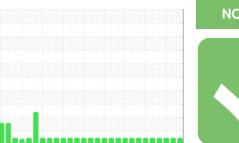


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

SULLAIR TYSCHI RC3 (S/N 006-92005951)

Refrigeration Compressor

USPI ALT-68 SC (--- 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.

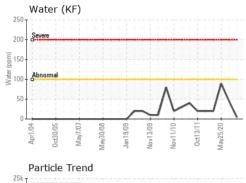
Fluid Condition

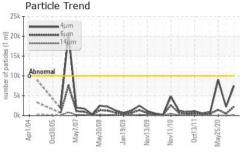
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

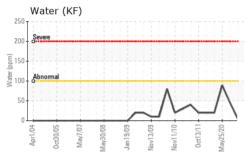
| SAMPLE INFORMATION method limit/base current history1 history2 |
|---|
| Sample Date |
| Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >8 0 1 <1 |
| Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >8 0 1 <1 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 Lead ppm ASTM D5185m >2 0 0 0 Copper ppm ASTM D5185m 0 0 0 0 |
| Oil Changed Client Info N/A N/A N/A N/A Sample Status NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >8 0 1 <1 Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Titanium ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 0 0 0 Lead ppm ASTM D5185m >2 0 0 0 Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m 0 0 0 Antimony |
| Sample Status NORMAL Use of Chromium ppm ASTM D5185m > 2 O |
| WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >8 0 1 <1 Chromium ppm ASTM D5185m 0 0 0 Nickel ppm ASTM D5185m 0 0 0 Titanium ppm ASTM D5185m 2 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 0 0 0 Lead ppm ASTM D5185m >2 0 0 0 Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 0 Antimony ppm ASTM D5185m 0 0 <1 0 Vanadium ppm ASTM D5185m 0 0 <1 0 |
| Iron ppm ASTM D5185m >8 0 1 <1 |
| Chromium ppm ASTM D5185m >2 0 0 0 Nickel ppm ASTM D5185m 0 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 0 0 Lead ppm ASTM D5185m >2 0 0 0 0 0 Copper ppm ASTM D5185m >8 0 0 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 <td< th=""></td<> |
| Nickel ppm ASTM D5185m 0 0 0 Titanium ppm ASTM D5185m 0 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 0 Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 <1 0 Cadmium ppm ASTM D5185m 0 0 <1 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese |
| Titanium ppm ASTM D5185m 0 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 0 Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 <1 |
| 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 0 0 Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 0 Vanadium ppm ASTM D5185m 0 0 <1 |
| Aluminum ppm ASTM D5185m >3 0 0 0 Lead ppm ASTM D5185m >2 0 0 0 Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 0 Vanadium ppm ASTM D5185m 0 0 <1 0 Cadmium ppm ASTM D5185m 0 0 <1 0 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 1 1 0 0 |
| Lead ppm ASTM D5185m >2 0 0 0 Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 <1 |
| Copper ppm ASTM D5185m >8 0 0 0 Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 <1 Cadmium ppm ASTM D5185m 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 1 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 <1 0 Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 2 0 Calcium ppm ASTM D5185m 1 1 1 0 |
| Tin ppm ASTM D5185m >4 0 0 0 Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 <1 |
| Antimony ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m 0 0 <1 |
| Vanadium ppm ASTM D5185m 0 0 <1 |
| Cadmium ppm ASTM D5185m 0 0 <1 |
| ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 1 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 <1 0 Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 2 0 Calcium ppm ASTM D5185m 1 1 0 |
| Boron ppm ASTM D5185m 0 1 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 <1 |
| Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 0 <1 0 Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 2 0 Calcium ppm ASTM D5185m 1 1 0 |
| Molybdenum ppm ASTM D5185m 0 <1 |
| Manganese ppm ASTM D5185m 0 0 0 Magnesium ppm ASTM D5185m 0 2 0 Calcium ppm ASTM D5185m 1 1 0 |
| Magnesium ppm ASTM D5185m 0 2 0 Calcium ppm ASTM D5185m 1 1 0 |
| Calcium ppm ASTM D5185m 1 1 0 |
| |
| Phosphorus nnm ASTM D5185m 0 0 |
| r nospilotas ppm Astivi Dotosiii • • • • • • |
| Zinc ppm ASTM D5185m 0 0 2 |
| Sulfur ppm ASTM D5185m 50 <1 |
| CONTAMINANTS method limit/base current history1 history2 |
| Silicon ppm ASTM D5185m >15 <1 0 <1 |
| Sodium ppm ASTM D5185m <1 |
| Potassium ppm ASTM D5185m >20 0 0 0 |
| Water % ASTM D6304 >0.01 0.001 0.004 0.008 |
| ppm Water ppm ASTM D6304 >100 4 44.9 89.2 |
| FLUID CLEANLINESS method limit/base current history1 history2 |
| Particles >4µm ASTM D7647 >10000 7453 2196 9020 |
| Particles >6µm ASTM D7647 >2500 2262 465 1447 |
| Particles >14µm ASTM D7647 >320 92 21 24 |
| Particles >21µm |
| Particles >38μm ASTM D7647 >20 0 0 |
| Particles >71µm |
| Oil Cleanliness ISO 4406 (c) >20/18/15 20/18/14 18/16/12 20/18/12 |
| FLUID DEGRADATION method limit/base current history1 history2 |

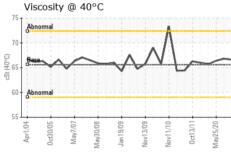


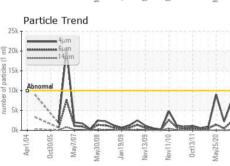
OIL ANALYSIS REPORT











| 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 | NONE | NONE | VLITE |
| 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 PROPERT | TIES | method | limit/base | current | history1 | history2 |

| I LOID I HOI LITT | ILO | | | | | |
|-------------------|-----|-----------|------|------|------|------|
| Visc @ 40°C | cSt | ASTM D445 | 65.6 | 66.6 | 66.8 | 66.4 |

SAMPLE IMAGES

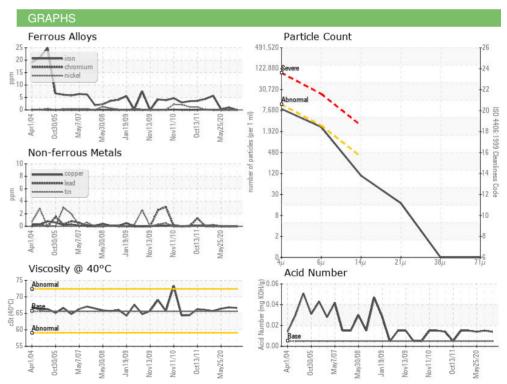




Bottom

Color









Certificate 12367

Laboratory Sample No.

: USP0015025 Lab Number : 06240426 Unique Number : 11129260

Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 18 Jul 2024

Tested : 19 Jul 2024

Diagnosed : 19 Jul 2024 - Doug Bogart

OSI GROUP - CHICAGO -USP - OSICHI

CHICAGO, IL US Contact: SERVICE MANAGER

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)

F: Contact/Location: SERVICE MANAGER - TYSCHI

T: