



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
[1479]
 Machine Id
SENNEBOGEN 835 835.0.3228
 Component
Diesel Engine
 Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP428945	---	---
Sample Date		Client Info		09 Mar 2024	---	---
Machine Age	hrs	Client Info		1231	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	49	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	23	---	---
Lead	ppm	ASTM D5185m	>40	1	---	---
Copper	ppm	ASTM D5185m	>330	16	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

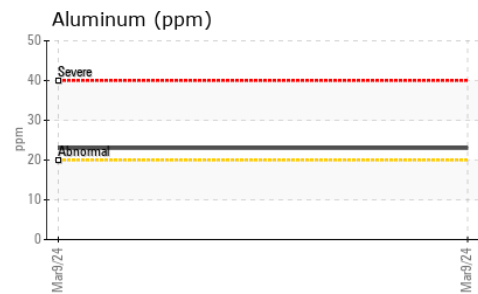
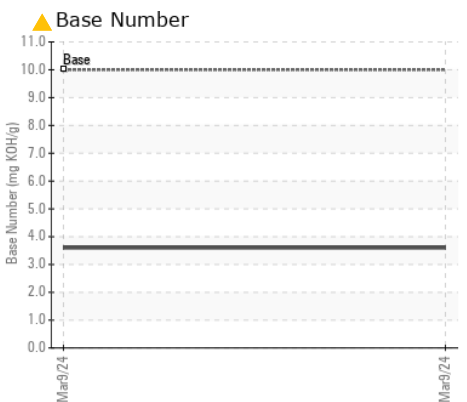
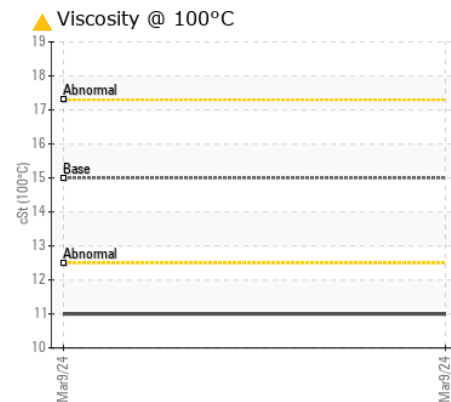
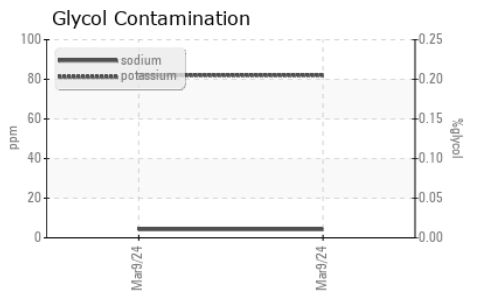
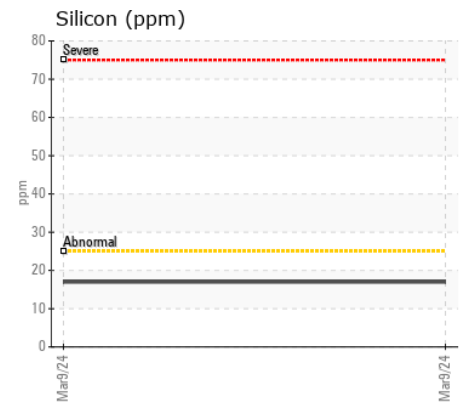
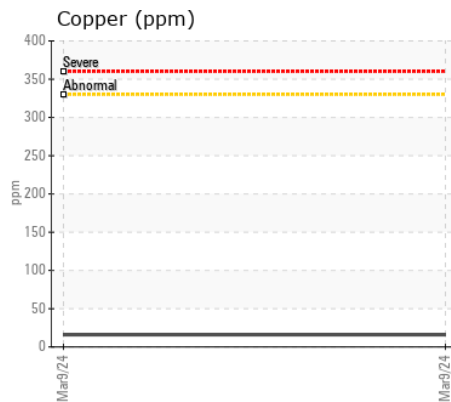
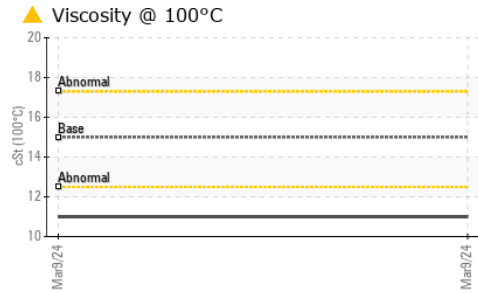
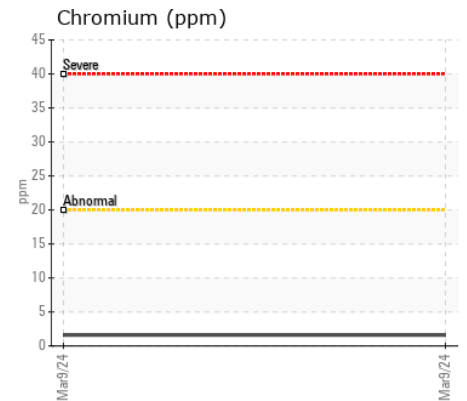
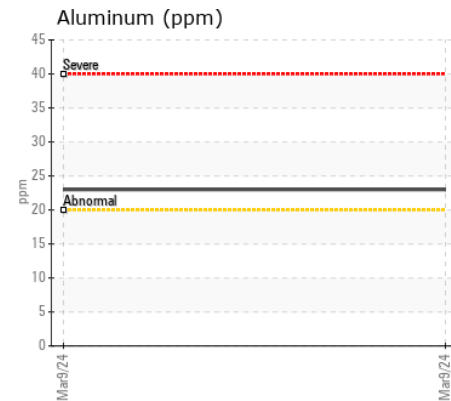
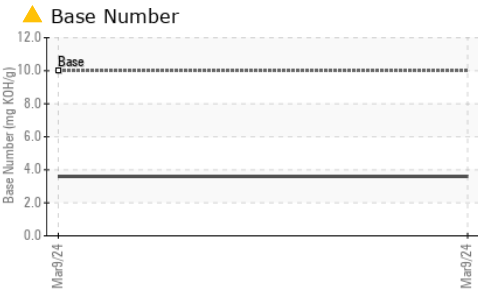
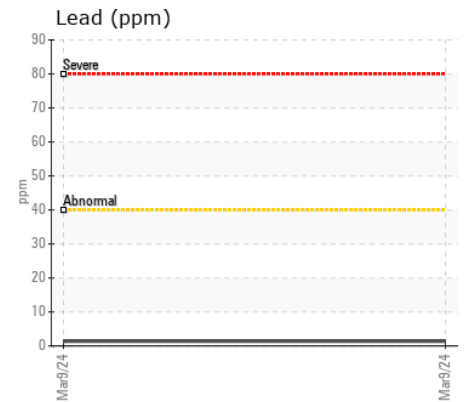
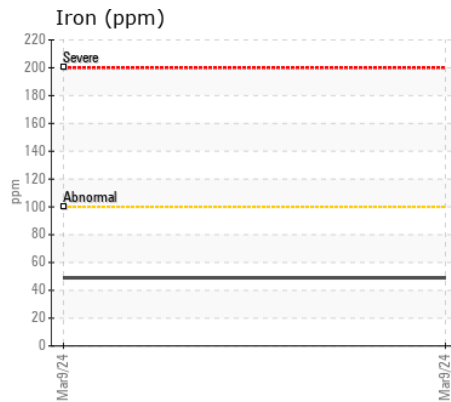
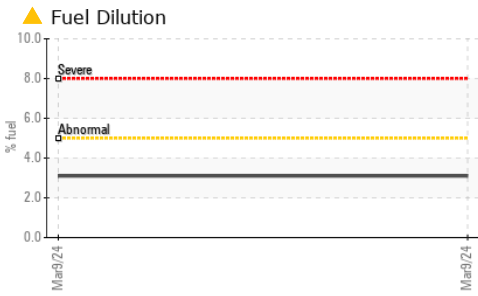
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring.

Silicon	ppm	ASTM D5185m	>25	17	---	---
Potassium	ppm	ASTM D5185m	>20	82	---	---
Fuel	%	ASTM D3524	>5	▲ 3.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	12.1	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.1	---	---
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

Fuel is present in the oil and is lowering the viscosity. The BN level is low.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	2.5	34	---	---
Barium	ppm	ASTM D5185m	0.0	5	---	---
Molybdenum	ppm	ASTM D5185m	0.7	80	---	---
Manganese	ppm	ASTM D5185m	0.0	6	---	---
Magnesium	ppm	ASTM D5185m	256	151	---	---
Calcium	ppm	ASTM D5185m	2057	2093	---	---
Phosphorus	ppm	ASTM D5185m	935	954	---	---
Zinc	ppm	ASTM D5185m	1223	1164	---	---
Sulfur	ppm	ASTM D5185m	4079	3712	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.4	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	▲ 3.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 11.0	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP428945 **Received** : 20 Mar 2024
Lab Number : 06123462 **Tested** : 22 Mar 2024
Unique Number : 10937613 **Diagnosed** : 22 Mar 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

SIMS METAL
 130 NORTH 12TH ST
 SACRAMENTO, CA
 US 95814
 Contact: EVERT

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)

T: (916)769-7864

F: