



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[SPM661533]
Machine Id
VOLVO EC220 315909
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		VCP445689	---	---
Sample Date		Client Info		18 Feb 2024	---	---
Machine Age	hrs	Client Info		810	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	24	---	---
Chromium	ppm	ASTM D5185m	>10	2	---	---
Nickel	ppm	ASTM D5185m	>10	6	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>10	3	---	---
Lead	ppm	ASTM D5185m	>20	1	---	---
Copper	ppm	ASTM D5185m	>15	10	---	---
Tin	ppm	ASTM D5185m	>10	3	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

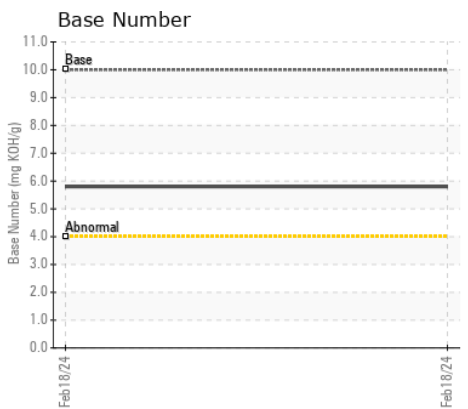
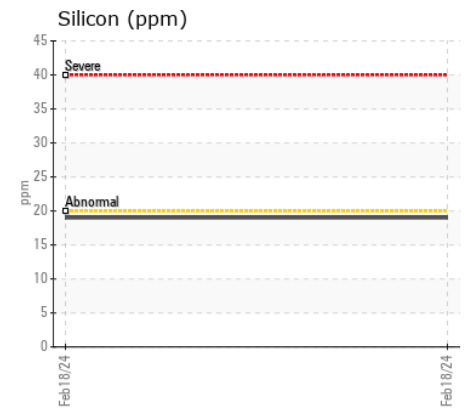
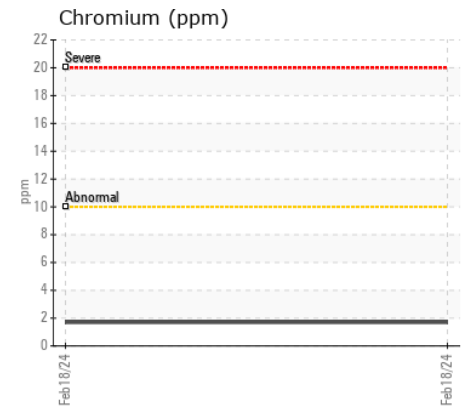
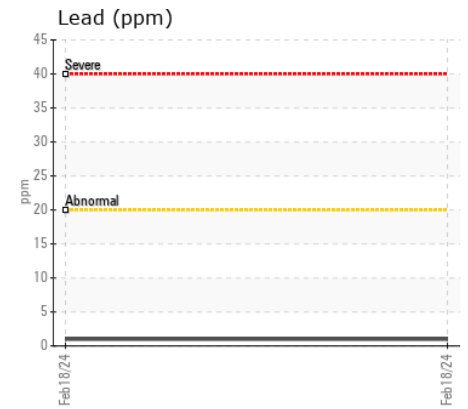
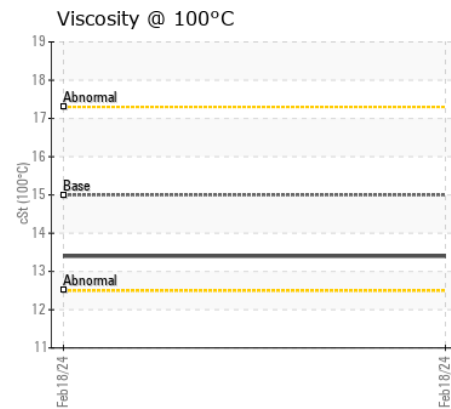
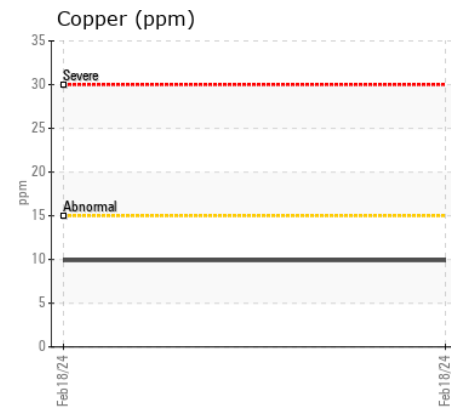
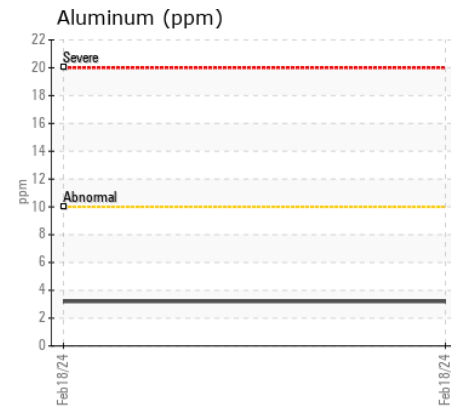
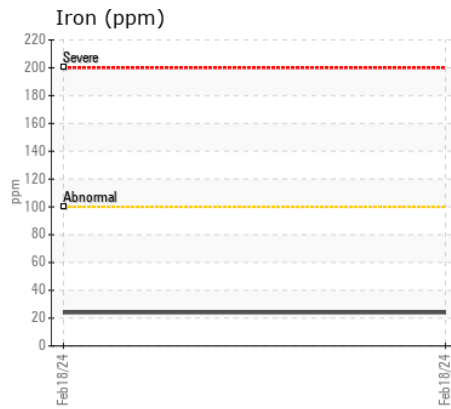
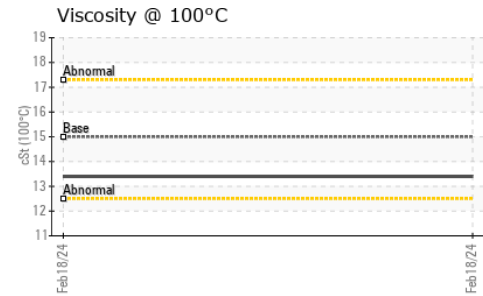
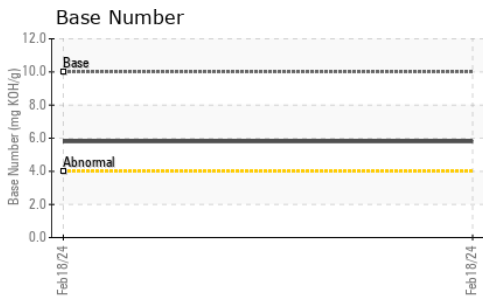
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	19	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Fuel		WC Method	>6.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	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	---	---
Boron	ppm	ASTM D5185m	2.5	84	---	---
Barium	ppm	ASTM D5185m	0.0	2	---	---
Molybdenum	ppm	ASTM D5185m	0.7	36	---	---
Manganese	ppm	ASTM D5185m	0.0	4	---	---
Magnesium	ppm	ASTM D5185m	256	144	---	---
Calcium	ppm	ASTM D5185m	2057	1945	---	---
Phosphorus	ppm	ASTM D5185m	935	885	---	---
Zinc	ppm	ASTM D5185m	1223	1092	---	---
Sulfur	ppm	ASTM D5185m	4079	3692	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	13.4	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : VCP445689

Lab Number : 06101440

Unique Number : 10899670

Test Package : MOB 1 (Additional Tests: TBN)

Received : 27 Feb 2024

Tested : 28 Feb 2024

Diagnosed : 28 Feb 2024 - Wes Davis

ALTA EQUIPMENT COMPANY

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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)