



PacLease

OIL ANALYSIS REPORT

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

Machine Id
857-4194

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | RPL0013979 | RPL0011005 | RPL0010430 |
| Sample Date | | Client Info | | 28 Dec 2023 | 24 Aug 2023 | 02 May 2023 |
| Machine Age | hrs | Client Info | | 13687 | 352907 | 334435 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | Not Changd | Not Changd |
| Filter Changed | | Client Info | | N/A | 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 | 17 | 50 | 21 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 3 | 1 |
| Lead | ppm | ASTM D5185m | >40 | 0 | 1 | 0 |
| Copper | ppm | ASTM D5185m | >330 | 5 | 6 | 3 |
| Tin | ppm | ASTM D5185m | >15 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

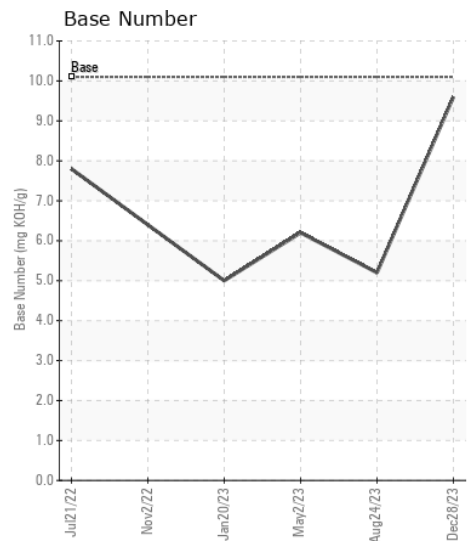
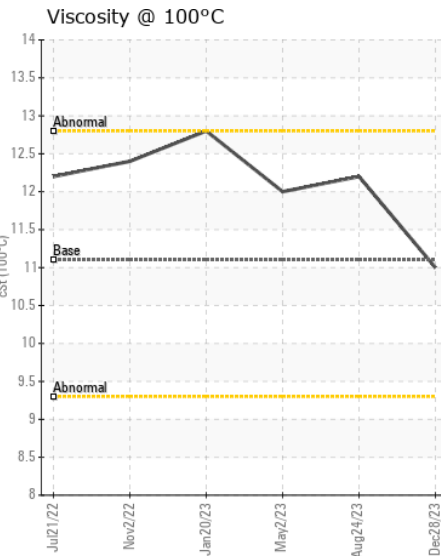
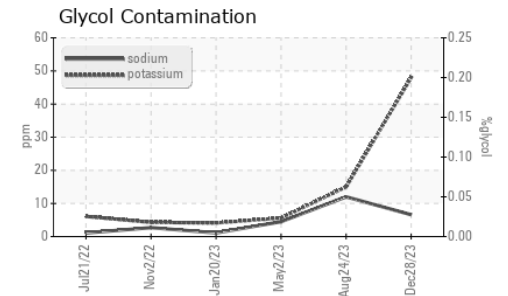
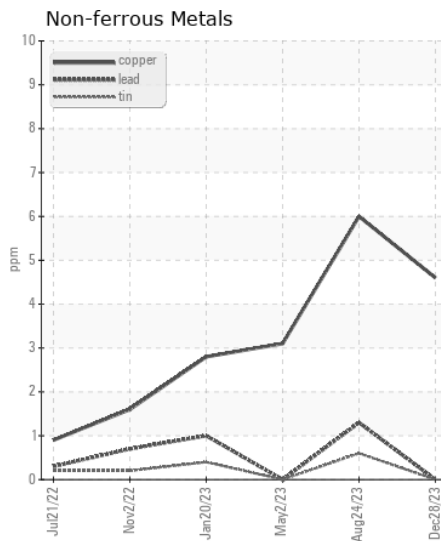
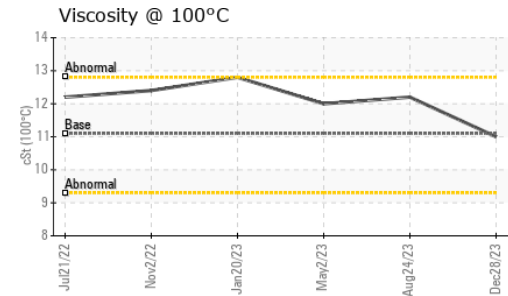
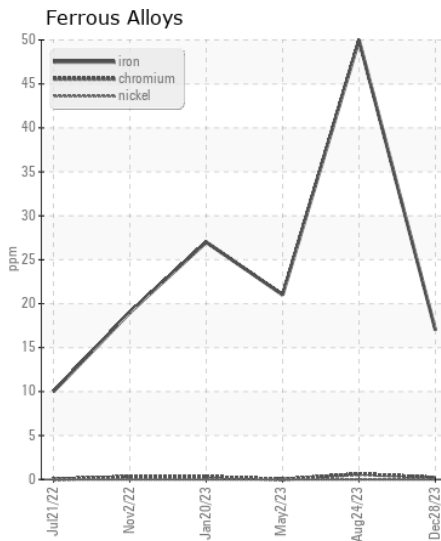
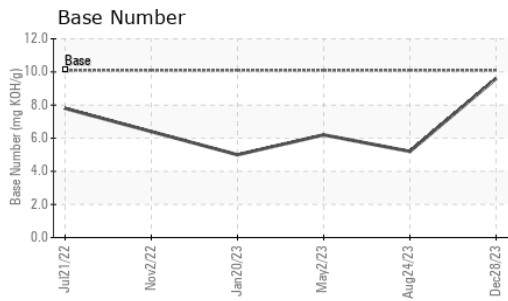
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 10 | 8 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 48 | 15 | 6 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | % | *ASTM D2982 | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.2 | 0.8 | 0.5 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 6.2 | 11.8 | 9.9 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.7 | 25.9 | 22.6 |
| 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 | | 7 | 12 | 4 |
| Boron | ppm | ASTM D5185m | | 86 | 15 | 26 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 56 | 15 | 12 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 531 | 665 | 637 |
| Calcium | ppm | ASTM D5185m | | 1692 | 1372 | 1339 |
| Phosphorus | ppm | ASTM D5185m | 1260 | 767 | 679 | 653 |
| Zinc | ppm | ASTM D5185m | 1400 | 917 | 851 | 759 |
| Sulfur | ppm | ASTM D5185m | | 2458 | 2712 | 3087 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.8 | 21.9 | 17.9 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.1 | 9.6 | 5.2 | 6.2 |
| Visc @ 100°C | cSt | ASTM D445 | 11.1 | 11.0 | 12.2 | 12.0 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0013979 **Received** : 10 Jan 2024
Lab Number : 06056261 **Diagnosed** : 11 Jan 2024
Unique Number : 10822210 **Diagnostician** : Angela Borella
Test Package : FLEET (Additional Tests: Glycol)

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

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)