

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id

SULLAIR AC2 - 100HP SULLAIR (S/N 0031-35677)

Air Compressor

USPI HT FG 46 (--- 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.

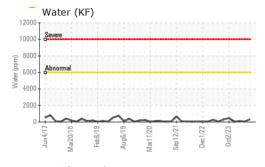
Fluid Condition

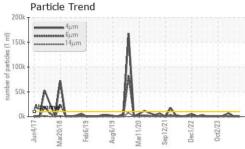
The oil viscosity is higher than normal. The AN level is approaching the top-end of the recommended limit. Confirmed.

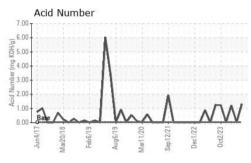
| SAMPLE INFORMATION method imitibase current history1 history2 | n2017 Muz2018 Feb2013 Aug2019 Muz2020 Sep2021 Ovc2022 Oct2023 | | | | | | | | | | |
|---|---|--------|-------------|--------------------|-------------|-------------|-------------|--|--|--|--|
| Sample Date | SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | | | | |
| Machine Age Oil Age hrs Client Info 0 0 0 Oil Oge hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 | Sample Number | | Client Info | | USPM36312 | USP0005495 | USPM30904 | | | | |
| Oil Age hrs Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A N/A WEAR METALS method limit/base current history1 history2 Iron ASTM D5185m >50 <1 | Sample Date | | Client Info | | 28 May 2024 | 01 Feb 2024 | 01 Feb 2024 | | | | |
| Oil Changed Sample Status Client Info N/A N/A N/A N/A ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 | Machine Age | hrs | Client Info | | 0 | 0 | 0 | | | | |
| Sample Status method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 4 0 Chromium ppm ASTM D5185m >4 0 0 0 Nickel ppm ASTM D5185m >4 0 0 0 Tittanium ppm ASTM D5185m >4 0 0 0 Silver ppm ASTM D5185m >10 <1 0 0 Aluminum ppm ASTM D5185m >20 <1 0 0 Copper ppm ASTM D5185m >20 <1 0 0 Copper ppm ASTM D5185m >5 <1 <1 <1 Vanadium ppm ASTM D5185m >5 <1 <1 <1 Vanadium ppm ASTM D5185m <0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 | Oil Age | hrs | Client Info | | 0 | 0 | 0 | | | | |
| WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >50 <1 4 0 Chromium ppm ASTM D5185m >4 0 0 0 Nickel ppm ASTM D5185m >4 0 0 0 Titanium ppm ASTM D5185m >1 0 0 0 Aluminum ppm ASTM D5185m >10 <1 0 0 Aluminum ppm ASTM D5185m >20 <1 0 0 Lead ppm ASTM D5185m >20 <1 0 0 Copper ppm ASTM D5185m >5 <1 <1 <1 <1 Vanadium ppm ASTM D5185m >5 <1 <1 <1 <0 Vanadium ppm ASTM D5185m <1 0 <0 <0 <0 <0 <0 <0 < | Oil Changed | | Client Info | | N/A | N/A | N/A | | | | |
| Iron | Sample Status | | | | ATTENTION | NORMAL | ATTENTION | | | | |
| Chromium ppm ASTM D5185m >4 0 0 0 Nickel ppm ASTM D5185m <1 0 0 0 Titanium ppm ASTM D5185m <1 0 0 0 Silver ppm ASTM D5185m <1 0 0 0 Aluminum ppm ASTM D5185m >20 <1 0 0 0 Lead ppm ASTM D5185m >20 <1 0 | WEAR METALS | | method | limit/base | current | history1 | history2 | | | | |
| Nickel ppm ASTM D5185m >4 0 0 0 Titanium ppm ASTM D5185m <1 0 0 Silver ppm ASTM D5185m <1 0 0 Aluminum ppm ASTM D5185m >10 <1 0 0 Aluminum ppm ASTM D5185m >20 <1 0 0 Aluminum ppm ASTM D5185m >20 <1 0 0 Lead ppm ASTM D5185m >40 0 0 0 Copper ppm ASTM D5185m >40 0 0 0 Vanadium ppm ASTM D5185m <1 <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 <t< th=""><th>Iron</th><th>ppm</th><th>ASTM D5185m</th><th>>50</th><th><1</th><th>4</th><th>0</th></t<> | Iron | ppm | ASTM D5185m | >50 | <1 | 4 | 0 | | | | |
| Titanium | Chromium | ppm | ASTM D5185m | >4 | 0 | 0 | 0 | | | | |
| Silver ppm ASTM D5185m <1 | Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | 0 | | | | |
| Aluminum ppm ASTM D5185m >10 <1 | Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| Lead | Silver | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| Copper ppm ASTM D5185m >40 0 0 0 Tin ppm ASTM D5185m >5 <1 <1 <1 Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 1 0 0 0 Magnesium ppm ASTM D5185m 2 0 0 0 Phosphorus ppm ASTM D5185m 2 0 0 1 Sulfur ppm ASTM D5185m 2 0 0 3 Sulfu | Aluminum | ppm | ASTM D5185m | >10 | <1 | 0 | 0 | | | | |
| Tin ppm ASTM D5185m >5 | Lead | ppm | ASTM D5185m | >20 | <1 | 0 | 0 | | | | |
| Tin ppm ASTM D5185m >5 <1 | Copper | ppm | ASTM D5185m | >40 | 0 | 0 | 0 | | | | |
| Cadmium ppm ASTM D5185m <1 | Tin | ppm | ASTM D5185m | >5 | <1 | <1 | <1 | | | | |
| ADDITIVES | Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| Boron ppm ASTM D5185m Q | Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| Barium | ADDITIVES | | method | limit/base | current | history1 | history2 | | | | |
| Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m <1 | Boron | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | |
| Manganese ppm ASTM D5185m <1 | Barium | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | |
| Magnesium ppm ASTM D5185m 1 0 0 Calcium ppm ASTM D5185m 2 0 0 Phosphorus ppm ASTM D5185m 5 2 0 <1 | Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 | | | | |
| Magnesium ppm ASTM D5185m 1 0 0 Calcium ppm ASTM D5185m 2 0 0 Phosphorus ppm ASTM D5185m 5 2 0 <1 | Manganese | ppm | ASTM D5185m | | <1 | 0 | 0 | | | | |
| Phosphorus ppm ASTM D5185m 5 2 0 <1 | Magnesium | ppm | ASTM D5185m | | 1 | 0 | 0 | | | | |
| Zinc ppm ASTM D5185m 6 0 0 Sulfur ppm ASTM D5185m 1 36 0 34 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 | Calcium | ppm | ASTM D5185m | | 2 | 0 | 0 | | | | |
| Zinc ppm ASTM D5185m 6 0 0 Sulfur ppm ASTM D5185m 1 36 0 34 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 | Phosphorus | ppm | ASTM D5185m | 5 | 2 | 0 | <1 | | | | |
| Sulfur ppm ASTM D5185m 1 36 0 34 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 <1 2 <1 Sodium ppm ASTM D5185m >20 2 1 2 Potassium ppm ASTM D5185m >20 2 1 2 Water % ASTM D6304 >0.6 0.031 0.004 0.012 ppm Water ppm ASTM D6304 >6000 318 45 129 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >2500 153 425< | | ppm | ASTM D5185m | | 6 | 0 | 0 | | | | |
| Silicon ppm ASTM D5185m >25 <1 | Sulfur | | ASTM D5185m | 1 | 36 | 0 | 34 | | | | |
| Sodium ppm ASTM D5185m 2 0 0 Potassium ppm ASTM D5185m >20 2 1 2 Water % ASTM D6304 >0.6 0.031 0.004 0.012 ppm Water ppm ASTM D6304 >6000 318 45 129 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 753 6903 243 Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >4 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 | CONTAMINANTS | | method | limit/base | current | history1 | history2 | | | | |
| Sodium ppm ASTM D5185m 2 0 0 Potassium ppm ASTM D5185m >20 2 1 2 Water % ASTM D6304 >0.6 0.031 0.004 0.012 ppm Water ppm ASTM D6304 >6000 318 45 129 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 753 6903 243 Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >4 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 | Silicon | ppm | ASTM D5185m | >25 | <1 | 2 | <1 | | | | |
| Potassium ppm ASTM D5185m >20 2 1 2 Water % ASTM D6304 >0.6 0.031 0.004 0.012 ppm Water ppm ASTM D6304 >6000 318 45 129 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 753 6903 243 Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >4 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | | | | | | | | | | | |
| Water % ASTM D6304 > 0.6 0.031 0.004 0.012 ppm Water ppm ASTM D6304 > 6000 318 45 129 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 > 10000 753 6903 243 Particles >6μm ASTM D7647 > 2500 153 425 70 Particles >14μm ASTM D7647 > 320 9 12 9 Particles >21μm ASTM D7647 > 80 2 4 3 Particles >38μm ASTM D7647 > 20 0 0 1 Particles >71μm ASTM D7647 > 4 0 0 0 Oil Cleanliness ISO 4406 (c) > 20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | | | | >20 | _ | | | | | | |
| ppm Water ppm ASTM D6304 >6000 318 45 129 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >10000 753 6903 243 Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | | • • | | | | | | | | | |
| Particles >4μm ASTM D7647 >10000 753 6903 243 Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | | | | | | | | | | | |
| Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 | | | | |
| Particles >6μm ASTM D7647 >2500 153 425 70 Particles >14μm ASTM D7647 >320 9 12 9 Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | Particles >4µm | | ASTM D7647 | >10000 | 753 | 6903 | 243 | | | | |
| Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | Particles >6µm | | ASTM D7647 | >2500 | 153 | 425 | 70 | | | | |
| Particles >21μm ASTM D7647 >80 2 4 3 Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | • | | | | | | | | | | |
| Particles >38μm ASTM D7647 >20 0 0 1 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | <u>'</u> | | | | | | | | | | |
| Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | • | | | | | | | | | | |
| Oil Cleanliness ISO 4406 (c) >20/18/15 17/14/10 20/16/11 15/13/10 FLUID DEGRADATION method limit/base current history1 history2 | • | | | | | | | | | | |
| | · | | | | | | | | | | |
| | FLUID DEGRADA | TION _ | method_ | limi <u>t/başe</u> | current | history1 | history2 | | | | |
| | | | | | | | | | | | |

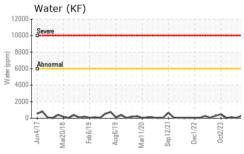


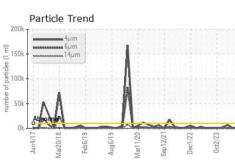
OIL ANALYSIS REPORT

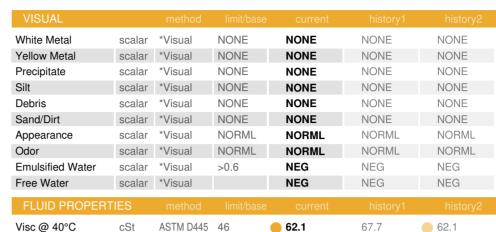










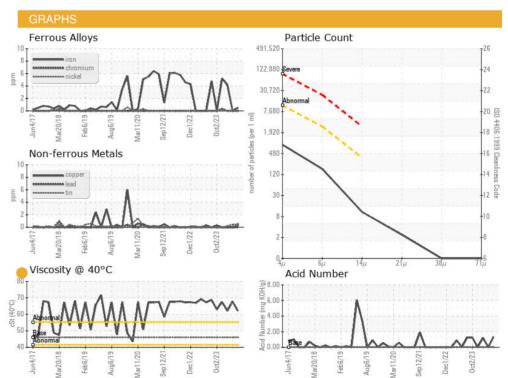


| SAMPLE IMAGES method limit/base current history1 history | | | | | | |
|--|---------------|--------|------------|---------|----------|----------|
| Critin LE INFIGEO Motors and Sacrotte Motors, includes | SAMPLE IMAGES | method | limit/base | current | history1 | history2 |

Color







: 31 May 2024 - Doug Bogart





Certificate 12367

Laboratory Sample No. Lab Number

: USPM36312 : 06193990 Unique Number : 11056113

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 May 2024 **Tested** : 30 May 2024

Diagnosed Test Package : IND 2

CARGILL FOODS-COLUMBUS

COLUMBUS, NE US 68601 Contact:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

 st - 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)

T:

F: