



# OIL ANALYSIS REPORT

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

Machine Id  
**857-5263**  
 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 |           | RPL0014560  | ---      | ---      |
| Sample Date    |     | Client Info |           | 25 Mar 2024 | ---      | ---      |
| Machine Age    | hrs | Client Info |           | 499         | ---      | ---      |
| Oil Age        | hrs | Client Info |           | 0           | ---      | ---      |
| Filter Age     | hrs | Client Info |           | 0           | ---      | ---      |
| Oil Changed    |     | Client Info |           | Not Chngd   | ---      | ---      |
| Filter Changed |     | Client Info |           | Not Chngd   | ---      | ---      |
| Sample Status  |     |             |           | NORMAL      | ---      | ---      |

## WEAR

Metal levels are typical for a new component breaking in.

|              |        |             |      |      |     |     |
|--------------|--------|-------------|------|------|-----|-----|
| Iron         | ppm    | ASTM D5185m | >100 | 39   | --- | --- |
| Chromium     | ppm    | ASTM D5185m | >20  | <1   | --- | --- |
| Nickel       | ppm    | ASTM D5185m | >4   | 0    | --- | --- |
| Titanium     | ppm    | ASTM D5185m |      | 0    | --- | --- |
| Silver       | ppm    | ASTM D5185m | >3   | <1   | --- | --- |
| Aluminum     | ppm    | ASTM D5185m | >20  | 19   | --- | --- |
| Lead         | ppm    | ASTM D5185m | >40  | 0    | --- | --- |
| Copper       | ppm    | ASTM D5185m | >330 | 11   | --- | --- |
| Tin          | ppm    | ASTM D5185m | >15  | <1   | --- | --- |
| Vanadium     | ppm    | ASTM D5185m |      | 0    | --- | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | --- | --- |

## CONTAMINATION

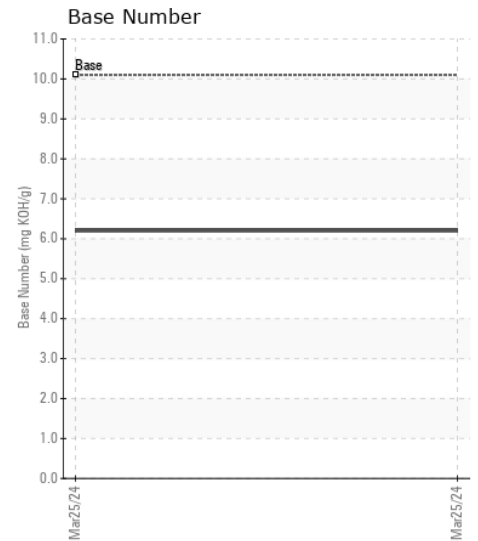
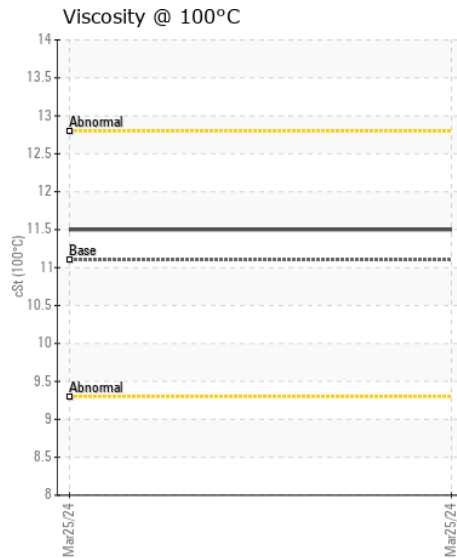
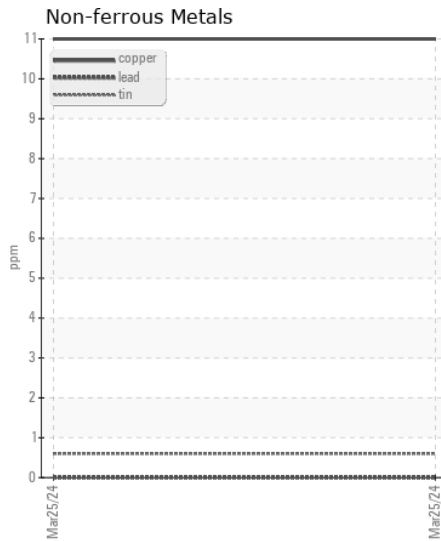
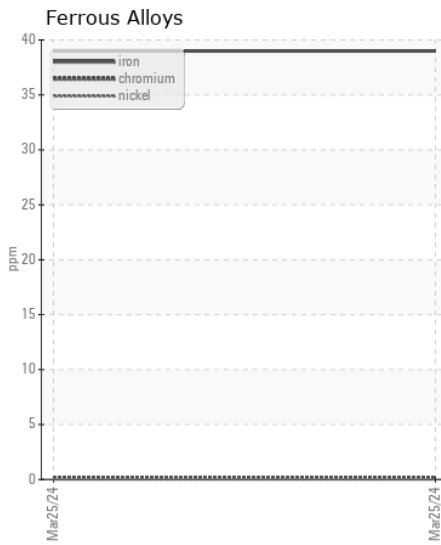
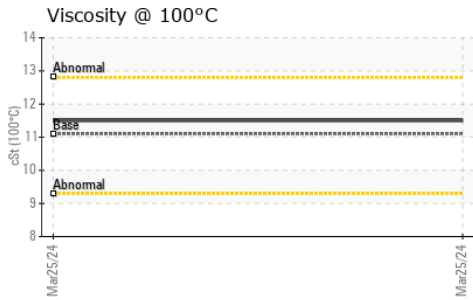
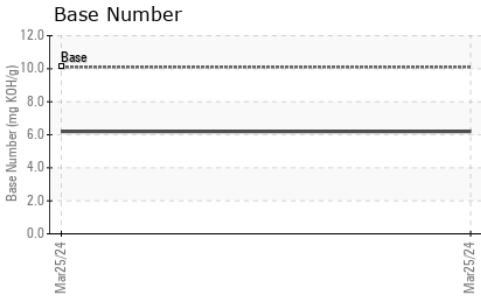
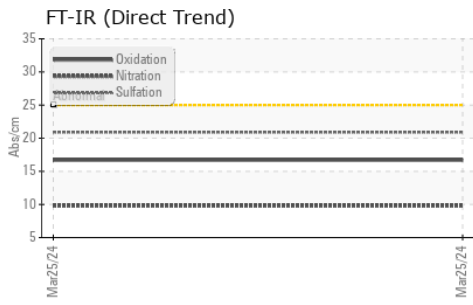
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

|                  |          |             |       |       |     |     |
|------------------|----------|-------------|-------|-------|-----|-----|
| Silicon          | ppm      | ASTM D5185m | >25   | 22    | --- | --- |
| Potassium        | ppm      | ASTM D5185m | >20   | 64    | --- | --- |
| Fuel             |          | WC Method   | >5    | <1.0  | --- | --- |
| Water            |          | WC Method   | >0.2  | NEG   | --- | --- |
| Glycol           |          | WC Method   |       | NEG   | --- | --- |
| Soot %           | %        | *ASTM D7844 | >3    | 0.1   | --- | --- |
| Nitration        | Abs/cm   | *ASTM D7624 | >20   | 9.8   | --- | --- |
| Sulfation        | Abs/.1mm | *ASTM D7415 | >30   | 20.9  | --- | --- |
| Silt             | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Debris           | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Sand/Dirt        | scalar   | *Visual     | NONE  | NONE  | --- | --- |
| Appearance       | scalar   | *Visual     | NORML | NORML | --- | --- |
| Odor             | scalar   | *Visual     | NORML | NORML | --- | --- |
| Emulsified Water | scalar   | *Visual     | >0.2  | 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 |      | 3    | --- | --- |
| Boron            | ppm      | ASTM D5185m |      | 58   | --- | --- |
| Barium           | ppm      | ASTM D5185m |      | 2    | --- | --- |
| Molybdenum       | ppm      | ASTM D5185m |      | <1   | --- | --- |
| Manganese        | ppm      | ASTM D5185m |      | 2    | --- | --- |
| Magnesium        | ppm      | ASTM D5185m |      | 822  | --- | --- |
| Calcium          | ppm      | ASTM D5185m |      | 1409 | --- | --- |
| Phosphorus       | ppm      | ASTM D5185m | 1260 | 820  | --- | --- |
| Zinc             | ppm      | ASTM D5185m | 1400 | 889  | --- | --- |
| Sulfur           | ppm      | ASTM D5185m |      | 3680 | --- | --- |
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25  | 16.7 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896  | 10.1 | 6.2  | --- | --- |
| Visc @ 100°C     | cSt      | ASTM D445   | 11.1 | 11.5 | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0014560  
**Lab Number** : 06149991  
**Unique Number** : 10980069  
**Test Package** : FLEET

**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Wes Davis

**RTL PACLEASE - 7001 - Houston**  
 6300 N. Loop East  
 Houston, TX  
 US 77026

Contact: RODNEY BRIGGS  
 briggsr@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)

T:  
F: