



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[3040]

Machine Id

VOLVO EC220EL 314928

Component

Diesel Engine

Fluid

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP434347	VCP406172	---
Sample Date		Client Info		18 Jun 2024	25 Apr 2023	---
Machine Age	hrs	Client Info		1515	510	---
Oil Age	hrs	Client Info		0	500	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	23	47	---
Chromium	ppm	ASTM D5185m	>10	<1	3	---
Nickel	ppm	ASTM D5185m	>10	<1	4	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	3	---
Lead	ppm	ASTM D5185m	>20	0	0	---
Copper	ppm	ASTM D5185m	>15	1	7	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

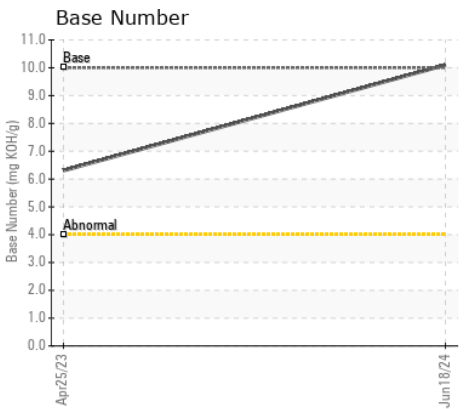
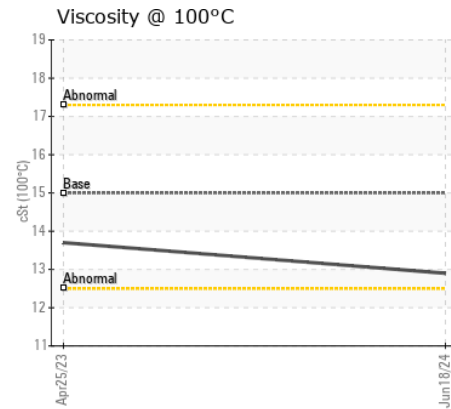
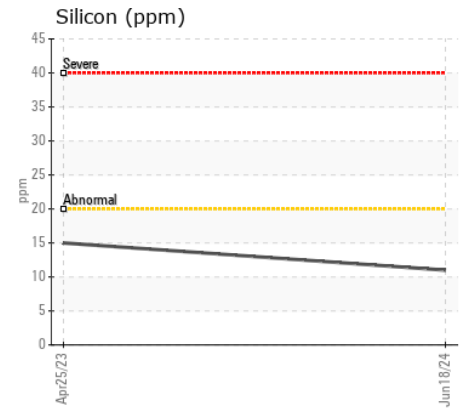
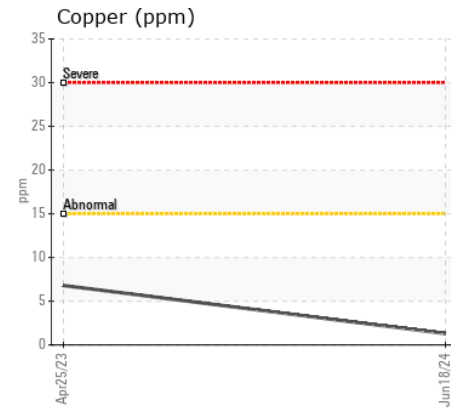
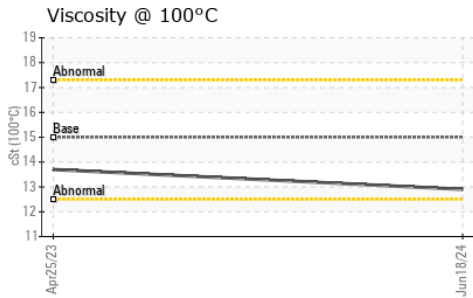
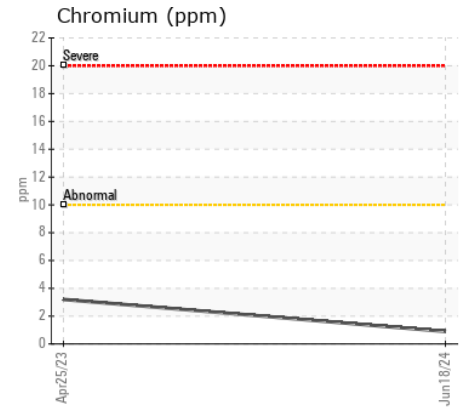
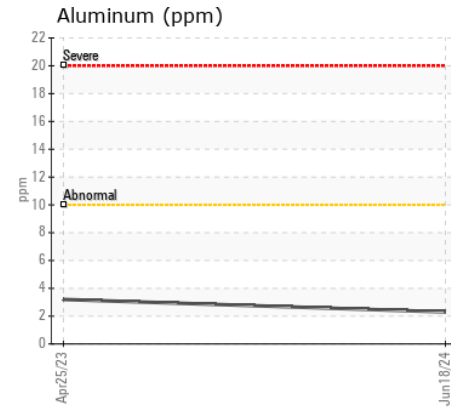
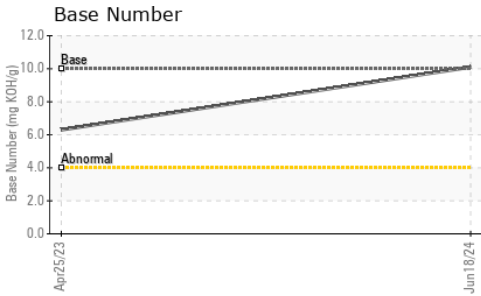
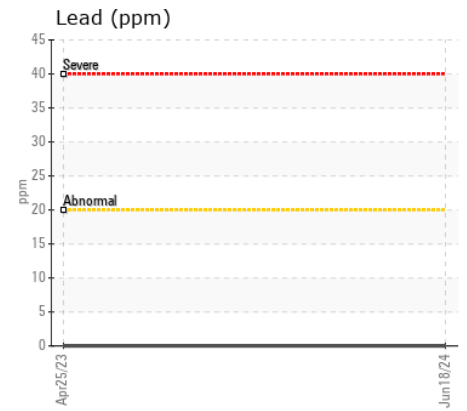
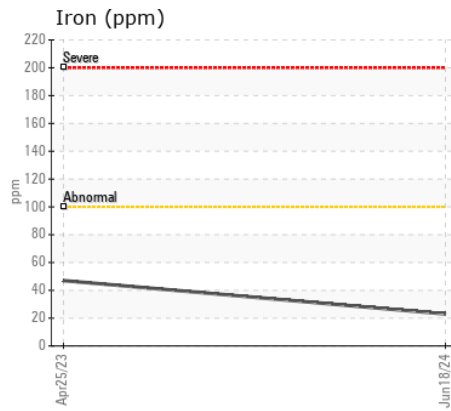
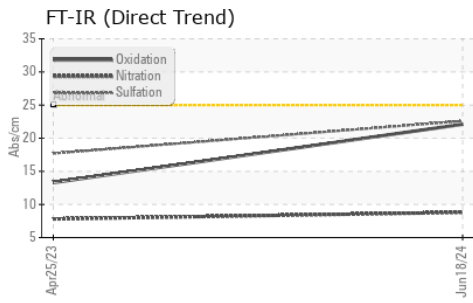
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	11	15	---
Potassium	ppm	ASTM D5185m	>20	2	4	---
Fuel		WC Method	>6.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	8.8	7.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	17.7	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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		2	4	---
Boron	ppm	ASTM D5185m	2.5	36	9	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.7	42	8	---
Manganese	ppm	ASTM D5185m	0.0	0	4	---
Magnesium	ppm	ASTM D5185m	256	528	133	---
Calcium	ppm	ASTM D5185m	2057	1808	2269	---
Phosphorus	ppm	ASTM D5185m	935	944	869	---
Zinc	ppm	ASTM D5185m	1223	1248	1092	---
Sulfur	ppm	ASTM D5185m	4079	2906	3576	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.1	13.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.1	6.3	---
Visc @ 100°C	cSt	ASTM D445	15.0	12.9	13.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP434347 **Received** : 26 Jun 2024
Lab Number : 06220778 **Tested** : 27 Jun 2024
Unique Number : 11098975 **Diagnosed** : 27 Jun 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)