



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**2H28**  
Machine Id  
**VOLVO VNL64T3 TCK9835 (S/N 4V4NC9EH9HN988253)**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ARI06055299</b>	ARI0004245	ARI0001468
Sample Date		Client Info		<b>08 Jan 2024</b>	18 Jan 2023	25 Mar 2020
Machine Age	mls	Client Info		<b>0</b>	190709	88010
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>5</b>	10	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	2
Tin	ppm	ASTM D5185m	>15	<b>1</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

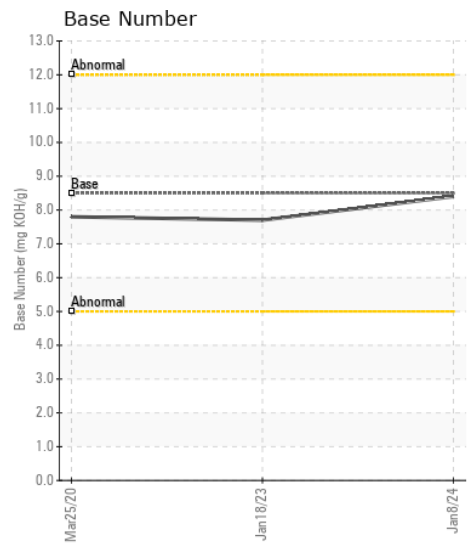
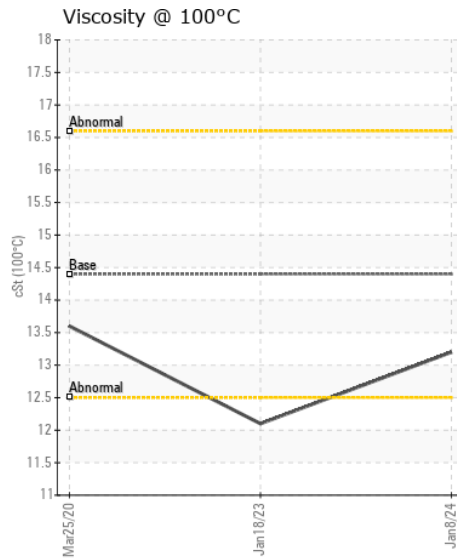
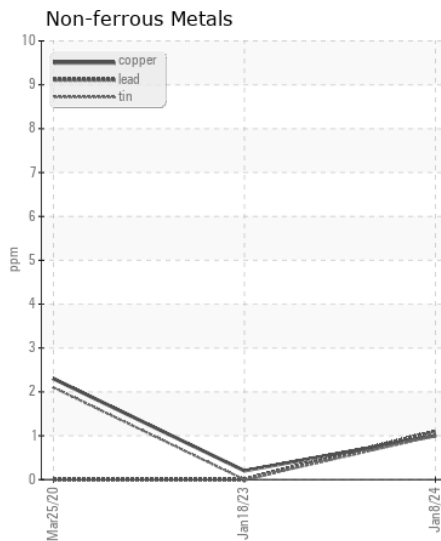
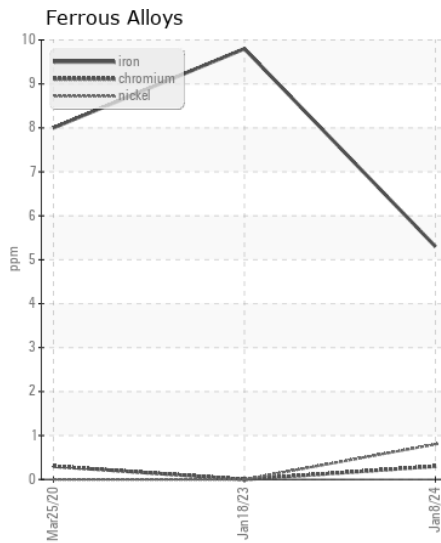
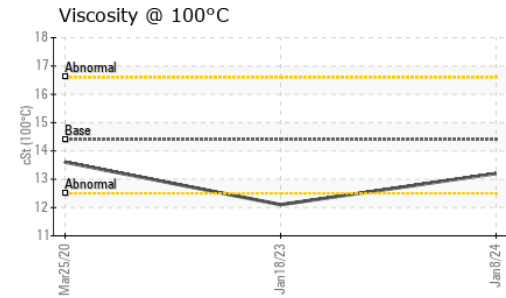
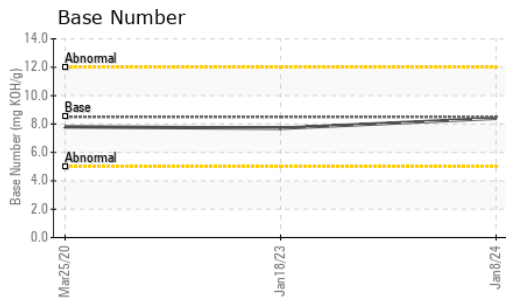
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	2	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	3
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	0.6	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.0</b>	9.4	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.0</b>	20.8	20.2
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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	>158	<b>0</b>	<1	3
Boron	ppm	ASTM D5185m	250	<b>348</b>	41	64
Barium	ppm	ASTM D5185m	10	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	100	<b>131</b>	59	52
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	450	<b>774</b>	432	416
Calcium	ppm	ASTM D5185m	3000	<b>1676</b>	1656	2066
Phosphorus	ppm	ASTM D5185m	1150	<b>754</b>	902	1000
Zinc	ppm	ASTM D5185m	1350	<b>995</b>	1120	1239
Sulfur	ppm	ASTM D5185m	4250	<b>3201</b>	2853	2967
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	17.5	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.4</b>	7.7	7.8
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.2</b>	▲ 12.1	13.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ARI06055299 **Received** : 09 Jan 2024  
**Lab Number** : 06055299 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821248 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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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)