MOB I VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
VOLVO A25F 73405
Component
Diesel Engine
Fluid
PHILLIPS 66 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

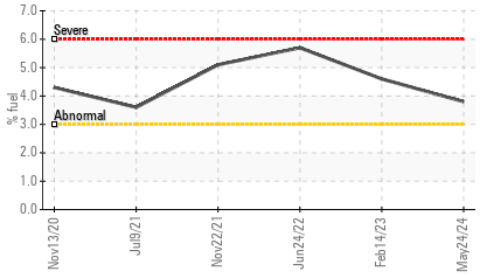
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

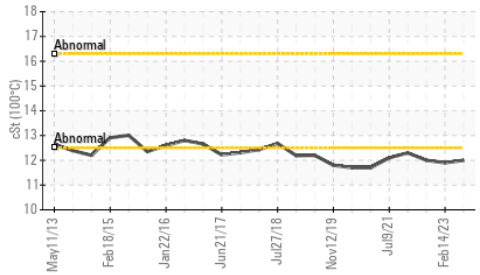
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP362650	VCP335825	VCP378524
Sample Date		Client Info		24 May 2024	14 Feb 2023	24 Jun 2022
Machine Age	hrs	Client Info		11865	11336	10796
Oil Age	hrs	Client Info		529	500	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>200	18	6	6
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		76	79	79
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	5	2	3
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>20	<1	0	<1
Tin	ppm	ASTM D5185m	>20	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	6	3	4
Potassium	ppm	ASTM D5185m	>20	<1	2	3
Fuel	%	ASTM D3524	>3.0	▲ 3.8	▲ 4.6	▲ 5.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.2	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	20.3	20.6
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		5	1	3
Boron	ppm	ASTM D5185m		152	110	108
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		15	7	5
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		394	358	403
Calcium	ppm	ASTM D5185m		1674	1630	1755
Phosphorus	ppm	ASTM D5185m		1022	952	961
Zinc	ppm	ASTM D5185m		1173	1116	1185
Sulfur	ppm	ASTM D5185m		4166	3644	4607
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	15.4	16.2
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	6.9	6.7
Visc @ 100°C	cSt	ASTM D445		▲ 12.0	▲ 11.9	▲ 12.0

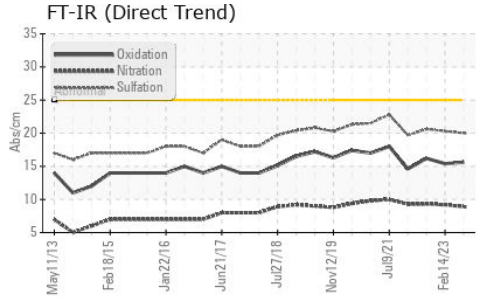
Fuel Dilution



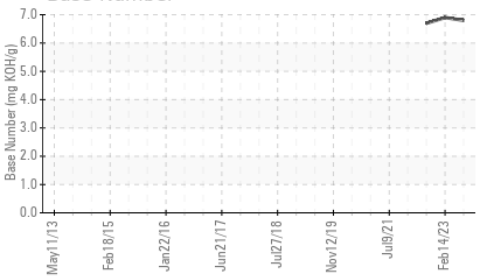
Viscosity @ 100°C



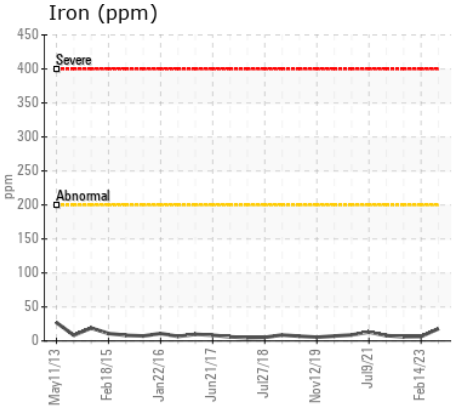
FT-IR (Direct Trend)



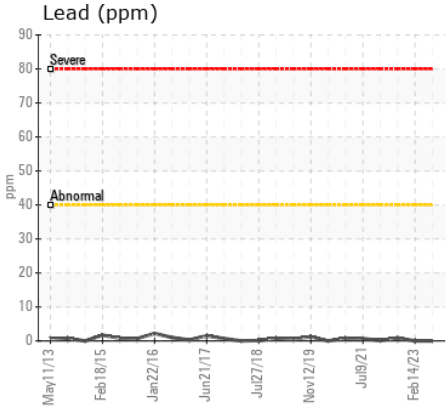
Base Number



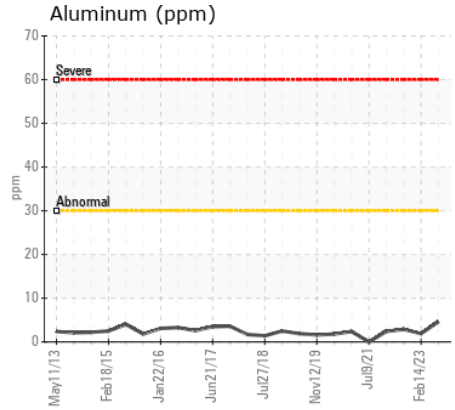
Iron (ppm)



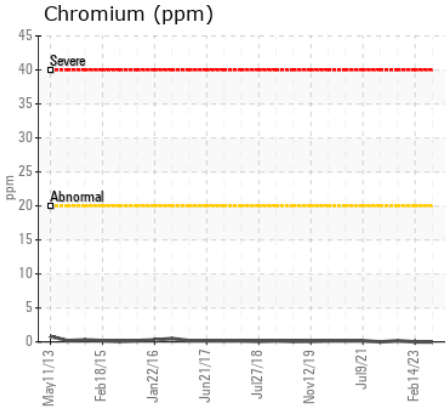
Lead (ppm)



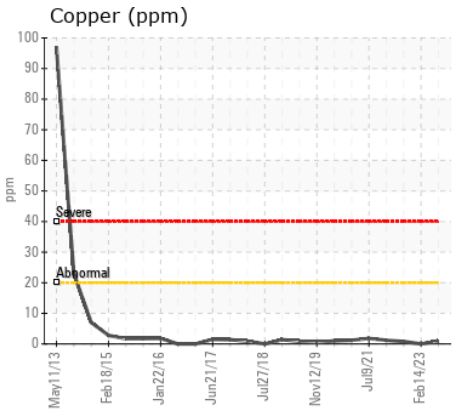
Aluminum (ppm)



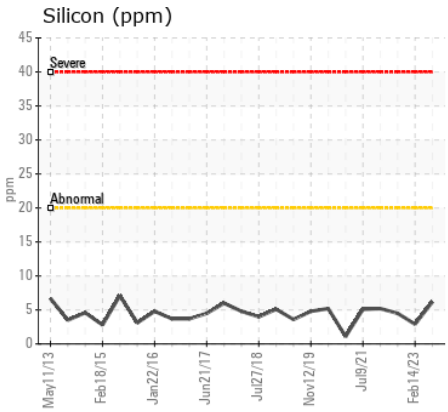
Chromium (ppm)



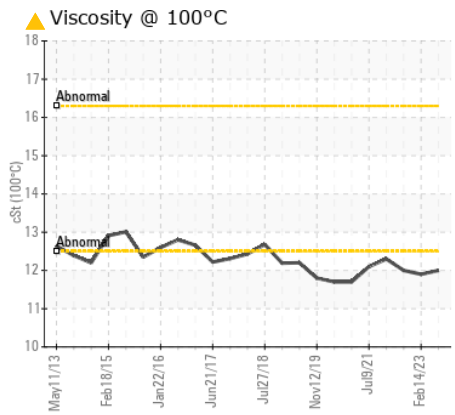
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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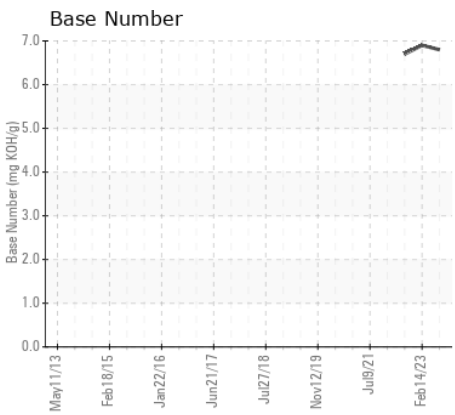

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP362650
Lab Number : 06196513
Unique Number : 11058636
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

Received : 31 May 2024
Tested : 05 Jun 2024
Diagnosed : 05 Jun 2024 - Wes Davis

WELLONS CONSTRUCTION
510 N POWELL AVE
DUNN, NC
US 28334
Contact: GREG WRENCH

T: (910)892-6630
F: (910)892-3046

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)