



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Area
RIDEAU BULK
Machine Id
VOLVO L220F 437253
Component
Diesel Engine
Fluid
SAE 15W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP450450	---	---
Sample Date		Client Info		07 May 2024	---	---
Machine Age	hrs	Client Info		17243	---	---
Oil Age	hrs	Client Info		40	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>30	4	---	---
Chromium	ppm	ASTM D5185(m)	>2	0	---	---
Nickel	ppm	ASTM D5185(m)	>4	0	---	---
Titanium	ppm	ASTM D5185(m)		30	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>5	1	---	---
Lead	ppm	ASTM D5185(m)	>8	0	---	---
Copper	ppm	ASTM D5185(m)	>85	<1	---	---
Tin	ppm	ASTM D5185(m)	>4	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	2	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Fuel	%	ASTM D7593*	>6.0	1.1	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	5.7	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.1	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---

FLUID CONDITION

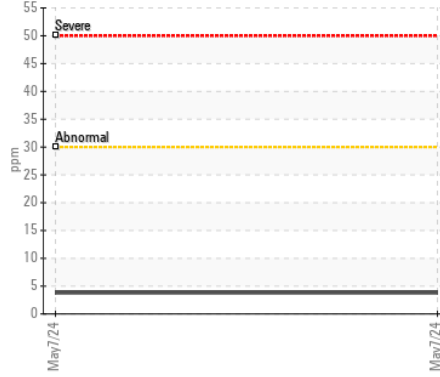
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>57	4	---	---
Boron	ppm	ASTM D5185(m)		85	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		27	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		279	---	---
Calcium	ppm	ASTM D5185(m)		1460	---	---
Phosphorus	ppm	ASTM D5185(m)		866	---	---
Zinc	ppm	ASTM D5185(m)		949	---	---
Sulfur	ppm	ASTM D5185(m)		2726	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.8	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	12.0	---	---

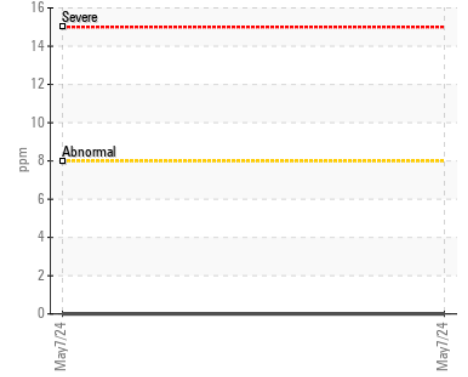
▲ Viscosity @ 100°C



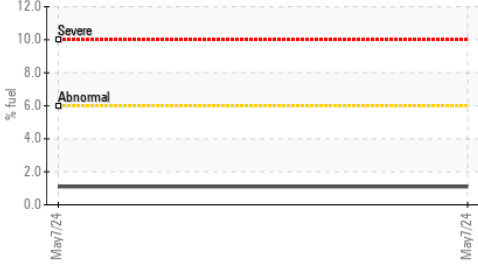
Iron (ppm)



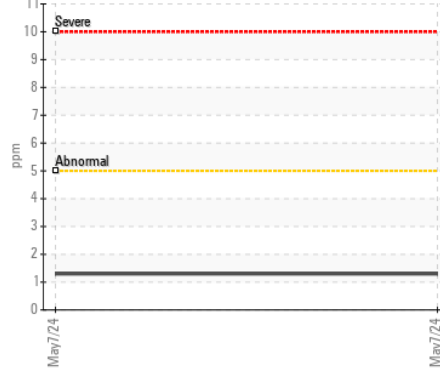
Lead (ppm)



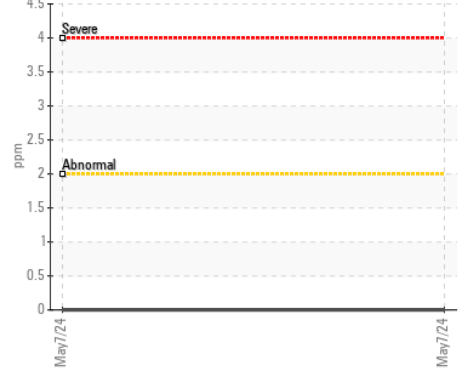
Fuel Dilution



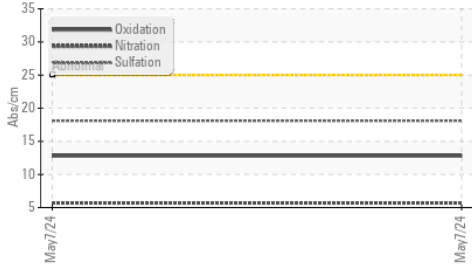
Aluminum (ppm)



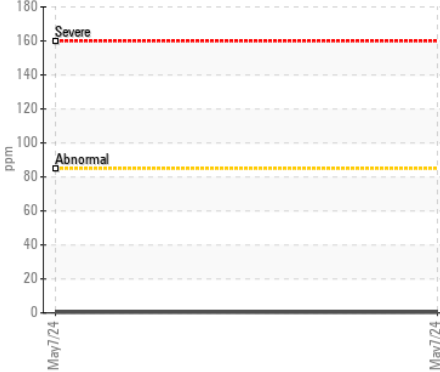
Chromium (ppm)



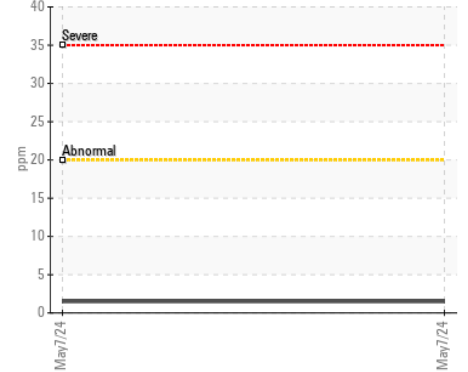
FT-IR (Direct Trend)



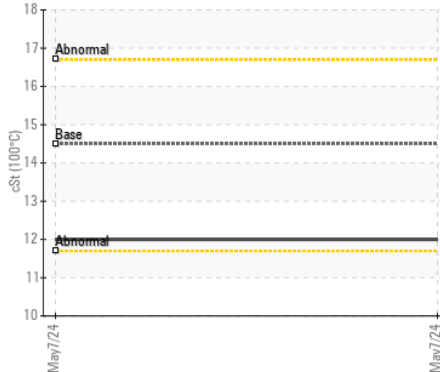
Copper (ppm)



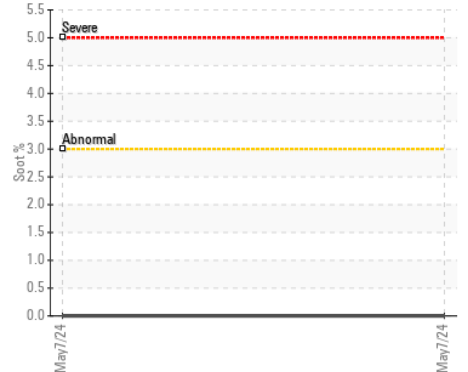
Silicon (ppm)



▲ Viscosity @ 100°C



Soot %



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VCP450450 **Received** : 14 May 2024
Lab Number : 02635232 **Tested** : 15 May 2024
Unique Number : 5776385 **Diagnosed** : 15 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FUELDILUTION, PercentFuel)

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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.