

# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id UTL-M0049 Component Bottom Left Oil Fluid NOT GIVEN (--- GAL)

#### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

# Wear

All component wear rates are normal.

# Contamination

There is no indication of any contamination in the oil.

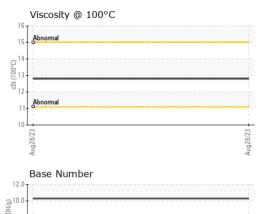
#### Fluid Condition

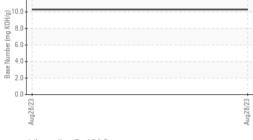
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

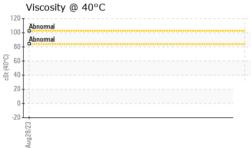
| SAMPLE INFORM    | NATION   | method      | limit/base | current     | history1 | history2 |
|------------------|----------|-------------|------------|-------------|----------|----------|
| Sample Number    |          | Client Info |            | WC0789393   |          |          |
| Sample Date      |          | Client Info |            | 28 Aug 2023 |          |          |
| Machine Age      | hrs      | Client Info |            | 738         |          |          |
| Oil Age          | hrs      | Client Info |            | 20          |          |          |
| Oil Changed      |          | Client Info |            | Changed     |          |          |
| Sample Status    |          |             |            | NORMAL      |          |          |
| WEAR METALS      |          | method      | limit/base | current     | history1 | history2 |
| Iron             | ppm      | ASTM D5185m |            | 2           |          |          |
| Chromium         | ppm      | ASTM D5185m |            | 0           |          |          |
| Nickel           | ppm      | ASTM D5185m |            | 0           |          |          |
| Titanium         | ppm      | ASTM D5185m |            | 0           |          |          |
| Silver           | ppm      | ASTM D5185m |            | 0           |          |          |
| Aluminum         | ppm      | ASTM D5185m |            | 1           |          |          |
| Lead             | ppm      | ASTM D5185m |            | 0           |          |          |
| Copper           | ppm      | ASTM D5185m |            | <1          |          |          |
| Tin              | ppm      | ASTM D5185m |            | <1          |          |          |
| Vanadium         | ppm      | ASTM D5185m |            | 0           |          |          |
| Cadmium          | ppm      | ASTM D5185m |            | 0           |          |          |
| ADDITIVES        |          | method      | limit/base | current     | history1 | history2 |
| Boron            | ppm      | ASTM D5185m |            | 71          |          |          |
| Barium           | ppm      | ASTM D5185m |            | 0           |          |          |
| Molybdenum       | ppm      | ASTM D5185m |            | 35          |          |          |
| Manganese        | ppm      | ASTM D5185m |            | <1          |          |          |
| Magnesium        | ppm      | ASTM D5185m |            | 497         |          |          |
| Calcium          | ppm      | ASTM D5185m |            | 1848        |          |          |
| Phosphorus       | ppm      | ASTM D5185m |            | 1006        |          |          |
| Zinc             | ppm      | ASTM D5185m |            | 1198        |          |          |
| Sulfur           | ppm      | ASTM D5185m |            | 3958        |          |          |
| CONTAMINANTS     |          | method      | limit/base | current     | history1 | history2 |
| Silicon          | ppm      | ASTM D5185m |            | 7           |          |          |
| Sodium           | ppm      | ASTM D5185m |            | 2           |          |          |
| Potassium        | ppm      | ASTM D5185m | >20        | <1          |          |          |
| INFRA-RED        |          | method      | limit/base | current     | history1 | history2 |
| Soot %           | %        | *ASTM D7844 |            | 0.1         |          |          |
| Nitration        | Abs/cm   | *ASTM D7624 |            | 4.7         |          |          |
| Sulfation        | Abs/.1mm | *ASTM D7415 |            | 21.1        |          |          |
| FLUID DEGRADA    |          | method      | limit/base | current     | history1 | history2 |
| Oxidation        | Abs/.1mm | *ASTM D7414 |            | 18.7        |          |          |
|                  |          |             |            |             |          |          |
| Base Number (BN) | mg KOH/g | ASTM D2896  |            | 10.3        |          |          |



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| VISUAL   |                                  | method                               | limit/base   | current          | history1           | history2                 |
|--|----------------------------------|--------------------------------------|--|------------------|--------------------|--------------------------|
| White Metal                                      | scalar                           | *Visual                              | NONE   | NONE             |                    |                          |
| ellow Metal                                      | scalar                           | *Visual                              | NONE   | NONE             |                    |                          |
| Precipitate                                      | scalar                           | *Visual                              | NONE   | NONE             |                    |                          |
| Silt   | scalar                           | *Visual                              | NONE   | NONE             |                    |                          |
| Debris   | scalar                           | *Visual                              | NONE   | NONE             |                    |                          |
| Sand/Dirt  | scalar                           | *Visual                              | NONE   | NONE             |                    |                          |
| Appearance                                       | scalar                           | *Visual                              | NORML  | NORML            |                    |                          |
| Ddor   | scalar                           | *Visual                              | NORML  | NORML            |                    |                          |
| Emulsified Water                                 | scalar                           | *Visual                              |  | NEG              |                    |                          |
| Free Water                                       | scalar                           | *Visual                              |  | NEG              |                    |                          |
| FLUID PROPERTI                                   | IES                              | method                               | limit/base   | current          | history1           | history2                 |
| /isc @ 100°C                                     | cSt                              | ASTM D445                            |  | 12.8             |                    |                          |
| SAMPLE IMAGES                                    |                                  |                                      | limit/baco   |                  | history1           | history?                 |
| SAMPLE IMAGES                                    |                                  | method                               | limit/base   | current          | history1           | history2                 |
|  |                                  |                                      |  |                  |                    |                          |
| Color  |                                  |                                      |  | no image         | no image           | no image                 |
|  |                                  |                                      |  |                  |                    |                          |
|  |                                  |                                      |  |                  |                    |                          |
| Bottom   |                                  |                                      |  | no image         | no image           | no image                 |
|  |                                  |                                      |  | no inago         | ago                | e image                  |
|  |                                  |                                      |  |                  |                    |                          |
| GRAPHS   |                                  |                                      |  |                  |                    |                          |
| Iron (ppm)                                       |                                  |                                      |  | Lead (ppm)       |                    |                          |
|  |                                  |                                      | E (  |                  |                    |                          |
|  |                                  |                                      | 8  |                  |                    |                          |
| 53   |                                  |                                      | 23   | 53               |                    |                          |
| Aug28/23   |                                  |                                      | Aug28/23   | Aug28/23         |                    |                          |
| a<br>Aluminum (ppm)                              |                                  |                                      | A  | ⊲<br>Chromium (p | nm)                |                          |
|  |                                  |                                      |  | cπionnun (p      | рш <i>)</i>        |                          |
|  |                                  |                                      |  |                  |                    |                          |
|  |                                  |                                      | ε,   |                  |                    |                          |
|  |                                  |                                      | E (  | -                |                    |                          |
|  |                                  |                                      |  | 1                |                    |                          |
| 1028/23  |                                  |                                      |  | 1                |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23   | Aug28/23         |                    |                          |
| Copper (ppm)                                     |                                  |                                      |  | Silicon (ppm)    |                    |                          |
|  |                                  |                                      | Aug28/23   | Silicon (ppm)    |                    |                          |
|  |                                  |                                      | Aug28/23   | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23   | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23   | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 + Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 + Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 + Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 + Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | Aug28/23 + Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     | )1 Madia                         |                                      | Aug26/23 + Aug28/23 +  | Silicon (ppm)    |                    |                          |
| Copper (ppm)                                     |                                  |                                      | 10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10   | Silicon (ppm)    | ALTERNA            | ATIVE POWE               |
| Copper (ppm)<br>Copper (ppm)<br>Viscosity @ 40°C | Received<br>Diagnose             | l : 30 /<br>ed : 31 /                | Aug26/23 + Aug28/23 +  | Silicon (ppm)    | ALTERNA<br>1000 NC |                          |
| Copper (ppm)<br>Copper (ppm)<br>Viscosity @ 40°C | Received<br>Diagnose<br>Diagnost | l : 30 /<br>ed : 31 /<br>ician : Sea | EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>(0)HOJ bul 10.0<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82Bhry<br>EZU82 | Silicon (ppm)    | ALTERNA<br>1000 NC | ATIVE POWE<br>DRTHGATE C |

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

Laboratory

Sample No. Lab Number Unique Number Test Package

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F:

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