

PROBLEM SUMMARY

ENGINE ROOM [PR1375387] FRICK C15-1 (S/N 5GC23130451)

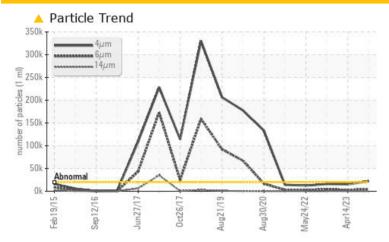
Refrigeration Compressor

FRICK COMPRESSOR OIL #3 (--- PNT)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | | |
|--------------------------|--------------|-----------|-----------------|------------------|-------------------|--|--|--|
| Sample Status | | | ATTENTION | ATTENTION | ATTENTION | | | |
| Particles >4µm | ASTM D7647 | >20000 | <u> </u> | 15218 | 16071 | | | |
| Particles >6μm | ASTM D7647 | >2500 | 4328 | 2894 | △ 3937 | | | |
| Oil Cleanliness | ISO 4406 (c) | >21/18/15 | 22/19/14 | 2 1/19/14 | 1 21/19/14 | | | |

Customer Id: PERPERUSP Sample No.: USP245932 Lab Number: 05929656 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

14 Apr 2023 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



31 Aug 2022 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



24 May 2022 Diag: Doug Bogart

ISO



Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



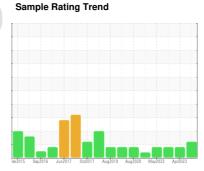


OIL ANALYSIS REPORT

ENGINE ROOM [PR1375387] FRICK C15-1 (S/N 5GC23130451)

Refrigeration Compressor

FRICK COMPRESSOR OIL #3 (--- PNT)





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.

| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-----------------|-----------------------------------|-----------------------------------|
| Sample Number | | Client Info | | USP245932 | USP245935 | USP241572 |
| Sample Date | | Client Info | | 09 Jul 2023 | 14 Apr 2023 | 31 Aug 2022 |
| Machine Age | hrs | Client Info | | 12599 | 0 | 7644 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changd | N/A | N/A |
| Sample Status | | | | ATTENTION | ATTENTION | ATTENTION |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >8 | 2 | 2 | 2 |
| Chromium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >3 | 0 | 0 | 1 |
| Lead | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >8 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >4 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 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 | 0 |
| Magnesium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | | 0 | 0 | 1 |
| Phosphorus | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Zinc | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | | 27 | 36 | 43 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 0 | 0 | <1 |
| Sodium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 1 |
| Water | % | ASTM D6304 | >0.01 | 0.003 | 0.001 | 0.002 |
| ppm Water | ppm | ASTM D6304 | >100 | 27.4 | 10.7 | 18.5 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4μm | | ASTM D7647 | >20000 | 22107 | 15218 | 16071 |
| Particles >6µm | | ASTM D7647 | >2500 | 4328 | 2894 | ▲ 3937 |
| Particles >14µm | | ASTM D7647 | >320 | 98 | 108 | 130 |
| Particles >21µm | | ASTM D7647 | >80 | 15 | 22 | 15 |
| Particles >38µm | | ASTM D7647 | >20 | 1 | 1 | 1 |
| Particles >71μm | | ASTM D7647 | >4 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >21/18/15 | <u>22/19/14</u> | <u>\$\text{\Delta}\$ 21/19/14</u> | <u>\$\text{\Delta}\$ 21/19/14</u> |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974 | | 0.015 | 0.014 | 0.015 |



OIL ANALYSIS REPORT





Certificate L2367

Lab Number **Unique Number**

: 10609603 Test Package : IND 2

. 05929656

: 22 Aug 2023 Diagnosed : Doug Bogart Diagnostician

US 31069 Contact: JAMES EAST james.east@perdue.com T: (478)988-6048

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)

Report Id: PERPERUSP [WUSCAR] 05929656 (Generated: 08/22/2023 16:27:56) Rev: 1

Contact/Location: JAMES EAST - PERPERUSP

F: