



# OIL ANALYSIS REPORT

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

Machine Id  
**857-4870**  
 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>RPL0014512</b>	RPL0014061	RPL0010314
Sample Date		Client Info		<b>28 Mar 2024</b>	06 Dec 2023	07 Aug 2023
Machine Age	hrs	Client Info		<b>1852</b>	1125	6530
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>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>39</b>	17	43
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>31</b>	18	4
Lead	ppm	ASTM D5185m	>40	<b>4</b>	0	3
Copper	ppm	ASTM D5185m	>330	<b>7</b>	5	36
Tin	ppm	ASTM D5185m	>15	<b>3</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
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.

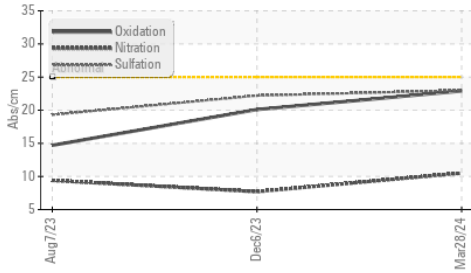
Silicon	ppm	ASTM D5185m	>25	<b>17</b>	10	49
Potassium	ppm	ASTM D5185m	>20	<b>113</b>	67	37
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	7.7	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	22.2	19.3
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

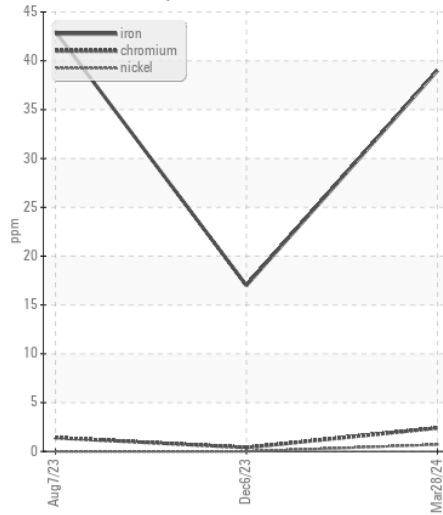
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	<1	7
Boron	ppm	ASTM D5185m		<b>30</b>	45	69
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>44</b>	42	16
Manganese	ppm	ASTM D5185m		<b>2</b>	0	6
Magnesium	ppm	ASTM D5185m		<b>521</b>	510	747
Calcium	ppm	ASTM D5185m		<b>1644</b>	1603	1423
Phosphorus	ppm	ASTM D5185m	1260	<b>777</b>	749	719
Zinc	ppm	ASTM D5185m	1400	<b>922</b>	869	875
Sulfur	ppm	ASTM D5185m		<b>2622</b>	2660	3453
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.9</b>	20.1	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>7.7</b>	9.3	6.9
Visc @ 100°C	cSt	ASTM D445	11.1	<b>10.7</b>	10.7	11.2

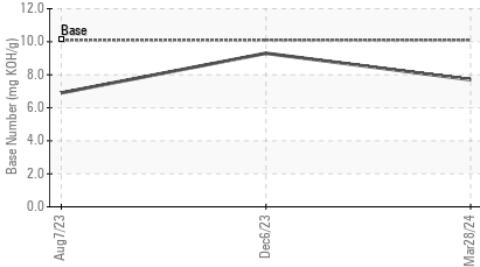
**FT-IR (Direct Trend)**



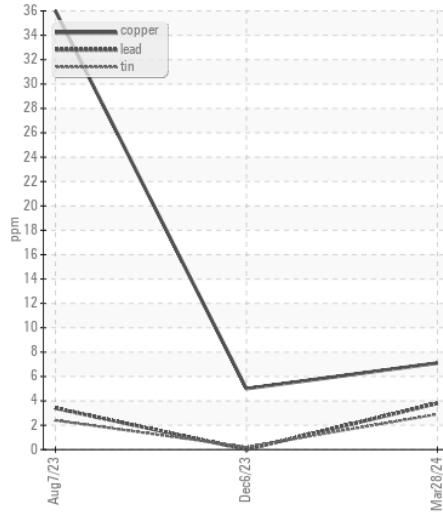
**Ferrous Alloys**



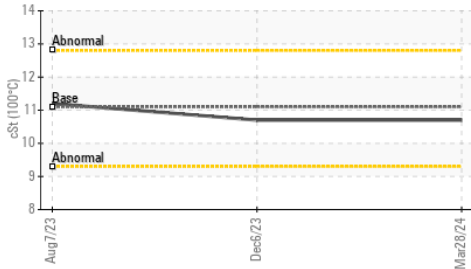
**Base Number**



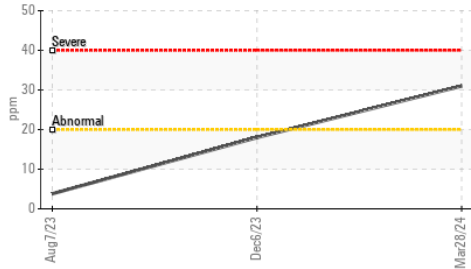
**Non-ferrous Metals**



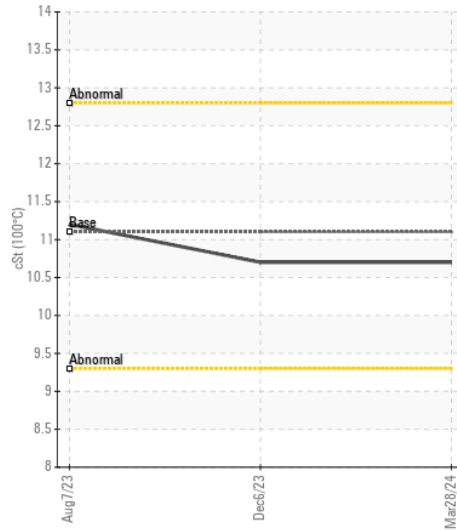
**Viscosity @ 100°C**



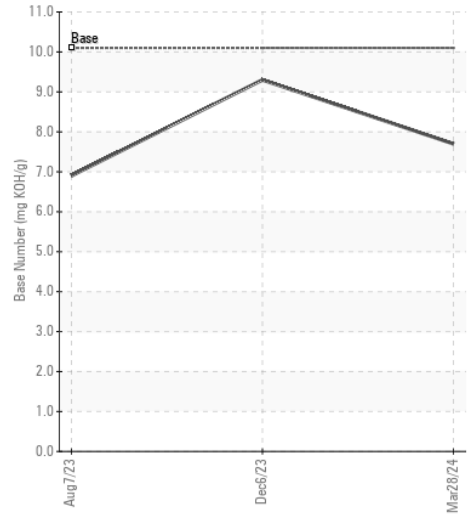
**Aluminum (ppm)**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0014512 **Received** : 16 Apr 2024  
**Lab Number** : 06149873 **Tested** : 17 Apr 2024  
**Unique Number** : 10979951 **Diagnosed** : 17 Apr 2024 - 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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F: