MOB I

VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO EC240BLC 11321
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

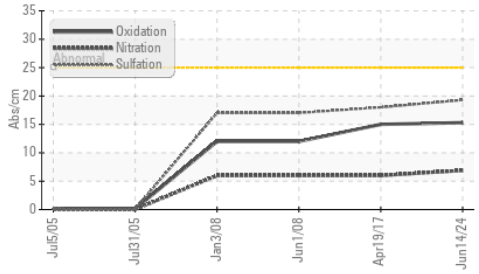
There is no indication of any contamination in the oil.

FLUID CONDITION

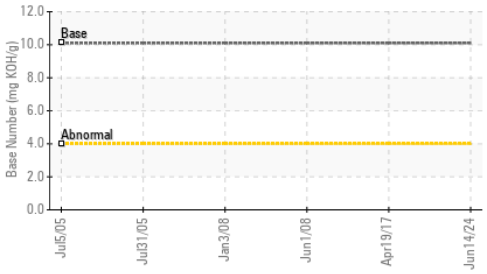
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCE166736	VCE166866	VC377345
Sample Date		Client Info		14 Jun 2024	19 Apr 2017	01 Jun 2008
Machine Age	hrs	Client Info		12277	8906	3689
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	Changed
Filter Changed		Client Info		Not Changd	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	16	5	3
Chromium	ppm	ASTM D5185m	>10	1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	4	1	1
Lead	ppm	ASTM D5185m	>20	<1	2	<1
Copper	ppm	ASTM D5185m	>15	1	<1	0
Tin	ppm	ASTM D5185m	>10	<1	4	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	12	4	4
Potassium	ppm	ASTM D5185m	>20	6	5	0
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	6.9	6.	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	18.	17.
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		6	5	<1
Boron	ppm	ASTM D5185m	316	81	51	0
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	40	5	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	24	368	66	283
Calcium	ppm	ASTM D5185m	2292	1840	2138	2282
Phosphorus	ppm	ASTM D5185m	1064	1060	850	1050
Zinc	ppm	ASTM D5185m	1160	1282	1048	1164
Sulfur	ppm	ASTM D5185m	4996	4078	3024	5037
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	15.	12.
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	9.0	---	---
Visc @ 100°C	cSt	ASTM D445	15.7	13.8	14.97	14.41

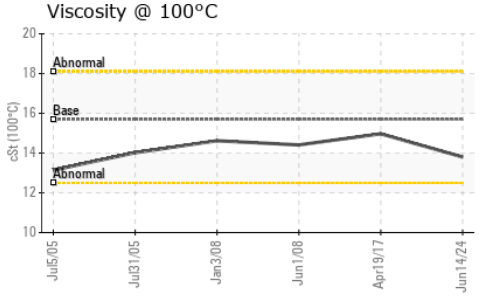
FT-IR (Direct Trend)



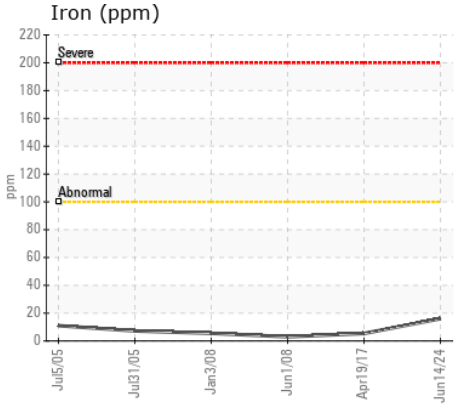
Base Number



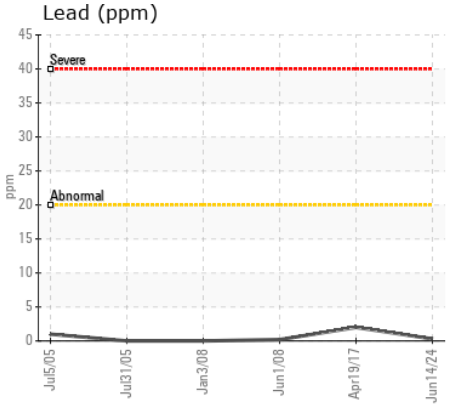
Viscosity @ 100°C



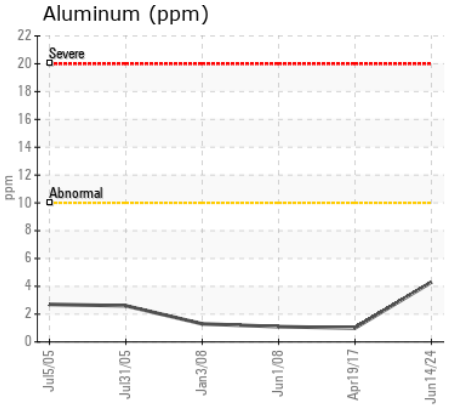
Iron (ppm)



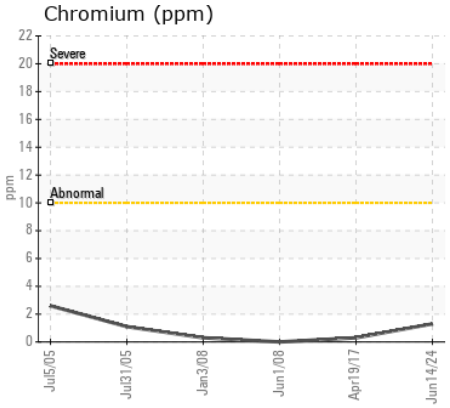
Lead (ppm)



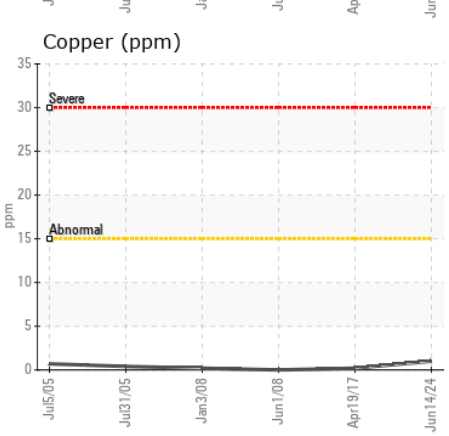
Aluminum (ppm)



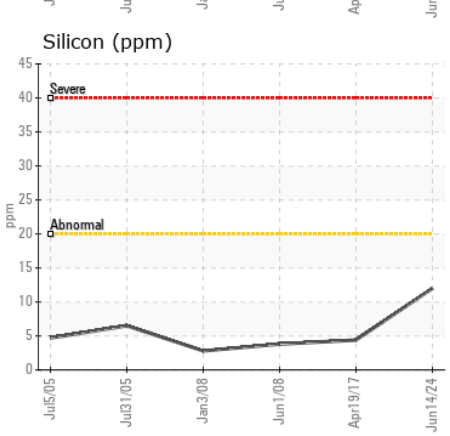
Chromium (ppm)



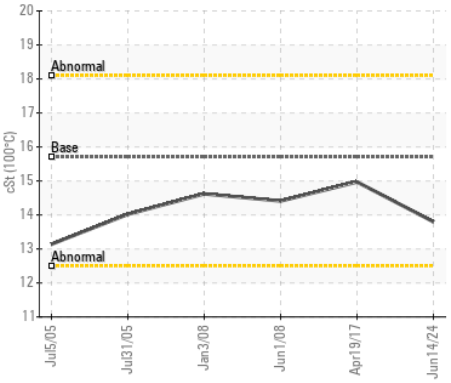
Copper (ppm)



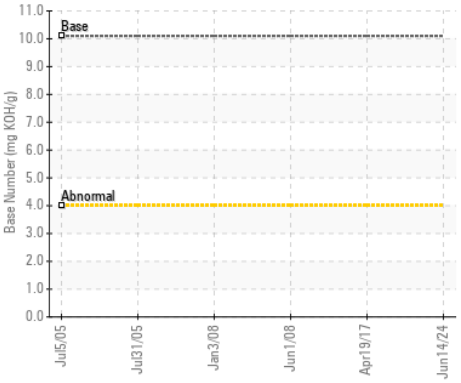
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCE166736
Lab Number : 06217462
Unique Number : 11090326
Test Package : MOB 1 (Additional Tests: TBN)
Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 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)

FLUVIAL SOLUTIONS
512 OAKWOOD AVE
RALEIGH, NC
US 27601
Contact: PETER JELENEVSKY
peter@fluvialsolutions.com
T: (919)605-6134
F: (919)821-4626