MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
VOLVO A25D 619 (S/N 72162)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (8 GAL)

RECOMMENDATION

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

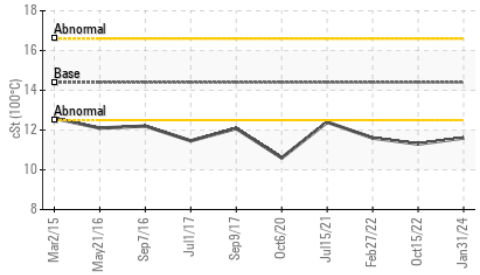
There is a moderate amount of fuel present in the oil.

FLUID CONDITION

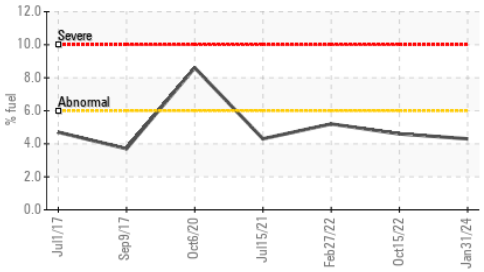
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005051	RW0004048	RW0003028
Sample Date		Client Info		31 Jan 2024	15 Oct 2022	27 Feb 2022
Machine Age	hrs	Client Info		15412	14738	14366
Oil Age	hrs	Client Info		313	372	235
Filter Age	hrs	Client Info		313	372	235
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	7	10	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	<1
Lead	ppm	ASTM D5185m	>40	2	2	1
Copper	ppm	ASTM D5185m	>330	<1	2	2
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	3	3
Potassium	ppm	ASTM D5185m	>20	0	2	0
Fuel	%	ASTM D3524	>6.0	▲ 4.3	▲ 4.6	▲ 5.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.1	7.3	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	20.5	19.6
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	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>158	0	0	1
Boron	ppm	ASTM D5185m	250	2	7	20
Barium	ppm	ASTM D5185m	10	0	2	0
Molybdenum	ppm	ASTM D5185m	100	56	57	60
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	859	792	796
Calcium	ppm	ASTM D5185m	3000	1017	1283	1351
Phosphorus	ppm	ASTM D5185m	1150	938	1029	1061
Zinc	ppm	ASTM D5185m	1350	1192	1203	1193
Sulfur	ppm	ASTM D5185m	4250	2933	3676	2934
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	13.9	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.97	8.67	8.35
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.6	▲ 11.3	▲ 11.6

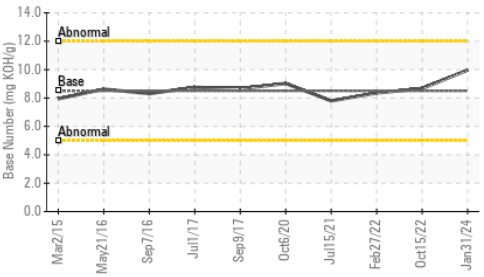
Viscosity @ 100°C



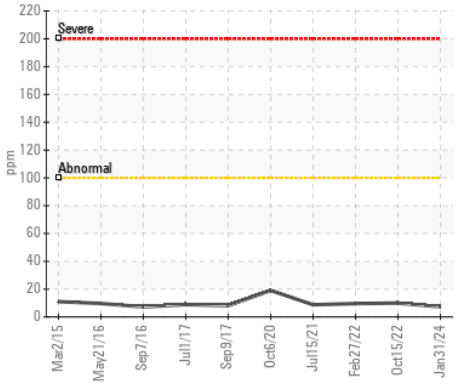
Fuel Dilution



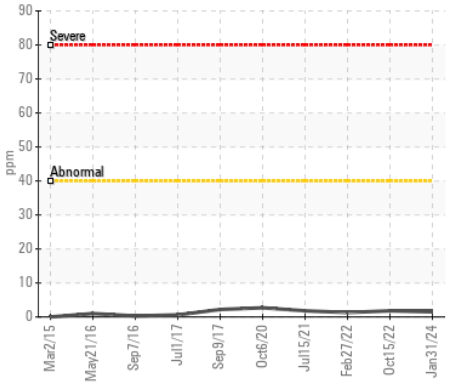
Base Number



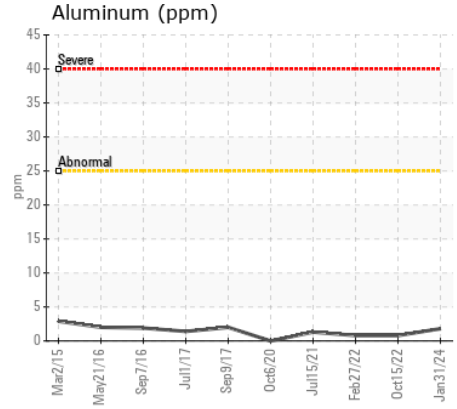
Iron (ppm)



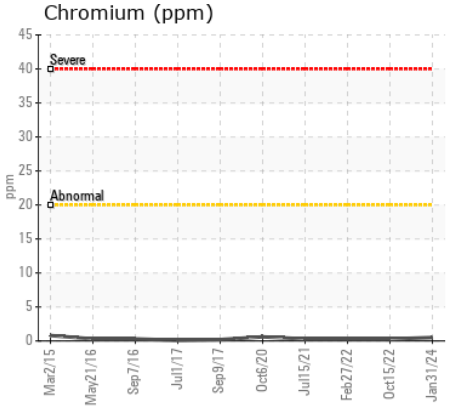
Lead (ppm)



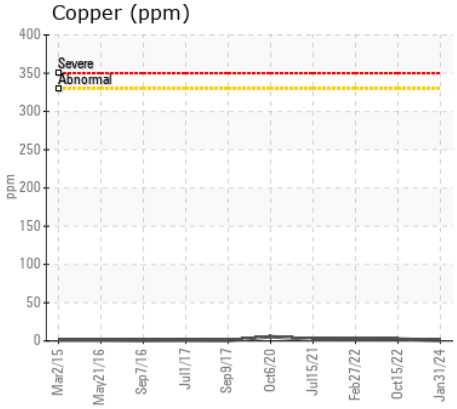
Aluminum (ppm)



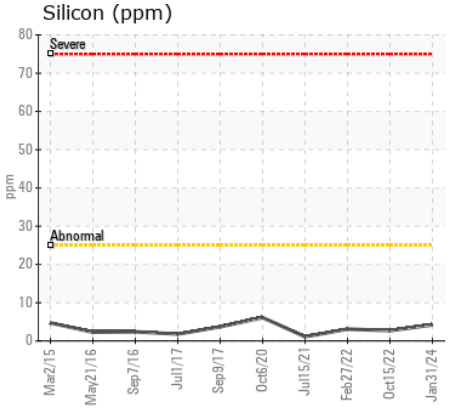
Chromium (ppm)



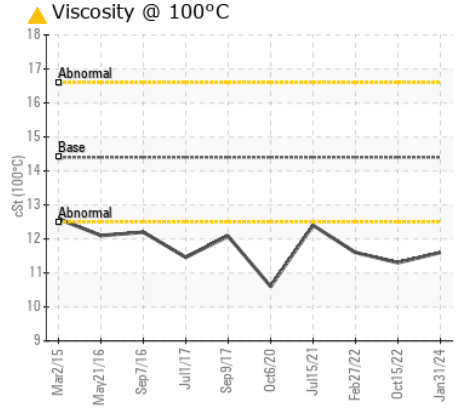
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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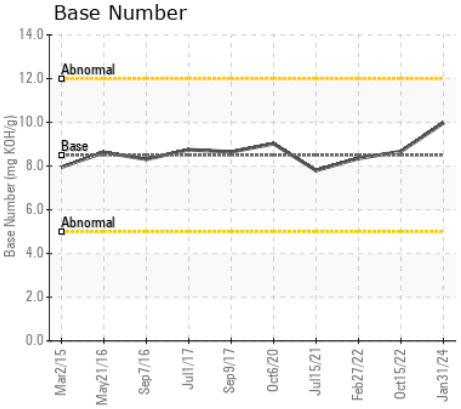

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005051
Lab Number : 06101126
Unique Number : 10899356
Test Package : MOB 2 (Additional Tests: PercentFuel)

Received : 26 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Doug Bogart

Certificate L2367

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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)