

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Area Injection Macrine Id 211 (S/N 10611) Component Hydraulic System 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

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

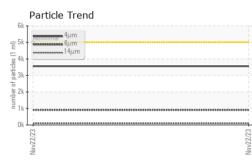
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

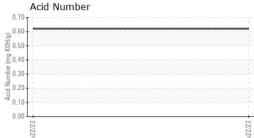
|                  |          |              |            | Nov2023     |                 |          |
|------------------|----------|--------------|------------|-------------|-----------------|----------|
| SAMPLE INFORM    | ATION    | method       | limit/base | current     | history1        | history2 |
| Sample Number    |          | Client Info  |            | DC0028925   |                 |          |
| Sample Date      |          | Client Info  |            | 22 Nov 2023 |                 |          |
| Machine Age      | hrs      | Client Info  |            | 0           |                 |          |
| Oil Age          | hrs      | Client Info  |            | 0           |                 |          |
| Oil Changed      |          | Client Info  |            | N/A         |                 |          |
| Sample Status    |          |              |            | NORMAL      |                 |          |
| CONTAMINATION    |          | method       | limit/base | current     | history1        | history2 |
| Water            |          | WC Method    | >0.1       | NEG         |                 |          |
| WEAR METALS      |          | method       | limit/base | current     | history1        | history2 |
| Iron             | ppm      | ASTM D5185m  | >20        | 4           |                 |          |
| Chromium         | ppm      | ASTM D5185m  | >10        | <1          |                 |          |
| Nickel           | ppm      | ASTM D5185m  | >10        | 0           |                 |          |
| Titanium         | ppm      | ASTM D5185m  |            | <1          |                 |          |
| Silver           | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Aluminum         | ppm      | ASTM D5185m  | >10        | 2           |                 |          |
| Lead             | ppm      | ASTM D5185m  | >10        | 0           |                 |          |
| Copper           | ppm      | ASTM D5185m  | >75        | <1          |                 |          |
| Tin              | ppm      | ASTM D5185m  | >10        | 0           |                 |          |
| Vanadium         | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Cadmium          | ppm      | ASTM D5185m  |            | 0           |                 |          |
| ADDITIVES        |          | method       | limit/base | current     | history1        | history2 |
| Boron            | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Barium           | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Manganese        | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Magnesium        | ppm      | ASTM D5185m  |            | 4           |                 |          |
| Calcium          | ppm      | ASTM D5185m  |            | 21          |                 |          |
| Phosphorus       | ppm      | ASTM D5185m  |            | 325         |                 |          |
| Zinc             | ppm      | ASTM D5185m  |            | 276         |                 |          |
| Sulfur           | ppm      | ASTM D5185m  |            | 3199        |                 |          |
| CONTAMINANTS     |          | method       | limit/base | current     | history1        | history2 |
| Silicon          | ppm      | ASTM D5185m  | >20        | 1           |                 |          |
| Sodium           | ppm      | ASTM D5185m  |            | 0           |                 |          |
| Potassium        | ppm      | ASTM D5185m  | >20        | 1           |                 |          |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current     | history1        | history2 |
| Particles >4µm   |          | ASTM D7647   | >5000      | 3557        |                 |          |
| Particles >6µm   |          | ASTM D7647   | >1300      | 913         |                 |          |
| Particles >14µm  |          | ASTM D7647   | >160       | 89          |                 |          |
| Particles >21µm  |          | ASTM D7647   | >40        | 32          |                 |          |
| Particles >38µm  |          | ASTM D7647   | >10        | 3           |                 |          |
| Particles >71µm  |          | ASTM D7647   | >3         | 0           |                 |          |
| Oil Cleanliness  |          | ISO 4406 (c) | >19/17/14  | 19/17/14    |                 |          |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1        | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045   |            | 0.62        |                 |          |
| 29:46) Rev: 1    | ,        |              |            | Subm        | itted By: RICHA |          |

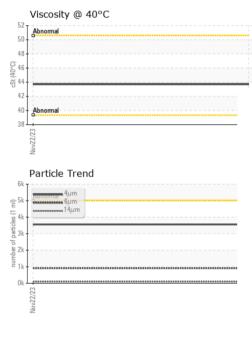
Submitted By: RICHARD STEPHENS

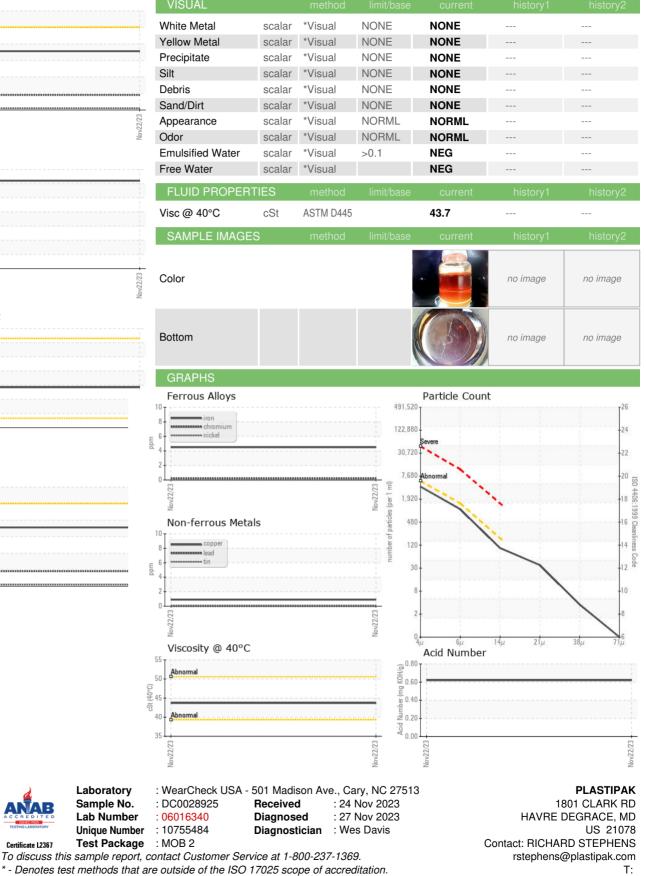


# **OIL ANALYSIS REPORT**









Certificate L2367

Laboratory

Sample No.

Lab Number

F: