



# OIL ANALYSIS REPORT

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

Machine Id  
**9571380**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (44 QTS)**

## 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>RPL0019648</b>	RPL0015240	RPL0007876
Sample Date		Client Info		<b>20 May 2024</b>	19 Dec 2023	06 Jul 2023
Machine Age		Client Info		<b>241048</b>	199958	187678
Oil Age		Client Info		<b>41090</b>	25000	169284
Filter Age		Client Info		<b>0</b>	25000	169284
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	<b>39</b>	12	22
Chromium	ppm	ASTM D5185m	>5	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	4	4
Lead	ppm	ASTM D5185m	>150	<b>8</b>	2	4
Copper	ppm	ASTM D5185m	>90	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185m	>5	<b>1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

There is no indication of any contamination in the oil.

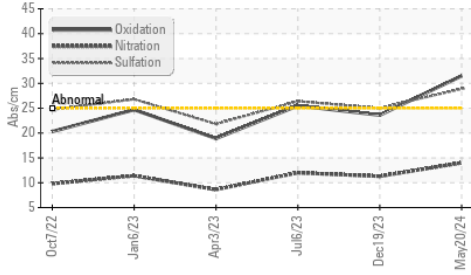
Silicon	ppm	ASTM D5185m	>35	<b>9</b>	6	9
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	9	6
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	<b>0.5</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.0</b>	11.3	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>28.9</b>	25.0	26.4
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

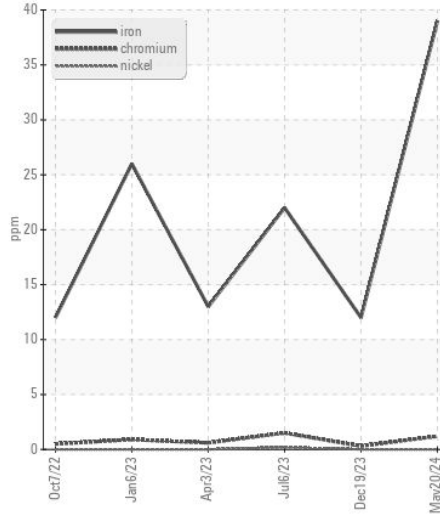
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	1	2
Boron	ppm	ASTM D5185m	151	<b>83</b>	133	109
Barium	ppm	ASTM D5185m	0.4	<b>&lt;1</b>	0	45
Molybdenum	ppm	ASTM D5185m	250	<b>109</b>	88	112
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	2
Magnesium	ppm	ASTM D5185m	0	<b>588</b>	531	604
Calcium	ppm	ASTM D5185m	2046	<b>1349</b>	992	1399
Phosphorus	ppm	ASTM D5185m	1043	<b>582</b>	431	573
Zinc	ppm	ASTM D5185m	943	<b>707</b>	543	759
Sulfur	ppm	ASTM D5185m	5012	<b>2428</b>	1665	2536
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>31.5</b>	23.6	25.5
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	<b>5.2</b>	7.2	6.0
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.0</b>	12.9	12.9

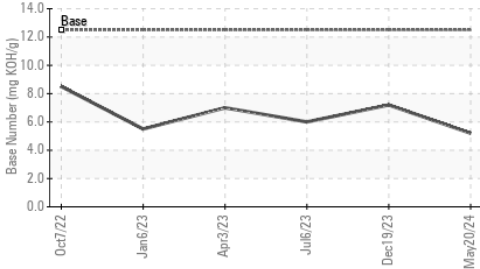
**FT-IR (Direct Trend)**



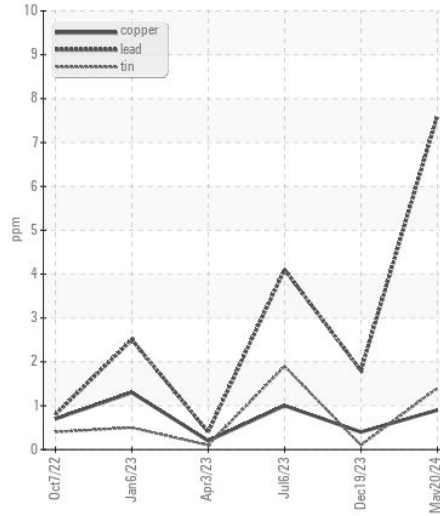
**Ferrous Alloys**



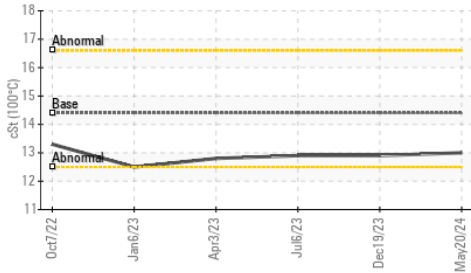
**Base Number**



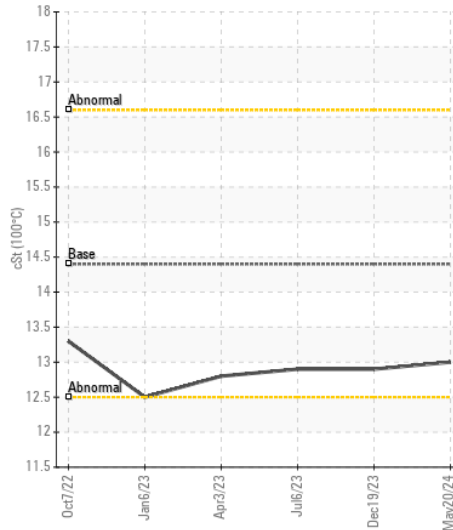
**Non-ferrous Metals**



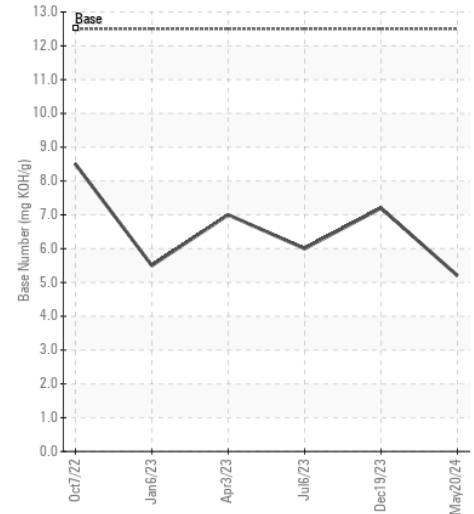
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RPL0019648  
**Lab Number** : 06193786  
**Unique Number** : 11055909  
**Test Package** : FLEET  
**Received** : 29 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 31 May 2024 - Angela Borella

**RTL PACLEASE - 7005 - Arlington**  
 1900 E Division  
 Arlington, TX  
 US 76011  
 Contact: Ricardo Ronquillo  
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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)