Sample Rating Trend


DT633
Component
Rear Differential
Fluid
CHEVRON RPM SYNTHETIC GEAR 75W90 (3 mls)


## 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.

## Fluid Condition

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

| SAMPLE INFORMATION | method | limitbase | current |  | history1 | history2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sample Number |  | Client Info |  | PCA0113166 | PCA0096978 | PCA0074826 |
| Sample Date |  | Client Info |  | $\mathbf{1 7}$ Jan 2024 | 17 May 2023 | 19 Sep 2022 |
| Machine Age | mls | Client Info | $\mathbf{2 5 9 5 9 0}$ | 234161 | 207873 |  |
| Oil Age | mls | Client Info |  | $\mathbf{2 5 4 2 9}$ | 175605 | 0 |
| Oil Changed |  | Client Info |  | Not Changd | Changed | Not Changd |
| Sample Status |  |  |  | NORMAL | NORMAL | ABNORMAL |


| CONTAMINATION |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water |  | WC Method | >. 2 | NEG | NEG | NEG |
| WEAR METALS |  | method | limitbase | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >1200 | 140 | 163 | 165 |
| Chromium | ppm | ASTM D5185m | >8 | <1 | <1 | 2 |
| Nickel | ppm | ASTM D5185m | >20 | 5 | 6 | 3 |
| Titanium | ppm | ASTM D5185m | >4 | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m |  | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >30 | 7 | 12 | 4 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | $>50$ | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m |  | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m |  | 0 | 0 | 0 |


| ADDITIVES |  | method | limitbase | current | history 1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boron | ppm | ASTM D5185m |  | 191 | 201 | 231 |
| Barium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m |  | 20 | 21 | 3 |
| Manganese | ppm | ASTM D5185m |  | <1 | 2 | 1 |
| Magnesium | ppm | ASTM D5185m |  | 173 | 155 | 41 |
| Calcium | ppm | ASTM D5185m |  | 294 | 298 | 50 |
| Phosphorus | ppm | ASTM D5185m |  | 1240 | 1247 | 1351 |
| Zinc | ppm | ASTM D5185m |  | 264 | 279 | 59 |
| Sulfur | ppm | ASTM D5185m |  | 18592 | 20976 | 27336 |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >230 | 18 | 39 | 23 |
| Sodium | ppm | ASTM D5185m |  | 1 | 2 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 2 | 1 |
| 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 | $\triangle$ MODER |
| 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 |

OIL
DIAGNOSTICS

## OIL ANALYSIS REPORT




Non-ferrous Metals


Viscosity @ $40^{\circ} \mathrm{C}$


