



# OIL ANALYSIS REPORT

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

Machine Id  
**FREIGHTLINER 12245**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (19 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0913885</b>	WC0882314	WCM1273292
Sample Date		Client Info		<b>04 Apr 2024</b>	05 Dec 2023	05 Mar 2021
Machine Age	mls	Client Info		<b>232642</b>	222833	0
Oil Age	mls	Client Info		<b>0</b>	10000	0
Filter Age	mls	Client Info		<b>0</b>	10000	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>32</b>	33	20
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>6</b>	5	5
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
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.

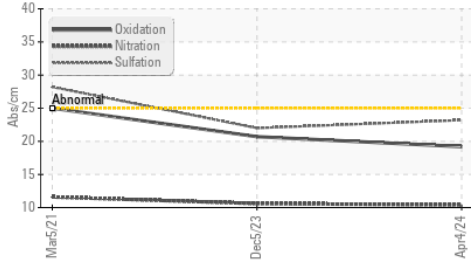
Silicon	ppm	ASTM D5185m	>20	<b>6</b>	5	3
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	4
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	10.6	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	22.0	28.2
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

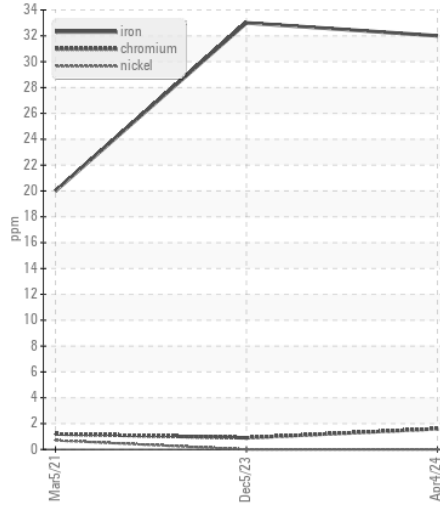
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	1	<1
Boron	ppm	ASTM D5185m	151	<b>222</b>	4	4
Barium	ppm	ASTM D5185m	0.4	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	250	<b>121</b>	68	24
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>792</b>	904	328
Calcium	ppm	ASTM D5185m	2046	<b>1829</b>	991	1885
Phosphorus	ppm	ASTM D5185m	1043	<b>896</b>	985	842
Zinc	ppm	ASTM D5185m	943	<b>1106</b>	1214	1016
Sulfur	ppm	ASTM D5185m	5012	<b>3404</b>	3153	2842
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	20.7	25
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	<b>8.6</b>	7.1	5.6
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.0</b>	12.6	12.8

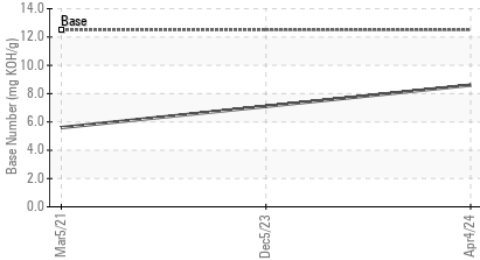
FT-IR (Direct Trend)



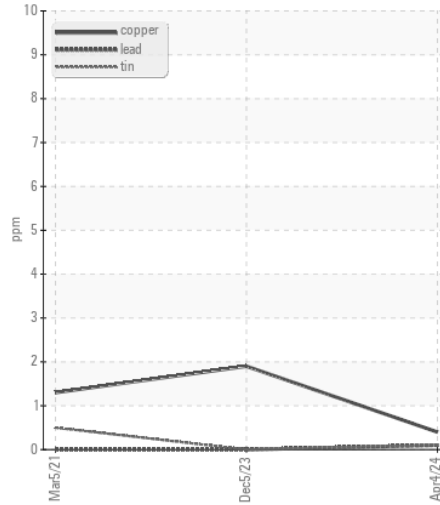
Ferrous Alloys



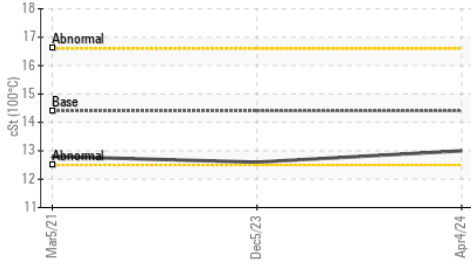
Base Number



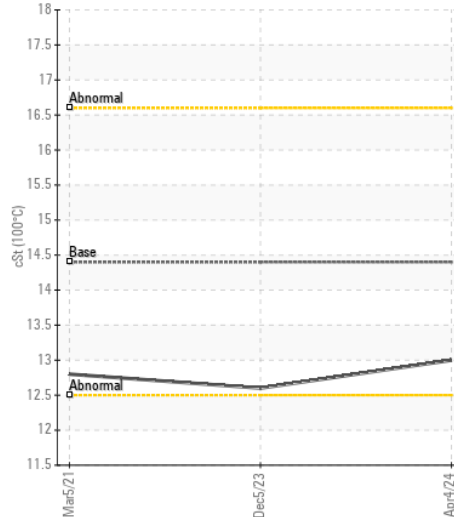
Non-ferrous Metals



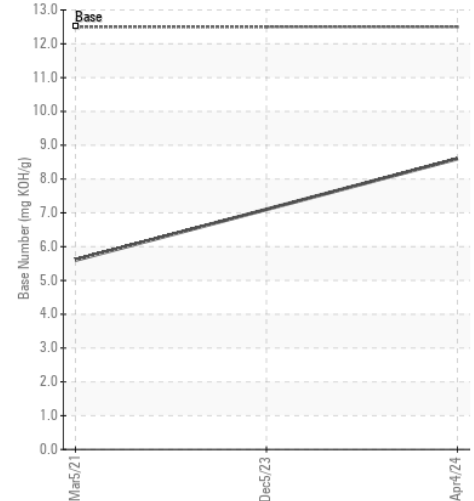
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0913885  
 Lab Number : 06193353  
 Unique Number : 11050105  
 Test Package : FLEET

Received : 28 May 2024  
 Tested : 30 May 2024  
 Diagnosed : 30 May 2024 - Wes Davis

**SALEM NATIONALEASE CORPORATION**  
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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)