

OIL ANALYSIS REPORT

CHEATHAM ANNEX 2AHT CRANE 2A

Component **Hydraulic System** MOBIL DTE 10 EXCEL 68 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

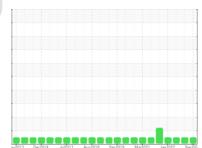
All component wear rates are normal.

Contamination

There is no indication of any contamination in the 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 Rating Trend

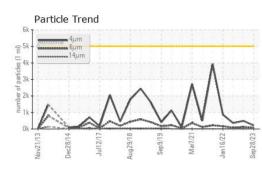


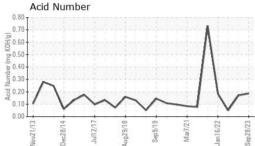
NORMAL

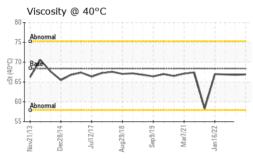
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|---------------|--------------|------------|-------------|-------------|-------------|
| Sample Number | | Client Info | | WC0752735 | WC0573874 | WC0573800 |
| Sample Date | | Client Info | | 28 Sep 2023 | 22 Jan 2023 | 24 Apr 2022 |
| 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 | >20 | 0 | <1 | <1 |
| Chromium | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >20 | 2 | 3 | 3 |
| Copper | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | | | | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 3 |
| Barium | ppm | ASTM D5185m | | 0 | 2 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 3 | 3 | 2 |
| Calcium | ppm | ASTM D5185m | | 99 | 106 | 110 |
| Phosphorus | ppm | ASTM D5185m | | 438 | 477 | 477 |
| Zinc | ppm | ASTM D5185m | | 66 | 94 | 82 |
| Sulfur | ppm | ASTM D5185m | | 2131 | 2854 | 2110 |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Silicon | ppm | | >15 | 2 | 2 | 2 |
| Sodium | ppm | ASTM D5185m | | <1 | 2 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | >5000 | 212 | 493 | 355 |
| Particles >6µm | | ASTM D7647 | >1300 | 67 | 118 | 74 |
| Particles >14µm | | ASTM D7647 | >160 | 8 | 6 | 10 |
| Particles >21µm | | ASTM D7647 | | 2 | 1 | 3 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 15/13/10 | 16/14/10 | 16/13/10 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.186 | 0.171 | 0.05 |

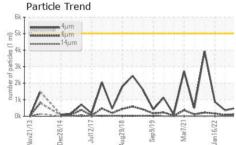


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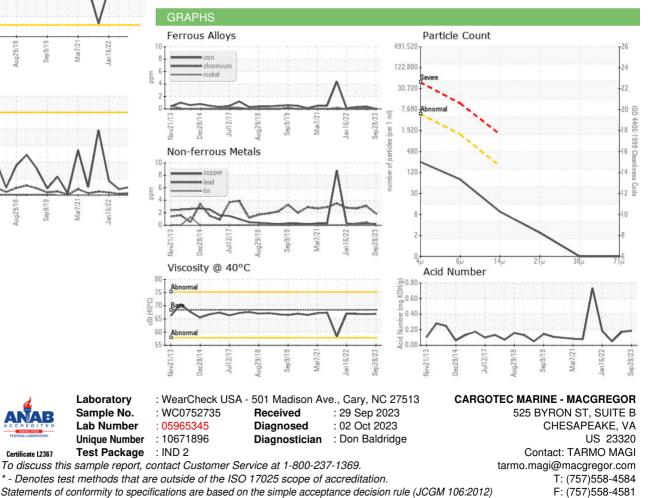






| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| 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 | >0.05 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 68.4 | 66.9 | 66.8 | 66.9 |
| SAMPLE IMAGES met | | method | limit/base | current | history1 | history2 |
| Color | | | | | | |
| Bottom | | | | | | |

Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

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