



VOLVO

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
[SWO-071782 VULCAN]
 Machine Id
VOLVO EC380EL 310021
 Component
Rear Right Final Drive
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

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

FLUID CONDITION

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

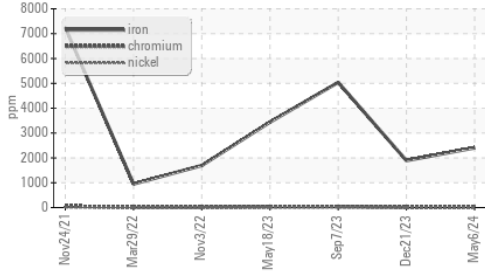
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP453735	VCP428707	VCP428913
Sample Date		Client Info		06 May 2024	21 Dec 2023	07 Sep 2023
Machine Age	hrs	Client Info		11224	10648	10247
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				SEVERE	SEVERE	SEVERE

Iron	ppm	ASTM D5185m	>500	▲ 2404	▲ 1892	▲ 5040
Chromium	ppm	ASTM D5185m	>10	▲ 21	6	▲ 39
Nickel	ppm	ASTM D5185m	>10	5	0	7
Titanium	ppm	ASTM D5185m		▲ 14	4	32
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	● 217	● 119	● 463
Lead	ppm	ASTM D5185m	>25	1	0	1
Copper	ppm	ASTM D5185m	>50	5	0	10
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	1
White Metal	scalar	*Visual	NONE	NONE	MODER	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

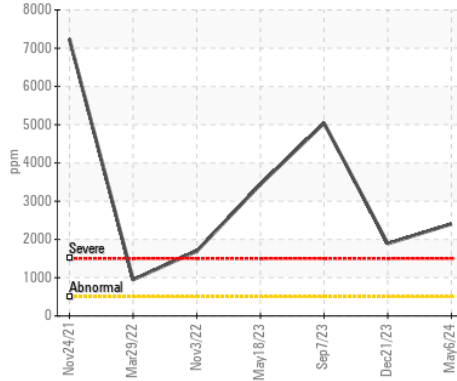
Silicon	ppm	ASTM D5185m	>75	▲ 906	▲ 534	▲ 2021
Potassium	ppm	ASTM D5185m	>20	74	38	147
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185m		18	0	38
Boron	ppm	ASTM D5185m		103	91	133
Barium	ppm	ASTM D5185m		3	5	0
Molybdenum	ppm	ASTM D5185m		9	5	9
Manganese	ppm	ASTM D5185m		15	6	32
Magnesium	ppm	ASTM D5185m		84	50	145
Calcium	ppm	ASTM D5185m		327	178	573
Phosphorus	ppm	ASTM D5185m		880	890	872
Zinc	ppm	ASTM D5185m		81	71	72
Sulfur	ppm	ASTM D5185m		23918	26630	25056
Visc @ 40°C	cSt	ASTM D445		321	303	466

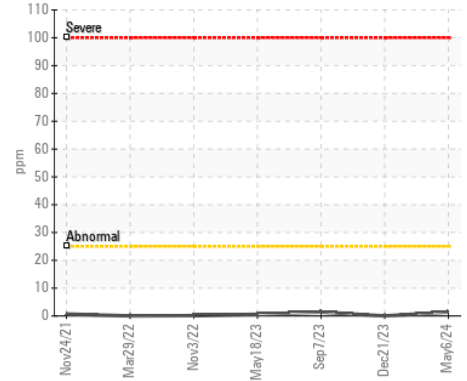
▲ Ferrous Alloys



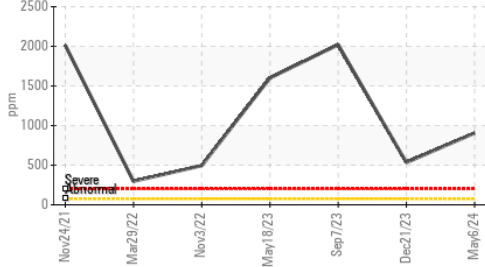
▲ Iron (ppm)



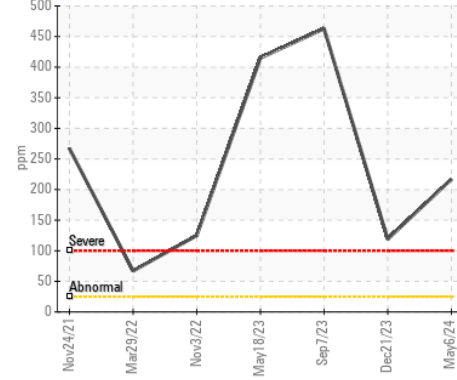
▲ Lead (ppm)



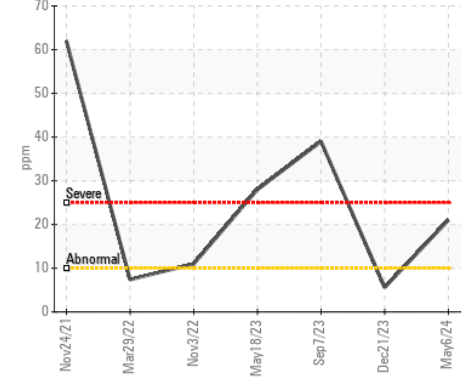
▲ Silicon (ppm)



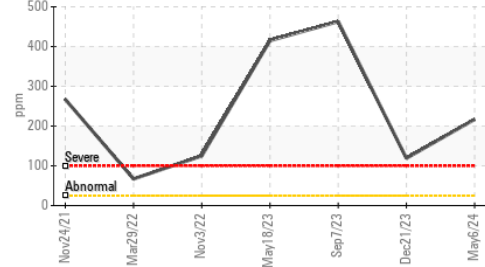
● Aluminum (ppm)



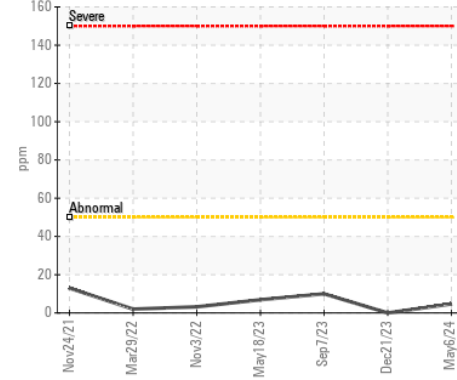
▲ Chromium (ppm)



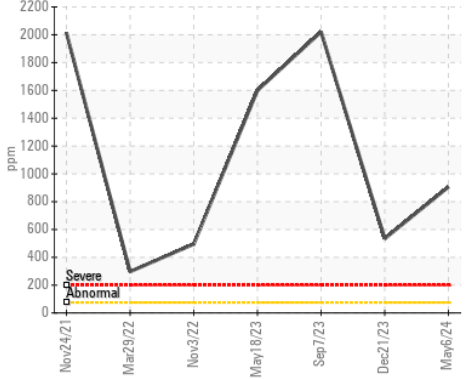
● Aluminum (ppm)



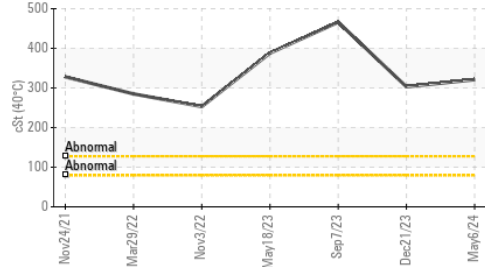
▲ Copper (ppm)



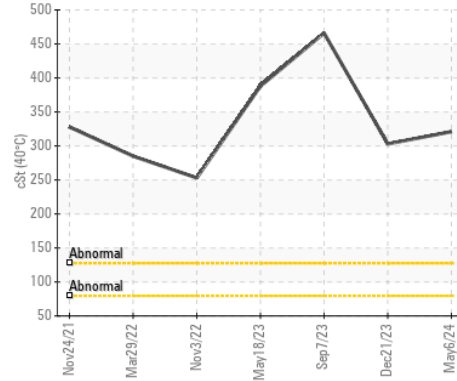
▲ Silicon (ppm)



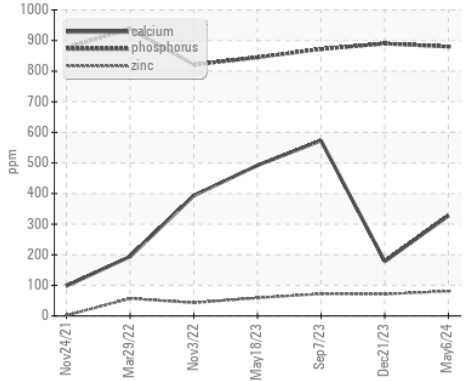
Viscosity @ 40°C



Viscosity @ 40°C



Additives



Certificate L2367

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

Sample No. : VCP453735

Lab Number : 06174245

Unique Number : 11020298

Test Package : MOB 1

Received : 09 May 2024

Tested : 10 May 2024

Diagnosed : 13 May 2024 - Angela Borella

WHITAKER CONTRACTING

692 CONVICT CAMP RD

GUNTERSVILLE, AL

US 35976

Contact: BROTHER WHITAKER

BrotherWhitaker@whitaker-contracting.com

T: (256)298-3905

F:

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)