



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[74]
Machine Id
VOLVO ECR235DL 210480
Component
Diesel Engine
Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VC527533	VC527553	VC527541
Sample Date		Client Info		30 Mar 2023	30 Nov 2021	27 May 2021
Machine Age	hrs	Client Info		3643	700	3037
Oil Age	hrs	Client Info		118	205	156
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	37	4	27
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	2	2	3
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>15	0	2	<1
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

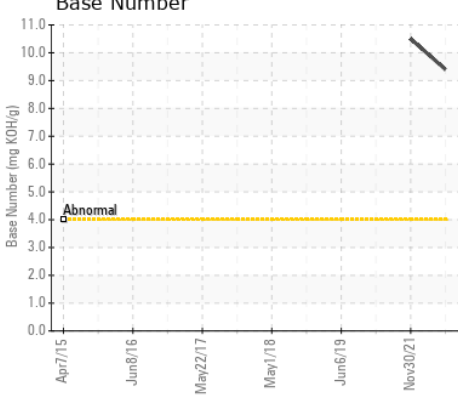
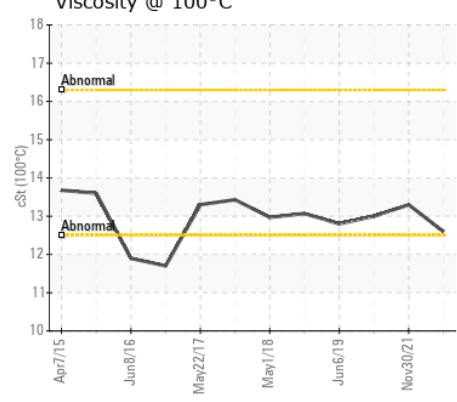
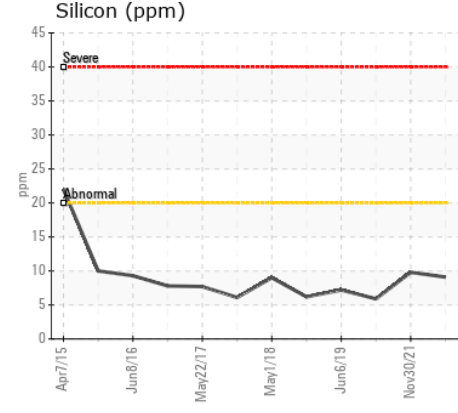
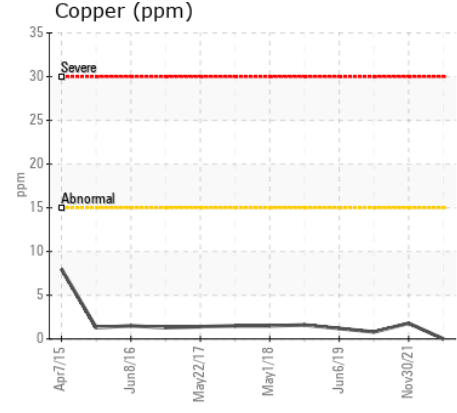
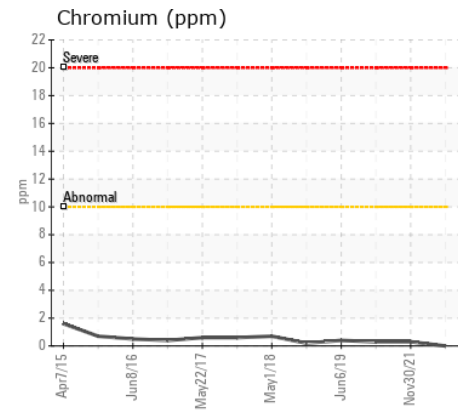
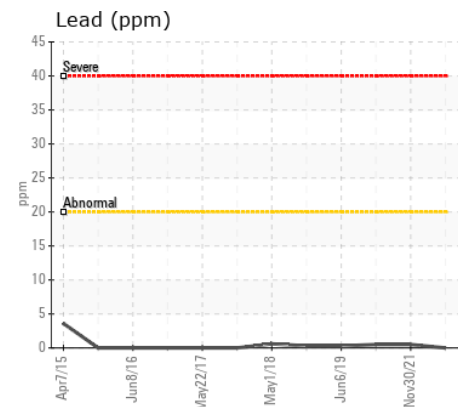
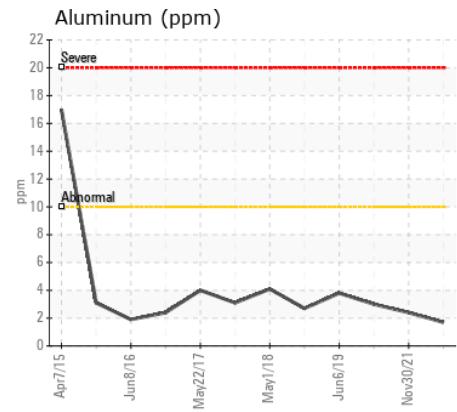
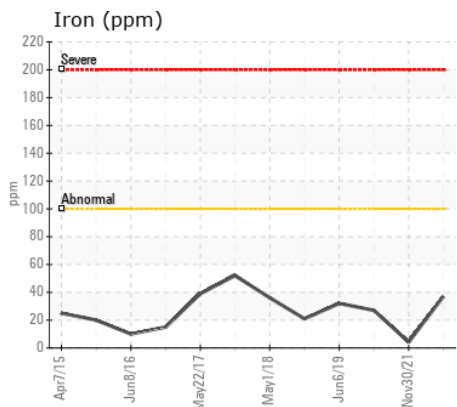
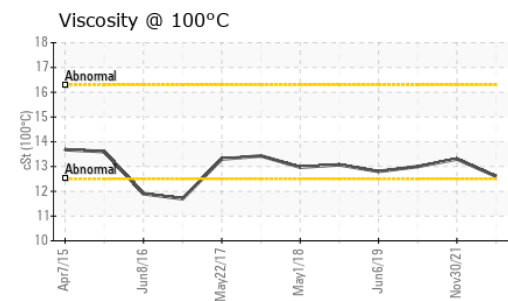
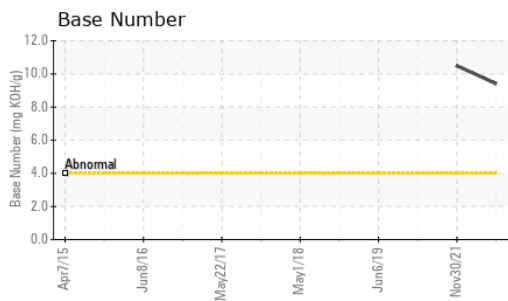
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	9	10	6
Potassium	ppm	ASTM D5185m	>20	<1	3	1
Fuel		WC Method	>5	<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	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.1	5.8	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	21.8	21.5
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

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.

Sodium	ppm	ASTM D5185m	>118	1	2	2
Boron	ppm	ASTM D5185m		43	69	152
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		34	37	37
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		356	542	534
Calcium	ppm	ASTM D5185m		1807	1741	1623
Phosphorus	ppm	ASTM D5185m		802	812	843
Zinc	ppm	ASTM D5185m		1009	916	974
Sulfur	ppm	ASTM D5185m		3203	2382	2608
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	19	17.1
Base Number (BN)	mg KOH/g	ASTM D2896		9.4	10.5	---
Visc @ 100°C	cSt	ASTM D445		12.6	13.3	13.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VC527533 **Received** : 10 Apr 2023
Lab Number : 05815887 **Diagnosed** : 13 Apr 2023
Unique Number : 10418679 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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Certificate L2367
 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)