



VOLVO

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
ABNORMAL
NORMAL



Area
[SPM675624]
Machine Id
VOLVO EC250ELR 314201
Component
Left Final Drive
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP444438	VCP423126	VCP404373
Sample Date		Client Info		04 Mar 2024	21 Jul 2023	17 Jan 2023
Machine Age	hrs	Client Info		3690	2533	2150
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				ABNORMAL	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	463	▲ 2066	▲ 1475
Chromium	ppm	ASTM D5185m	>10	9	▲ 24	▲ 20
Nickel	ppm	ASTM D5185m	>10	0	4	2
Titanium	ppm	ASTM D5185m		2	11	7
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	32	186	134
Lead	ppm	ASTM D5185m	>25	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	<1	4	3
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

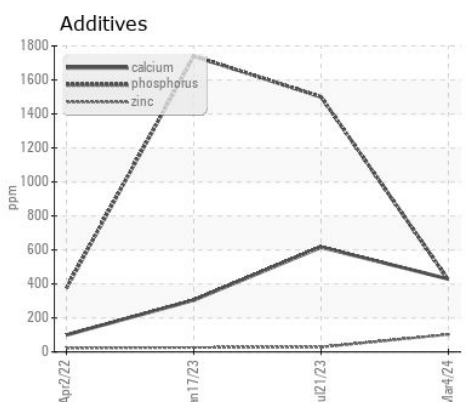
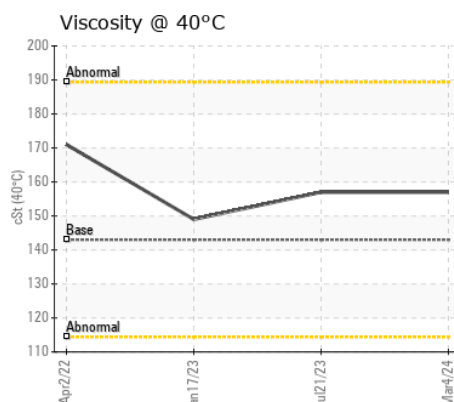
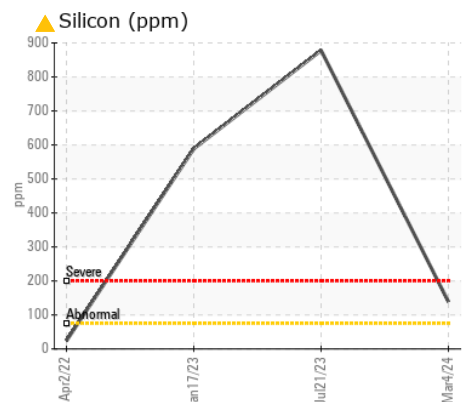
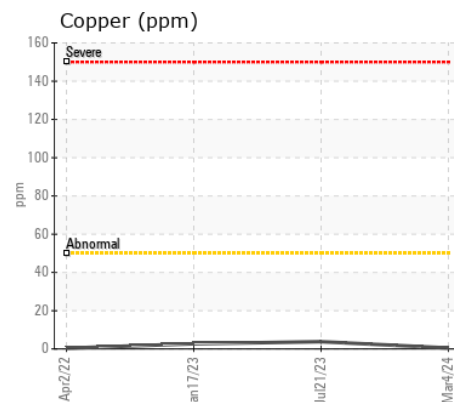
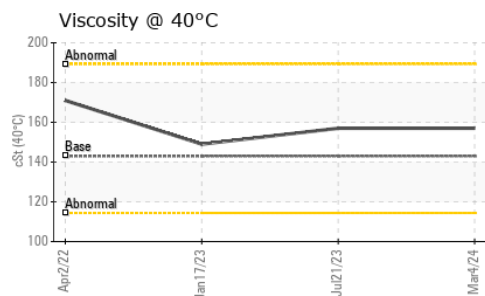
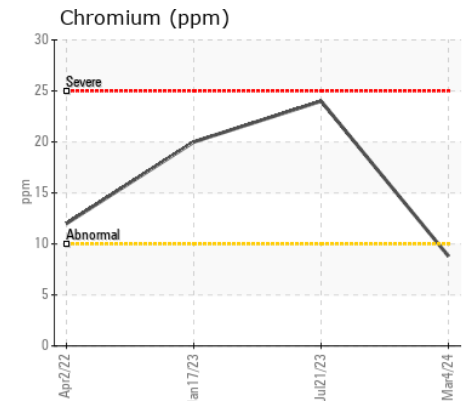
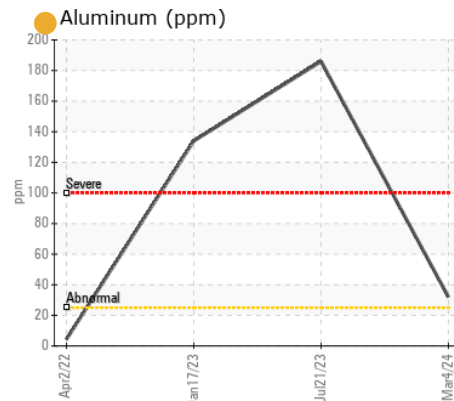
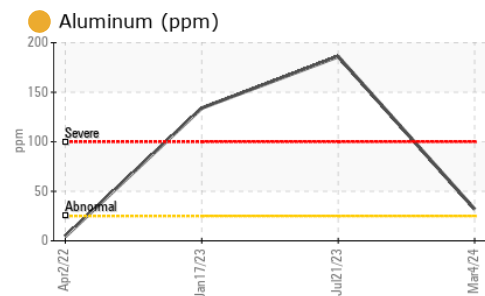
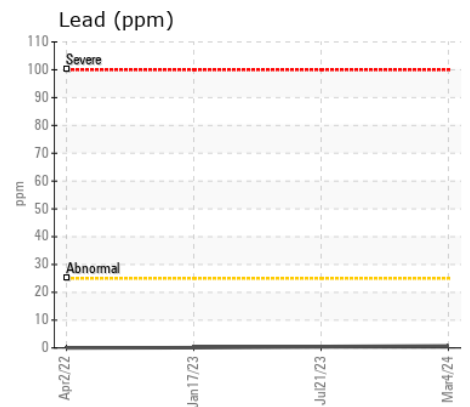
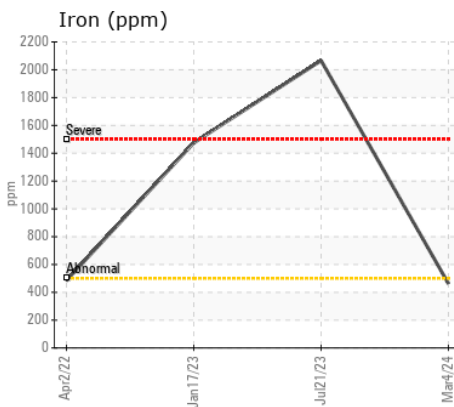
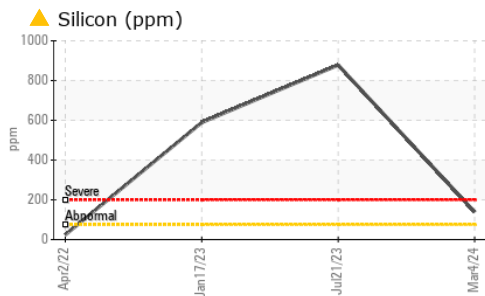
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	139	▲ 878	▲ 589
Potassium	ppm	ASTM D5185m	>20	8	79	56
Water		WC Method	>0.2	NEG	NEG	NEG
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

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	3	20	12
Boron	ppm	ASTM D5185m	400	4	100	115
Barium	ppm	ASTM D5185m	200	0	0	2
Molybdenum	ppm	ASTM D5185m	12	0	2	2
Manganese	ppm	ASTM D5185m		16	18	14
Magnesium	ppm	ASTM D5185m	12	67	245	128
Calcium	ppm	ASTM D5185m	150	429	616	305
Phosphorus	ppm	ASTM D5185m	1650	423	1500	1740
Zinc	ppm	ASTM D5185m	125	103	28	26
Sulfur	ppm	ASTM D5185m	22500	18513	23547	19040
Visc @ 40°C	cSt	ASTM D445	143	157	157	149



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP444438 **Received** : 18 Mar 2024
Lab Number : 06121198 **Tested** : 19 Mar 2024
Unique Number : 10930031 **Diagnosed** : 20 Mar 2024 - Don Baldrige
Test Package : MOB 1

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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)