



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**VOLVO VNL 3005 (S/N RN654171)**

Component  
**Diesel Engine**

Fluid  
**SAFETY-KLEEN PERFORMANCE PLUS 15W40 (--- QTS)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry updates.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DE0000653</b>	---	---
Sample Date		Client Info		<b>06 Apr 2024</b>	---	---
Machine Age	mls	Client Info		<b>79624</b>	---	---
Oil Age	mls	Client Info		<b>32761</b>	---	---
Filter Age	mls	Client Info		<b>32761</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>27</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	>2	<b>4</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>10</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>209</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

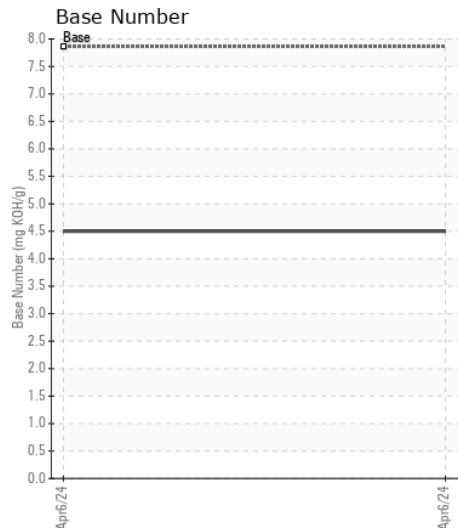
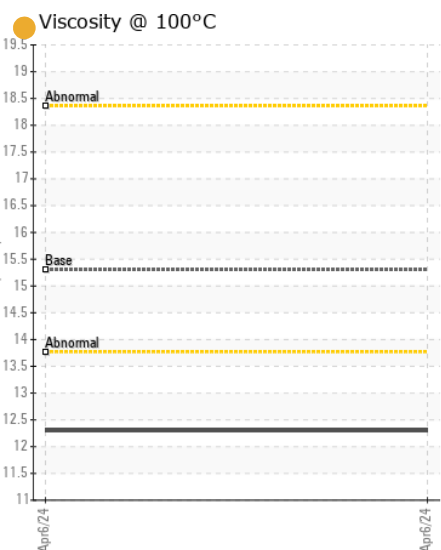
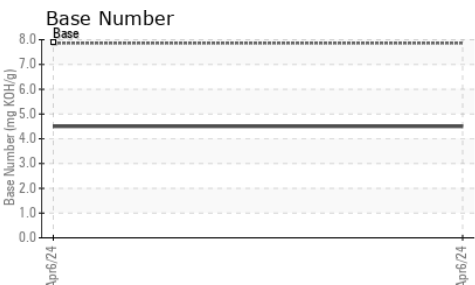
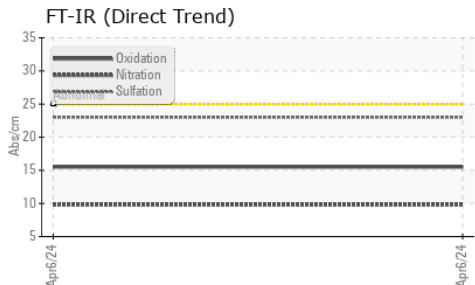
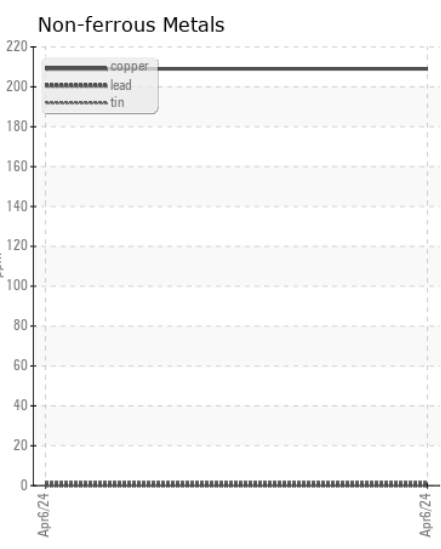
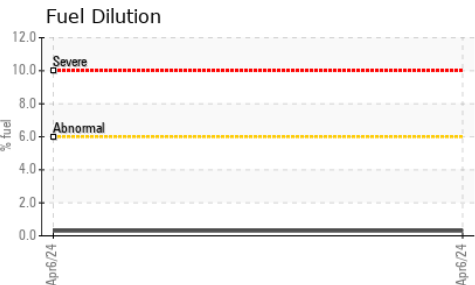
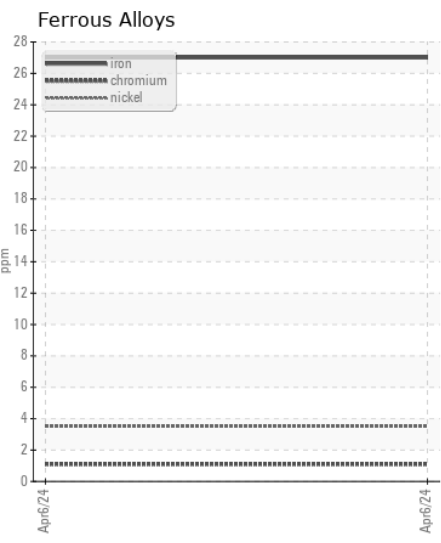
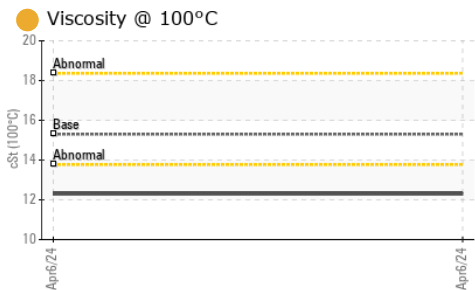
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>25</b>	---	---
Fuel	%	ASTM D3524	>6.0	<b>0.3</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.8</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

### FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>2</b>	---	---
Boron	ppm	ASTM D5185m	1.4	<b>2</b>	---	---
Barium	ppm	ASTM D5185m	0.1	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	0.1	<b>6</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	2.7	<b>40</b>	---	---
Calcium	ppm	ASTM D5185m	2328	<b>2292</b>	---	---
Phosphorus	ppm	ASTM D5185m	924	<b>825</b>	---	---
Zinc	ppm	ASTM D5185m	1004	<b>1086</b>	---	---
Sulfur	ppm	ASTM D5185m	3828	<b>3133</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.5</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	7.86	<b>4.5</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.3	<b>12.3</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DE0000653 **Received** : 22 Apr 2024  
**Lab Number** : 06156629 **Tested** : 09 Jul 2024  
**Unique Number** : 10992052 **Diagnosed** : 09 Jul 2024 - Doug Bogart  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

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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)