



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

Machine Id
254000-1100
 Component
Gasoline Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (6 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | GFL0096263 | GFL0104677 | GFL0104691 |
| Sample Date | | Client Info | | 21 Jun 2024 | 13 Jun 2024 | 05 Jun 2024 |
| Machine Age | mls | Client Info | | 210090 | 209371 | 208484 |
| Oil Age | mls | Client Info | | 202509 | 202509 | 202509 |
| Filter Age | mls | Client Info | | 202509 | 202509 | 202509 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >150 | 42 | 32 | 31 |
| Chromium | ppm | ASTM D5185m | >20 | 1 | 1 | 1 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | | 13 | 11 | 11 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >40 | 7 | 5 | 4 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >155 | 27 | 21 | 21 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

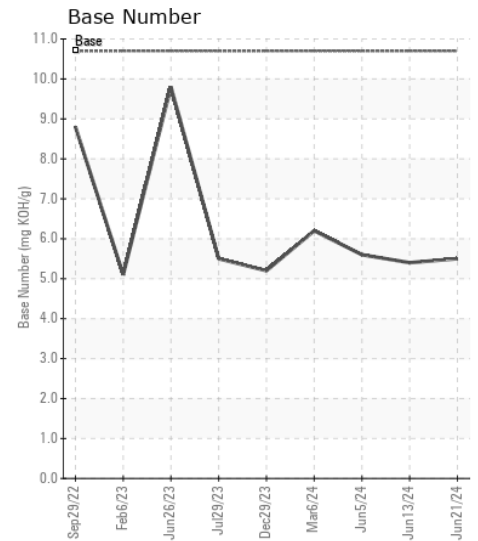
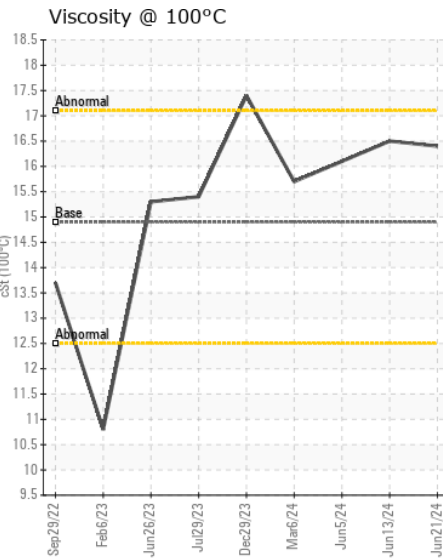
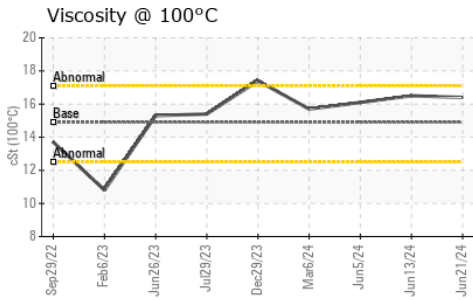
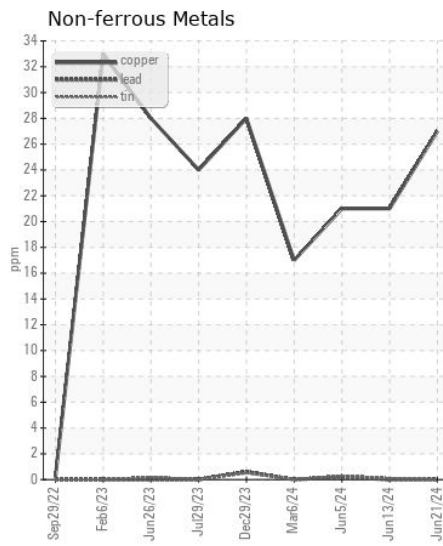
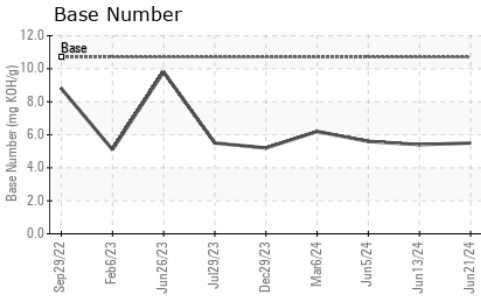
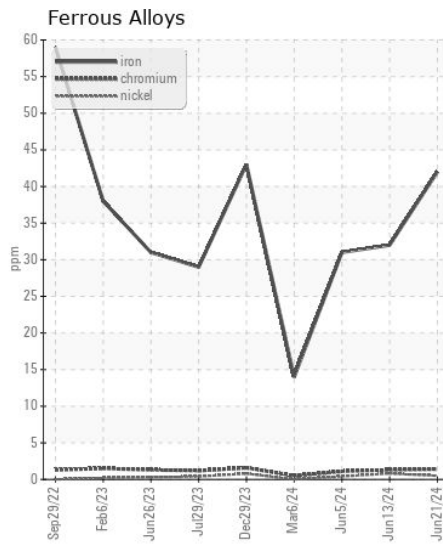
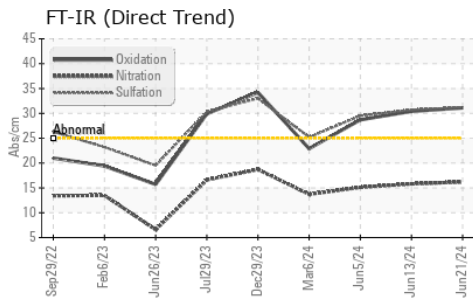
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >30 | 9 | 8 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 5 | 4 | 4 |
| Fuel | | WC Method | >4.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0.1 | 0.1 | 0.1 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 16.2 | 15.8 | 15.1 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 31.2 | 30.7 | 29.5 |
| 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 | >0.2 | 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 | >400 | 5 | 4 | 2 |
| Boron | ppm | ASTM D5185m | | 69 | 63 | 74 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 65 | 52 | 55 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 802 | 635 | 622 |
| Calcium | ppm | ASTM D5185m | | 1792 | 1432 | 1419 |
| Phosphorus | ppm | ASTM D5185m | 760 | 839 | 748 | 693 |
| Zinc | ppm | ASTM D5185m | 830 | 1097 | 855 | 857 |
| Sulfur | ppm | ASTM D5185m | 2770 | 3808 | 2757 | 2979 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 31.1 | 30.4 | 28.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.7 | 5.5 | 5.4 | 5.6 |
| Visc @ 100°C | cSt | ASTM D445 | 14.9 | 16.4 | 16.5 | 16.1 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0096263
Lab Number : 06221062
Unique Number : 11099259
Test Package : FLEET
Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Don Baldrige

GFL Environmental - 624 - Elmira Hauling
 10164 M-32
 Elmira, MI
 US 49730

Contact: ANDY GROBASKI
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T: (989)370-2941

F:

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)