

OIL ANALYSIS REPORT

Sample Rating Trend

-



Machine Id **A504** Component **Hydraulic System** Fluid **MOBIL DTE 10 EXCEL 32 (43 GAL)**

DIAGNOSIS

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.

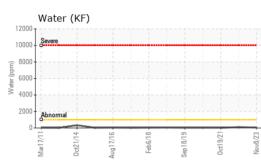
| | | Mar2011 | Oct2014 Aug2016 | Feb2018 Sep2019 Oct2021 | Nov2023 | | | |
|------------------|----------|--------------|-----------------|-------------------------|---------------------------------------|-------------|--|--|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 | | |
| Sample Number | | Client Info | | MHI026268 | MHI025116 | MHI017700 | | |
| Sample Date | | Client Info | | 08 Nov 2023 | 11 Oct 2022 | 19 Oct 2021 | | |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 | | |
| Oil Age | hrs | Client Info | | 94765 | 88256 | 82366 | | |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd | | |
| Sample Status | | | | NORMAL | NORMAL | NORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | |
| Iron | ppm | ASTM D5185m | >50 | 9 | 12 | 12 | | |
| Chromium | ppm | ASTM D5185m | >20 | 0 | <1 | <1 | | |
| Nickel | ppm | ASTM D5185m | >20 | 4 | 7 | 7 | | |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 | | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >20 | <1 | <1 | 0 | | |
| Lead | ppm | ASTM D5185m | >20 | <1 | 1 | 1 | | |
| Copper | ppm | ASTM D5185m | >20 | <1 | <1 | <1 | | |
| Tin | | ASTM D5185m | >20 | 0 | 0 | <1 | | |
| Antimony | ppm | ASTM D5185m | 220 | | | 0 | | |
| , | ppm | | | | | | | |
| 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 | <1 | 2 | | |
| Barium | ppm | ASTM D5185m | | 6 | 0 | 0 | | |
| Molybdenum | ppm | ASTM D5185m | | 0 | <1 | <1 | | |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | 0 | | |
| Magnesium | ppm | ASTM D5185m | | <1 | 0 | <1 | | |
| Calcium | ppm | ASTM D5185m | 120 | 98 | 110 | 119 | | |
| Phosphorus | ppm | ASTM D5185m | 475 | 362 | 442 | 457 | | |
| Zinc | ppm | ASTM D5185m | | 19 | 9 | 32 | | |
| Sulfur | ppm | ASTM D5185m | 1275 | 1615 | 1926 | 1792 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 | | |
| Silicon | ppm | ASTM D5185m | >+30 | 0 | <1 | <1 | | |
| Sodium | ppm | ASTM D5185m | | 0 | 2 | 2 | | |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | <1 | | |
| Water | % | ASTM D6304 | | 0.005 | 0.010 | 0.002 | | |
| ppm Water | ppm | ASTM D6304 | >1000 | 51.0 | 104.4 | 25.0 | | |
| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 | | |
| Particles >4µm | | ASTM D7647 | >5000 | 1080 | 473 | 673 | | |
| Particles >6µm | | ASTM D7647 | >1300 | 261 | 141 | 237 | | |
| Particles >14µm | | ASTM D7647 | >160 | 22 | 20 | 42 | | |
| Particles >21µm | | ASTM D7647 | >40 | 7 | 7 | 12 | | |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 1 | 0 | | |
| Particles >71µm | | ASTM D7647 | | 0 | 0 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 17/15/12 | 16/14/11 | 17/15/13 | | |
| FLUID DEGRADA | | method | limit/base | current | history1 | history2 | | |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.06 | 0.18 | 0.087 | | |
| 30:03) Rev: 1 | manoning | | | | Contact/Location: DANIEL BOYD - DIADI | | | |

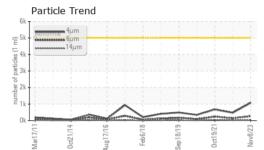
Report Id: DIADIL [WUSCAR] 06009632 (Generated: 11/19/2023 13:30:03) Rev: 1

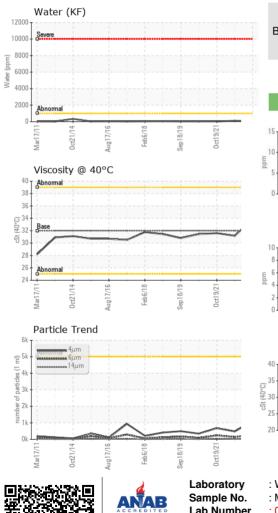
Contact/Location: DANIEL BOYD - DIADIL



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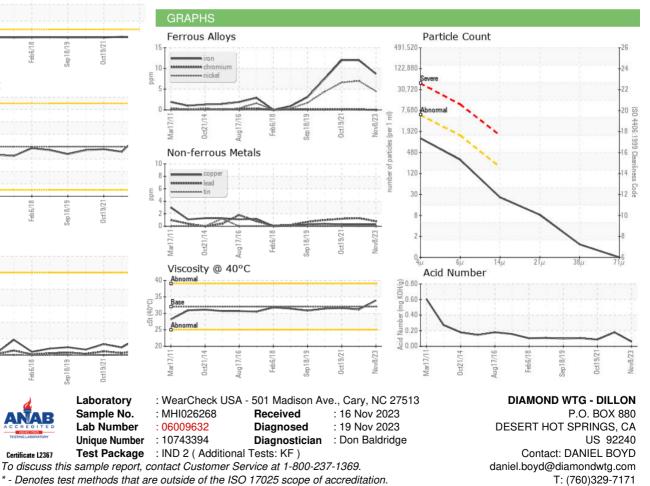






| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | LIGHT |
| 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 | >0.1 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | 32 | 33.9 | 31.17 | 31.6 |
| SAMPLE IMAGES | 6 | method | limit/base | current | history1 | history2 |
| Color | | | | | | |

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)

Certificate L2367

Contact/Location: DANIEL BOYD - DIADIL

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