



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO EC300EL 313148
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP437546	VCP432584	VCP412084
Sample Date		Client Info		14 May 2024	28 Feb 2024	25 Oct 2023
Machine Age	hrs	Client Info		7144	6788	6401
Oil Age	hrs	Client Info		0	0	292
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	8	6	5
Chromium	ppm	ASTM D5185m	>10	1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	1	<1	0
Aluminum	ppm	ASTM D5185m	>10	5	3	3
Lead	ppm	ASTM D5185m	>20	<1	<1	0
Copper	ppm	ASTM D5185m	>15	3	1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

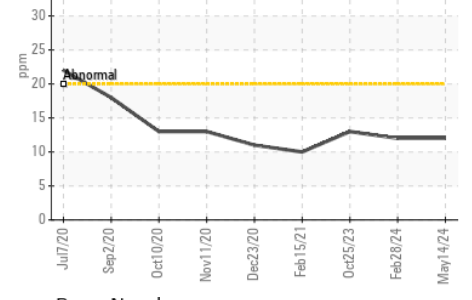
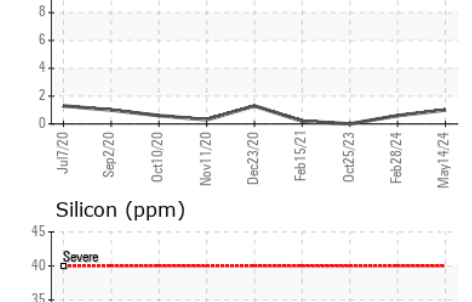
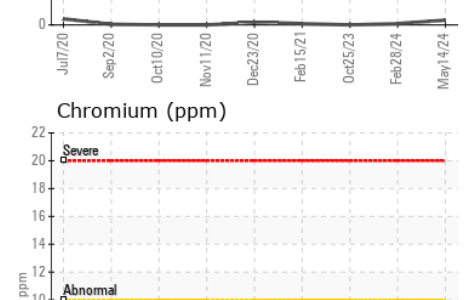
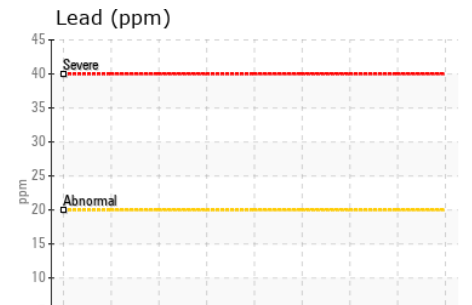
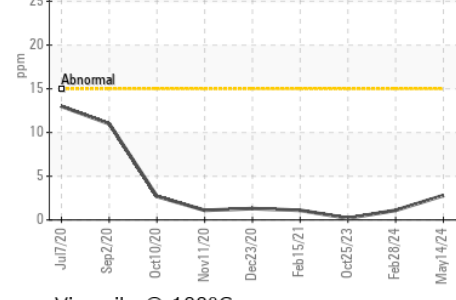
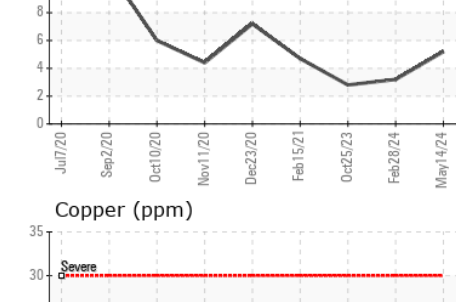
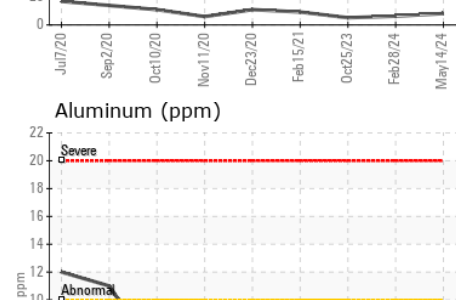
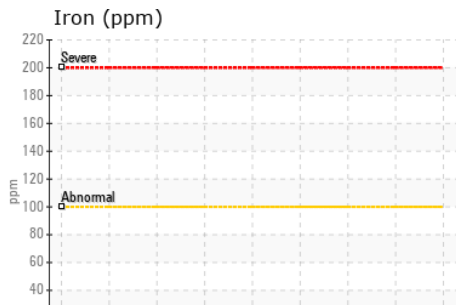
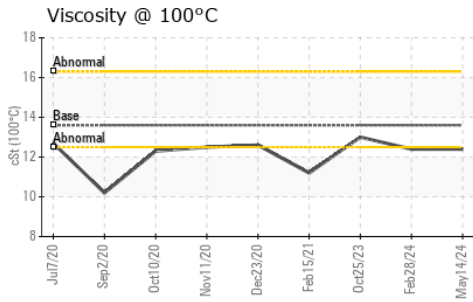
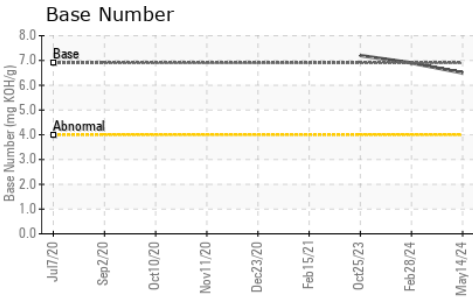
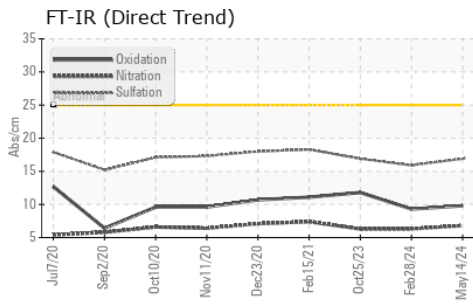
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	12	12	13
Potassium	ppm	ASTM D5185m	>20	4	3	1
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	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.3	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.9	15.9	16.9
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		3	0	1
Boron	ppm	ASTM D5185m	39	30	29	30
Barium	ppm	ASTM D5185m	1	0	0	4
Molybdenum	ppm	ASTM D5185m	49	35	46	50
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	616	172	170	268
Calcium	ppm	ASTM D5185m	1554	1979	2091	1723
Phosphorus	ppm	ASTM D5185m	899	867	914	871
Zinc	ppm	ASTM D5185m	1069	1008	1038	959
Sulfur	ppm	ASTM D5185m	2624	3890	3892	2755
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.8	9.3	11.8
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	6.5	6.9	7.2
Visc @ 100°C	cSt	ASTM D445	13.6	12.4	12.4	13.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP437546 **Received** : 29 May 2024
Lab Number : 06193670 **Tested** : 30 May 2024
Unique Number : 11050422 **Diagnosed** : 30 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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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)