



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**FREIGHTLINER 52903**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0935020</b>	WC0892044	WC0879052
Sample Date		Client Info		<b>27 May 2024</b>	07 Mar 2024	10 Dec 2023
Machine Age	kms	Client Info		<b>0</b>	631899	353185
Oil Age	kms	Client Info		<b>0</b>	63128	35050
Filter Age	kms	Client Info		<b>0</b>	63128	35050
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>65	<b>20</b>	25	22
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>35	<b>11</b>	17	12
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>180	<b>13</b>	11	12
Tin	ppm	ASTM D5185(m)	>8	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

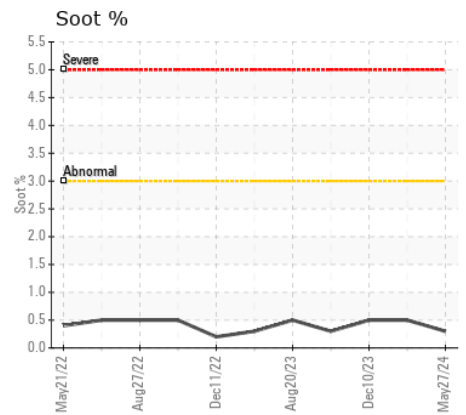
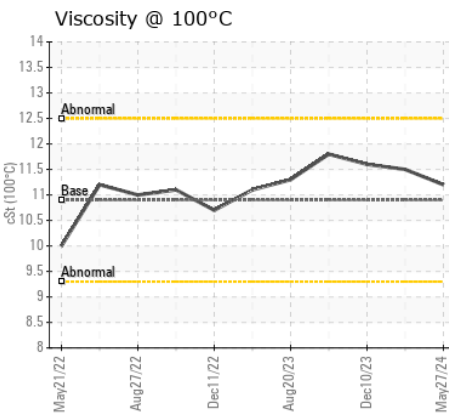
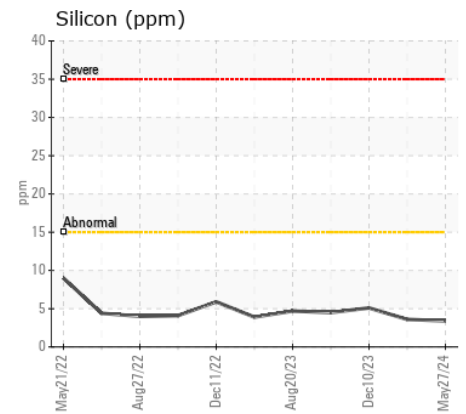
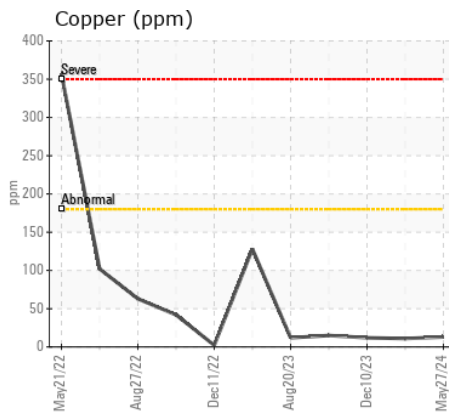
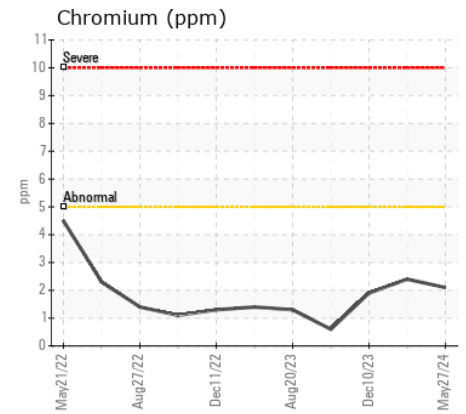
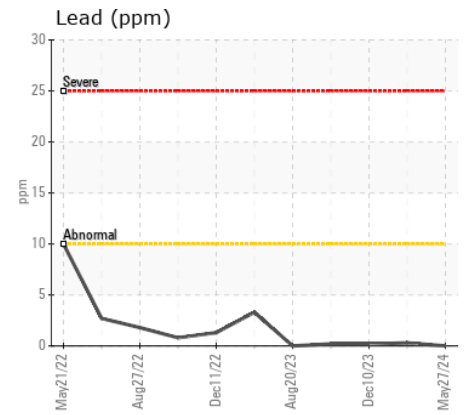
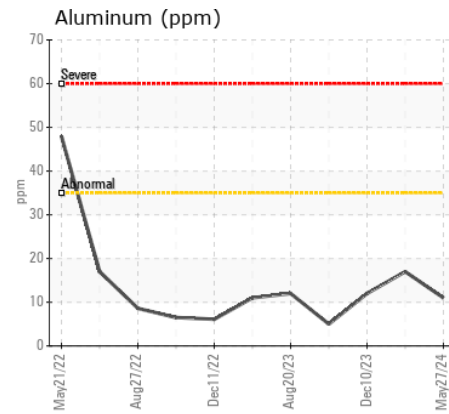
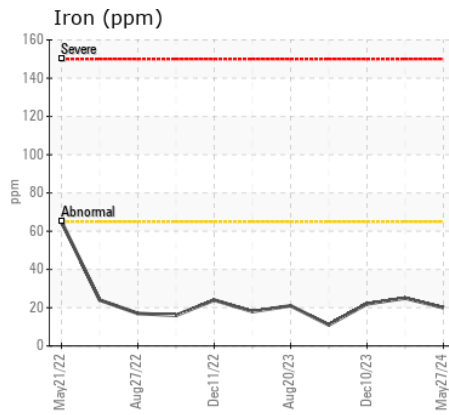
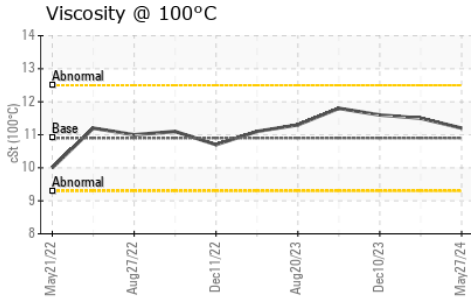
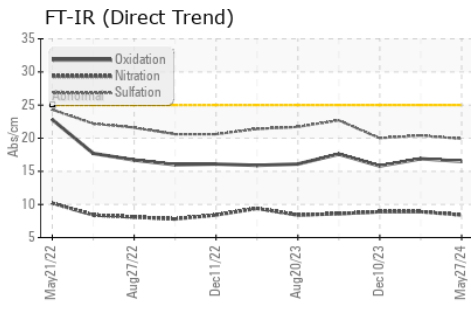
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	4	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	5	4
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*	>3	<b>0.3</b>	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.4</b>	8.9	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.9</b>	20.4	20.0
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	3
Boron	ppm	ASTM D5185(m)	250	<b>4</b>	3	3
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>62</b>	65	61
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	450	<b>987</b>	987	968
Calcium	ppm	ASTM D5185(m)	3000	<b>1089</b>	1106	1087
Phosphorus	ppm	ASTM D5185(m)	1150	<b>968</b>	966	957
Zinc	ppm	ASTM D5185(m)	1350	<b>1193</b>	1187	1182
Sulfur	ppm	ASTM D5185(m)	4250	<b>2292</b>	2497	2418
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.5</b>	16.9	15.8
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.2</b>	11.5	11.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0935020  
**Lab Number** : 02640147  
**Unique Number** : 5789309  
**Test Package** : MOB 1

**Received** : 06 Jun 2024  
**Tested** : 06 Jun 2024  
**Diagnosed** : 06 Jun 2024 - Wes Davis

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.