

PROBLEM SUMMARY

Sample Rating Trend

VIS DEBRIS





Machine Id
DT631 Component **Front Differential CHEVRON RPM SYNTHETIC GEAR 75W90 (4 mls)**

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | | | | | |
|--------------------------|--------|---------|------|----------|--------|----------|--|--|--|--|--|
| Sample Status | | | | ABNORMAL | NORMAL | ABNORMAL | | | | | |
| Debris | scalar | *Visual | NONE | ▲ MODER | NONE | NONE | | | | | |

Customer Id: NWWPIE Sample No.: PCA0103296 Lab Number: 05977422 Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

21 Apr 2023 Diag: Sean Felton

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



17 Oct 2022 Diag: Jonathan Hester

DIRT



We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.



06 May 2022 Diag: Don Baldridge

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





OIL ANALYSIS REPORT

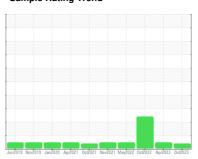
Sample Rating Trend

VIS DEBRIS



DT631 Component **Front Differential**

CHEVRON RPM SYNTHETIC GEAR 75W90 (4 mls)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

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

Fluid Condition

The condition of the oil is acceptable for the time in service.

| - Juni2019 Novi2019 - Juni2020 - Аргi2021 - Окс10021 - Novi2022 - Окс10022 - Аргi2023 - Окс10023 - | | | | | | | | |
|--|--------|-------------|------------|-------------|-------------|-------------|--|--|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 | | |
| Sample Number | | Client Info | | PCA0103296 | PCA0091169 | PCA0080960 | | |
| Sample Date | | Client Info | | 10 Oct 2023 | 21 Apr 2023 | 17 Oct 2022 | | |
| Machine Age | mls | Client Info | | 257872 | 231859 | 206336 | | |
| Oil Age | mls | Client Info | | 13 | 181798 | 182293 | | |
| Oil Changed | | Client Info | | Not Changd | Changed | Not Changd | | |
| Sample Status | | | | ABNORMAL | NORMAL | ABNORMAL | | |
| WEAR METALS | S | method | limit/base | current | history1 | history2 | | |
| Iron | ppm | ASTM D5185m | >870 | 176 | 284 | 522 | | |
| Chromium | ppm | ASTM D5185m | >8 | 1 | 2 | 2 | | |
| Nickel | ppm | ASTM D5185m | >25 | 4 | 6 | <1 | | |
| Titanium | ppm | ASTM D5185m | >4 | <1 | <1 | 3 | | |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >40 | 4 | 10 | <u>^</u> 52 | | |
| Lead | ppm | ASTM D5185m | >25 | <1 | 0 | 5 | | |
| Copper | ppm | ASTM D5185m | >60 | 2 | 1 | 40 | | |
| Tin | ppm | ASTM D5185m | >5 | 0 | 0 | 4 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | | |
| Boron | ppm | ASTM D5185m | | 189 | 212 | 237 | | |
| Barium | ppm | ASTM D5185m | | 2 | 0 | <1 | | |
| Molybdenum | ppm | ASTM D5185m | | 22 | 20 | 13 | | |
| Manganese | ppm | ASTM D5185m | | 1 | 2 | 4 | | |
| Magnesium | ppm | ASTM D5185m | | 185 | 156 | 59 | | |
| Calcium | ppm | ASTM D5185m | | 308 | 234 | 136 | | |
| Phosphorus | ppm | ASTM D5185m | | 1216 | 1302 | 1349 | | |
| Zinc | ppm | ASTM D5185m | | 284 | 238 | 103 | | |
| Sulfur | ppm | ASTM D5185m | | 19150 | 20205 | 22311 | | |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 | | |
| Silicon | ppm | ASTM D5185m | >285 | 33 | 53 | 1 57 | | |
| Sodium | ppm | ASTM D5185m | | 3 | 11 | 5 | | |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 5 | 10 | | |
| 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 | ▲ MODER | 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 | >.2 | NEG | NEG | NEG | | |
| Free Water | scalar | *Visual | | NEG | NEG | NEG | | |
| FLUID PROPE | RTIES | method | limit/base | current | history1 | history2 | | |
| | | | | | | | | |

Visc @ 40°C

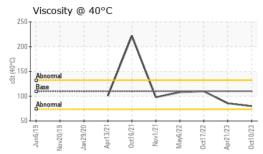
cSt

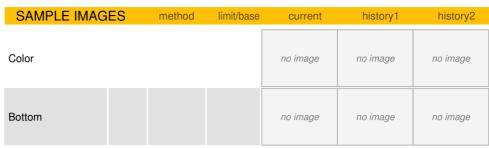
ASTM D445 110

110

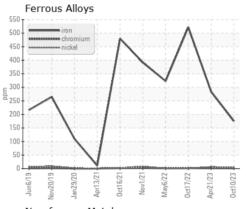


OIL ANALYSIS REPORT

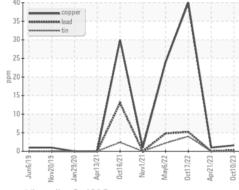


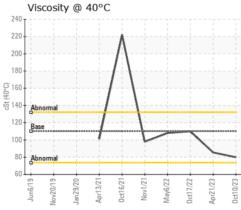


GRAPHS



Non-ferrous Metals









Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10689372 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0103296 : 05977422

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

Received

: 12 Oct 2023 Diagnosed : 16 Oct 2023 Diagnostician : Don Baldridge NW WHITE & CO - ANDERSON DIVISION

2605 RIVER RD PIEDMONT, SC US 29673

Contact: James Threatt jthreatt@nwwhite.com T: (864)918-4646

* - 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)