

## Machine Id KOMATSU PC50HR2 EX47 (S/N 8885) Component Diesel Engine Fluid DURAMAX 15W40 (--- QTS)

| DURAWAX 15W40 ( Q15)  |                  |          |             |           |             |             |             |
|---|------------------|----------|-------------|-----------|-------------|-------------|-------------|
| RECOMMENDATION  | Test             | UOM      | Method      | Limit/Abn | Current     | History1    | History2    |
| Resample at the next service interval to monitor.   | Sample Number    |          | Client Info |           | DC0034609   | DC0014251   | DC0006534   |
|   | Sample Date      |          | Client Info |           | 07 Nov 2023 | 01 Jul 2021 | 18 Jun 2020 |
|   | Machine Age      | hrs      | Client Info |           | 2196        | 1685        | 1350        |
|   | Oil Age          | hrs      | Client Info |           | 511         | 250         | 0           |
|   | Filter Age       | hrs      | Client Info |           | 511         | 250         | 0           |
|   | Oil Changed      |          | Client Info |           | N/A         | Changed     | Changed     |
|   | Filter Changed   |          | Client Info |           | N/A         | Changed     | Changed     |
|   | Sample Status    |          |             |           | NORMAL      | NORMAL      | NORMAL      |
| WEAR  | Iron             | ppm      | ASTM D5185m | >100      | 16          | 11          | 10          |
|   | Chromium         | ppm      | ASTM D5185m | >20       | <1          | <1          | <1          |
| All component wear rates are normal.  | Nickel           | ppm      | ASTM D5185m | >4        | 0           | <1          | <1          |
|   | Titanium         | ppm      | ASTM D5185m |           | 0           | <1          | 0           |
|   | Silver           | ppm      | ASTM D5185m | >3        | 0           | <1          | 0           |
|   | Aluminum         | ppm      | ASTM D5185m | >20       | 3           | 2           | 2           |
|   | Lead             | ppm      | ASTM D5185m | >40       | 0           | <1          | 0           |
|   | Copper           | ppm      | ASTM D5185m | >330      | 4           | 2           | 1           |
|   | Tin              | ppm      | ASTM D5185m | >15       | 0           | <1          | <1          |
|   | Vanadium         | ppm      | ASTM D5185m |           | 0           | 0           | 0           |
|   | White Metal      | scalar   | *Visual     | NONE      | NONE        | NONE        | NONE        |
|   | Yellow Metal     | scalar   | *Visual     | NONE      | NONE        | NONE        | NONE        |
| CONTAMINATION   | Silicon          | ppm      | ASTM D5185m | >25       | 6           | 5           | 4           |
|   | Potassium        | ppm      | ASTM D5185m | >20       | 1           | 2           | 1           |
| There is no indication of any contamination in the oil.   | 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        | 0.8         | 0.5         | 0.6         |
|   | Nitration        | Abs/cm   | *ASTM D7624 | >20       | 9.6         | 9.5         | 9.6         |
|   | Sulfation        | Abs/.1mm | *ASTM D7415 | >30       | 19.7        | 18.4        | 19.2        |
|   | 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   | Sodium           | ppm      | ASTM D5185m |           | 2           | <1          | 2           |
|   | Boron            | ppm      | ASTM D5185m |           | 3           | 5           | 3           |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium           | ppm      | ASTM D5185m |           | 0           | 0           | 0           |
|   | Molybdenum       | ppm      | ASTM D5185m |           | 2           | 5           | 3           |
|   | Manganese        | ppm      | ASTM D5185m |           | <1          | <1          | <1          |
|   | Magnesium        | ppm      | ASTM D5185m |           | 56          | 48          | 69          |
|   | Calcium          | ppm      | ASTM D5185m |           | 2475        | 2401        | 2439        |
|   | Phosphorus       | ppm      | ASTM D5185m |           | 1011        | 939         | 910         |
|   | Zinc             | ppm      | ASTM D5185m |           | 1186        | 1060        | 1030        |
|   | Sulfur           | ppm      | ASTM D5185m |           | 3886        | 3309        | 2470        |
|   | Oxidation        | Abs/.1mm | *ASTM D7414 | >25       | 12.3        | 11.9        | 12.6        |
|   | Base Number (BN) | mg KOH/g | ASTM D2896  |           | 7.1         |             |             |
|   |                  |          |             |           |             |             |             |

Visc @ 100°C cSt

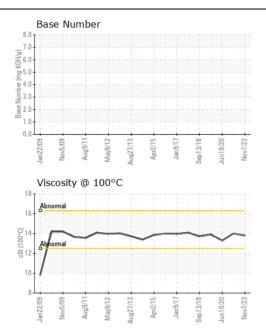
ASTM D445

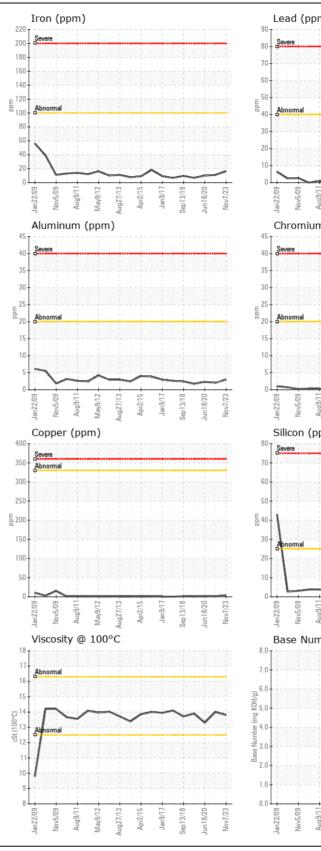
Submitted By: KARL GASTRICH

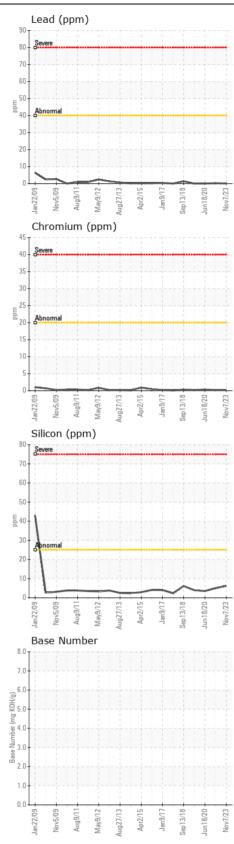
14.0

13.8

13.3







: WearCheck USA - 501 Madison Ave., Cary, NC 27513 ROSS CONTRACTING INC. Laboratory : DC0034609 : 28 Feb 2024 1007 RISING RIDGE ROAD Sample No. Received Lab Number : 06103465 MOUNT AIRY, MD Tested :01 Mar 2024 Unique Number : 10901695 : 01 Mar 2024 - Wes Davis US 21771 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Contact: JONATHAN KUENTZ Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jonathank@rosscontracting.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (301)831-5500 F: (301)831-5900

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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