MOB I VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
VOLVO A25F 80245
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

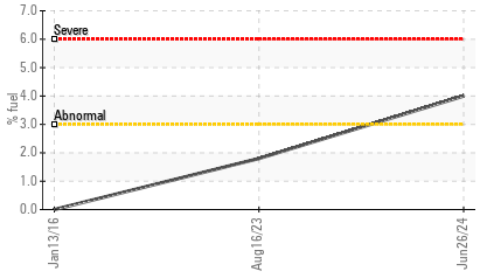
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

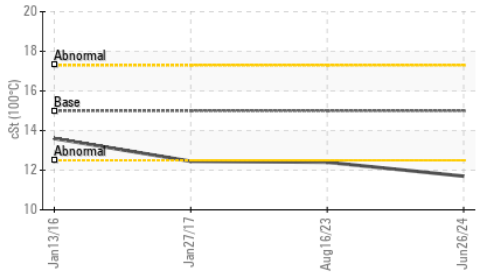
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP442393	VCP384961	VCP189469
Sample Date		Client Info		26 Jun 2024	16 Aug 2023	27 Jan 2017
Machine Age	hrs	Client Info		7370	6756	3396
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	16	11	54
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	2
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	7	5	6
Lead	ppm	ASTM D5185m	>40	<1	0	4
Copper	ppm	ASTM D5185m	>20	1	<1	10
Tin	ppm	ASTM D5185m	>20	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	8	5	10
Potassium	ppm	ASTM D5185m	>20	2	0	3
Fuel	%	ASTM D3524	>3.0	▲ 4.0	1.8	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.1	10.
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	21.6	25.
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		5	2	8
Boron	ppm	ASTM D5185m	2.5	35	58	16
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	42	43	56
Manganese	ppm	ASTM D5185m	0.0	<1	<1	1
Magnesium	ppm	ASTM D5185m	256	538	572	718
Calcium	ppm	ASTM D5185m	2057	1678	1812	1334
Phosphorus	ppm	ASTM D5185m	935	933	1005	738
Zinc	ppm	ASTM D5185m	1223	1175	1203	1046
Sulfur	ppm	ASTM D5185m	4079	3083	3644	2598
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	19.5	20.
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.7	9.5	---
Visc @ 100°C	cSt	ASTM D445	15.0	▲ 11.7	12.4	12.45

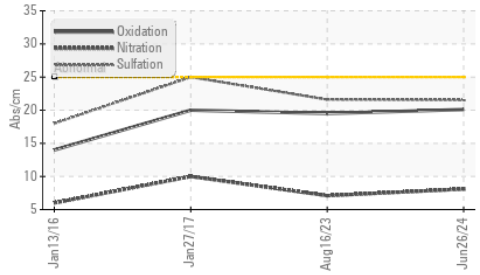
Fuel Dilution



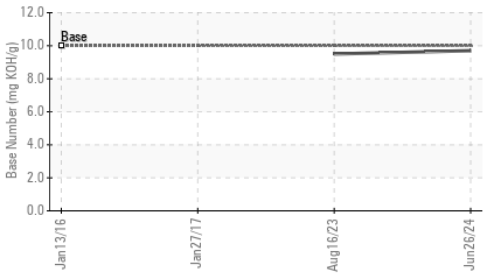
Viscosity @ 100°C



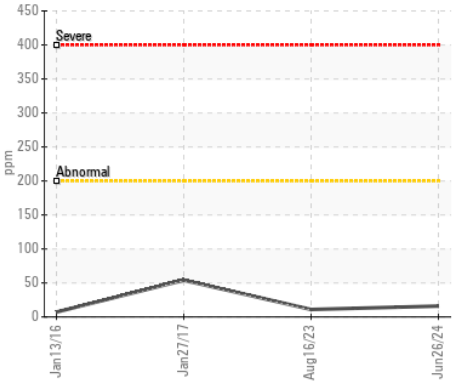
FT-IR (Direct Trend)



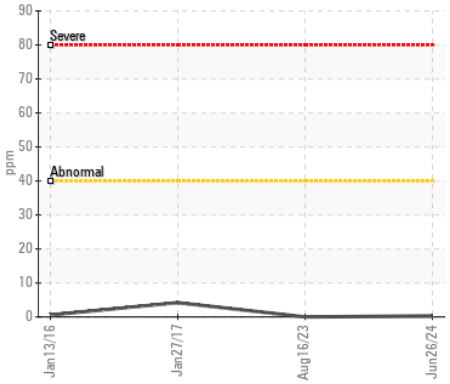
Base Number



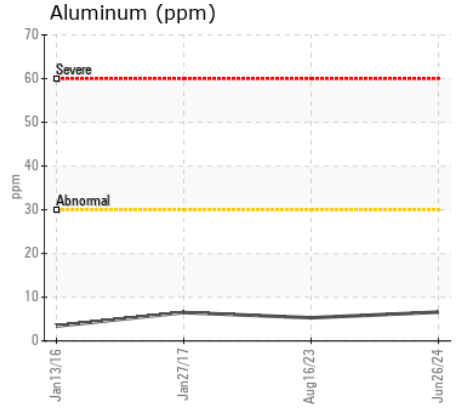
Iron (ppm)



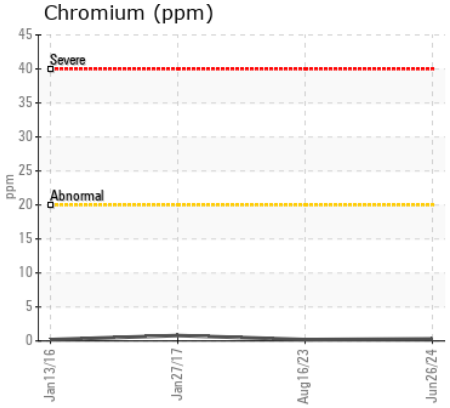
Lead (ppm)



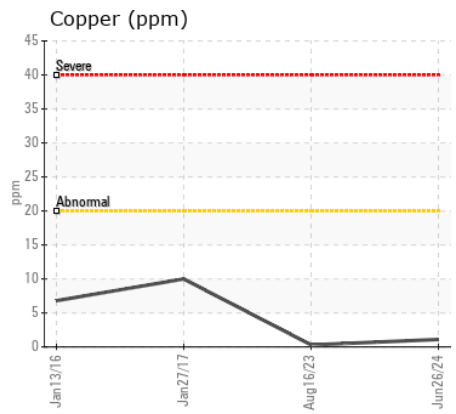
Aluminum (ppm)



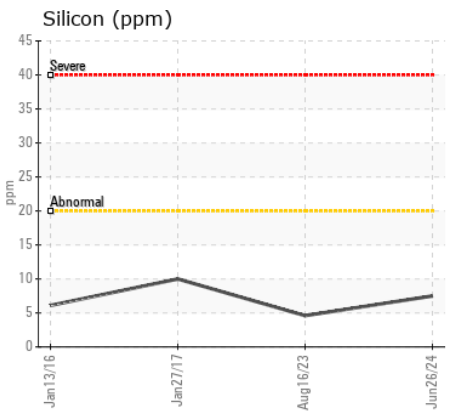
Chromium (ppm)



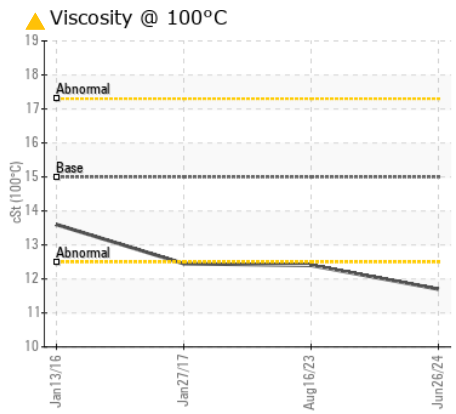
Copper (ppm)



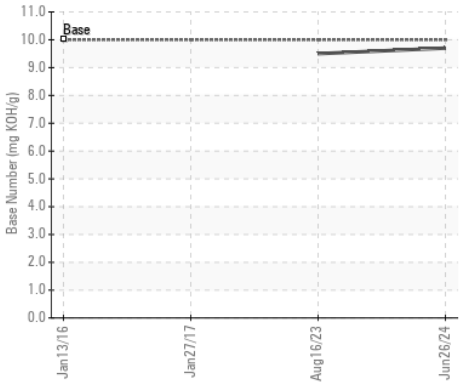
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP442393
Lab Number : 06221977
Unique Number : 11100174
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 27 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Wes Davis

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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