



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO VNL860 3007 (S/N RN654173)

Component
Diesel Engine

Fluid
CHEVRON DELO 400 XSP 5W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DE0000651	---	---
Sample Date		Client Info		07 Feb 2024	---	---
Machine Age	mls	Client Info		42892	---	---
Oil Age	mls	Client Info		28088	---	---
Filter Age	mls	Client Info		28088	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	27	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>2	2	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	<1	---	---
Aluminum	ppm	ASTM D5185m	>25	23	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	136	---	---
Tin	ppm	ASTM D5185m	>15	3	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

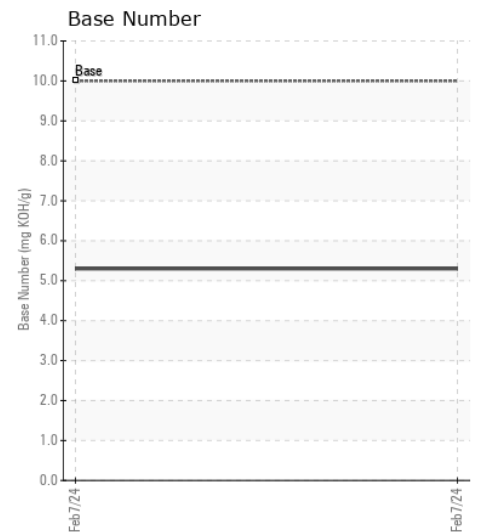
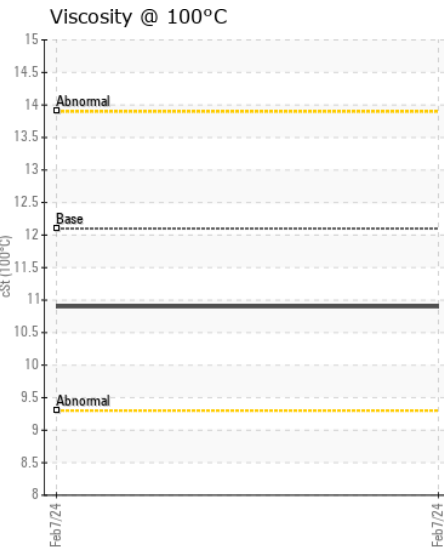
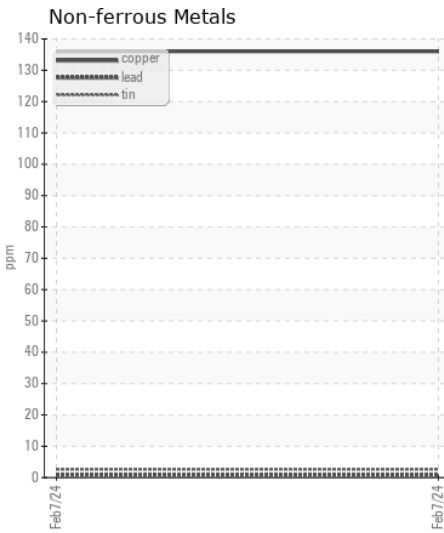
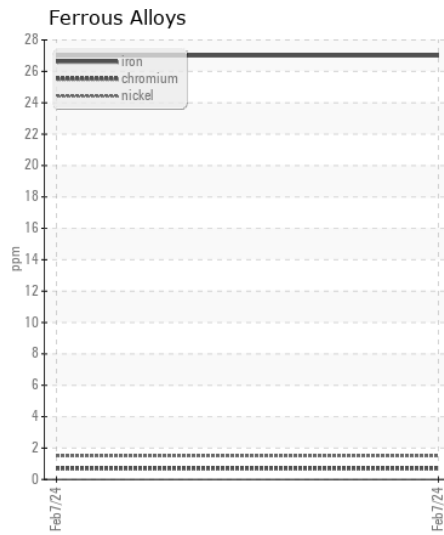
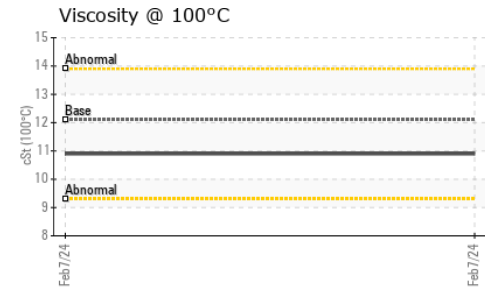
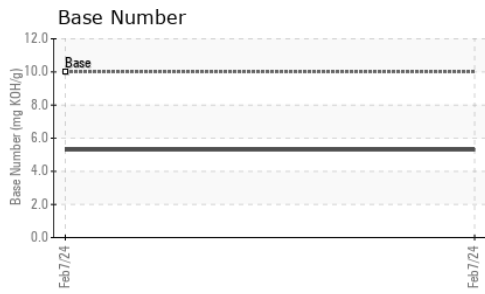
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	18	---	---
Potassium	ppm	ASTM D5185m	>20	63	---	---
Fuel		WC Method	>6.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	11.0	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.7	---	---
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	>0.2	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		42	---	---
Barium	ppm	ASTM D5185m		13	---	---
Molybdenum	ppm	ASTM D5185m		25	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		701	---	---
Calcium	ppm	ASTM D5185m		1348	---	---
Phosphorus	ppm	ASTM D5185m	800	718	---	---
Zinc	ppm	ASTM D5185m	800	836	---	---
Sulfur	ppm	ASTM D5185m	3000	2721	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.3	---	---
Visc @ 100°C	cSt	ASTM D445	12.1	10.9	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : DE0000651

Lab Number : 06086536

Unique Number : 10873981

Test Package : FLEET

Received : 12 Feb 2024

Tested : 13 Feb 2024

Diagnosed : 13 Feb 2024 - Wes Davis

US COMMERCIAL FREIGHT

333 HOLLENBECK ST

ROCHESTER, NY

US 14621

Contact: SERVICE

service@uscommercialfreight.com

T: (585)755-8757

F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)