



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
[SWO-071782 VULCAN]
 Machine Id
VOLVO EC380EL 310021
 Component
Swing Drive
 Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP453705	VCP428702	VCP428933
Sample Date		Client Info		06 May 2024	21 Dec 2023	07 Sep 2023
Machine Age	hrs	Client Info		11224	10648	10247
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	222	302	524
Chromium	ppm	ASTM D5185m	>10	3	1	8
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	5	7
Lead	ppm	ASTM D5185m	>50	2	0	2
Copper	ppm	ASTM D5185m	>50	37	▲ 122	▲ 114
Tin	ppm	ASTM D5185m	>10	2	0	2
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

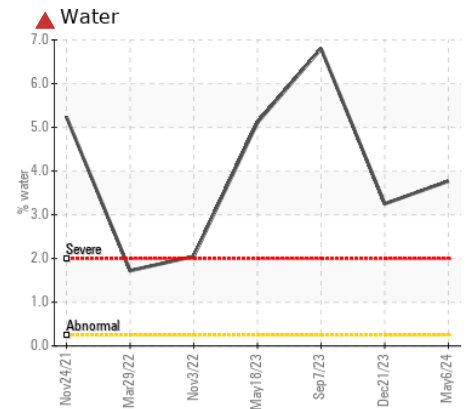
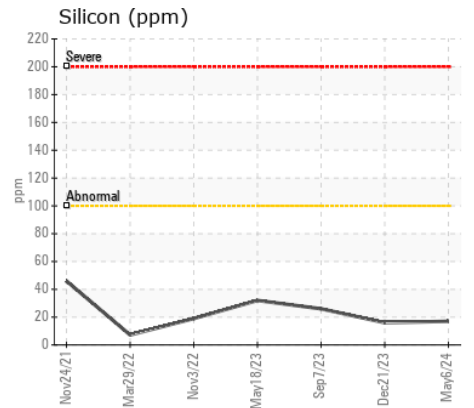
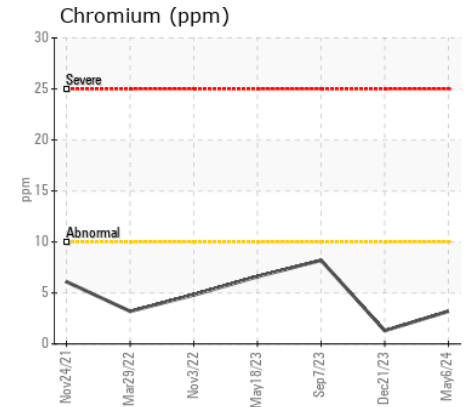
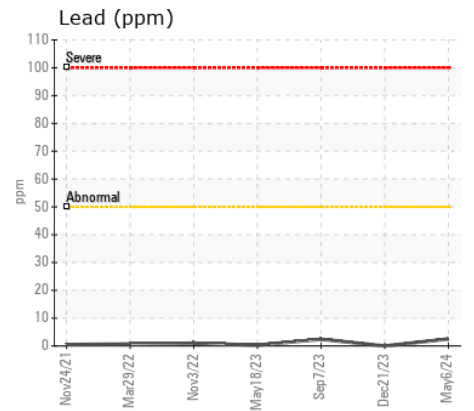
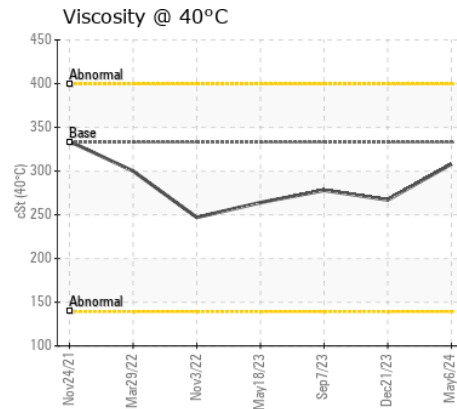
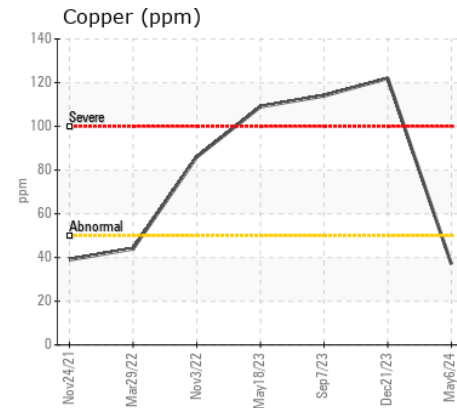
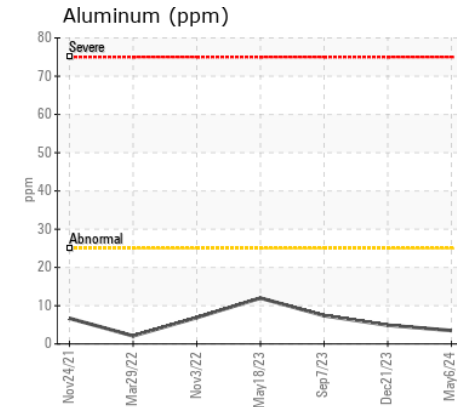
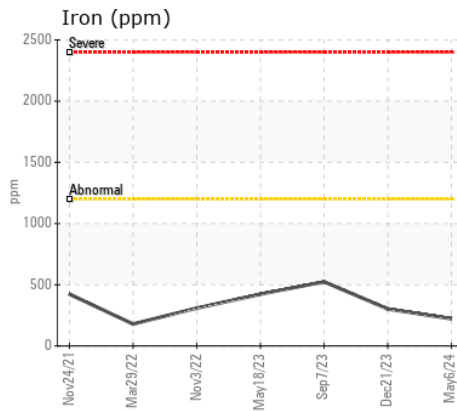
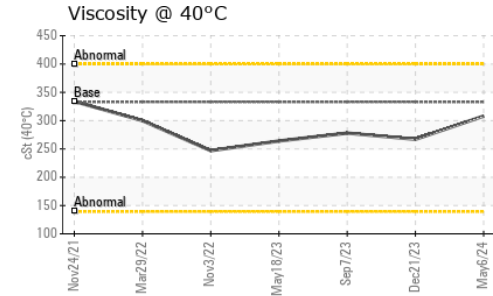
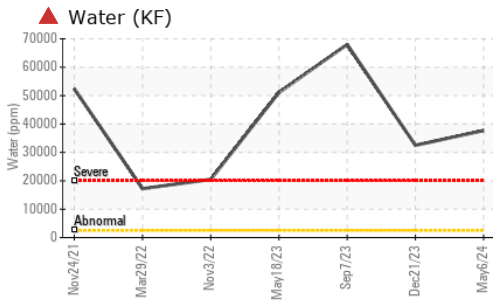
Appearance is milky. There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>100	17	16	26
Potassium	ppm	ASTM D5185m	>20	1	0	6
Water	%	ASTM D6304	>0.25	▲ 3.77	▲ 3.25	▲ 6.80
ppm Water	ppm	ASTM D6304	>2500	▲ 37700	▲ 32500	▲ 68000
Silt	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● MILKY	● MILKY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.25	▲ 0.2%	▲ 0.2%	▲ 0.2%

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		0	0	5
Boron	ppm	ASTM D5185m	111	99	79	125
Barium	ppm	ASTM D5185m	0.0	<1	5	0
Molybdenum	ppm	ASTM D5185m	0.9	8	0	4
Manganese	ppm	ASTM D5185m	0.0	5	2	12
Magnesium	ppm	ASTM D5185m	39	32	14	23
Calcium	ppm	ASTM D5185m	93	101	83	120
Phosphorus	ppm	ASTM D5185m	920	975	877	878
Zinc	ppm	ASTM D5185m	104	162	187	235
Sulfur	ppm	ASTM D5185m	20179	29337	26755	24383
Visc @ 40°C	cSt	ASTM D445	333	308	267	278



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP453705 **Received** : 09 May 2024
Lab Number : 06174218 **Tested** : 13 May 2024
Unique Number : 11020271 **Diagnosed** : 13 May 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: KF)

WHITAKER CONTRACTING
 692 CONVICT CAMP RD
 GUNTERSVILLE, AL
 US 35976

Contact: BROTHER WHITAKER
 BrotherWhitaker@whitaker-contracting.com
 T: (256)298-3905

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)

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