

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL



DIAGNOSIS

Recommendation

Contamination

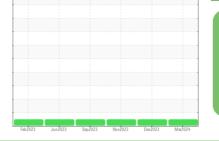
Fluid Condition

in service.

Wear

fluid

### BEELMAN CATERPILLAR 980M BEELMAN (S/N CKRS00698) Componen Transmission





LW0007645

Not Changd

NORMAL

NEG

6

0

0

0

0

<1

0

1

0

0

0

5

0

30

<1

82

2910

858

1039

4567

4

2

0

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

14151

14151

03 Nov 2023

**DIESEL ENGINE OIL SAE 40 (--- GAL)** 

### SAMPLE INFORMATION method LW0008251 PCA0115500 Sample Number **Client Info** Resample at the next service interval to monitor. Sample Date Client Info 28 Mar 2024 19 Dec 2023 Machine Age hrs Client Info 15210 14467 All component wear rates are normal. Oil Age hrs Client Info 15210 14467 Oil Changed Not Changd **Client Info** Not Changd Sample Status NORMAL NORMAL There is no indication of any contamination in the CONTAMINATION >0.1 NEG Water WC Method NEG The condition of the fluid is acceptable for the time WEAR METALS ASTM D5185m >200 7 7 Iron ppm Chromium ASTM D5185m 0 ppm >10 <1 0 0 Nickel ASTM D5185m ppm Titanium 0 0 ppm ASTM D5185m 0 0 Silver ppm ASTM D5185m Aluminum ppm ASTM D5185m >50 1 2 >50 0 0 Lead ASTM D5185m ppm 2 >200 1 Copper ppm ASTM D5185m 0 Tin ASTM D5185m >10 0 ppm Vanadium 0 0 ppm ASTM D5185m 0 Cadmium 0 ppm ASTM D5185m **ADDITIVES** 250 17 19 Boron ASTM D5185m ppm 0 Barium ppm ASTM D5185m 10 0 Molvbdenum ASTM D5185m 100 27 30 ppm ASTM D5185m <1 0 Manganese ppm Magnesium ASTM D5185m 450 226 228 ppm Calcium ASTM D5185m 3000 2671 ppm 2706 Phosphorus ASTM D5185m 1150 984 847 ppm Zinc ppm ASTM D5185m 1350 1098 1086 Sulfur ASTM D5185m 4250 5579 4671 ppm CONTAMINANTS 3 Silicon ppm ASTM D5185m >50 4 Sodium ASTM D5185m >216 2 0 ppm Potassium ASTM D5185m >20 0 2 ppm VISUAL NONE White Metal scalar \*Visual NONE NONE Yellow Metal \*Visual NONE NONE NONE scalar NONE \*Visual NONE NONE Precipitate scalar Silt scalar \*Visual NONE NONE NONE Debris \*Visua NONE NONE scalar NONE Sand/Dirt scalar \*Visual NONE NONE NONE \*Visual NORML NORML NORML Appearance scalar NORML NORML NORML Odor scalar \*Visual **Emulsified Water** NEG scalar \*Visual >0.1 NEG

Report Id: THOLYN [WUSCAR] 06136694 (Generated: 04/03/2024 05:34:09) Rev: 1

Free Water

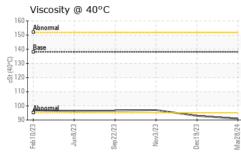
scalar \*Visual

NEG

NEG



# **OIL ANALYSIS REPORT**



| 1                             | @ 40°C        | cSt         | AST       | M D445                                | 138        | ç               | 1.0   | 92.9        |           | 97.0       |      |
|-------------------------------|---------------|-------------|-----------|---------------------------------------|------------|-----------------|---|-------------|-----------|------------|------|
| SA                            | MPLE I        | MAGES       | m         | ethod                                 | limit/ba   | ase             | current   | his         | tory1     | histo      | ory2 |
| Color                         |               |             |           |                                       |            | no image        |   | no image    |           | no image   |      |
| Bottom                        |               |             |           |                                       |            |                 | no image  | no image    |           | no image   |      |
| GF                            | RAPHS         |             |           |                                       |            |                 |   |             |           |            |      |
| Iro<br>500 T                  | n (ppm)       |             |           |                                       |            | Le              | ad (ppm)  |             |           |            |      |
| 400 - Seve                    | re            |             |           |                                       | -          | 150 - Se        | vere  |             |           |            |      |
| 300 Abn                       |               |             |           |                                       |            | 톱 100 -         |   |             |           |            |      |
| 200-0                         | ormal         |             |           |                                       |            | 1.1             | normal  |             |           |            |      |
| 100                           |               |             |           |                                       |            | 0               |   |             |           |            |      |
| Feb 10/23 -                   | Jun8/23 -     | Sep 22/23 . | Nov3/23 - | Dec19/23 -                            | Mar28/24 - | eb 10/23        | Jun8/23 -   | Sep 22/23 - | Nov3/23 - | Dec19/23 - |      |
|                               | ¬<br>minum (p |             | 2         | De                                    | W          |                 | romium (p   |             | 2         | De         |      |
| 80 Seve                       |               |             | 1         |                                       |            | <sup>30</sup> T | vere  |             | 1         | i<br>i     |      |
|                               | ormal         |             |           |                                       |            | 20 -            |   |             |           |            |      |
| la 40                         |               |             |           |                                       |            | 10 - Ab         | normal  |             |           |            |      |
| 20                            |               |             |           |                                       |            | 5-              |   |             |           |            |      |
| V3 0                          | /23           | /23         | /23 -     | /23                                   | /24        | 123 0           | /23   | /23         | /23       | /23        | _    |
| Feb10/23                      | Jun8/23       | Sep22/23    | Nov3/23   | Dec19/23                              | Mar28/24   | Feb 10/23       | Jun8/23   | Sep22/23    | Nov3/23   | Dec19/23   |      |
| Coj<br>500 t                  | oper (ppm     | 1)          |           |                                       |            | 140             | icon (ppm)  |             |           |            |      |
| 400 - Seve                    | re            |             |           |                                       |            | 120 -           | vere  |             |           |            |      |
| 300 Abn                       |               |             |           |                                       |            | E 80-           |   |             |           |            |      |
| 200 -                         | ormal         |             |           |                                       |            | 60 - Ab         | normal  |             |           |            | _    |
| 100                           |               |             |           |                                       |            | 20              |   |             |           |            |      |
| Feb 10/23                     | Jun8/23       | Sep22/23    | Nov3/23   | Dec19/23                              | Mar28/24   | Feb 10/23       | Jun8/23   | Sep 22/23   | Nov3/23   | Dec19/23   |      |
|                               | cosity @ 4    |             | _         | Q                                     | ≥          |                 | lditives  | õ           |           | ā          |      |
| 160<br>150 <b>Abn</b>         | ormal         | 1           |           |                                       |            | 3500<br>3000    | calcium   |             |           | 1          |      |
| 140 Base                      | 2             |             |           |                                       |            | 2500 - 📂        | phosphon<br>zinc  | IS          |           |            |      |
| ਉ<br>ਸ਼੍ਹ 120                 |               |             |           |                                       |            | 톱 2000          |   |             |           |            |      |
| 110-<br>100 - Abn             | ormal         |             |           | · · · · · · · · · · · · · · · · · · · |            | 1000            | National Statements   |             |           |            |      |
| 90                            |               | 2/23+       | Nov3/23 - | 9/23                                  | 8/24       | 500 - 500       | 8/23  | 2/23        | Nov3/23   | 9/23       |      |
| Feb 10/23                     | Jun8/23       | Sep 22/23   | Nov       | Dec19/23                              | Mar28/24   | Feb 10/23       | Jun8/23   | Sep 22/23   | Nov       | Dec19/23   |      |
| <b>b.</b> : PCA0 <sup>-</sup> |               |             |           |                                       |            |                 | CHICAGO MACHINERY II<br>3142 EAST LINCO<br>LYNWOOD,<br>Ves Davis US 60411-77<br>Contact: Mike Korbe |             |           |            |      |

