



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
WMC
Component
Port Main Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | MW05934668 | MW05862880 | MW05823773 |
| Sample Date | | Client Info | | 24 Aug 2023 | 01 Jun 2023 | 18 Apr 2023 |
| Machine Age | hrs | Client Info | | 18260 | 17736 | 16976 |
| Oil Age | hrs | Client Info | | 524 | 760 | 772 |
| 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 | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >75 | 4 | 6 | 12 |
| Chromium | ppm | ASTM D5185m | >8 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >3 | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >15 | <1 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >18 | <1 | 8 | ▲ 25 |
| Copper | ppm | ASTM D5185m | >80 | <1 | <1 | 2 |
| Tin | ppm | ASTM D5185m | >14 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

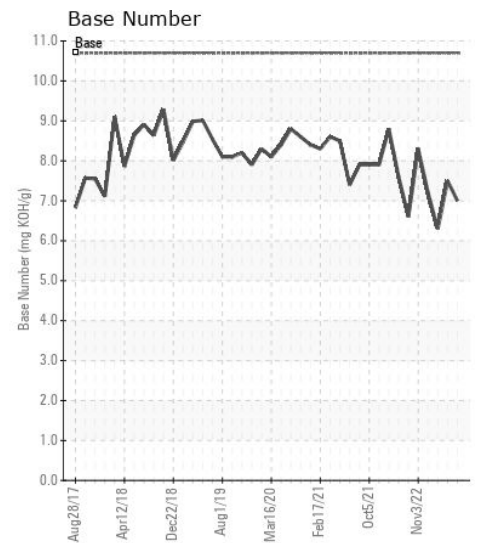
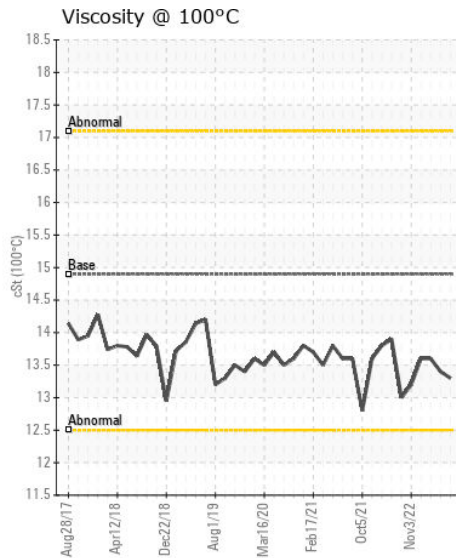
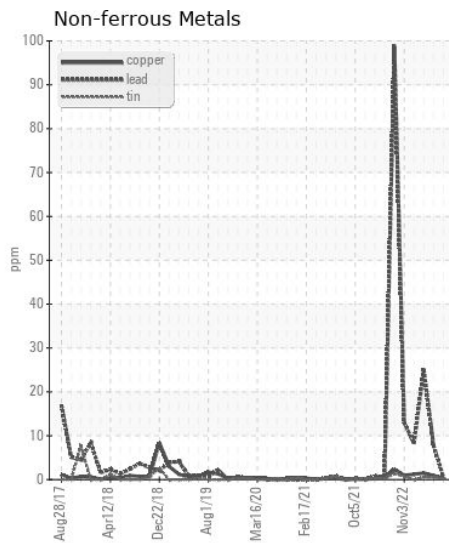
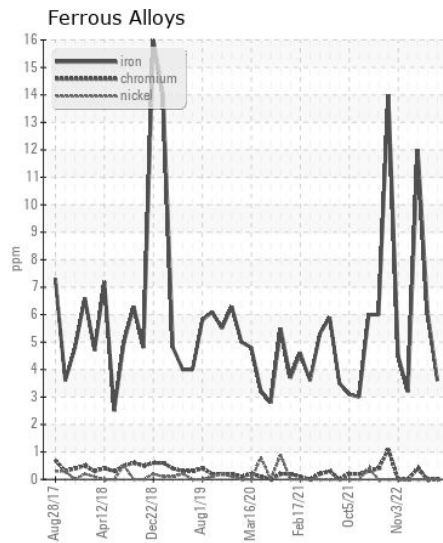
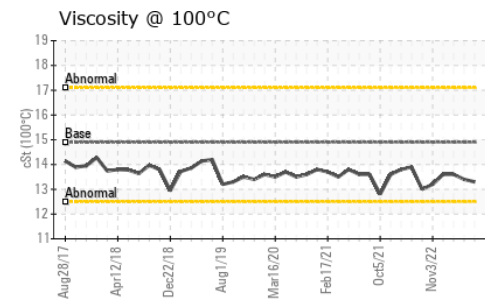
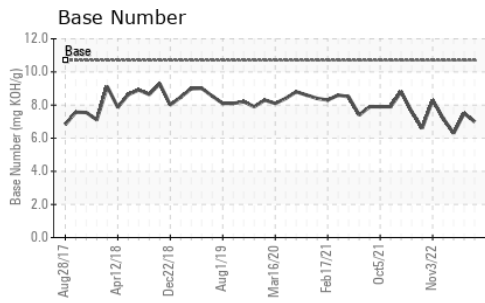
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >20 | 5 | 5 | 7 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 1 | 2 |
| Fuel | | WC Method | >4.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0.1 | 0.2 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 6.2 | 8.6 | 8.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.5 | 24.0 | 23.8 |
| 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

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | >75 | 4 | 4 | 8 |
| Boron | ppm | ASTM D5185m | | 422 | 267 | 297 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 94 | 96 | 95 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 459 | 531 | 475 |
| Calcium | ppm | ASTM D5185m | | 1601 | 1708 | 1574 |
| Phosphorus | ppm | ASTM D5185m | 760 | 962 | 731 | 835 |
| Zinc | ppm | ASTM D5185m | 830 | 1189 | 931 | 1070 |
| Sulfur | ppm | ASTM D5185m | 2770 | 3728 | 3081 | 2874 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.6 | 19.3 | 20.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.7 | 7.0 | 7.5 | 6.3 |
| Visc @ 100°C | cSt | ASTM D445 | 14.9 | 13.3 | 13.4 | 13.6 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05934668
Lab Number : 05934668
Unique Number : 10619939
Test Package : MAR 2
Received : 25 Aug 2023
Tested : 28 Aug 2023
Diagnosed : 28 Aug 2023 - Don Baldrige

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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)