

No relevant graphs to display

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | | | | |
|--------------------------|--------|---------|------|----------|-----------|--|--|--|--|--|
| Sample Status | | | | ABNORMAL | ATTENTION | | | | | |
| Debris | scalar | *Visual | NONE | A MODER | NONE | | | | | |

Customer Id: MARSCHI Sample No.: WC0605531 Lab Number: 05924980 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u> There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

29 Jul 2022 Diag: Jonathan Hester

VISCOSITY



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.





OIL ANALYSIS REPORT

Area [603530571 SDR] Machine Id SOUTH DRK CHOC PMP P3D01 (S/N 20062585) Component

Gearbox

Fluid GEAR OIL ISO 150 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

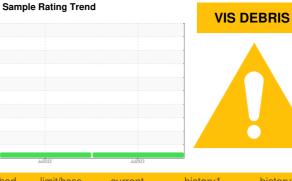
All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

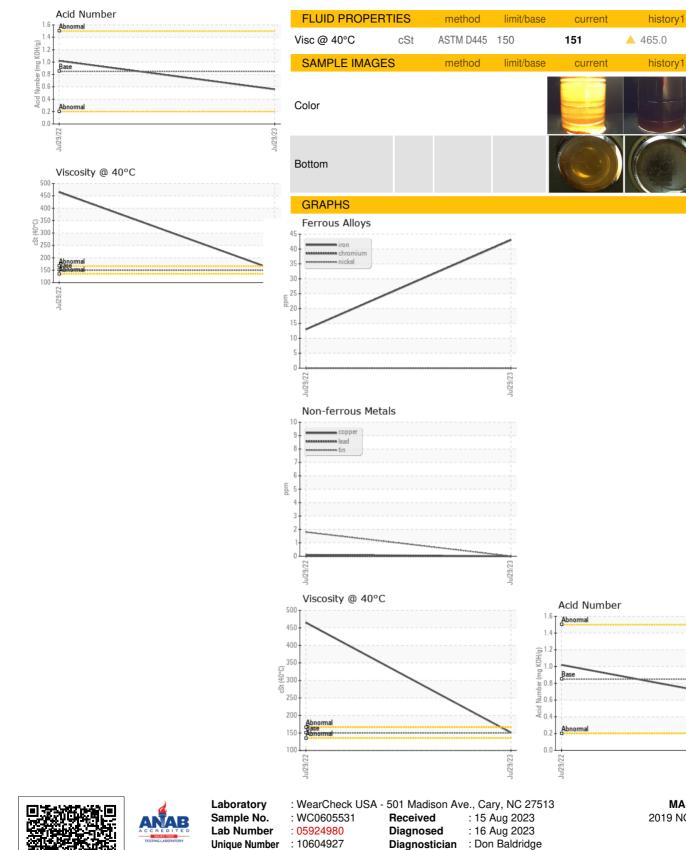
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|------------|-------------|-------------|----------|
| Sample Number | | Client Info | | WC0605531 | WC0562510 | |
| Sample Date | | Client Info | | 29 Jul 2023 | 29 Jul 2022 | |
| Machine Age | hrs | Client Info | | 0 | 0 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | Changed | Changed | |
| Sample Status | | | | ABNORMAL | ATTENTION | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | 43 | 13 | |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | |
| Nickel | ppm | ASTM D5185m | >15 | 0 | 0 | |
| Titanium | ppm | ASTM D5185m | >15 | 0 | <1 | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | <1 | |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | |
| Copper | ppm | ASTM D5185m | >200 | 0 | <1 | |
| Tin | ppm | ASTM D5185m | >25 | 0 | 2 | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | |
| | ppm | | 11 | - | - | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 50 | 0 | 0 | |
| Barium | ppm | ASTM D5185m | 15 | 0 | 2 | |
| Molybdenum | ppm | ASTM D5185m | 15 | 0 | 0 | |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | |
| Magnesium | ppm | ASTM D5185m | 50 | 0 | 0 | |
| Calcium | ppm | ASTM D5185m | 50 | 1 | 6 | |
| Phosphorus | ppm | ASTM D5185m | 350 | 213 | 474 | |
| Zinc | ppm | ASTM D5185m | 100 | 0 | 1 | |
| Sulfur | ppm | ASTM D5185m | 12500 | 2149 | 888 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >50 | 1 | 42 | |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.85 | 0.56 | 1.02 | |
| VISUAL | | method | limit/base | current | history1 | history2 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | |
| Silt | scalar | *Visual | NONE | NONE | NONE | |
| Debris | scalar | *Visual | NONE | | NONE | |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| Appearance | scalar | *Visual | NORML | NORML | NORML | |
| Odor | scalar | *Visual | NORML | NORML | NORML | |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | |
| Free Water | scalar | *Visual | | NEG | NEG | |
| | | | | | | |



OIL ANALYSIS REPORT



MARS CHOCOLATE 2019 NORTH OAK PARK CHICAGO, IL US 60707 Contact: TONY FIORE tony.fiore@effem.com T: (773)745-2279 F:

Report Id: MARSCHI [WUSCAR] 05924980 (Generated: 08/16/2023 16:19:05) Rev: 1

Certificate L2367

Test Package : IND 2

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)

Contact/Location: TONY FIORE - MARSCHI

history2

history2

no image

no image