

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

COMP 9 ASSET 2509 (S/N 2016339)

Refrigeration Compressor

USPI 1009-68 SC (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

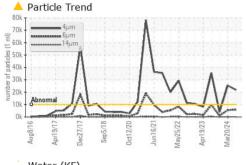
Fluid Condition

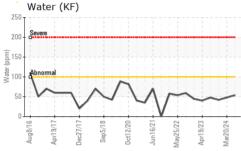
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

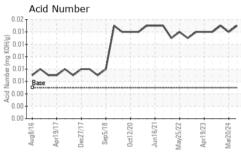
| | | ıg2016 Apr20 | 17 Dec2017 Sep2018 0 | zł2020 Jun2021 May2022 Apr202 | 3 Widi2024 | |
|------------------|----------|--------------|----------------------|-------------------------------|-----------------|-------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | USP0013197 | USP0008227 | USP0004735 |
| Sample Date | | Client Info | | 12 Jun 2024 | 20 Mar 2024 | 21 Dec 2023 |
| Machine Age | hrs | Client Info | | 45824 | 44944 | 43468 |
| Oil Age | hrs | Client Info | | 45824 | 0 | 43468 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | 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 | | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >8 | 0 | <1 | 0 |
| Tin | ppm | ASTM D5185m | >4 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | <1 | 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 | | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Zinc | ppm | ASTM D5185m | | 3 | 2 | 0 |
| Sulfur | ppm | ASTM D5185m | 50 | 16 | 0 | 0 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 4 | 4 | 3 |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | 2 |
| Water | % | ASTM D6304 | >0.01 | 0.005 | 0.004 | 0.004 |
| ppm Water | ppm | ASTM D6304 | >100 | 54 | 48 | 42 |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | <u> </u> | <u>▲</u> 25377 | 4081 |
| Particles >6µm | | ASTM D7647 | >2500 | <u></u> 5793 | ▲ 5581 | 995 |
| Particles >14μm | | ASTM D7647 | >320 | 187 | 114 | 33 |
| Particles >21µm | | ASTM D7647 | >80 | 23 | 19 | 7 |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | <u>22/20/15</u> | <u>22/20/14</u> | 19/17/12 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.005 | 0.015 | 0.014 | 0.015 |

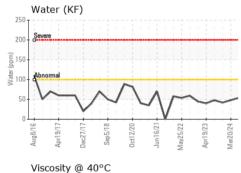


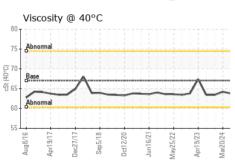
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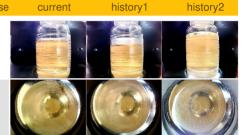


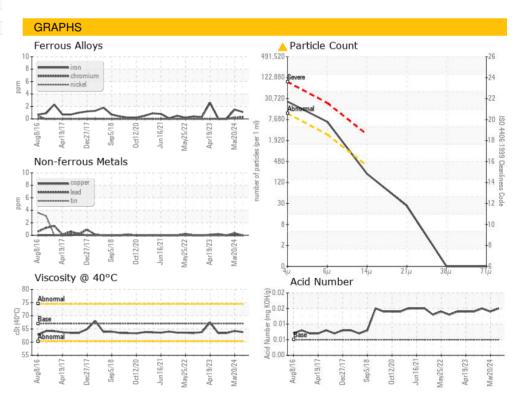


| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | LIGHT | NONE | NONE |
| 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 | >0.01 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 67 | 63.8 | 64.2 | 63.4 |

SAMPLE IMAGES method limit/base Color











Certificate 12367

Laboratory Sample No.

Test Package : IND 2

: USP0013197 Lab Number : 06214711 Unique Number : 11087575

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Jun 2024 **Tested** : 24 Jun 2024

Diagnosed

: 24 Jun 2024 - Doug Bogart

TYSON - NEWBERN TN

2000 BIFFLE RD NEWBERN, TN US 38059

Contact: ROBBIE SCOTT

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)

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