



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**857-4038**  
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		<b>RPL0014648</b>	RPL0011009	RPL0010591
Sample Date		Client Info		<b>10 Nov 2023</b>	23 Aug 2023	21 Mar 2023
Machine Age	hrs	Client Info		<b>7216</b>	6658	144862
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>78</b>	45	25
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>15</b>	5	6
Lead	ppm	ASTM D5185m	>40	<b>11</b>	2	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

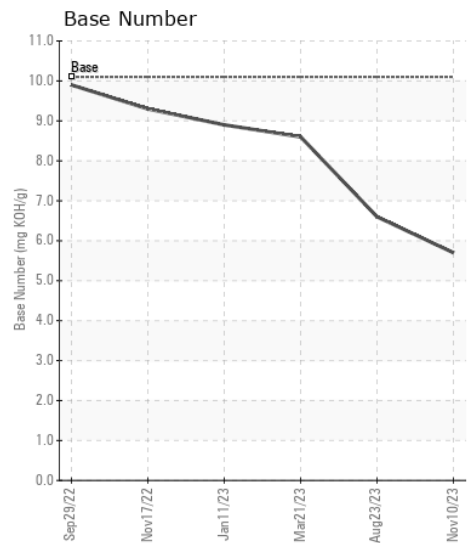
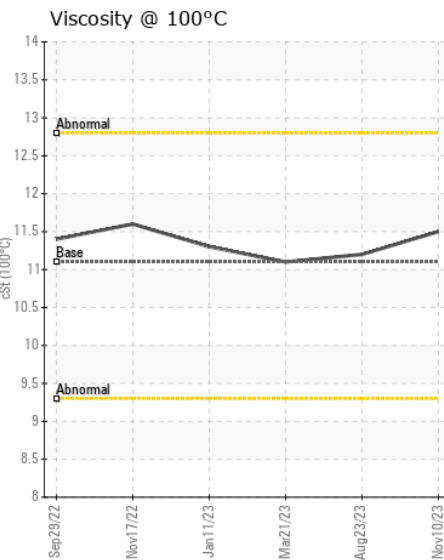
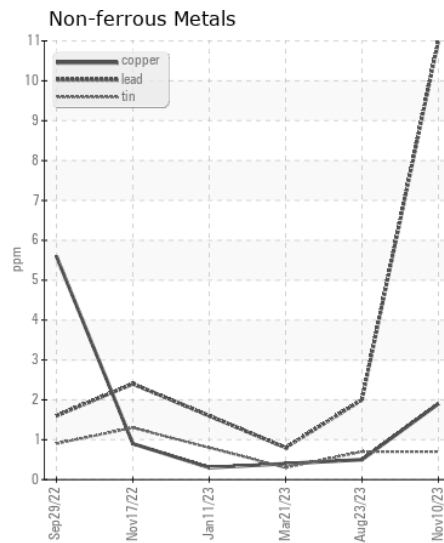
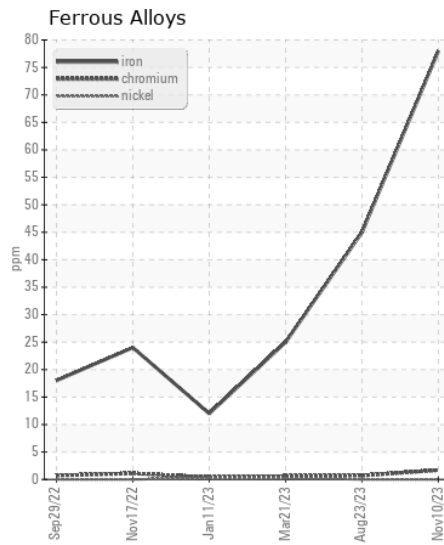
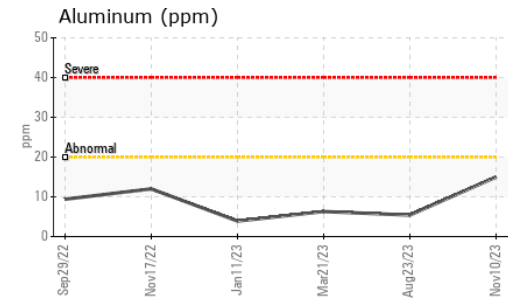
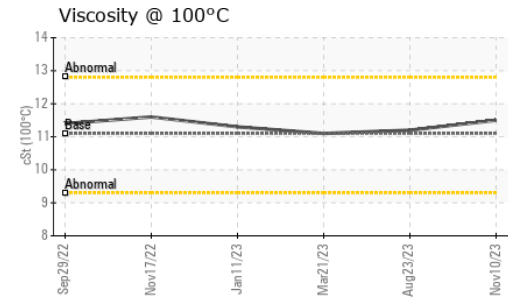
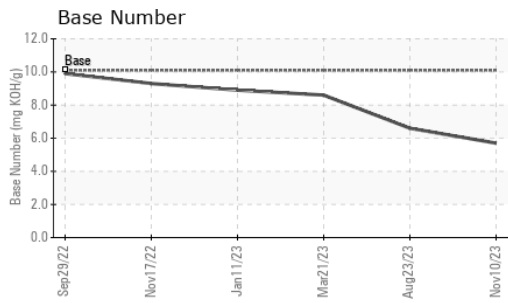
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>40</b>	24	19
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.4</b>	10.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.0</b>	20.7	18.4
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>5</b>	6	4
Boron	ppm	ASTM D5185m		<b>28</b>	43	89
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>16</b>	16	16
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>678</b>	744	678
Calcium	ppm	ASTM D5185m		<b>1591</b>	1594	1454
Phosphorus	ppm	ASTM D5185m	1260	<b>769</b>	752	746
Zinc	ppm	ASTM D5185m	1400	<b>944</b>	895	873
Sulfur	ppm	ASTM D5185m		<b>2937</b>	3676	2964
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.4</b>	17.0	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>5.7</b>	6.6	8.6
Visc @ 100°C	cSt	ASTM D445	11.1	<b>11.5</b>	11.2	11.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0014648 **Received** : 10 Jan 2024  
**Lab Number** : 06056157 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10822106 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

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