MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 162
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

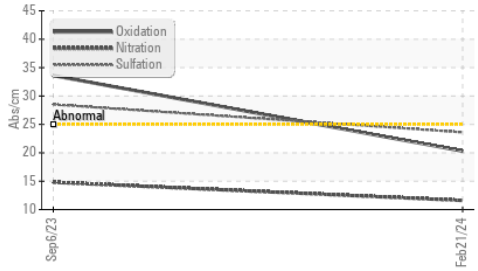
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

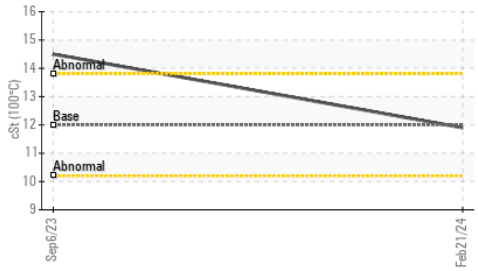
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083930	PC0075181	---
Sample Date		Client Info		21 Feb 2024	06 Sep 2023	---
Machine Age	kms	Client Info		48628	27783	---
Oil Age	kms	Client Info		20845	27783	---
Filter Age	kms	Client Info		20845	27783	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185(m)	>80	61	140	---
Chromium	ppm	ASTM D5185(m)	>5	2	5	---
Nickel	ppm	ASTM D5185(m)	>2	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>30	11	24	---
Lead	ppm	ASTM D5185(m)	>30	0	2	---
Copper	ppm	ASTM D5185(m)	>150	7	61	---
Tin	ppm	ASTM D5185(m)	>5	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185(m)	>20	6	28	---
Potassium	ppm	ASTM D5185(m)	>20	26	43	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	1	1.3	---
Nitration	Abs/cm	ASTM D7624*	>20	11.6	14.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.6	28.5	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	VLITE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)		3	6	---
Boron	ppm	ASTM D5185(m)	2	6	29	---
Barium	ppm	ASTM D5185(m)	0	<1	6	---
Molybdenum	ppm	ASTM D5185(m)	50	58	40	---
Manganese	ppm	ASTM D5185(m)	0	<1	7	---
Magnesium	ppm	ASTM D5185(m)	950	883	550	---
Calcium	ppm	ASTM D5185(m)	1050	1087	1615	---
Phosphorus	ppm	ASTM D5185(m)	995	866	734	---
Zinc	ppm	ASTM D5185(m)	1180	1120	860	---
Sulfur	ppm	ASTM D5185(m)	2600	2265	1715	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.3	33.6	---
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	80.2	112	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.9	14.5	---
Viscosity Index (VI)	Scale	ASTM D2270*	144	142	132	---

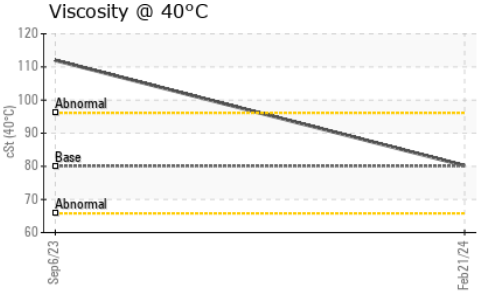
FT-IR (Direct Trend)



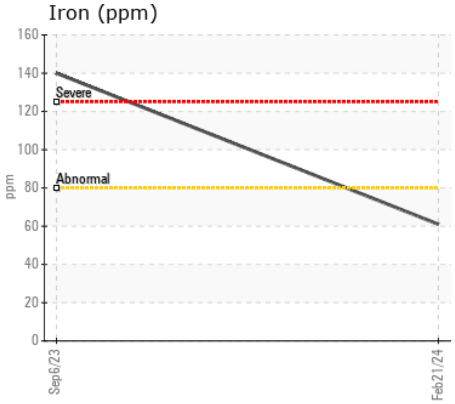
Viscosity @ 100°C



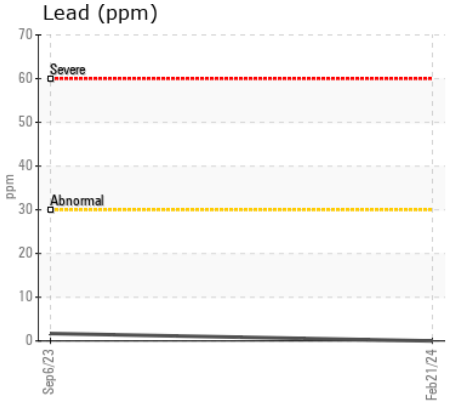
Viscosity @ 40°C



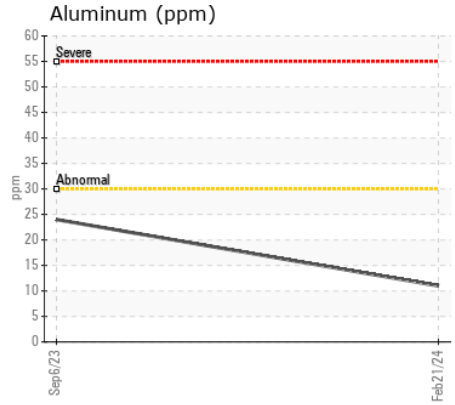
Iron (ppm)



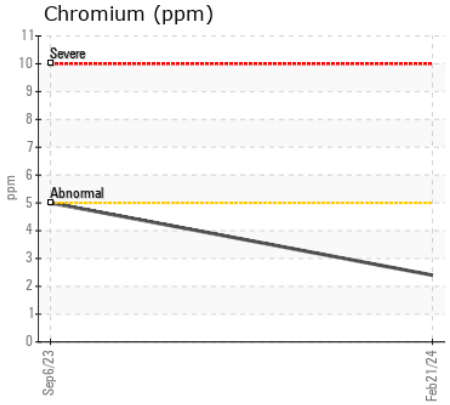
Lead (ppm)



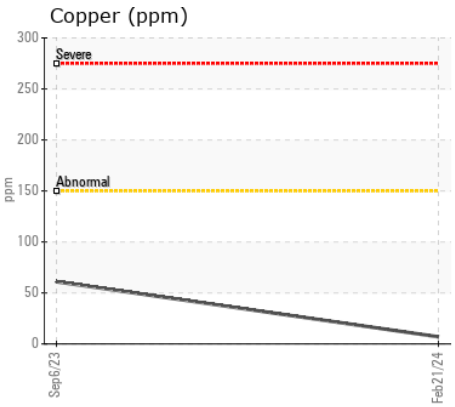
Aluminum (ppm)



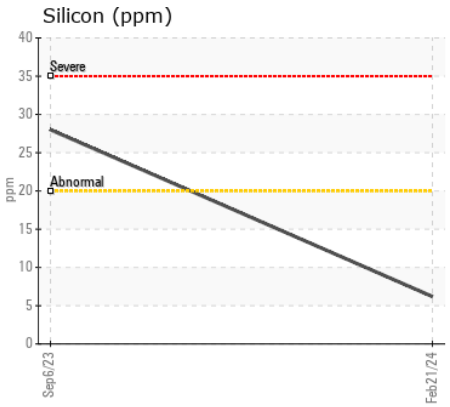
Chromium (ppm)



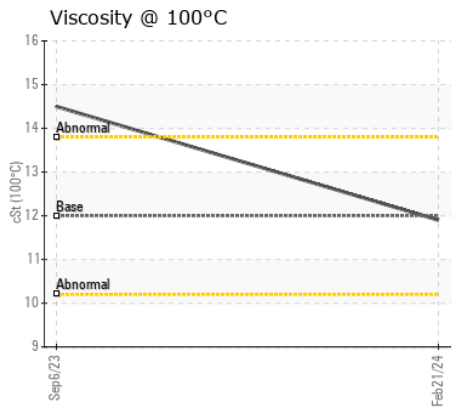
Copper (ppm)



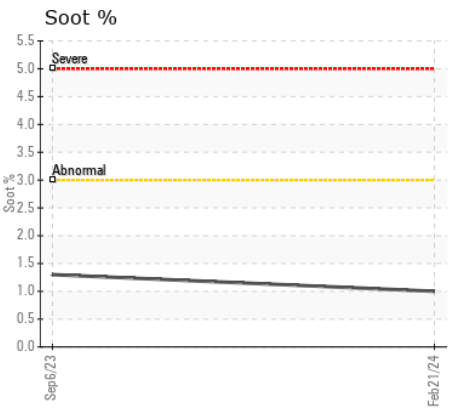
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: PC0083930	**Received**	: 05 Apr 2024
Lab Number	: 02626845	**Tested**	: 05 Apr 2024
Unique Number	: 5759977	**Diagnosed**	: 05 Apr 2024 - Wes Davis
Test Package	: MOB 1 (Additional Tests: KV40, VI, Visual)		

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.

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