WEAR CONTAMINATION FLUID CONDITION

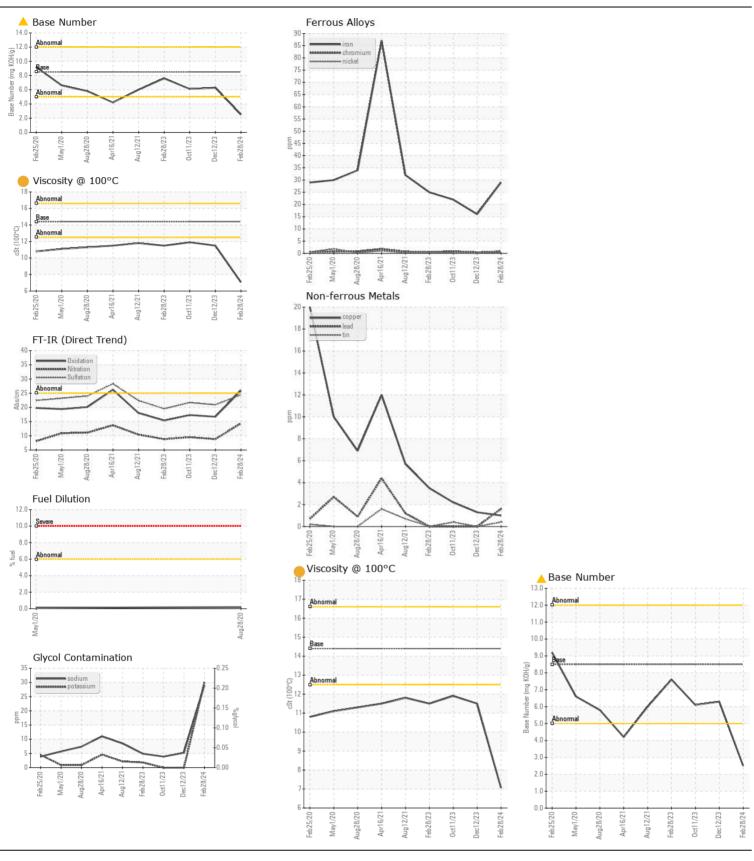
NORMAL NORMAL ABNORMAL

Machine Id

## **VOLVO 26653**

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		PCA0118955	PCA0106421	PCA0068359
	Sample Date		Client Info		28 Feb 2024	12 Dec 2023	11 Oct 2023
	Machine Age	mls	Client Info		30000	0	715961
	Oil Age	mls	Client Info		30000	30000	30000
	Filter Age	mls	Client Info		30000	30000	30000
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	29	16	22
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>2	1	0	<1
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>2	<1	0	<1
	Aluminum	ppm	ASTM D5185m	>25	2	2	2
	Lead	ppm	ASTM D5185m	>40	2	0	0
	Copper	ppm	ASTM D5185m	>330	1	1	2
	Tin	ppm	ASTM D5185m	>15	<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	4	6
	Potassium	ppm	ASTM D5185m	>20	30	0	0
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>6.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol	%	*ASTM D2982		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.4	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	14.4	8.8	9.5
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.4	20.9	21.7
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORMI
	Odor	scalar	*Visual	NORML	NORML	NORML	NORMI
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	29	5	4
	Boron	ppm	ASTM D5185m	250	<1	5	0
The oil viscosity is lower than normal. The BN level is low. Confirm oil type.	Barium	ppm	ASTM D5185m	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	45	63	61
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m	450	617	914	940
	Calcium	ppm	ASTM D5185m	3000	743	1084	1071
	Phosphorus	ppm	ASTM D5185m	1150	704	1010	976
	Zinc	ppm	ASTM D5185m	1350	856	1259	1243
	Sulfur	ppm	ASTM D5185m	4250	2151	2687	2511
	Oxidation	Abs/.1mm	*ASTM D7414	>25	25.9	16.7	17.3
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>2.5</b>	6.3	6.1
	Visc @ 100°C	cSt	ASTM D445	111	7.06	11.5	11.9







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06145212

: PCA0118955

Received Unique Number: 10970020

: 10 Apr 2024 **Tested** Diagnosed Test Package: FLEET (Additional Tests: FuelDilution, Glycol)

: 16 Apr 2024

: 16 Apr 2024 - Jonathan Hester

Contact: Service Manager

189 PERDUE WAY

CANDOR, NC

US 27229

T: F:

**PERDUE FARMS INC - GARAGE** 

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)