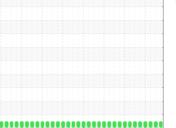


OIL ANALYSIS REPORT

Sample Rating Trend







2/020 Feb/2/21 Ju/2/21 Nov/2/21 Ju/2/22 Dov/2/22 Au/2/22 Au/2/22 Au/2/22

| Sample Date Client Info 14 Nov 2023 03 Oct 2023 07 Sep 202 Machine Age days Client Info 0 0 0 Oil Age days Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A WEAR METALS method Imit/base current history1 history1 Iron ppm ASTM 0585m >60 0 <1 <1 Okcel ppm ASTM 0585m 0 0 0 0 Nickel ppm ASTM 0585m 0 0 0 0 Barinum ppm ASTM 0585m 5 0 0 0 Adamium ppm ASTM 0585m 0 0 0 0 Adamium ppm ASTM 0585m 0 0 0 0 Adamium ppm ASTM 0585m 0 | SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
|---|------------------|----------|-------------|------------|-------------|-------------|-------------|
| Machine Age days Client Info 0 0 0 Oil Age days Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status Imit/base current Nistory! Iron ppm ASTM 05185m >60 0 <1 | Sample Number | | Client Info | | WC0820256 | WC0820279 | WC0820283 |
| Oil Age days Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM 05185m >60 0 <1 | Sample Date | | Client Info | | 14 Nov 2023 | 03 Oct 2023 | 07 Sep 2023 |
| Oil Changed Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 NoRMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM 05185m >60 0 <1 | Machine Age | days | Client Info | | 0 | 0 | 0 |
| Sample Status NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 nistory1 Iron ppm ASTM D5185m >60 0 <1 | Oil Age | days | Client Info | | 0 | 0 | 0 |
| WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >60 0 <1 | Oil Changed | | Client Info | | N/A | N/A | N/A |
| Iron ppm ASTM D5185m >60 0 <1 <1 Chromium ppm ASTM D5185m 0 0 <1 | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| Dromium ppm ASTM D5185m >4 | WEAR METALS | | method | limit/base | current | history1 | history2 |
| Nickel ppm ASTM D5185m 0 0 <1 Titanium ppm ASTM D5185m <1 | Iron | ppm | ASTM D5185m | >60 | 0 | <1 | <1 |
| Titanium ppm ASTM D5185m <1 0 0 Silver ppm ASTM D5185m 5 0 0 0 Aluminum ppm ASTM D5185m >5 0 0 0 Lead ppm ASTM D5185m >50 0 0 0 Copper ppm ASTM D5185m >30 2 1 0 0 Tin ppm ASTM D5185m >10 0 0 0 0 Cadmium ppm ASTM D5185m >10 0 0 0 0 0 ASTM D5185m <1 | Chromium | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >5 0 0 0 Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >15 <1 | Nickel | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum ppm ASTM D5185m >5 0 0 0 Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >30 2 1 0 Tin ppm ASTM D5185m >15 <1 | Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Lead ppm ASTM D5185m >10 0 0 0 0 Copper ppm ASTM D5185m >30 2 1 0 Tin ppm ASTM D5185m >15 <1 | Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Lead ppm ASTM D5185m >10 0 0 0 Copper ppm ASTM D5185m >30 2 1 0 Tin ppm ASTM D5185m >15 <1 | Aluminum | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Copper ppm ASTM D5185m >30 2 1 0 Tin ppm ASTM D5185m >15 <1 | Lead | | ASTM D5185m | >10 | 0 | 0 | 0 |
| Tin ppm ASTM D5185m >15 <1 <1 2 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m <1 | | | | >30 | 2 | 1 | 0 |
| Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m <1 | | | | | | | |
| 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 <1 0 0 Molybdenum ppm ASTM D5185m <1 5 0 Manganese ppm ASTM D5185m <1 <1 2 Calcium ppm ASTM D5185m 0 33 0 Sulfur ppm ASTM D5185m 0 33 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 | | | | | | | |
| Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 <1 | | | | | - | | |
| Barium ppm ASTM D5185m 0 <1 0 Molybdenum ppm ASTM D5185m <1 | ADDITIVES | | method | limit/base | current | history1 | history2 |
| Molybdenum ppm ASTM D5185m <1 5 0 Manganese ppm ASTM D5185m 0 0 <1 | Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese ppm ASTW D5185m 0 0 <1 <1 Magnesium ppm ASTW D5185m <1 | Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Manganese ppm ASTM D5185m 0 0 <1 <1 Magnesium ppm ASTM D5185m <1 | Molybdenum | ppm | ASTM D5185m | | <1 | 5 | 0 |
| Magnesium ppm ASTM D5185m <1 <1 2 Calcium ppm ASTM D5185m <1 | - | | ASTM D5185m | | 0 | | <1 |
| Calcium ppm ASTM D5185m <1 3 0 Phosphorus ppm ASTM D5185m 139 161 171 Zinc ppm ASTM D5185m 0 12 0 Sulfur ppm ASTM D5185m 0 33 0 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >50 <1 | • | | | | <1 | <1 | |
| Phosphorus ppm ASTM D5185m 139 161 171 Zinc ppm ASTM D5185m 0 12 0 Sulfur ppm ASTM D5185m 0 33 0 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >50 <1 <1 <1 Sodium ppm ASTM D5185m >50 <1 <1 <1 Sodium ppm ASTM D5185m >20 <1 1 <1 Vater % ASTM D5185m >20 <1 1 <1 Water % ASTM D5185m >20 <1 0.002 0.006 ppm ASTM D5185m >20 <1 0.004 0.002 0.006 ppm ASTM D5185m >20 <1 0.004 0.002 0.006 ppm ASTM D5185m >20 <1 0.002 0.006 0.002 < | • | | ASTM D5185m | | <1 | 3 | 0 |
| Zinc ppm ASTM D5185m 0 12 0 Sulfur ppm ASTM D5185m 0 33 0 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >50 <1 | | | | | 139 | | 171 |
| Sulfur ppm ASTM D5185m 0 33 0 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 <1 | | | | | | | |
| Silicon ppm ASTM D5185m >50 <1 <1 <1 Sodium ppm ASTM D5185m 0 0 0 1 Potassium ppm ASTM D5185m >20 <1 | - | | | | - | | |
| Sodium ppm ASTM D5185m 0 0 1 Potassium ppm ASTM D5185m >20 <1 | CONTAMINANTS | 5 | method | limit/base | current | history1 | history |
| Sodium ppm ASTM D5185m 0 0 1 Potassium ppm ASTM D5185m >20 <1 | Silicon | maa | ASTM D5185m | >50 | <1 | <1 | <1 |
| Potassium ppm ASTM D5185m >20 <1 1 <1 Water % ASTM D6304 >0.1 0.004 0.002 0.006 ppm Water ppm ASTM D6304 >1000 43 21.6 61.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >1000 502 425 134 Particles >6µm ASTM D7647 >2500 132 106 33 Particles >6µm ASTM D7647 >320 18 12 2 Particles >14µm ASTM D7647 >80 5 3 0 Particles >21µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >20 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 | Sodium | | ASTM D5185m | | 0 | | |
| Water % ASTM D6304 >0.1 0.004 0.002 0.006 ppm Water ppm ASTM D6304 >1000 43 21.6 61.4 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 >10000 502 425 134 Particles >6µm ASTM D7647 >2500 132 106 33 Particles >6µm ASTM D7647 >320 18 12 2 Particles >14µm ASTM D7647 >80 5 3 0 Particles >21µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >4 0 0 0 Oll Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history1 | | | | >20 | - | | |
| ppm Water ppm ASTM D6304 >1000 43 21.6 61.4 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >10000 502 425 134 Particles >6µm ASTM D7647 >2500 132 106 33 Particles >6µm ASTM D7647 >320 18 12 2 Particles >14µm ASTM D7647 >80 5 3 0 Particles >21µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >4 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history1 | | | | | | | |
| Particles >4μm ASTM D7647 >10000 502 425 134 Particles >6μm ASTM D7647 >2500 132 106 33 Particles >14μm ASTM D7647 >320 18 12 2 Particles >21μm ASTM D7647 >80 5 3 0 Particles >21μm ASTM D7647 >20 0 0 0 Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history1 | | | | | | | |
| Particles >6μm ASTM D7647 >2500 132 106 33 Particles >14μm ASTM D7647 >20 18 12 2 Particles >21μm ASTM D7647 >80 5 3 0 Particles >21μm ASTM D7647 >80 5 3 0 Particles >38μm ASTM D7647 >20 0 0 0 Particles >38μm ASTM D7647 >4 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history2 | FLUID CLEANLI | NESS | method | limit/base | current | history1 | history |
| Particles >14µm ASTM D7647 >320 18 12 2 Particles >21µm ASTM D7647 >80 5 3 0 Particles >21µm ASTM D7647 >80 5 3 0 Particles >38µm ASTM D7647 >20 0 0 0 Particles >38µm ASTM D7647 >4 0 0 0 Particles >71µm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history2 | Particles >4µm | | ASTM D7647 | >10000 | 502 | 425 | 134 |
| Particles >21μm ASTM D7647 >80 5 3 0 Particles >38μm ASTM D7647 >20 0 0 0 Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history2 | Particles >6µm | | ASTM D7647 | >2500 | 132 | 106 | 33 |
| Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history2 | Particles >14µm | | ASTM D7647 | >320 | 18 | 12 | 2 |
| Particles >38μm ASTM D7647 >20 0 0 0 Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history2 | Particles >21µm | | ASTM D7647 | >80 | 5 | 3 | 0 |
| Particles >71μm ASTM D7647 >4 0 0 0 Oil Cleanliness ISO 4406 (c) >20/18/15 16/14/11 16/14/11 14/12/9 FLUID DEGRADATION method limit/base current history1 history2 | | | | | 0 | | 0 |
| Oil CleanlinessISO 4406 (c)>20/18/1516/14/1116/14/1114/12/9FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2 | | | | >4 | 0 | 0 | 0 |
| | | | | | | | |
| | FLUID DEGRAD | ATION | method | limit/base | current | history1 | history2 |
| | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.41 | 0.47 | 0.40 |

Machine Id CP-63 Component Screw Compressor Fluid SYNTHOSOL 100 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

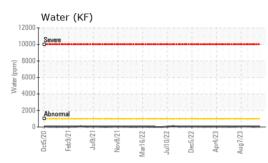
Fluid Condition

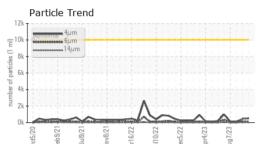
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

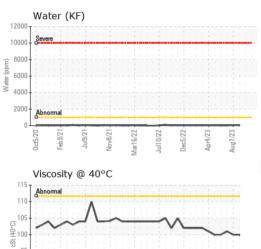
Contact/Location: JOE BARRETT - UGIMESWC

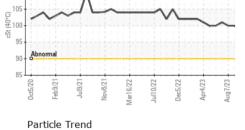


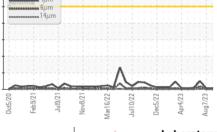
OIL ANALYSIS REPORT











Certificate L2367

r of particles (1 ml)

8

4)

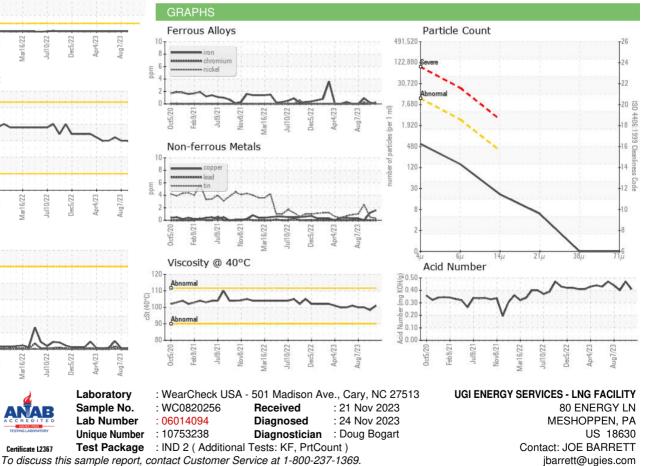
2



Bottom

* - 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: UGIMESWC [WUSCAR] 06014094 (Generated: 11/24/2023 09:12:16) Rev: 1

Contact/Location: JOE BARRETT - UGIMESWC

T:

F: