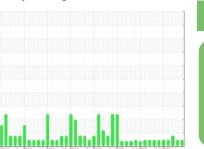


# **OIL ANALYSIS REPORT**

### Sample Rating Trend



**NORMAL** 



Machine Id

# FES N6 FES B3 (S/N 98437049)

Component Refrigeration Compressor

FES 2 (--- GAL)

#### Recommendation

Resample at the next service interval to monitor.

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.

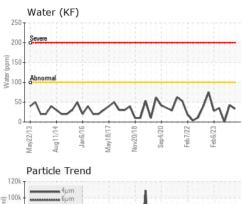
### **Fluid Condition**

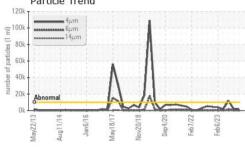
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

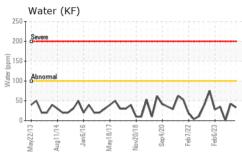
| v/2013 Aug/2014 Jan/2016 May/2017 Nov/2018 Sap/2020 Fab/2022 Fab/2023 |          |              |            |             |             |             |  |  |  |  |
|---|----------|--------------|------------|-------------|-------------|-------------|--|--|--|--|
| SAMPLE INFORM   | MATION   | method       | limit/base | current     | history1    | history2    |  |  |  |  |
| Sample Number   |          | Client Info  |            | USP0006542  | USP243336   | USP243335   |  |  |  |  |
| Sample Date   |          | Client Info  |            | 20 Apr 2024 | 27 Oct 2023 | 01 Aug 2023 |  |  |  |  |
| Machine Age   | hrs      | Client Info  |            | 62933       | 61700       | 60709       |  |  |  |  |
| Oil Age   | hrs      | Client Info  |            | 0           | 0           | 0           |  |  |  |  |
| Oil Changed   |          | Client Info  |            | N/A         | N/A         | N/A         |  |  |  |  |
| Sample Status   |          |              |            | NORMAL      | NORMAL      | ATTENTION   |  |  |  |  |
| WEAR METALS   |          | method       | limit/base | current     | history1    | history2    |  |  |  |  |
| Iron  | ppm      | ASTM D5185m  | >8         | 35          | 24          | 15          |  |  |  |  |
| Chromium  | ppm      | ASTM D5185m  | >2         | <1          | <1          | 0           |  |  |  |  |
| Nickel  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |  |  |  |  |
| Titanium  | ppm      | ASTM D5185m  |            | <1          | 0           | <1          |  |  |  |  |
| Silver  | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0           |  |  |  |  |
| Aluminum  | ppm      | ASTM D5185m  | >3         | 0           | 0           | <1          |  |  |  |  |
| Lead  | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |  |  |  |  |
| Copper  | ppm      | ASTM D5185m  | >8         | <1          | <1          | <1          |  |  |  |  |
| Tin   | ppm      | ASTM D5185m  | >4         | <1          | 0           | 0           |  |  |  |  |
| Vanadium  | ppm      | ASTM D5185m  |            | <1          | 0           | <1          |  |  |  |  |
| Cadmium   | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |  |  |  |  |
| ADDITIVES   |          | method       | limit/base | current     | history1    | history2    |  |  |  |  |
| Boron   | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |  |  |  |  |
| Barium  | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |  |  |  |  |
| Molybdenum  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |  |  |  |  |
| Manganese   | ppm      | ASTM D5185m  |            | <1          | 0           | <1          |  |  |  |  |
| Magnesium   | ppm      | ASTM D5185m  |            | <1          | <1          | 2           |  |  |  |  |
| Calcium   | ppm      | ASTM D5185m  |            | 0           | 1           | 0           |  |  |  |  |
| Phosphorus  | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |  |  |  |  |
| Zinc  | ppm      | ASTM D5185m  |            | 0           | 3           | 0           |  |  |  |  |
| Sulfur  | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |  |  |  |  |
| CONTAMINANTS  |          | method       | limit/base | current     | history1    | history2    |  |  |  |  |
| Silicon   | ppm      | ASTM D5185m  | >15        | 3           | 2           | 3           |  |  |  |  |
| Sodium  | ppm      | ASTM D5185m  |            | 0           | 0           | <1          |  |  |  |  |
| Potassium   | ppm      | ASTM D5185m  | >20        | <1          | <1          | 0           |  |  |  |  |
| Water   | %        | ASTM D6304   | >0.01      | 0.003       | 0.004       | 0.00        |  |  |  |  |
| ppm Water   | ppm      | ASTM D6304   | >100       | 33          | 42.7        | 0.00        |  |  |  |  |
| FLUID CLEANLIN  | IESS     | method       | limit/base | current     | history1    | history2    |  |  |  |  |
| Particles >4μm  |          | ASTM D7647   | >10000     | 1733        | 2063        | <u> </u>    |  |  |  |  |
| Particles >6µm  |          | ASTM D7647   | >2500      | 254         | 357         | 1499        |  |  |  |  |
| Particles >14μm   |          | ASTM D7647   | >320       | 10          | 8           | 12          |  |  |  |  |
| Particles >21µm   |          | ASTM D7647   | >80        | 2           | 2           | 3           |  |  |  |  |
| Particles >38µm   |          | ASTM D7647   | >20        | 0           | 0           | 0           |  |  |  |  |
| Particles >71µm   |          | ASTM D7647   |            | 0           | 0           | 0           |  |  |  |  |
| Oil Cleanliness   |          | ISO 4406 (c) | >20/18/15  | 18/15/10    | 18/16/10    | 21/18/11    |  |  |  |  |
| FLUID DEGRADA   | TION     | method       | limit/base | current     | history1    | history2    |  |  |  |  |
| Acid Number (AN)  | mg KOH/g | ASTM D974    |            | 0.055       | 0.015       | 0.014       |  |  |  |  |

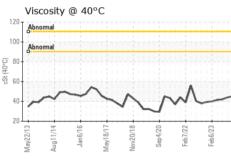


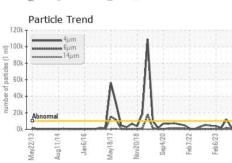
## **OIL ANALYSIS REPORT**

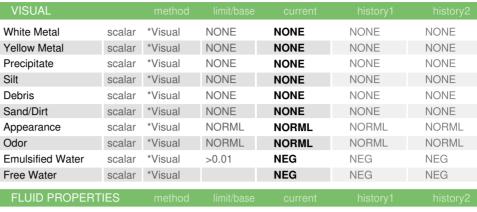










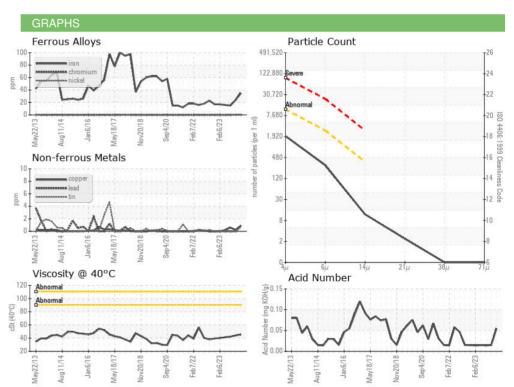


| Visc @ 40°C | cSt | ASTM D445 | 45.3 | 44.1 | 42.2 |
|-------------|-----|-----------|------|------|------|
| 04451514405 | -0  |           |      |      |      |

Color











Certificate 12367

Laboratory Sample No.

: USP0006542 Lab Number : 06160436 Unique Number : 10995859

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Apr 2024

**Tested** : 26 Apr 2024 Diagnosed

: 30 Apr 2024 - Doug Bogart

**JACOBS TECHNOLOGIES** ALLEN PARK, MI

US Contact:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

 $^st$  - 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)

T:

F: