



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W2023067]

Machine Id

ONAN K100168996

Component

Genset

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (5 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA044329	---	---
Sample Date		Client Info		02 May 2024	---	---
Machine Age	hrs	Client Info		2007	---	---
Oil Age	hrs	Client Info		176	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	4	---	---
Chromium	ppm	ASTM D5185(m)	>4	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>5	0	---	---
Aluminum	ppm	ASTM D5185(m)	>12	2	---	---
Lead	ppm	ASTM D5185(m)	>17	0	---	---
Copper	ppm	ASTM D5185(m)	>70	<1	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

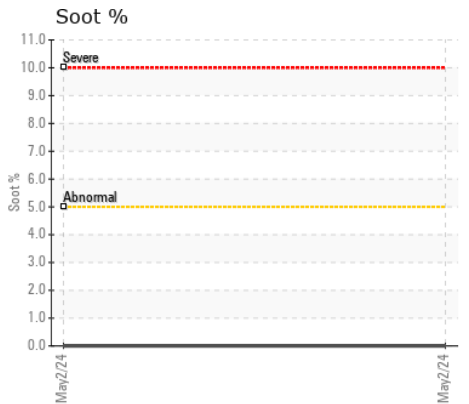
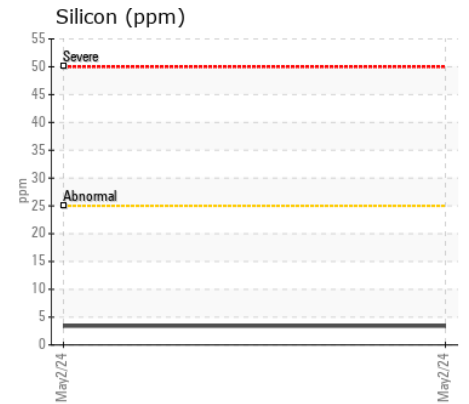
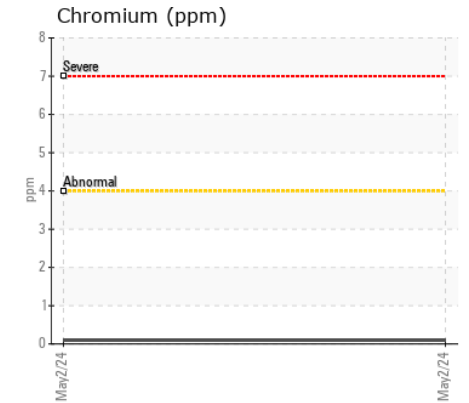
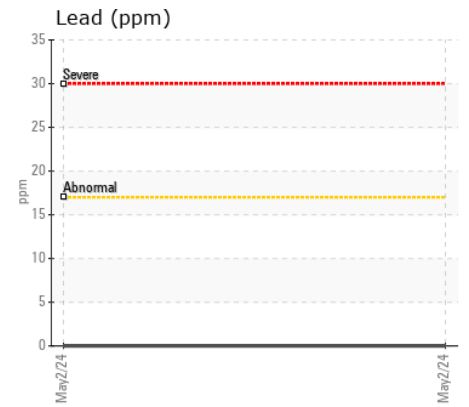
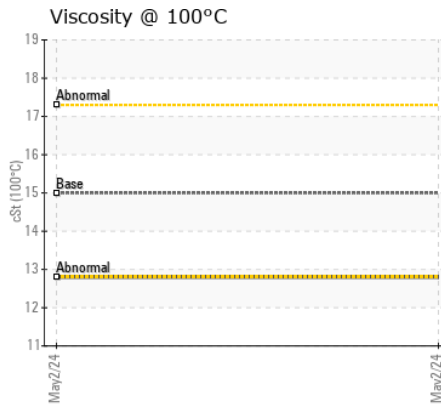
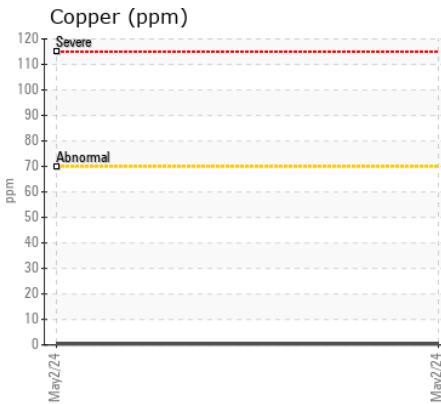
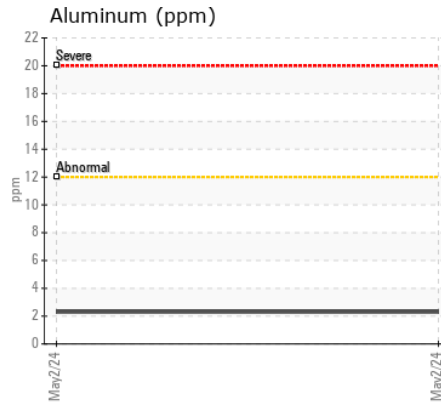
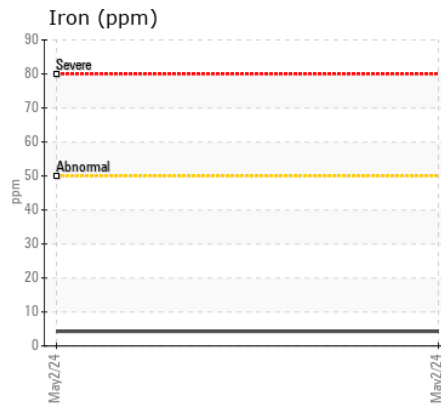
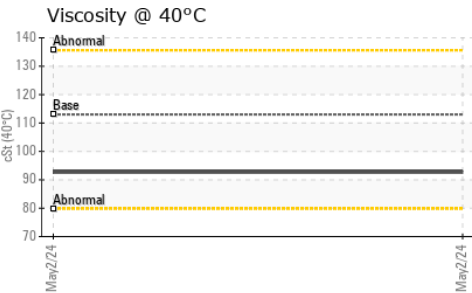
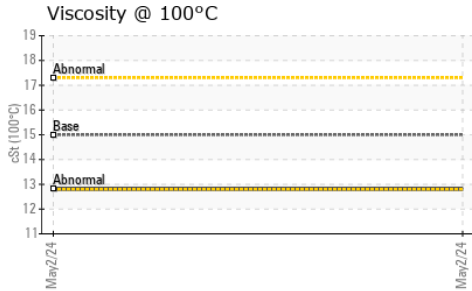
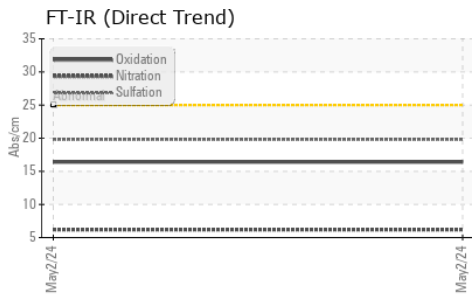
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	6.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)	2.5	3	---	---
Barium	ppm	ASTM D5185(m)	0.0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0.7	55	---	---
Manganese	ppm	ASTM D5185(m)	0.0	0	---	---
Magnesium	ppm	ASTM D5185(m)	256	920	---	---
Calcium	ppm	ASTM D5185(m)	2057	1348	---	---
Phosphorus	ppm	ASTM D5185(m)	935	1014	---	---
Zinc	ppm	ASTM D5185(m)	1223	1217	---	---
Sulfur	ppm	ASTM D5185(m)	4079	2745	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	113	92.7	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	12.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	138	135	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VPA044329 **Received** : 03 May 2024
Lab Number : **02633317** **Tested** : 06 May 2024
Unique Number : 5774470 **Diagnosed** : 06 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Canadian Coast Guard
 9860 W Saanich Rd
 Sidney, BC
 CA V8L 5T5
 Contact: Nick Berben

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.

mcharles-seniorengineer@cha.ccg-s-ngcc.gc.ca
 T:
 F: