MOB I

VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[25641]
Machine Id
VOLVO EC350E 314526
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

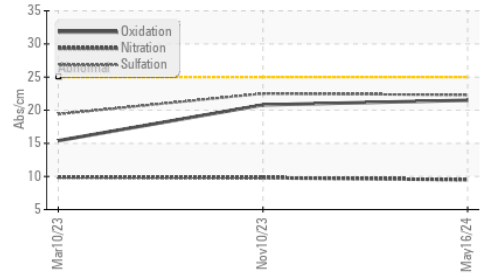
There is no indication of any contamination in the oil.

FLUID CONDITION

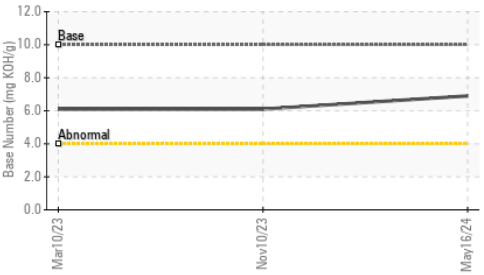
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP453728	VCP420538	VCP404417
Sample Date		Client Info		16 May 2024	10 Nov 2023	10 Mar 2023
Machine Age	hrs	Client Info		2086	1305	400
Oil Age	hrs	Client Info		0	1000	400
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	10	6	9
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	3	3
Lead	ppm	ASTM D5185m	>20	<1	<1	2
Copper	ppm	ASTM D5185m	>15	24	▲ 50	▲ 446
Tin	ppm	ASTM D5185m	>10	1	1	2
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	9	12	30
Potassium	ppm	ASTM D5185m	>20	<1	0	4
Fuel	%	ASTM D3524	>6.0	<1.0	<1.0	0.8
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.5	9.8	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.5	19.4
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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		3	3	<1
Boron	ppm	ASTM D5185m	2.5	30	28	39
Barium	ppm	ASTM D5185m	0.0	0	0	3
Molybdenum	ppm	ASTM D5185m	0.7	46	46	87
Manganese	ppm	ASTM D5185m	0.0	1	2	3
Magnesium	ppm	ASTM D5185m	256	517	404	11
Calcium	ppm	ASTM D5185m	2057	1698	1669	2226
Phosphorus	ppm	ASTM D5185m	935	939	816	952
Zinc	ppm	ASTM D5185m	1223	1144	1072	1149
Sulfur	ppm	ASTM D5185m	4079	3280	2754	4081
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.5	20.8	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	10	6.9	6.1	6.1
Visc @ 100°C	cSt	ASTM D445	15.0	12.3	● 11.9	● 10.1

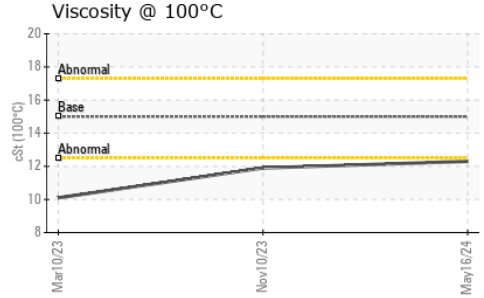
FT-IR (Direct Trend)



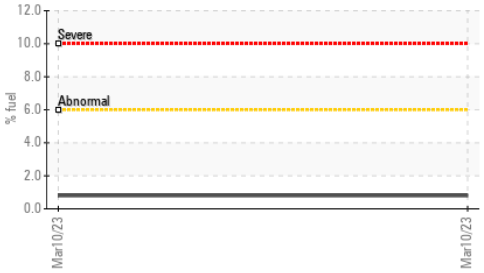
Base Number



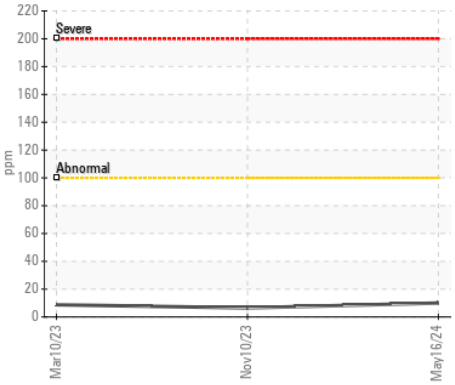
Viscosity @ 100°C



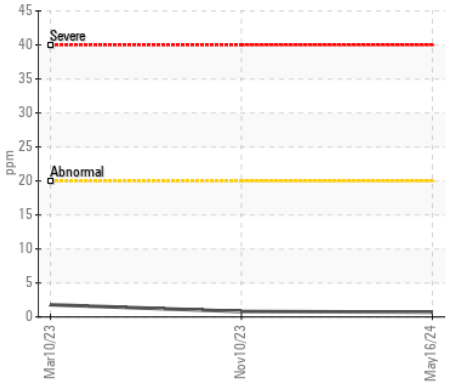
Fuel Dilution



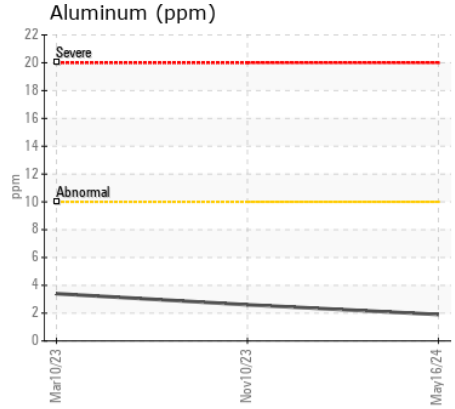
Iron (ppm)



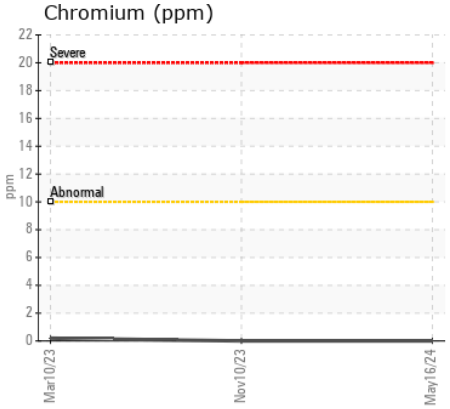
Lead (ppm)



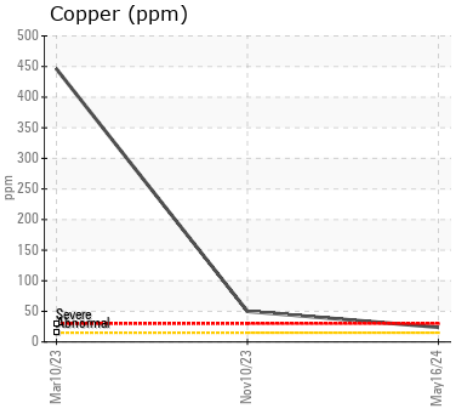
Aluminum (ppm)



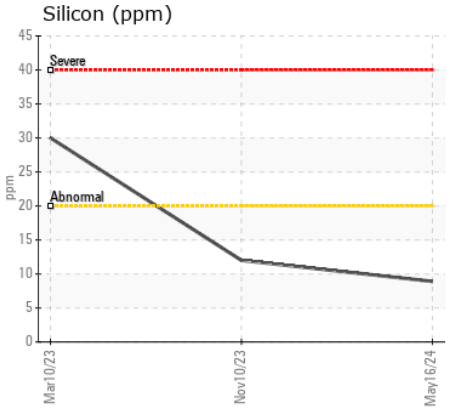
Chromium (ppm)



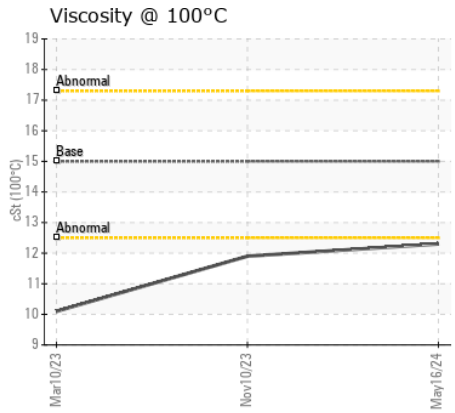
Copper (ppm)



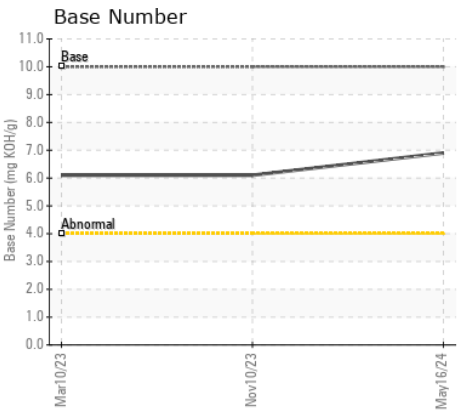
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP453728
Lab Number : 06185794
Unique Number : 11042546
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 23 May 2024 - Jonathan Hester

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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