



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[816556]
 Machine Id
FREIGHTLINER 188032
 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		PC0071725	---	---
Sample Date		Client Info		05 Sep 2023	---	---
Machine Age	kms	Client Info		41720	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>80	9	---	---
Chromium	ppm	ASTM D5185(m)	>5	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>30	<1	---	---
Lead	ppm	ASTM D5185(m)	>30	<1	---	---
Copper	ppm	ASTM D5185(m)	>150	1	---	---
Tin	ppm	ASTM D5185(m)	>5	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

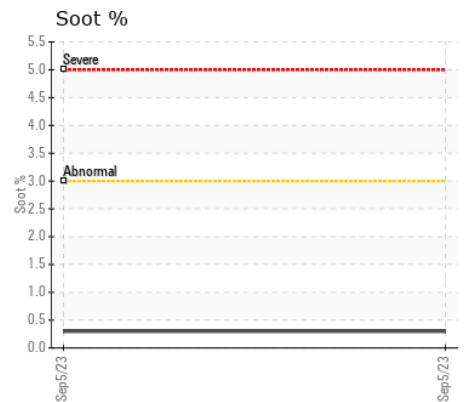
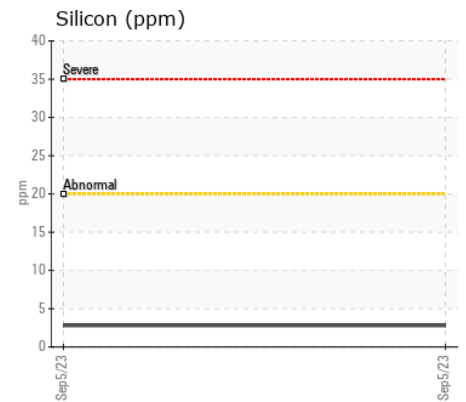
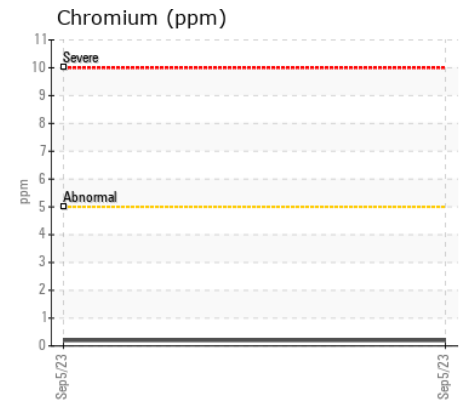
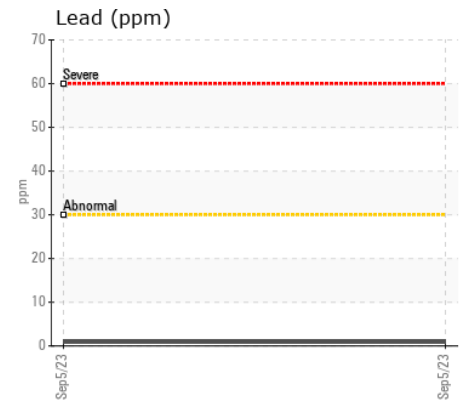
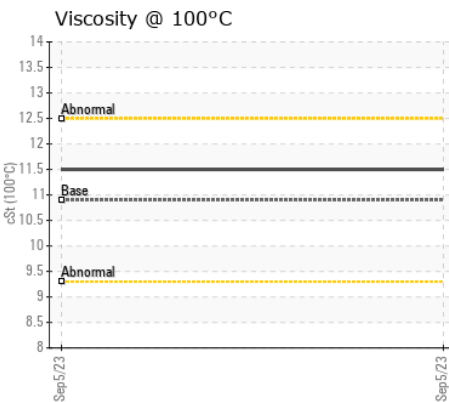
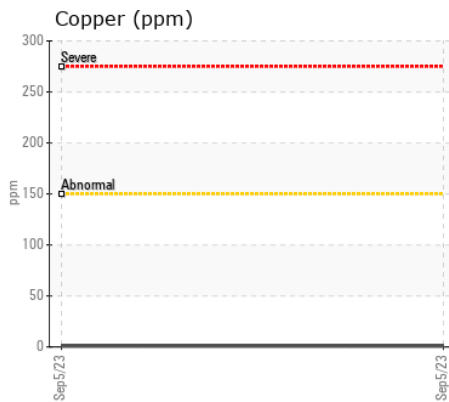
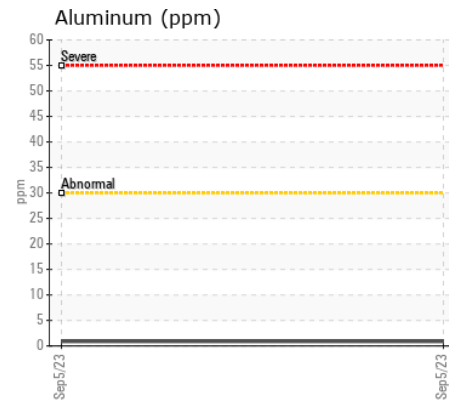
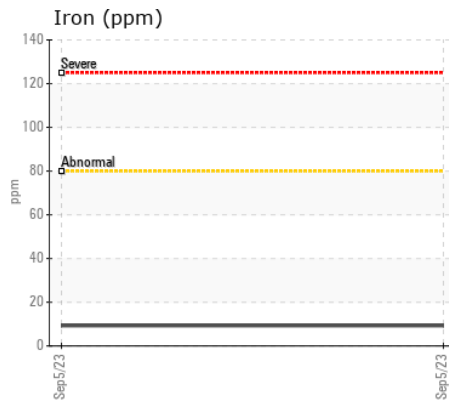
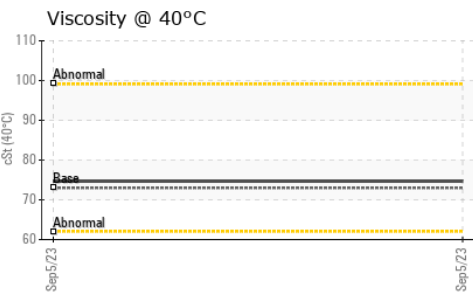
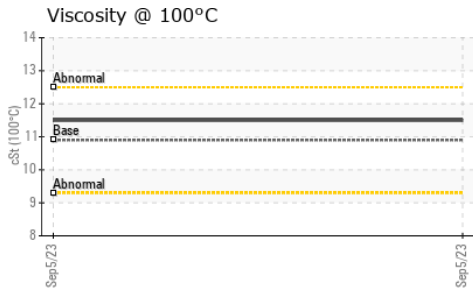
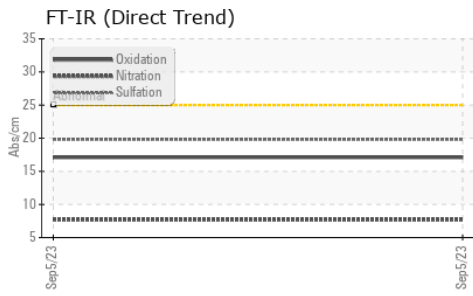
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	1	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.3	---	---
Nitration	Abs/cm	ASTM D7624*	>20	7.7	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		12	---	---
Boron	ppm	ASTM D5185(m)	250	3	---	---
Barium	ppm	ASTM D5185(m)	10	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	100	60	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	450	943	---	---
Calcium	ppm	ASTM D5185(m)	3000	1038	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	999	---	---
Zinc	ppm	ASTM D5185(m)	1350	1171	---	---
Sulfur	ppm	ASTM D5185(m)	4250	2554	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.1	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	73	74.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.5	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	138	146	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0071725 **Received** : 26 Oct 2023
Lab Number : 02592037 **Tested** : 26 Oct 2023
Unique Number : 5669116 **Diagnosed** : 26 Oct 2023 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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