MOB I

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER T-39
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a components first oil change.

CONTAMINATION

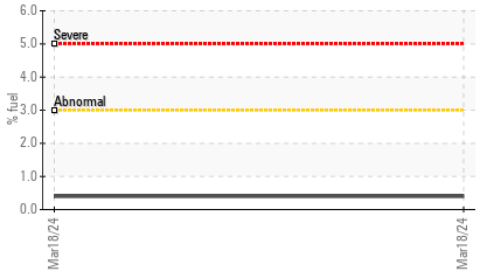
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

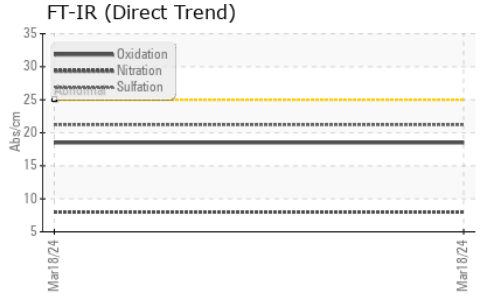
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0772784	---	---
Sample Date		Client Info		18 Mar 2024	---	---
Machine Age	kms	Client Info		18155	---	---
Oil Age	kms	Client Info		18155	---	---
Filter Age	kms	Client Info		18155	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				NORMAL	---	---
Iron	ppm	ASTM D5185(m)	>65	39	---	---
Chromium	ppm	ASTM D5185(m)	>5	<1	---	---
Nickel	ppm	ASTM D5185(m)	>3	<1	---	---
Titanium	ppm	ASTM D5185(m)	>5	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>35	6	---	---
Lead	ppm	ASTM D5185(m)	>10	5	---	---
Copper	ppm	ASTM D5185(m)	>180	234	---	---
Tin	ppm	ASTM D5185(m)	>8	2	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Silicon	ppm	ASTM D5185(m)	>15	5	---	---
Potassium	ppm	ASTM D5185(m)	>20	10	---	---
Fuel	%	ASTM D7593*	>3.0	0.4	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		6	---	---
Boron	ppm	ASTM D5185(m)	250	33	---	---
Barium	ppm	ASTM D5185(m)	10	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	100	29	---	---
Manganese	ppm	ASTM D5185(m)		3	---	---
Magnesium	ppm	ASTM D5185(m)	450	344	---	---
Calcium	ppm	ASTM D5185(m)	3000	1867	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	733	---	---
Zinc	ppm	ASTM D5185(m)	1350	886	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2085	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	10.9	---	---

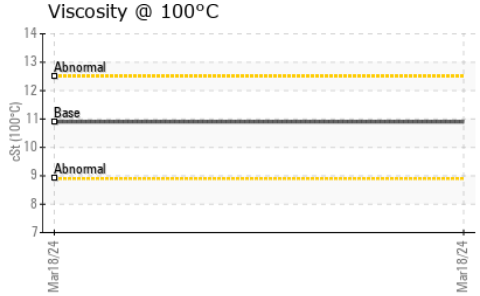
Fuel Dilution



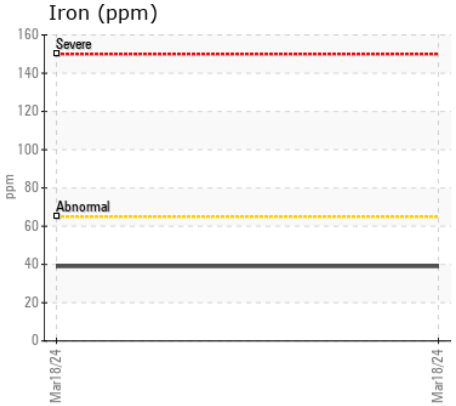
FT-IR (Direct Trend)



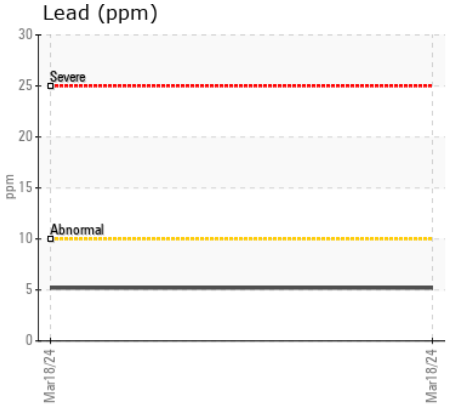
Viscosity @ 100°C



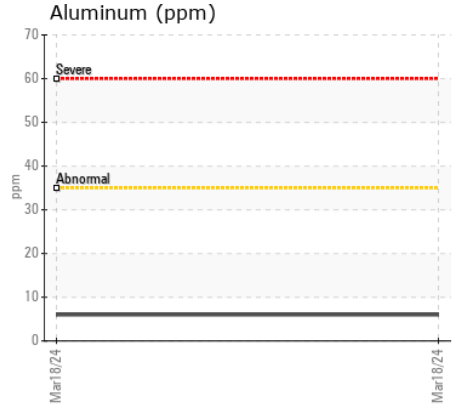
Iron (ppm)



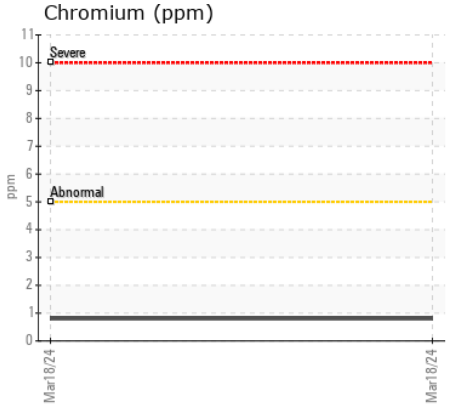
Lead (ppm)



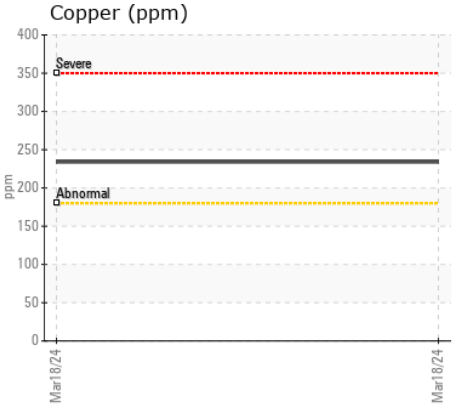
Aluminum (ppm)



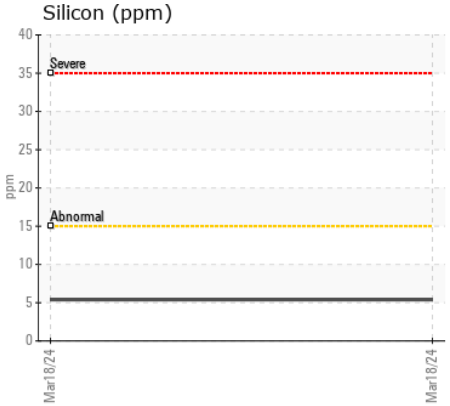
Chromium (ppm)



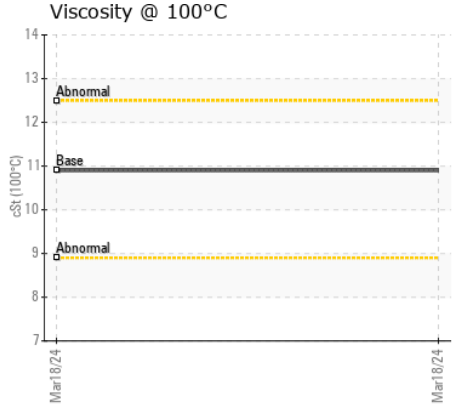
Copper (ppm)



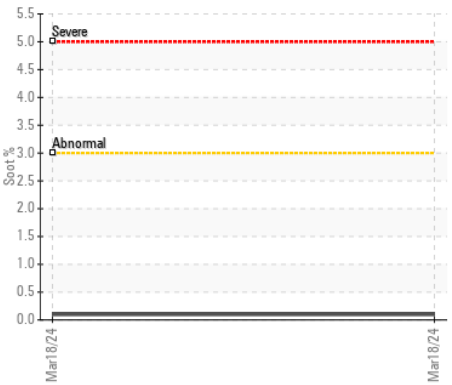
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0772784 **Received** : 17 Apr 2024
Lab Number : 02629524 **Tested** : 19 Apr 2024
Unique Number : 5762656 **Diagnosed** : 19 Apr 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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.

MIDDLESEX COUNTY ROAD DEPARTMENT
1988 GAINSBOROUGH ROAD, R.R. #41
LONDON, ON
CA N6H 5L2
Contact: PAUL MONIZ
pmoniz@middlesex.ca
T: (519)471-2020
F: (519)471-2335