

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id C-1 C-1 Component Hydraulic System Fluid NOT GIVEN (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

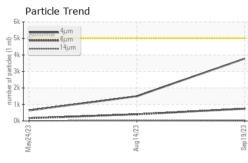
### Fluid Condition

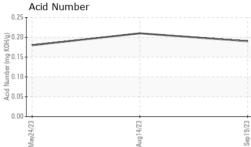
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

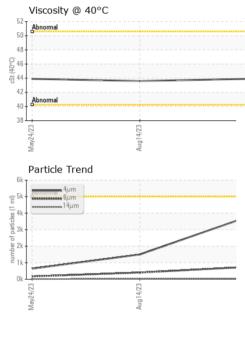
|                  |          |              |            | Aug2023 Sep202 |             |             |
|------------------|----------|--------------|------------|----------------|-------------|-------------|
| SAMPLE INFORM    | IATION   | method       | limit/base | current        | history1    | history2    |
| Sample Number    |          | Client Info  |            | TLC05964605    | TLC0001002  | TLC05857203 |
| Sample Date      |          | Client Info  |            | 19 Sep 2023    | 14 Aug 2023 | 24 May 2023 |
| Machine Age      | hrs      | Client Info  |            | 0              | 0           | 0           |
| Oil Age          | hrs      | Client Info  |            | 0              | 0           | 0           |
| Oil Changed      |          | Client Info  |            | N/A            | N/A         | N/A         |
| Sample Status    |          |              |            | NORMAL         | NORMAL      | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current        | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >20        | 0              | <1          | <1          |
| Chromium         | ppm      | ASTM D5185m  | >20        | 0              | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  | >20        | 0              | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | 0              | 0           | 0           |
| Silver           | ppm      | ASTM D5185m  |            | 0              | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m  | >20        | 0              | 0           | <1          |
| Lead             | ppm      | ASTM D5185m  | >20        | 0              | 0           | 0           |
| Copper           | ppm      | ASTM D5185m  | >20        | 0              | 0           | 0           |
| Tin              | ppm      | ASTM D5185m  | >20        | 0              | 0           | 0           |
| 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              | 0           | 0           |
| Barium           | ppm      | ASTM D5185m  |            | <1             | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0              | 0           | <1          |
| Manganese        | ppm      | ASTM D5185m  |            | 0              | 0           | <1          |
| Magnesium        | ppm      | ASTM D5185m  |            | 9              | 6           | 6           |
| Calcium          | ppm      | ASTM D5185m  |            | 57             | 55          | 58          |
| Phosphorus       | ppm      | ASTM D5185m  |            | 75             | 74          | 76          |
| Zinc             | ppm      | ASTM D5185m  |            | 45             | 37          | 27          |
| Sulfur           | ppm      | ASTM D5185m  |            | 376            | 468         | 456         |
| CONTAMINANTS     |          | method       | limit/base | current        | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | 0              | <1          | 0           |
| Sodium           | ppm      | ASTM D5185m  |            | <1             | 1           | <1          |
| Potassium        | ppm      | ASTM D5185m  | >20        | 0              | 0           | 0           |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current        | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >5000      | 3778           | 1500        | 637         |
| Particles >6µm   |          | ASTM D7647   | >1300      | 743            | 405         | 171         |
| Particles >14µm  |          | ASTM D7647   | >160       | 41             | 24          | 14          |
| Particles >21µm  |          | ASTM D7647   | >40        | 5              | 4           | 4           |
| Particles >38µm  |          | ASTM D7647   | >10        | 0              | 0           | 0           |
| Particles >71µm  |          | ASTM D7647   | >3         | 0              | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >19/17/14  | 19/17/13       | 18/16/12    | 16/15/11    |
| FLUID DEGRADA    |          | method       | limit/base | current        | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   |            | 0.19           | 0.21        | 0.18        |
|                  |          |              |            |                |             |             |



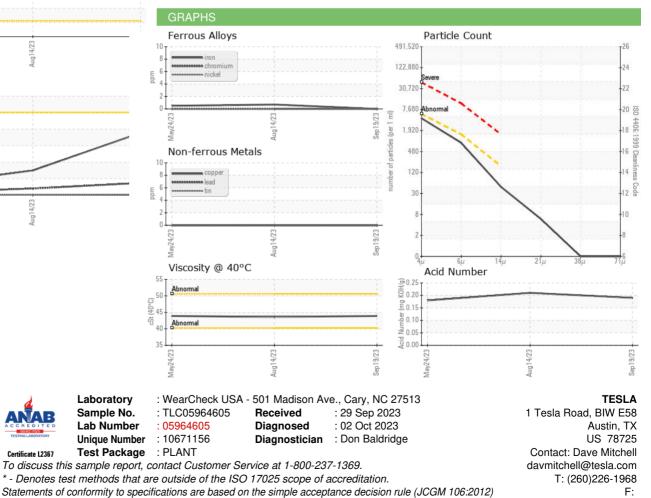
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| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | NONE     | LIGHT    |
| Debris           | scalar | *Visual   | NONE       | NONE    | NONE     | LIGHT    |
| 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   | >0.05      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERTIES |        | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 |            | 43.9    | 43.6     | 43.9     |
| SAMPLE IMAGES    |        | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| Bottom           |        |           |            |         |          |          |



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