



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
CAVANAGH [394790]
Machine Id
VOLVO EC480EL 314289
Component
Hydraulic System
Fluid
VOLVO VDS-4.5 Premium Motor Oil 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP380074	VCP352020	---
Sample Date		Client Info		14 Feb 2024	16 Oct 2022	---
Machine Age	hrs	Client Info		6034	4032	---
Oil Age	hrs	Client Info		0	0	---
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 D5185(m)	>25	7	7	---
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>10	<1	0	---
Titanium	ppm	ASTM D5185(m)		30	60	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	3	3	---
Lead	ppm	ASTM D5185(m)	>20	<1	1	---
Copper	ppm	ASTM D5185(m)	>150	25	28	---
Tin	ppm	ASTM D5185(m)	>10	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

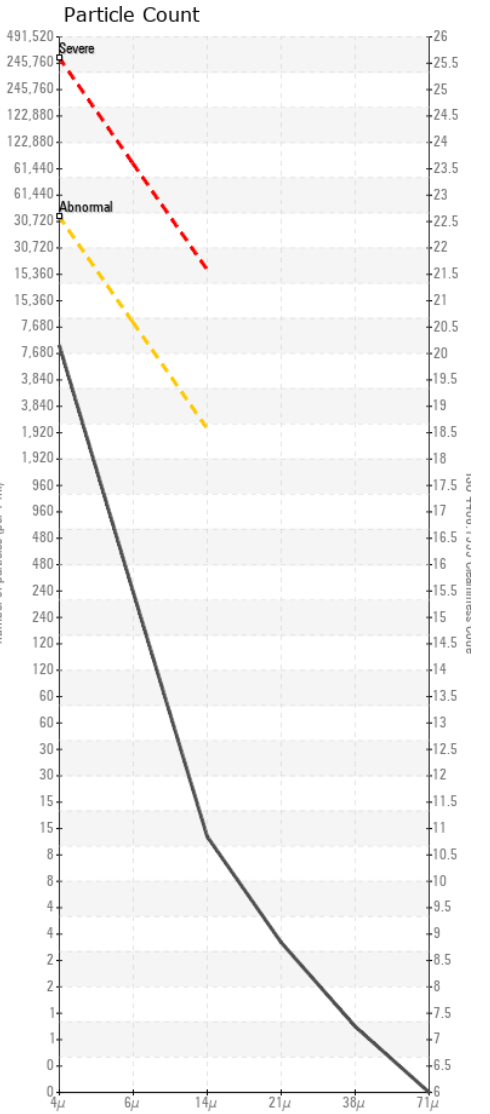
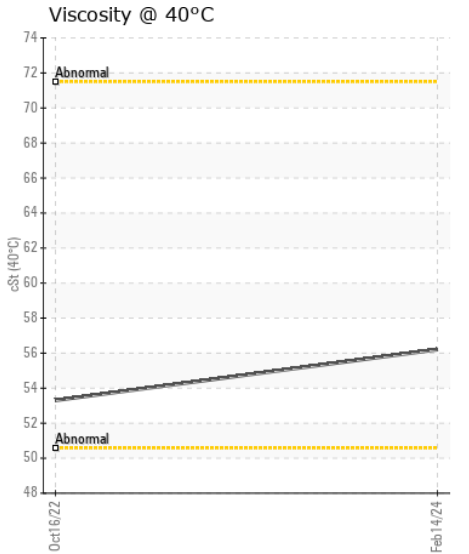
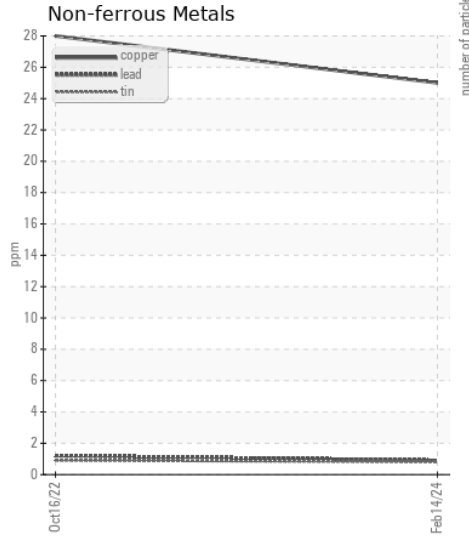
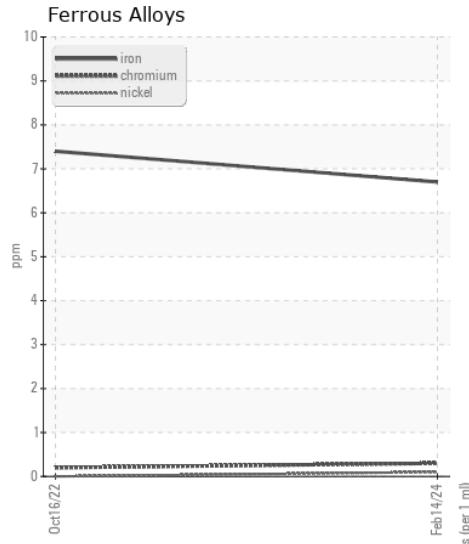
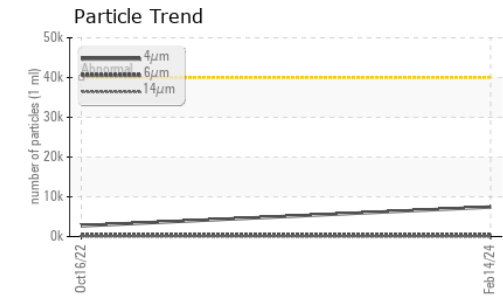
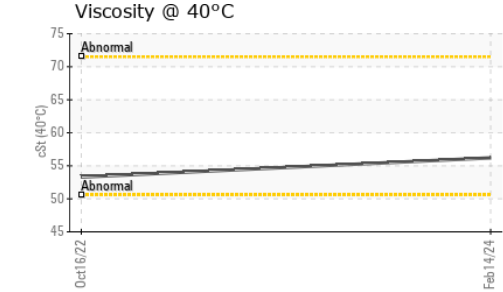
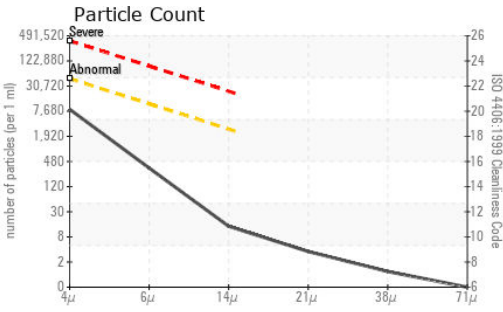
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>50	6	6	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>40000	7436	2713	---
Particles >6µm		ASTM D7647	>10000	294	495	---
Particles >14µm		ASTM D7647	>2500	12	43	---
Particles >21µm		ASTM D7647	>640	3	11	---
Particles >38µm		ASTM D7647	>160	1	0	---
Particles >71µm		ASTM D7647	>40	0	0	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	20/15/11	19/16/13	---
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	4	---
Boron	ppm	ASTM D5185(m)		80	120	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		26	6	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		475	299	---
Calcium	ppm	ASTM D5185(m)		1405	1426	---
Phosphorus	ppm	ASTM D5185(m)		957	960	---
Zinc	ppm	ASTM D5185(m)		1040	1018	---
Sulfur	ppm	ASTM D5185(m)		2822	2880	---
Visc @ 40°C	cSt	ASTM D7279(m)		56.2	53.3	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VCP380074 **Received** : 21 Feb 2024
Lab Number : 02617139 **Tested** : 22 Feb 2024
Unique Number : 5734249 **Diagnosed** : 22 Feb 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.