

PROBLEM SUMMARY

Sample Rating Trend



TYSVIC 2 (S/N 2512761)

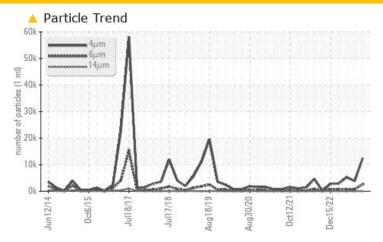
Refrigeration Compressor

USPI ALT-68 SC (--- GAL)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | | | |
|--------------------------|--------------|---------|-----------------|----------|----------|--|--|--|--|
| Sample Status | | | ATTENTION | NORMAL | NORMAL | | | | |
| Particles >6µm | ASTM D7647 | >2500 | ^ 2605 | 798 | 719 | | | | |
| Oil Cleanliness | ISO 4406 (c) | >/18/15 | 21/19/13 | 19/17/12 | 20/17/11 | | | | |

Customer Id: TYSVIC01 Sample No.: USP0003480 Lab Number: 06007017 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

31 Aug 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



29 May 2023 Diag: Doug Bogart

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



02 Mar 2023 Diag: Doug Bogart

NORMAL



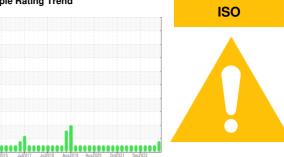
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



TYSVIC 2 (S/N 2512761)

Refrigeration Compressor

USPI ALT-68 SC (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is a moderate 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.

| n2014 Oct2015 Ju2017 Ju2018 Aug2019 Aug2020 Oct2021 Occ2022 | | | | | | | | | |
|---|----------|--------------|------------|-------------------|-------------|-------------|--|--|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | | | |
| Sample Number | | Client Info | | USP0003480 | USP0000329 | USP243278 | | | |
| Sample Date | | Client Info | | 13 Nov 2023 | 31 Aug 2023 | 29 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 | | | | ATTENTION | NORMAL | NORMAL | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | | |
| Iron | ppm | ASTM D5185m | >8 | <1 | 0 | <1 | | | |
| Chromium | ppm | ASTM D5185m | >2 | <1 | 0 | <1 | | | |
| Nickel | ppm | ASTM D5185m | | <1 | 0 | <1 | | | |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 | | | |
| Aluminum | ppm | ASTM D5185m | >3 | 0 | 0 | 0 | | | |
| Lead | ppm | ASTM D5185m | >2 | 0 | 0 | <1 | | | |
| Copper | ppm | ASTM D5185m | >8 | 0 | 0 | 0 | | | |
| Tin | ppm | ASTM D5185m | >4 | 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 | | 0 | 0 | 0 | | | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 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 | 0 | 0 | | | |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 | | | |
| Sulfur | ppm | ASTM D5185m | 50 | 0 | 0 | 0 | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 | | | |
| Silicon | ppm | ASTM D5185m | >15 | <1 | 0 | <1 | | | |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | <1 | | | |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | 2 | | | |
| Water | % | ASTM D6304 | >0.01 | 0.001 | 0.001 | 0.002 | | | |
| ppm Water | ppm | ASTM D6304 | >100 | 10.2 | 0.00 | 20.3 | | | |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 | | | |
| Particles >4µm | | ASTM D7647 | | 12453 | 3868 | 5252 | | | |
| Particles >6µm | | ASTM D7647 | >2500 | ^ 2605 | 798 | 719 | | | |
| Particles >14μm | | ASTM D7647 | >320 | 45 | 27 | 19 | | | |
| Particles >21µm | | ASTM D7647 | >80 | 6 | 6 | 1 | | | |
| Particles >38µm | | ASTM D7647 | >20 | 0 | 1 | 0 | | | |
| Particles >71µm | | ASTM D7647 | >4 | 0 | 1 | 0 | | | |
| Oil Cleanliness | | ISO 4406 (c) | >/18/15 | <u>^</u> 21/19/13 | 19/17/12 | 20/17/11 | | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 | | | |
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.005 | 0.014 | 0.014 | 0.015 | | | |



OIL ANALYSIS REPORT





Certificate L2367

Sample No. Lab Number **Unique Number**

: USP0003480 : 06007017 : 10740779 Test Package : IND 2

: 14 Nov 2023 Received : 15 Nov 2023 Diagnosed

Diagnostician : Doug Bogart 1785 INTERPLEX DR VICKSBURG, MS US 39183

Contact: RICK DUNN

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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