MOB I VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
SENNEBOGEN 870 870.0.1004
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

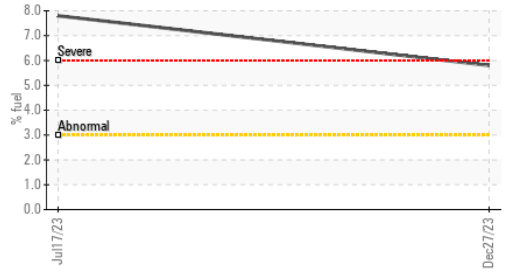
There is a moderate amount of fuel present in the oil.

FLUID CONDITION

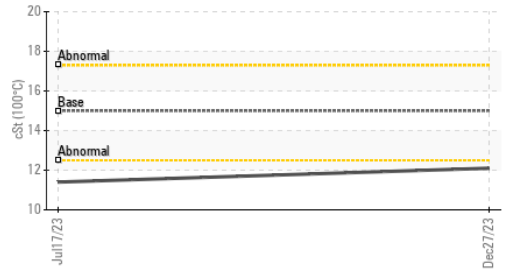
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP431373	VCP411563	---
Sample Date		Client Info		27 Dec 2023	17 Jul 2023	---
Machine Age	hrs	Client Info		7688	6800	---
Oil Age	hrs	Client Info		500	500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	SEVERE	---
Iron	ppm	ASTM D5185m	>90	16	7	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	<1	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	1	<1	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	3	4	---
Potassium	ppm	ASTM D5185m	>20	10	2	---
Fuel	%	ASTM D3524	>3.0	▲ 5.8	7.8	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>6	0.2	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	12.6	10.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	21.9	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		0	3	---
Boron	ppm	ASTM D5185m	2.5	21	38	---
Barium	ppm	ASTM D5185m	0.0	3	0	---
Molybdenum	ppm	ASTM D5185m	0.7	45	48	---
Manganese	ppm	ASTM D5185m	0.0	0	<1	---
Magnesium	ppm	ASTM D5185m	256	633	655	---
Calcium	ppm	ASTM D5185m	2057	1533	1778	---
Phosphorus	ppm	ASTM D5185m	935	928	1020	---
Zinc	ppm	ASTM D5185m	1223	1187	1295	---
Sulfur	ppm	ASTM D5185m	4079	3003	2968	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	▲ 28.3	21.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.4	9.3	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 12.1	▲ 11.4	---

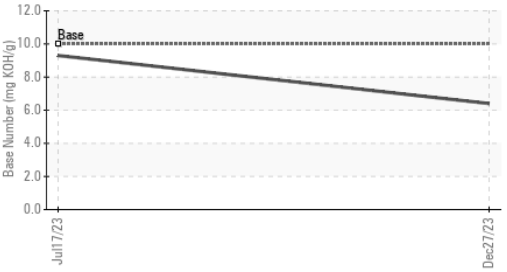
Fuel Dilution



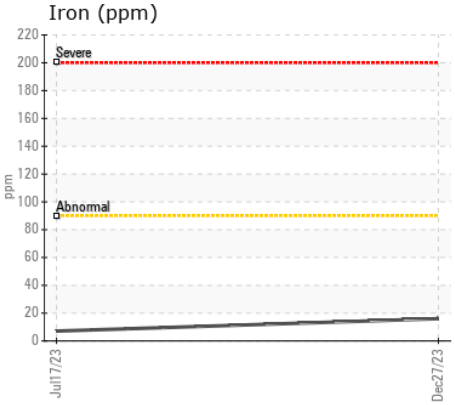
Viscosity @ 100°C



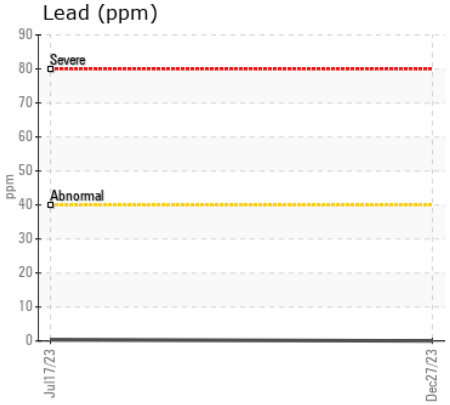
Base Number



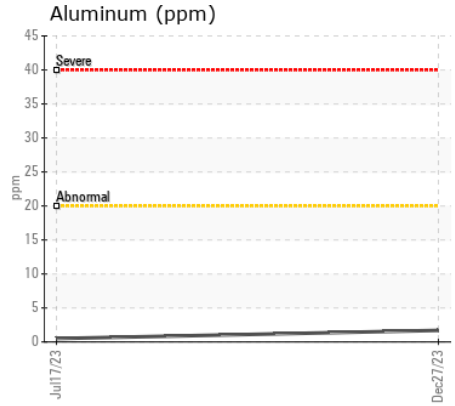
Iron (ppm)



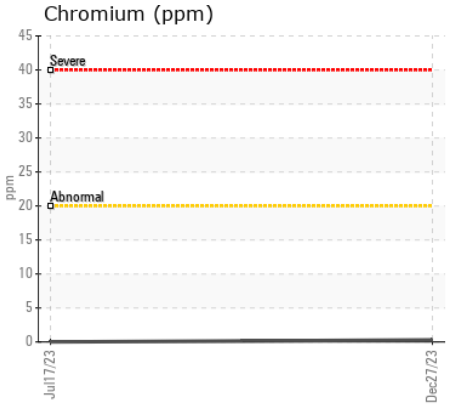
Lead (ppm)



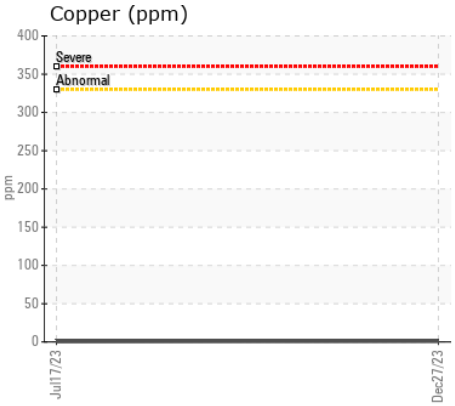
Aluminum (ppm)



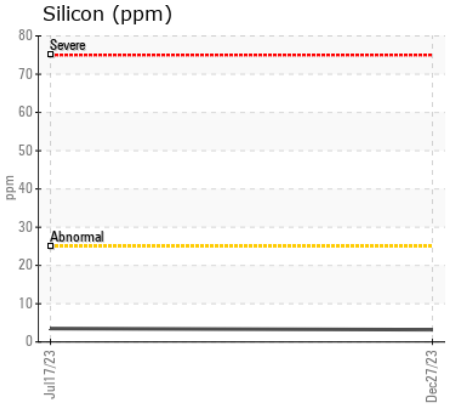
Chromium (ppm)



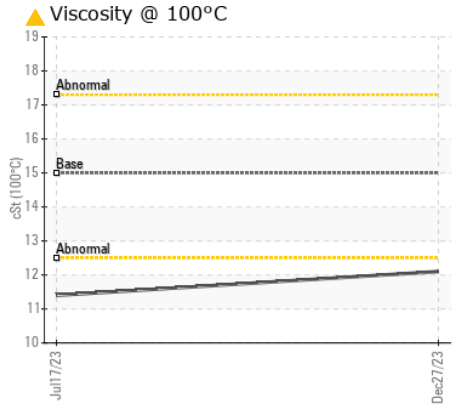
Copper (ppm)



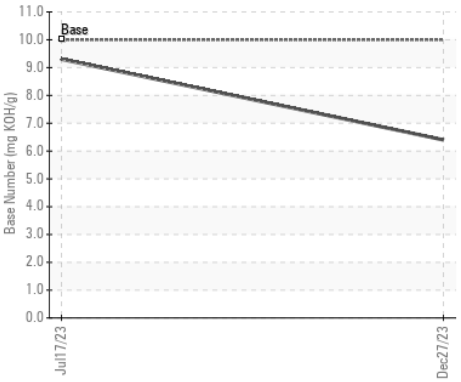
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP431373 **Recieved** : 18 Jan 2024
Lab Number : 06063973 **Diagnosed** : 22 Jan 2024
Unique Number : 10835355 **Diagnostician** : Sean Felton
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

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)

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