

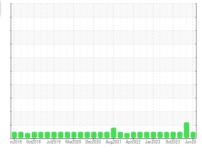
# **OIL ANALYSIS REPORT**

# Sample Rating Trend

ENGINE ROOM
C-1 (S/N S0867PFMCTHAA03)

Refrigeration Compressor

**USPI 1009-68 SC (85 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 component. The amount and size of particulates present in the system is acceptable.

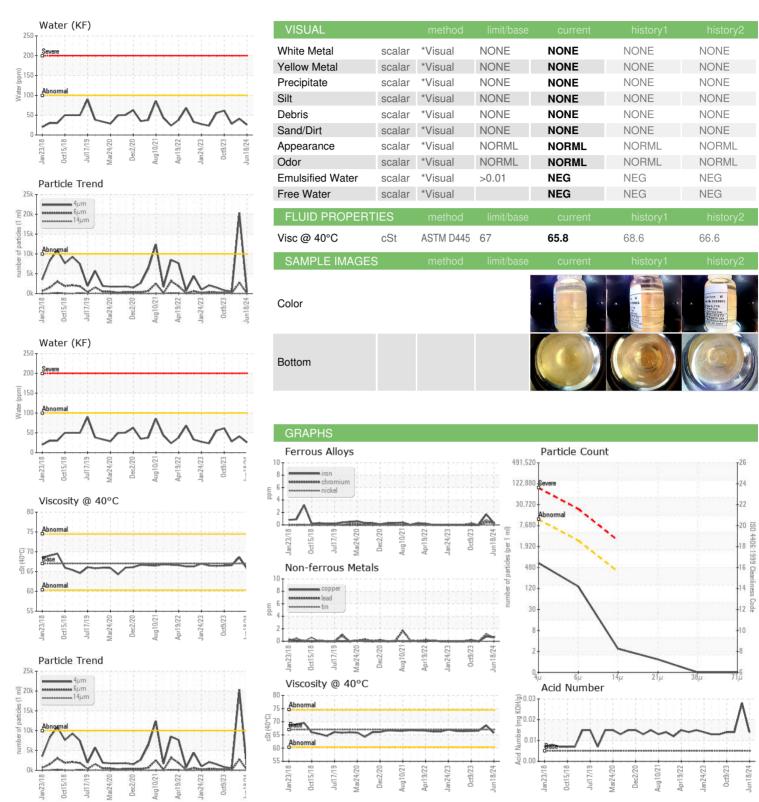
## **Fluid Condition**

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

|                  |          | m2018 Oct2011 | 3 Jul2019 Mar2020 Dec20 | 120 Aug2021 Apr2022 Jan2023 0 | t2023 Jun20.    |             |
|------------------|----------|---------------|-------------------------|-------------------------------|-----------------|-------------|
| SAMPLE INFORM    | MATION   | method        | limit/base              | current                       | history1        | history2    |
| Sample Number    |          | Client Info   |                         | USP0013142                    | USP0008165      | USP0005198  |
| Sample Date      |          | Client Info   |                         | 18 Jun 2024                   | 01 Apr 2024     | 27 Dec 2023 |
| Machine Age      | hrs      | Client Info   |                         | 9015                          | 8905            | 7705        |
| Oil Age          | hrs      | Client Info   |                         | 20193                         | 2095            | 18883       |
| Oil Changed      |          | Client Info   |                         | N/A                           | N/A             | N/A         |
| Sample Status    |          |               |                         | NORMAL                        | ABNORMAL        | NORMAL      |
| WEAR METALS      |          | method        | limit/base              | current                       | history1        | history2    |
| Iron             | ppm      | ASTM D5185m   | >8                      | <1                            | 2               | 0           |
| Chromium         | ppm      | ASTM D5185m   | >2                      | <1                            | <1              | 0           |
| Nickel           | ppm      | ASTM D5185m   |                         | <1                            | <1              | 0           |
| Titanium         | ppm      | ASTM D5185m   |                         | <1                            | <1              | 0           |
| Silver           | ppm      | ASTM D5185m   | >2                      | <1                            | 0               | 0           |
| Aluminum         | ppm      | ASTM D5185m   | >3                      | 0                             | 0               | 0           |
| Lead             | ppm      | ASTM D5185m   | >2                      | <1                            | <1              | 0           |
| Copper           | ppm      | ASTM D5185m   | >8                      | <1                            | <1              | 0           |
| Tin              | ppm      | ASTM D5185m   | >4                      | <1                            | 1               | 0           |
| Vanadium         | ppm      | ASTM D5185m   |                         | <1                            | <1              | 0           |
| Cadmium          | ppm      | ASTM D5185m   |                         | <1                            | <1              | 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   |                         | <1                            | <1              | 0           |
| Manganese        | ppm      | ASTM D5185m   |                         | <1                            | <1              | 0           |
| Magnesium        | ppm      | ASTM D5185m   |                         | 0                             | <1              | 0           |
| Calcium          | ppm      | ASTM D5185m   |                         | 0                             | 0               | 0           |
| Phosphorus       | ppm      | ASTM D5185m   |                         | 0                             | 0               | 0           |
| Zinc             | ppm      | ASTM D5185m   |                         | <1                            | 0               | 0           |
| Sulfur           | ppm      | ASTM D5185m   | 50                      | 0                             | 0               | 14          |
| CONTAMINANTS     |          | method        | limit/base              | current                       | history1        | history2    |
| Silicon          | ppm      | ASTM D5185m   | >15                     | 2                             | 2               | 0           |
| Sodium           | ppm      | ASTM D5185m   |                         | 0                             | 0               | 0           |
| Potassium        | ppm      | ASTM D5185m   | >20                     | 1                             | 1               | 0           |
| Water            | %        | ASTM D6304    | >0.01                   | 0.003                         | 0.004           | 0.003       |
| ppm Water        | ppm      | ASTM D6304    | >100                    | 26                            | 41              | 28          |
| FLUID CLEANLIN   | ESS      | method        | limit/base              | current                       | history1        | history2    |
| Particles >4µm   |          | ASTM D7647    | >10000                  | 568                           | △ 20339         | 466         |
| Particles >6µm   |          | ASTM D7647    | >2500                   | 121                           | 2767            | 119         |
| Particles >14µm  |          | ASTM D7647    | >320                    | 2                             | 29              | 11          |
| Particles >21µm  |          | ASTM D7647    | >80                     | 1                             | 4               | 3           |
| Particles >38µm  |          | ASTM D7647    | >20                     | 0                             | 0               | 0           |
| Particles >71µm  |          | ASTM D7647    | >4                      | 0                             | 0               | 0           |
| Oil Cleanliness  |          | ISO 4406 (c)  | >20/18/15               | 16/14/9                       | <u>22/19/12</u> | 16/14/11    |
| FLUID DEGRADA    | TION     | method        | limit/base              | current                       | history1        | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D974     | 0.005                   | 0.014                         | 0.028           | 0.014       |



## **OIL ANALYSIS REPORT**







Certificate 12367

Laboratory Sample No.

Lab Number Unique Number : 11090222

Test Package : IND 2

: USP0013142 : 06217358

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received **Tested** 

: 25 Jun 2024 Diagnosed

: 25 Jun 2024 - Doug Bogart

: 21 Jun 2024

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)

**TYSON - ROCHELLE** 

Contact: Service Manager

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