MOB

VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Area
[SPM715231]
Machine Id
SENNEBOGEN 835ME 835.0.3282
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

The oil 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

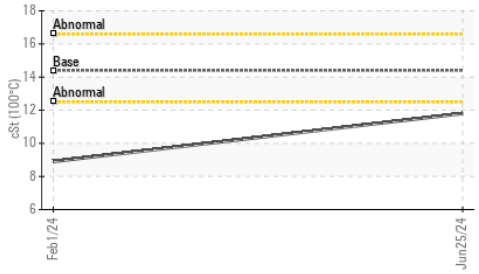
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring.

FLUID CONDITION

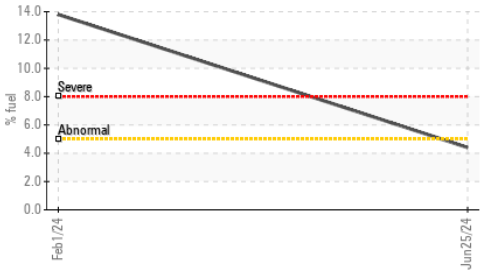
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP446417	VCP436914	---
Sample Date		Client Info		25 Jun 2024	01 Feb 2024	---
Machine Age	hrs	Client Info		1200	515	---
Oil Age	hrs	Client Info		0	0	---
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	>100	21	22	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	13	11	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	3	15	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	4	14	---
Potassium	ppm	ASTM D5185m	>20	37	37	---
Fuel	%	ASTM D3524	>5	▲ 4.4	▲ 13.8	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	19.9	---
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	>158	4	4	---
Boron	ppm	ASTM D5185m	250	3	47	---
Barium	ppm	ASTM D5185m	10	<1	4	---
Molybdenum	ppm	ASTM D5185m	100	62	72	---
Manganese	ppm	ASTM D5185m		1	4	---
Magnesium	ppm	ASTM D5185m	450	873	91	---
Calcium	ppm	ASTM D5185m	3000	1156	1773	---
Phosphorus	ppm	ASTM D5185m	1150	977	823	---
Zinc	ppm	ASTM D5185m	1350	1114	967	---
Sulfur	ppm	ASTM D5185m	4250	3006	2824	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.3	19.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.7	5.6	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.8	▲ 8.9	---

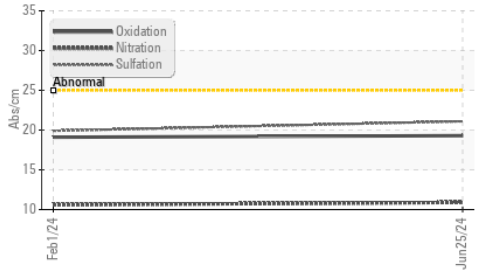
Viscosity @ 100°C



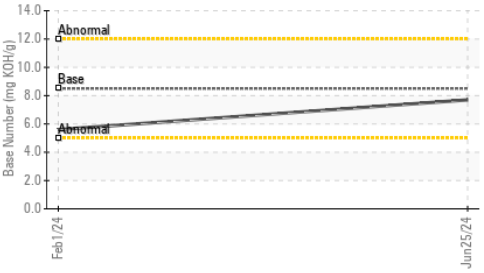
Fuel Dilution



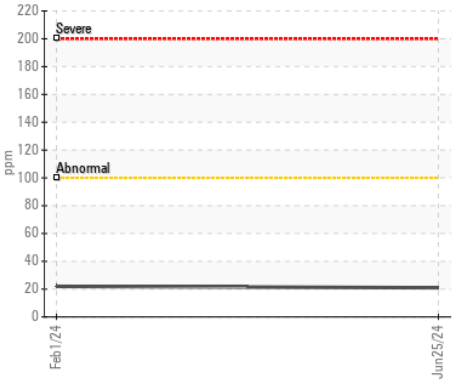
FT-IR (Direct Trend)



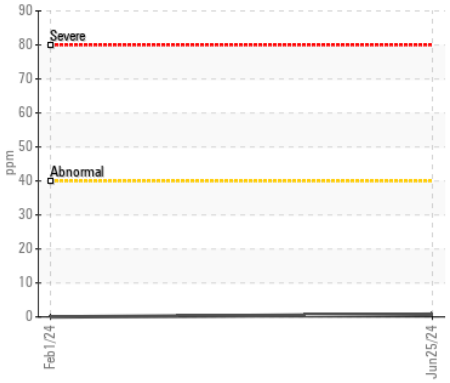
Base Number



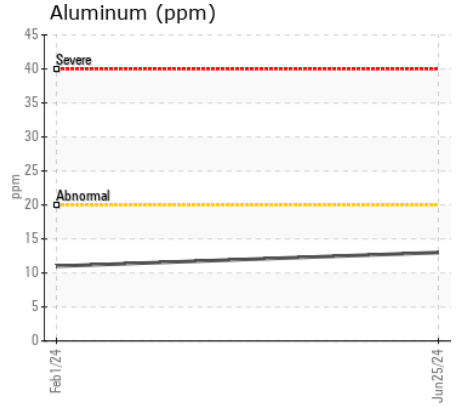
Iron (ppm)



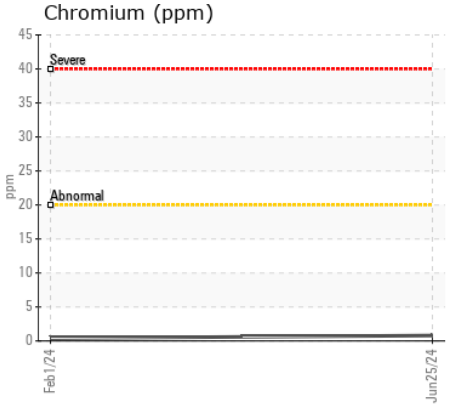
Lead (ppm)



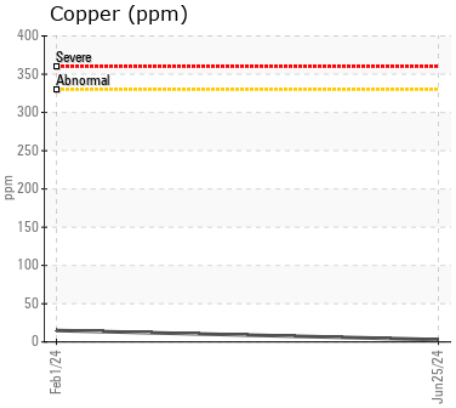
Aluminum (ppm)



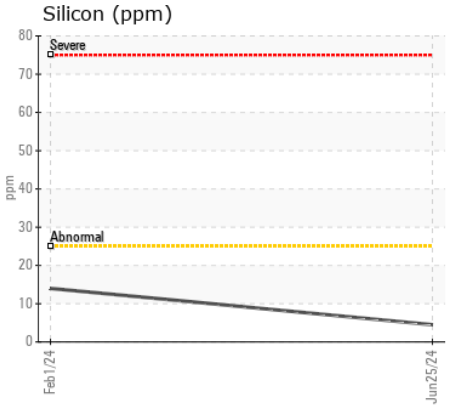
Chromium (ppm)



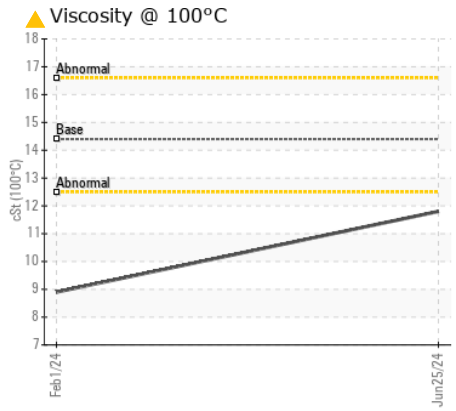
Copper (ppm)



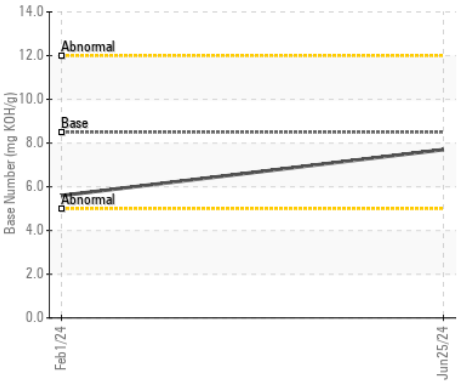
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP446417 **Received** : 18 Jul 2024
Lab Number : 06239967 **Tested** : 19 Jul 2024
Unique Number : 11128801 **Diagnosed** : 19 Jul 2024 - Wes Davis
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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