

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Area

**MINING** ME-66 CATERPILLAR 980M MK700460 Transmission (Manual) Fluid

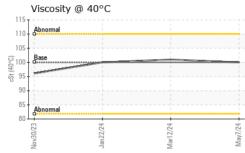
CAT TDTO TRANS-DRIVE SAE 30 (20 GAL)

| DIAGNOSIS   | SAMPLE INFORM | IATION           | method             | limit/base | current      | history1     | history2     |
|---|---------------|------------------|--------------------|------------|--------------|--------------|--------------|
| Recommendation  | Sample Number |                  | Client Info        |            | WC0910923    | WC0909667    | WC0880672    |
| Resample at the next service interval to monitor.                                       | Sample Date   |                  | Client Info        |            | 07 May 2024  | 12 Mar 2024  | 22 Jan 2024  |
| Vear  | Machine Age   | hrs              | Client Info        |            | 6064         | 5546         | 5015         |
| All component wear rates are normal.  | Oil Age       | hrs              | Client Info        |            | 500          | 1000         | 1000         |
| Contamination   | Oil Changed   |                  | Client Info        |            | Not Changd   | Changed      | Changed      |
| There is no indication of any contamination in the                                      | Sample Status |                  |                    |            | NORMAL       | NORMAL       | NORMAL       |
| luid.   | CONTAMINATION | J                | method             | limit/base | current      | history1     | history2     |
| Fluid Condition<br>The condition of the fluid is acceptable for the time<br>in service. | Water         |                  | WC Method          | >0.1       | NEG          | NEG          | NEG          |
|   | WEAR METALS   |                  | method             | limit/base | current      | history1     | history2     |
|   | Iron          | ppm              | ASTM D5185m        | >200       | 1            | 8            | 4            |
|   | Chromium      | ppm              | ASTM D5185m        | >5         | <1           | <1           | 0            |
|   | Nickel        | ppm              | ASTM D5185m        | >5         | 0            | 0            | <1           |
|   | Titanium      | ppm              | ASTM D5185m        |            | 0            | <1           | 0            |
|   | Silver        | ppm              | ASTM D5185m        | >7         | 0            | 0            | 0            |
|   | Aluminum      | ppm              | ASTM D5185m        |            | 0            | 2            | 1            |
|   | Lead          | ppm              |                    | >45        | 0            | 0            | <1           |
|   | Copper        | ppm              | ASTM D5185m        | >225       | 0            | 2            | <1           |
|   | Tin           | ppm              | ASTM D5185m        |            | <1           | <1           | <1           |
|   | Vanadium      | ppm              | ASTM D5185m        |            | 0            | 0            | 0            |
|   | Cadmium       | ppm              | ASTM D5185m        |            | 0            | 0            | 0            |
|   | ADDITIVES     |                  | method             | limit/base | current      | history1     | history2     |
|   | Boron         | ppm              | ASTM D5185m        |            | 0            | 8            | <1           |
|   | Barium        | ppm              | ASTM D5185m        |            | 1            | 0            | <1           |
|   | Molybdenum    | ppm              | ASTM D5185m        |            | 0            | 1            | 0            |
|   | Manganese     | ppm              | ASTM D5185m        |            | <1           | 0            | <1           |
|   | Magnesium     | ppm              | ASTM D5185m        |            | 20           | 16           | 20           |
|   | Calcium       | ppm              | ASTM D5185m        | 2980       | 2988         | 2843         | 2710         |
|   | Phosphorus    | ppm              |                    | 1100       | 1079         | 984          | 872          |
|   | Zinc          | ppm              | ASTM D5185m        |            | 1219         | 1182         | 1115         |
|   | Sulfur        | ppm              | ASTM D5185m        |            | 7211         | 7400         | 5345         |
|   | CONTAMINANTS  |                  | method             | limit/base | current      | history1     | history2     |
|   | Silicon       | ppm              | ASTM D5185m        | >125       | 5            | 6            | 5            |
|   | Sodium        | ppm              | ASTM D5185m        |            | 1            | 0            | 3            |
|   | Potassium     | ppm              | ASTM D5185m        |            | 0            | 2            | <1           |
|   | VISUAL        |                  | method             | limit/base | current      | history1     | history2     |
|   | White Metal   | scalar           | *Visual            | NONE       | NONE         | NONE         | NONE         |
|   | Yellow Metal  | scalar           | *Visual            | NONE       | NONE         | NONE         | NONE         |
|   | Precipitate   | scalar           | *Visual            | NONE       | NONE         | NONE         | NONE         |
|   | 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        |
|   | rippourunoc   |                  |                    |            |              |              |              |
|   | Odor          | scalar           | *Visual            | NORML      | NORML        | NORML        | NORML        |
|   |               | scalar<br>scalar | *Visual<br>*Visual | NORML >0.1 | NORML<br>NEG | NORML<br>NEG | NORML<br>NEG |

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## **OIL ANALYSIS REPORT**



| FLUID PROPERTIES  | method             | limit/base   | current   | history1 | history2   |
|---|--------------------|--|-----------|----------|--|
| Visc @ 40°C cSt   | ASTM D445          | 100  | 100       | 101      | 100  |
| SAMPLE IMAGES   | method             | limit/base   | current   | history1 | history2   |
| Color   |                    |  | no image  | no image | no image   |
| Bottom  |                    |  | no image  | no image | no image   |
| GRAPHS  |                    | l  |           |          |  |
| Ferrous Alloys  |                    |  |           |          |  |
| 9<br>8<br>8   | $\wedge$           |  |           |          |  |
| 6   |                    |  |           |          |  |
| 4   |                    |  |           |          |  |
| 3 2   |                    |  |           |          |  |
|   | 4                  | 4  |           |          |  |
| Nov30/23<br>Jan22/24  | Mar12/24           | May7/24  |           |          |  |
| Non-ferrous Metals  |                    |  |           |          |  |
| 9 copper  |                    |  |           |          |  |
| 7   |                    |  |           |          |  |
| 5-  |                    |  |           |          |  |
| 4 3   |                    |  |           |          |  |
| 2   | $\sim$             |  |           |          |  |
|   | 24                 | 24   |           |          |  |
| Nov30/23<br>Jan22/24  | Mar12/24           | May7/24  |           |          |  |
| Viscosity @ 40°C  |                    |  |           |          |  |
| 110 Abnormal  |                    |  |           |          |  |
| 105   |                    |  |           |          |  |
| 100 - Base<br>95  |                    |  |           |          |  |
| 95  |                    |  |           |          |  |
| 85 -  |                    |  |           |          |  |
| 80 Abnormal   |                    |  |           |          |  |
| Nov30/23<br>Jan22/24  | Mar12/24           | May7/24  |           |          |  |
| WearCheck USA - 501 Madiso<br>WC0910923 Rece<br>06177991 Teste<br>11029317 Diag | ived :13<br>ed :14 | , NC 27513<br>May 2024<br>May 2024<br>May 2024 - V | Ves Davis |          | CAMDEN - 094<br>SAND MILL RD<br>CAMDEN, TN<br>US 38320 |
| CONST   |                    |  |           |          | t: TRACY KEE   |

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)

Certificate L2367

Contact/Location: TRACY KEE - COVCAMTN Page 2 of 2

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