



OIL ANALYSIS REPORT

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

Machine Id
3111
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0863241 | WC0863255 | WC0863319 |
| Sample Date | | Client Info | | 26 Jan 2024 | 23 Dec 2023 | 11 Nov 2023 |
| Machine Age | mls | Client Info | | 418771 | 406479 | 390440 |
| Oil Age | mls | Client Info | | 28331 | 389429 | 348702 |
| Filter Age | mls | Client Info | | 28331 | 17050 | 41738 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Changed |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 7 | 7 | 20 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 6 | 4 | 8 |
| Lead | ppm | ASTM D5185m | >40 | <1 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >330 | 2 | <1 | 3 |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

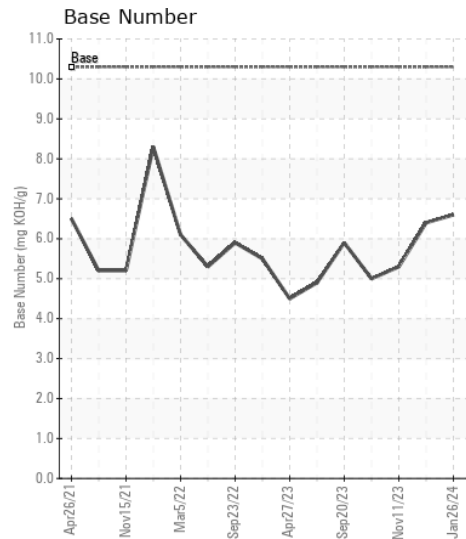
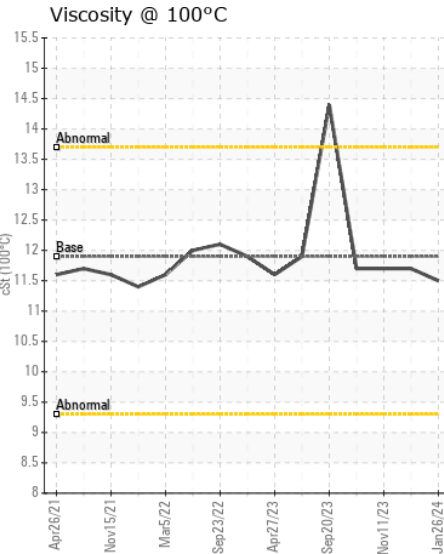
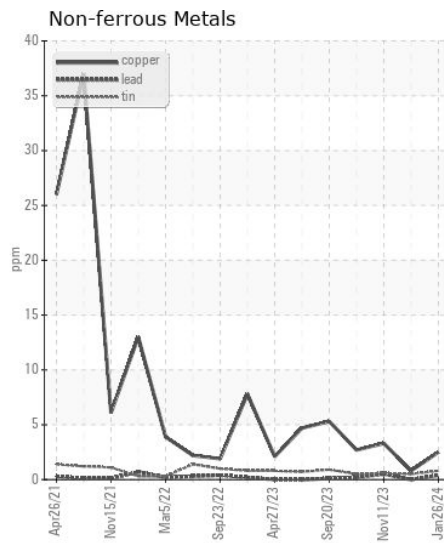
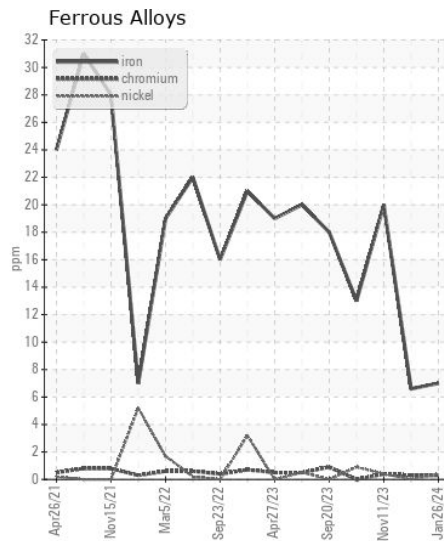
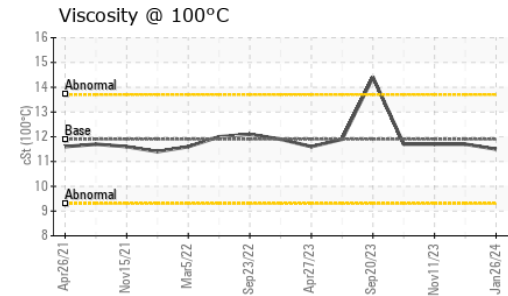
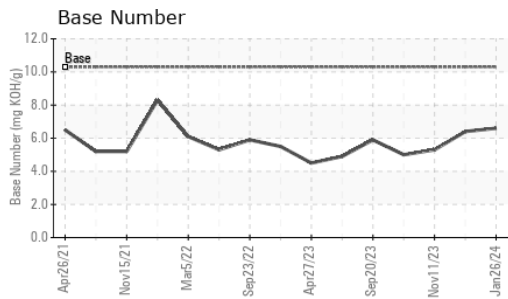
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 7 | 6 | 11 |
| Potassium | ppm | ASTM D5185m | >20 | 9 | 7 | 15 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.3 | 0.3 | 0.5 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.3 | 9.3 | 10.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.7 | 20.4 | 25.2 |
| 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 | | 18 | 13 | 35 |
| Boron | ppm | ASTM D5185m | | 37 | 47 | 23 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 9 |
| Molybdenum | ppm | ASTM D5185m | | 7 | 3 | 7 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 709 | 817 | 802 |
| Calcium | ppm | ASTM D5185m | 2900 | 1299 | 1427 | 1471 |
| Phosphorus | ppm | ASTM D5185m | 1100 | 720 | 819 | 814 |
| Zinc | ppm | ASTM D5185m | 1200 | 779 | 926 | 899 |
| Sulfur | ppm | ASTM D5185m | 4000 | 2811 | 3292 | 3310 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 15.3 | 15.5 | 20.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.3 | 6.6 | 6.4 | 5.3 |
| Visc @ 100°C | cSt | ASTM D445 | 11.9 | 11.5 | 11.7 | 11.7 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0863241 **Received** : 01 Feb 2024
Lab Number : 06077421 **Diagnosed** : 02 Feb 2024
Unique Number : 10859512 **Diagnostician** : Wes Davis
Test Package : FLEET

LTI/MILKY WAY - SUNNYSIDE
 333 MIDVALE RD
 SUNNYSIDE, WA
 US 98944
 Contact: JERRY CRISP
 jcrisp@ltii.lynden.com
 T: (509)839-5844
 F: (509)839-6556

Certificate L2367
 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)