



PacLease

OIL ANALYSIS REPORT

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

Machine Id
857-4687

Component
Diesel Engine

Fluid
CHEVRON DELO 400 SAE 10W30 (--- GAL)

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 | | RPL0014592 | RPL0010381 | RPL0010612 |
| Sample Date | | Client Info | | 28 Nov 2023 | 29 Jun 2023 | 16 Mar 2023 |
| Machine Age | mls | Client Info | | 15553 | 10518 | 8573 |
| Oil Age | mls | Client Info | | 0 | 0 | 0 |
| Filter Age | mls | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

Metal levels are typical for a new component breaking in.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 16 | 8 | 6 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 16 | 8 | 5 |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >330 | 389 | 120 | 46 |
| Tin | ppm | ASTM D5185m | >15 | 0 | <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

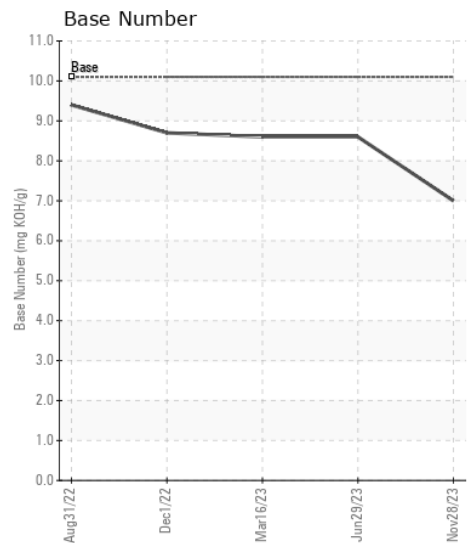
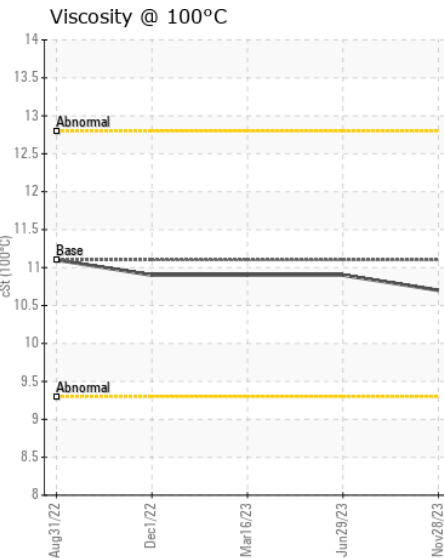
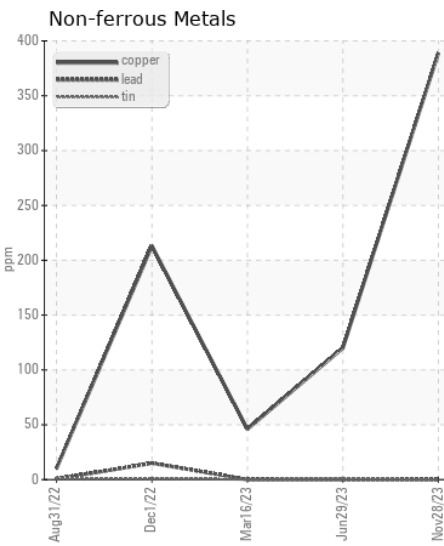
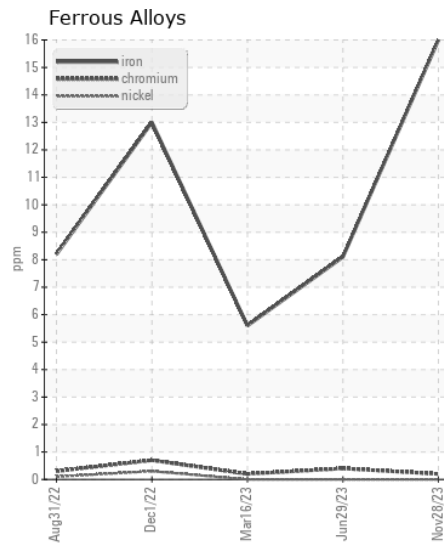
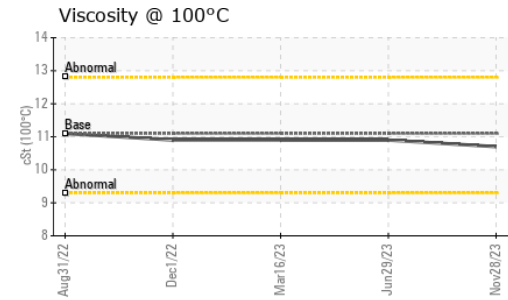
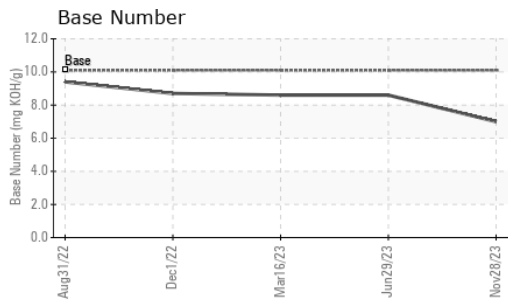
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 9 | 6 | 5 |
| Potassium | ppm | ASTM D5185m | >20 | 55 | 22 | 13 |
| 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 | 0.2 | 0.1 | 0.1 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.4 | 8.3 | 6.8 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 18.9 | 18.2 | 17.6 |
| 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 | | 2 | 3 | 2 |
| Boron | ppm | ASTM D5185m | | 72 | 102 | 106 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 9 | 11 | 10 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 693 | 738 | 647 |
| Calcium | ppm | ASTM D5185m | | 1319 | 1370 | 1330 |
| Phosphorus | ppm | ASTM D5185m | 1260 | 757 | 729 | 706 |
| Zinc | ppm | ASTM D5185m | 1400 | 801 | 856 | 806 |
| Sulfur | ppm | ASTM D5185m | | 3117 | 3708 | 2994 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.6 | 12.8 | 11.7 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.1 | 7.0 | 8.6 | 8.6 |
| Visc @ 100°C | cSt | ASTM D445 | 11.1 | 10.7 | 10.9 | 10.9 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0014592 **Received** : 10 Jan 2024
Lab Number : 06056145 **Diagnosed** : 11 Jan 2024
Unique Number : 10822094 **Diagnostician** : Wes Davis
Test Package : FLEET

RTL PACLEASE - 7001 - Houston
 6300 N. Loop East
 Houston, TX
 US 77026
 Contact: RODNEY BRIGGS
 briggs@rushenterprises.com

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)

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