

OIL ANALYSIS REPORT

Sample Rating Trend





Reference New (Unused) Oil Fluid MOBIL DTE 846 (--- LTR)

DIAGNOSIS

Recommendation

This is the baseline readout on this new (unused) oil. The fluid is suitable for service.

Wear

{not applicable}

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. There is no indication of any contamination in the new (unused) oil.

Fluid Condition

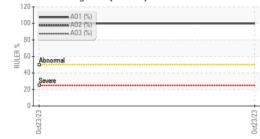
The AN level is acceptable for this fluid. The condition of the oil is suitable for service.

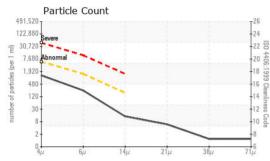
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--|---|---|------------|--|--|--|
| Sample Number | | Client Info | | WC | | |
| Sample Date | | Client Info | | 23 Oct 2023 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >5 | 0 | | |
| Chromium | ppm | ASTM D5185(m) | >5 | 0 | | |
| Nickel | ppm | ASTM D5185(m) | >5 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | |
| Silver | ppm | ASTM D5185(m) | >5 | <1 | | |
| Aluminum | ppm | ASTM D5185(m) | >5 | <1 | | |
| Lead | ppm | ASTM D5185(m) | >5 | <1 | | |
| Copper | ppm | ASTM D5185(m) | >5 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >5 | 0 | | |
| Antimony | ppm | ASTM D5185(m) | | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | | 0 | | |
| Beryllium | ppm | ASTM D5185(m) | | 0 | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | | <1 | | |
| Barium | ppm | ASTM D5185(m) | | 0 | | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 0 | | |
| Magnesium | ppm | ASTM D5185(m) | | • | | |
| Calcium | | | | 0 | | |
| | ppm | ASTM D5185(m) | | 0 <1 | | |
| Phosphorus | ppm ppm | . , | | | | |
| | | ASTM D5185(m) | | <1 | | |
| Phosphorus Zinc Sulfur | ppm | ASTM D5185(m) ASTM D5185(m) | | <1 1254 | | |
| Zinc Sulfur | ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | | <1 1254 <1 | | |
| Zinc Sulfur | ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | limit/base | <1 1254 <1 13 | | |
| Zinc Sulfur Lithium | ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | | <1 1254 <1 13 <1 | | |
| Zinc Sulfur Lithium CONTAMINANTS | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method | | <1 1254 <1 13 <1 current | | |
| Zinc Sulfur Lithium CONTAMINANTS Silicon | ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D5185(m) | | <1 1254 <1 13 <1 current 0 | history1 | |
| Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >15 | <1 1254 <1 13 <1 <u>current</u> 0 <1 | history1 | history2 |
| Zinc Sulfur CONTAMINANTS CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >15 >20 | <1 1254 <1 13 <1 current 0 <1 0 | history1 | history2 |
| Zinc Sulfur CONTAMINANTS CONTAMINANTS Silicon Sodium Potassium INFRA-RED | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >15 >20 | <1 1254 <1 13 <1 current 0 <1 0 current | history1 history1 | history2 history2 |

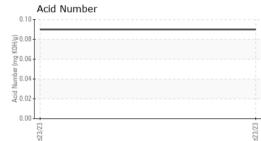


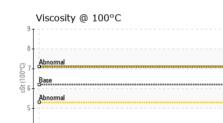
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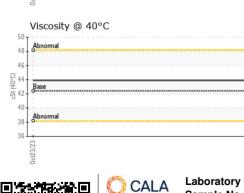












| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
|----------------------|----------|---------------|------------|----------|----------|----------|
| Particles >4µm | | ASTM D7647 | >5000 | 1114 | | |
| Particles >6µm | | ASTM D7647 | >1300 | 209 | | |
| Particles >14µm | | ASTM D7647 | >160 | 12 | | |
| Particles >21µm | | ASTM D7647 | >40 | 5 | | |
| Particles >38µm | | ASTM D7647 | >10 | 1 | | |
| Particles >71µm | | ASTM D7647 | >3 | 1 | | |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 17/15/11 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | ASTM D7414* | | 3.5 | | |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.09 | | |
| Anti-Oxidant 1 | % | ASTM D6971* | <25 | 100 | | |
| Anti-Oxidant 2 | % | ASTM D6971* | <25 | 100 | | |
| VISUAL | | method | limit/base | current | history1 | history2 |
| White Metal | scalar | Visual* | NONE | NONE | | |
| Yellow Metal | scalar | Visual* | NONE | NONE | | |
| Precipitate | scalar | Visual* | NONE | NONE | | |
| Silt | scalar | Visual* | NONE | NONE | | |
| Debris | scalar | Visual* | NONE | NONE | | |
| Sand/Dirt | scalar | Visual* | NONE | NONE | | |
| Appearance | scalar | Visual* | NORML | NORML | | |
| Odor | scalar | Visual* | NORML | NORML | | |
| Emulsified Water | scalar | Visual* | | NEG | | |
| Free Water | scalar | Visual* | | NEG | | |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 42.4 | 43.9 | | |
| Visc @ 100°C | cSt | ASTM D7279(m) | 6.2 | 7.1 | | |
| Viscosity Index (VI) | Scale | ASTM D2270* | 106 | 121 | | |
| SAMPLE IMAGES | ; | method | limit/base | current | history1 | history2 |
| | | | | | | |
| Color | | | | | no image | no image |
| | | | | 1 | | |
| | | | | | | |
| Bottom | | | | | no image | no image |
| | | | | | | |
| | | | | | | |

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Mikan Inc. CALA Sample No. : WC Received : 24 Oct 2023 43 Sagona Avenue Lab Number : 02591388 Diagnosed : 10 Nov 2023 Mount Pearl, NL ISO 17025:2017 Accredited Laboratory Unique Number : 5668467 Diagnostician : Bill Quesnel CA A1N 4P9 Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, RULer, TAN Man, VQontact: Dina MArie Oldford To discuss this sample report, contact Customer Service at 1-800-268-2131. doldford@mikan.ca Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (709)364-6619 Validity of results and interpretation are based on the sample and information as supplied. F: (709)364-3501