

OIL ANALYSIS REPORT



ISO

AC-4 (S/N 202110160002)

Air Compressor

SUMMIT ULTIMA 46 (--- GAL)

DIAGNOSIS

A Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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 | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|--------------|------------|-------------------|--------------|----------|
| Sample Number | | Client Info | | USP0008219 | USP242233 | |
| Sample Date | | Client Info | | 20 Mar 2024 | 22 Oct 2023 | |
| Machine Age | hrs | Client Info | | 0 | 0 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | ABNORMAL | ABNORMAL | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 12 | <u>▲</u> 72 | |
| Chromium | ppm | ASTM D5185m | >4 | <1 | 0 | |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 1 | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >10 | 0 | <1 | |
| Lead | ppm | ASTM D5185m | >20 | 0 | <1 | |
| Copper | ppm | ASTM D5185m | >40 | 7 | 31 | |
| Tin | ppm | ASTM D5185m | >5 | <1 | <1 | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | |
| Barium | ppm | ASTM D5185m | | 0 | 17 | |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | |
| Magnesium | ppm | ASTM D5185m | | <1 | 3 | |
| Calcium | ppm | ASTM D5185m | | 1 | 8 | |
| Phosphorus | ppm | ASTM D5185m | | 12 | 26 | |
| Zinc | ppm | ASTM D5185m | | 35 | 75 | |
| Sulfur | ppm | ASTM D5185m | | 61 | 93 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 2 | 3 | |
| Sodium | ppm | ASTM D5185m | | 3 | 7 | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 2 | |
| Water | % | ASTM D6304 | >0.6 | 0.003 | 0.483 | |
| ppm Water | ppm | ASTM D6304 | >6000 | 34 | 4830 | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >10000 | A 214816 | | |
| Particles >6µm | | ASTM D7647 | >2500 | 🔺 61694 | | |
| Particles >14µm | | ASTM D7647 | >320 | A 3285 | | |
| Particles >21µm | | ASTM D7647 | >80 | <u> </u> | | |
| Particles >38µm | | ASTM D7647 | >20 | A 36 | | |
| Particles >71µm | | ASTM D7647 | >4 | 3 | | |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | 4 25/23/19 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.10 | 2 .40 | |



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| Particle Trend | | VISUAL | | method | limit/base | current | history1 | history2 |
|--------------------|---|--------------------------|--|--------------|--|---------------|--------------|---|
| 4μm 6μm 14μm | | White Metal | scalar | *Visual | NONE | NONE | 🔺 MODER | |
| 14μm | | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| | | Precipitate | scalar | *Visual | NONE | NONE | NONE | |
| | | Silt | scalar | *Visual | NONE | NONE | NONE | |
| | | Debris | scalar | *Visual | NONE | NONE | 🔺 HEAVY | |
| Abnormal e | | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| 0ct22/23 | Mar20/24 | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| 0 | N Sai | Odor | scalar | *Visual | NORML | NORML | NORML | |
| Water (KF) | | Emulsified Water | scalar | *Visual | >0.6 | NEG | 0.2% | |
| Ι. | | Free Water | scalar | *Visual | | NEG | NEG | |
| Severe | | FLUID PROPER | TIES | method | limit/base | current | history1 | history2 |
| Abnormal | - | Visc @ 40°C | cSt | ASTM D445 | | 51.9 | 52.0 | |
| | | SAMPLE IMAGE | S | method | limit/base | current | history1 | history2 |
| 0cd2/23 | Mar20/24 | Color | | | | | | no image |
| Acid Number | | Bottom | | | | | | no image |
| | | GRAPHS | | | | | | |
| | | Ferrous Alloys | | | | Particle Coun | t | |
| | | 80 | | | 491,52 | ٥ | | T ²⁶ |
| | 2 | 60 - and chromium | | | 122,88 | Severe | | -24 |
| 0ct22/23 | U U C~~ | E 40 - | | | 30,72 | | | -2 |
| 0 | 4 4 | 20 - | | | | Abnormal | | |
| Water (KF) | | 0 | | | 7,68 | • | | -20 -18 -18 |
| Severe | | 0ct22/23 | | | Mar20/24 particles (per 1 m)) 86 | D- | | -11 |
| | | - | | | Ma cles (p | N. 19 | | |
| Abnormal | | Non-ferrous Meta | ls | | offined 48 | 0- | . \ | -11 |
| | | copper | | | ora 12 | 0- | | -14 |
| | | 30 - E ao | _ | | 1111 | | | |
| • | | Ē 20- | and the second division of the second divisio | | | | | |
| //23 | 4 | 10 | | | | 8 - | | 10 |
| 0ct22/23 | UC~- 11 | | | | 24 | 2- | | 8 |
| | | 0ct22// | | | Mar20/2 | | | |
| Viscosity @ 40°C | | Viscosity @ 40°C | | | 2 | 0 4μ 6μ | 14µ 21µ | 38µ 71µ |
| Abnormal | | 55 T | | | -2 | Acid Number | | |
| | | 50 - Abnormal | | | (^B /HOX | | | |
| 1 | | 0.0 | | | Ĕ1. | 5 - | | |
| | | () + 45 | | | LI | 0 | | |
| AL | | 40 Abnormal | | | Acid Nu | 5 | | |
| Abnormal | | 35 4 | | | | | | |
| 22/23 | P C U | lct22/ | | | lar20/. |)ct22/ | | |
| | Laboratory Sample No. Lab Number Unique Number | | Rece Teste | ived : 01 | v, NC 27513 1 Apr 2024 2 Apr 2024 4 Apr 2024 - Do | | | U M POULT LOVERLY REMONT, US 68 |
| | ertificate L2367 Test Package | | | | _ | | Contact: MAT | THEW ARNI |
| | o discuss this sample report | | | | | | | |
| | Denotes test methods that | are outside of the ISO | 1/1125 600 | no of accror | notetion | | | - |

Contact/Location: MATTHEW ARNDT - LINFRE