WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Machine Id WMC

Component Port Reduction Gear

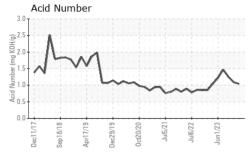
| Fluid | | | | | | | |
|--|------------------|----------|-------------|-----------|-------------|-------------|-------------|
| Reduction Gear Oil (GAL) | | | | | | | |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. | Sample Number | | Client Info | | MW06048414 | MW06017500 | MW05981987 |
| | Sample Date | | Client Info | | 01 Jan 2024 | 23 Nov 2023 | 16 Oct 2023 |
| | Machine Age | hrs | Client Info | | 46330 | 64062 | 64062 |
| | Oil Age | hrs | Client Info | | 1330 | 537 | 802 |
| | Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | N/A | N/A | N/A |
| | Filter Changed | | Client Info | | N/A | N/A | N/A |
| | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| WEAR | Iron | ppm | ASTM D5185m | >150 | <1 | 2 | <1 |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| | Nickel | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| | Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| | Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | >25 | 1 | 2 | <1 |
| | Lead | ppm | ASTM D5185m | >100 | 1 | 0 | <1 |
| | Copper | ppm | ASTM D5185m | >50 | 2 | <1 | 0 |
| | Tin | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >50 | 5 | 5 | 4 |
| There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | 1 | 2 | 2 |
| | Water | | WC Method | >0.1 | NEG | NEG | NEG |
| | 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 | >0.1 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 2 | 0 | 1 |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. | Boron | ppm | ASTM D5185m | | 354 | 346 | 360 |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | 3 |
| | Molybdenum | ppm | ASTM D5185m | | 38 | 38 | 46 |
| | Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| | Magnesium | ppm | ASTM D5185m | | 39 | 30 | 79 |
| | Calcium | ppm | ASTM D5185m | | 2671 | 2550 | 2535 |
| | Phosphorus | ppm | ASTM D5185m | | 828 | 668 | 821 |
| | Zinc | ppm | ASTM D5185m | | 924 | 859 | 926 |
| | Sulfur | ppm | ASTM D5185m | | 3145 | 3396 | 3086 |
| | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.04 | 1.09 | 1.25 |

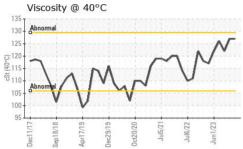
Visc @ 40°C cSt ASTM D445

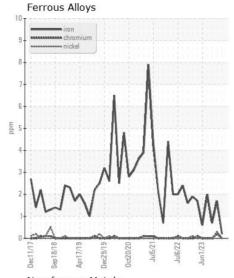
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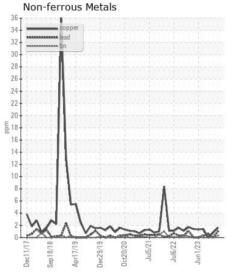
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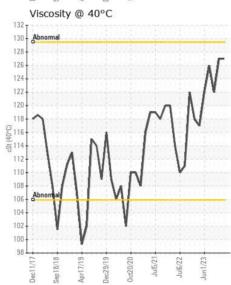
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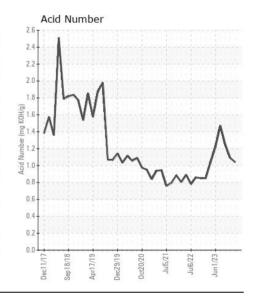














Laboratory Sample No.

: MW06048414 Lab Number : 06048414 Unique Number : 10809022 Test Package : MAR 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Dec 2023 : 02 Jan 2024

Tested Diagnosed

: 02 Jan 2024 - Wes Davis

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ILLINOIS MARINE TOWING

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Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - 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)