATION**

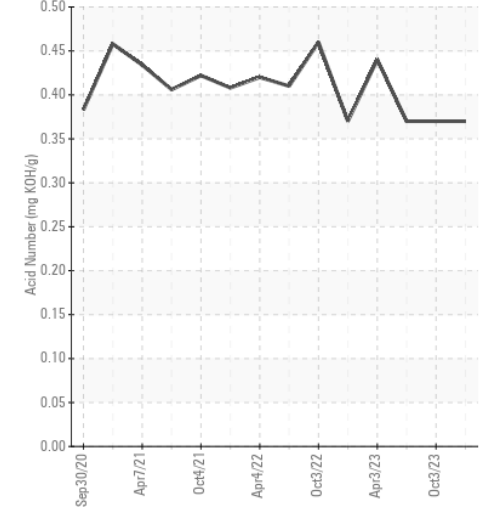
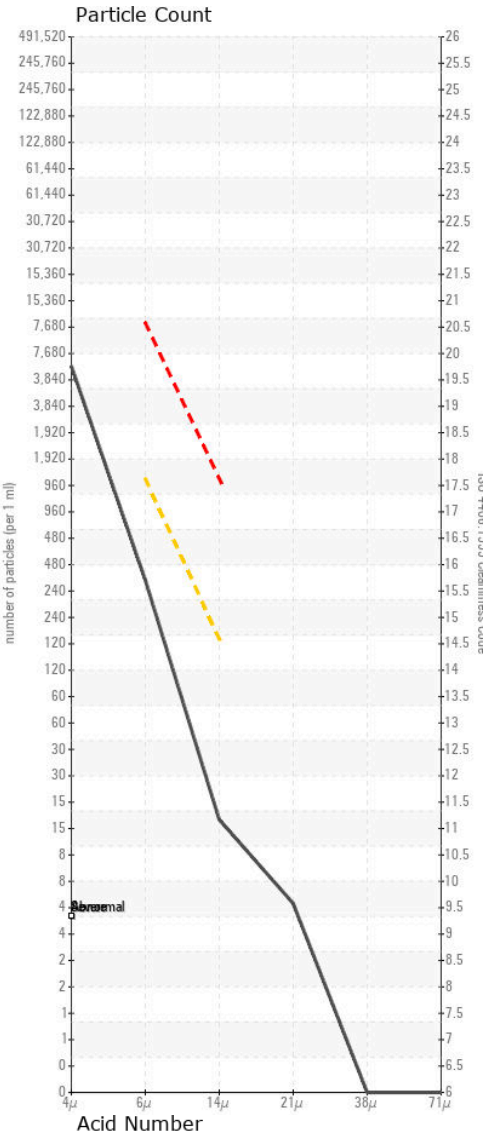
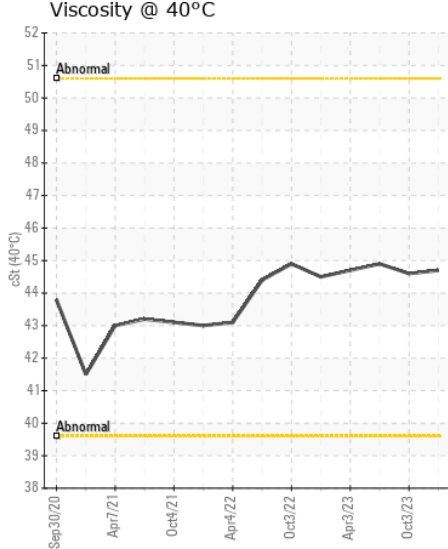
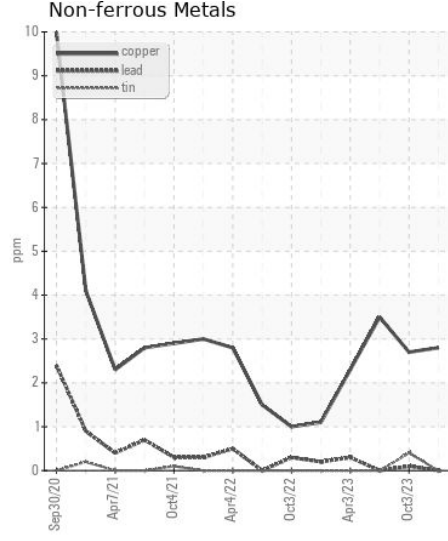
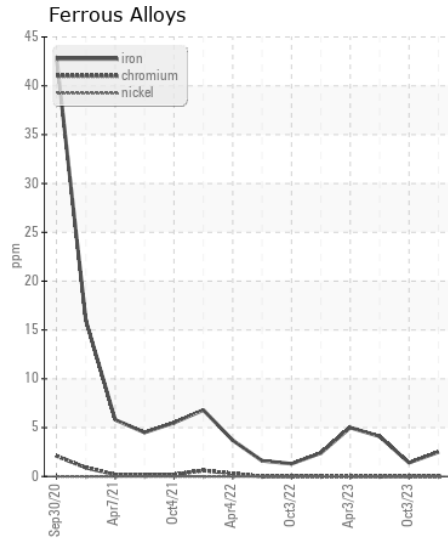
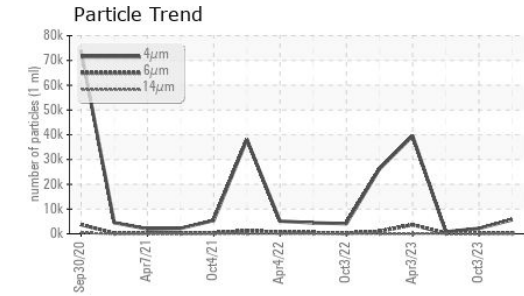
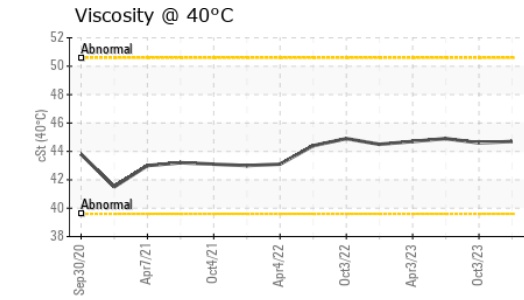
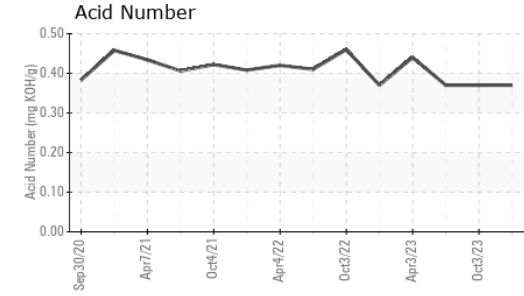
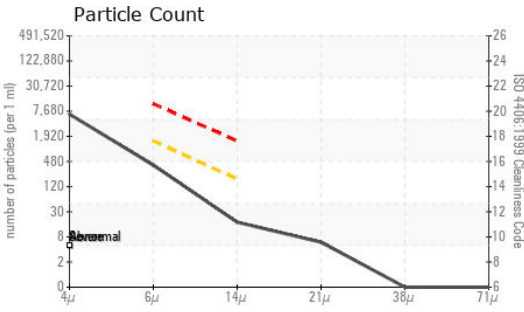
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

|                  |        |              |        |              |       |       |
|------------------|--------|--------------|--------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185m  | >20    | <b>1</b>     | 1     | 2     |
| Potassium        | ppm    | ASTM D5185m  | >20    | <b>0</b>     | <1    | 1     |
| Water            |        | WC Method    | >0.1   | <b>NEG</b>   | NEG   | NEG   |
| Particles >4µm   |        | ASTM D7647   |        | <b>5676</b>  | 2186  | 798   |
| Particles >6µm   |        | ASTM D7647   | >1300  | <b>345</b>   | 286   | 186   |
| Particles >14µm  |        | ASTM D7647   | >160   | <b>15</b>    | 12    | 31    |
| Particles >21µm  |        | ASTM D7647   | >40    | <b>5</b>     | 3     | 11    |
| Particles >38µm  |        | ASTM D7647   | >10    | <b>0</b>     | 1     | 1     |
| Particles >71µm  |        | ASTM D7647   | >3     | <b>0</b>     | 1     | 0     |
| Oil Cleanliness  |        | ISO 4406 (c) | >17/14 | <b>16/11</b> | 15/11 | 15/12 |
| Silt             | scalar | *Visual      | NONE   | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | *Visual      | NONE   | <b>NONE</b>  | NONE  | NONE  |
| Sand/Dirt        | scalar | *Visual      | NONE   | <b>NONE</b>  | NONE  | NONE  |
| Appearance       | scalar | *Visual      | NORML  | <b>NORML</b> | NORML | NORML |
| Odor             | scalar | *Visual      | NORML  | <b>NORML</b> | NORML | NORML |
| Emulsified Water | scalar | *Visual      | >0.1   | <b>NEG</b>   | 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 |  | <b>&lt;1</b> | 0    | 1    |
| Boron            | ppm      | ASTM D5185m |  | <b>0</b>     | 0    | 0    |
| Barium           | ppm      | ASTM D5185m |  | <b>0</b>     | 0    | <1   |
| Molybdenum       | ppm      | ASTM D5185m |  | <b>0</b>     | 0    | 0    |
| Manganese        | ppm      | ASTM D5185m |  | <b>0</b>     | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m |  | <b>0</b>     | 2    | 3    |
| Calcium          | ppm      | ASTM D5185m |  | <b>19</b>    | 21   | 39   |
| Phosphorus       | ppm      | ASTM D5185m |  | <b>304</b>   | 307  | 320  |
| Zinc             | ppm      | ASTM D5185m |  | <b>311</b>   | 302  | 291  |
| Sulfur           | ppm      | ASTM D5185m |  | <b>1180</b>  | 1247 | 1719 |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |  | <b>0.37</b>  | 0.37 | 0.37 |
| Visc @ 40°C      | cSt      | ASTM D445   |  | <b>44.7</b>  | 44.6 | 44.9 |



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0014081 **Received** : 16 Jan 2024  
**Lab Number** : 06061000 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832382 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2

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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)