MOB I

VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[41782 COVIA]
Machine Id
VOLVO L180C 61057
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

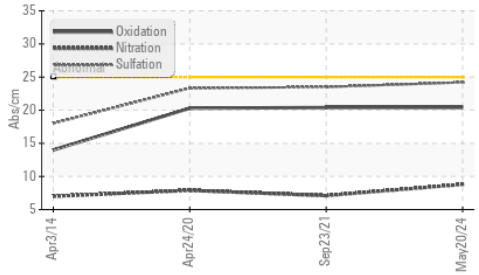
There is no indication of any contamination in the oil.

FLUID CONDITION

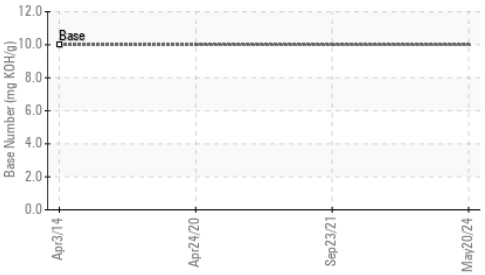
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP453791	VCP337085	VCP239710
Sample Date		Client Info		20 May 2024	23 Sep 2021	24 Apr 2020
Machine Age	hrs	Client Info		4333	3040	0
Oil Age	hrs	Client Info		0	0	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	19	8	17
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>30	5	5	4
Lead	ppm	ASTM D5185m	>40	9	3	8
Copper	ppm	ASTM D5185m	>20	18	4	7
Tin	ppm	ASTM D5185m	>20	3	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	8
Potassium	ppm	ASTM D5185m	>20	3	<1	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.8	7.1	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.2	23.5	23.3
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		2	<1	3
Boron	ppm	ASTM D5185m	2.5	260	134	148
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	96	62	75
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	256	584	543	667
Calcium	ppm	ASTM D5185m	2057	1691	1634	1882
Phosphorus	ppm	ASTM D5185m	935	948	850	754
Zinc	ppm	ASTM D5185m	1223	1186	969	904
Sulfur	ppm	ASTM D5185m	4079	3189	2293	2022
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	20.4	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.0	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.1	13.2	13.3

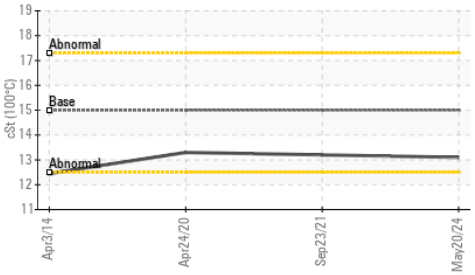
FT-IR (Direct Trend)



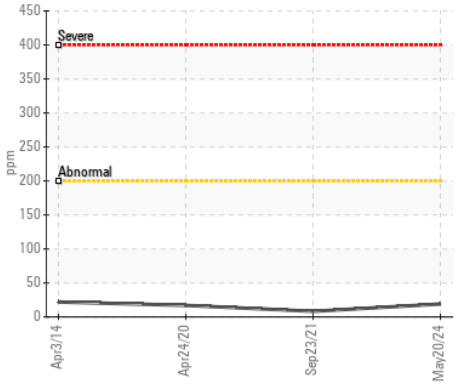
Base Number



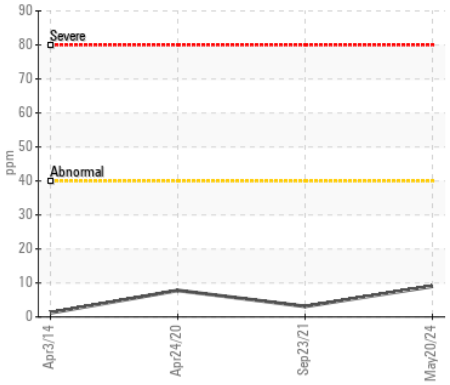
Viscosity @ 100°C



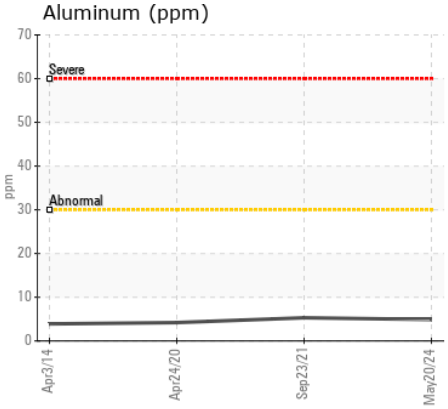
Iron (ppm)



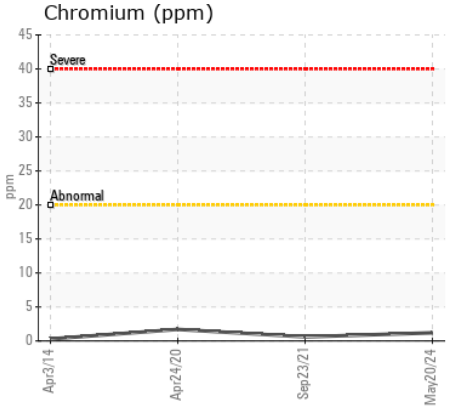
Lead (ppm)



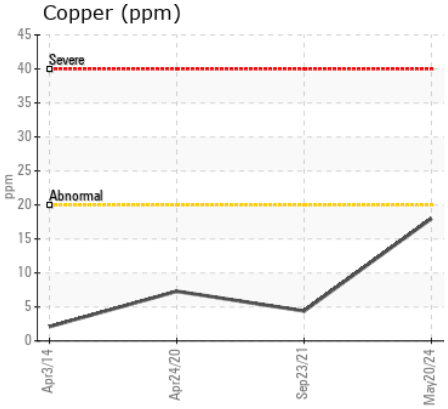
Aluminum (ppm)



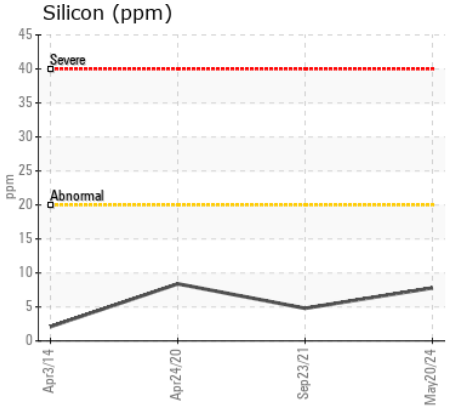
Chromium (ppm)



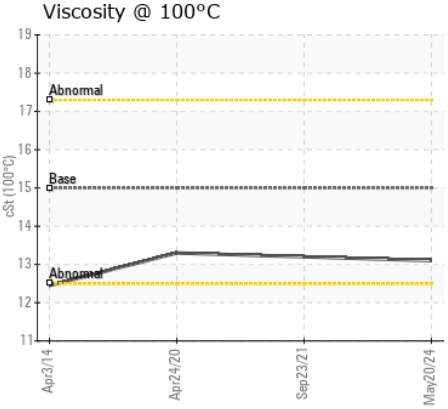
Copper (ppm)



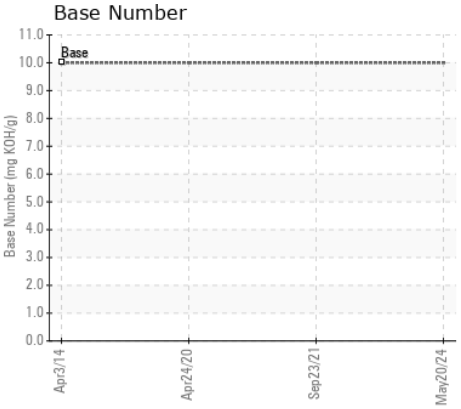
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP453791
Lab Number : 06188756
Unique Number : 11045508
Test Package : MOB 1 (Additional Tests: TBN)

Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 28 May 2024 - Sean Felton

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)

215 - ASCENDUM MACHINERY INC - CAYCE
2303 AIRPORT BLVD
CAYCE, SC
US 29033
Contact: TAMI BROWDER

T: (803)923-2138
F: (803)791-9920