



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
VOLVO EC160EL 310125
Component
Rear Right Final Drive
Fluid
VOLVO SUPER GEAR OIL 75W-80-GO102 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. 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. There is a moderate concentration of water present in the oil.

FLUID CONDITION

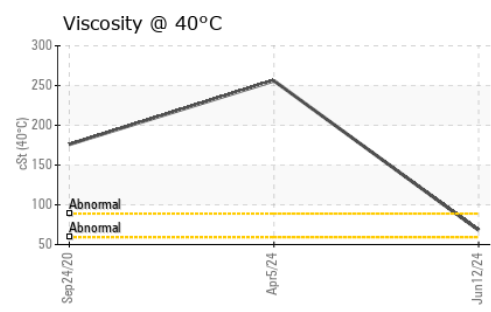
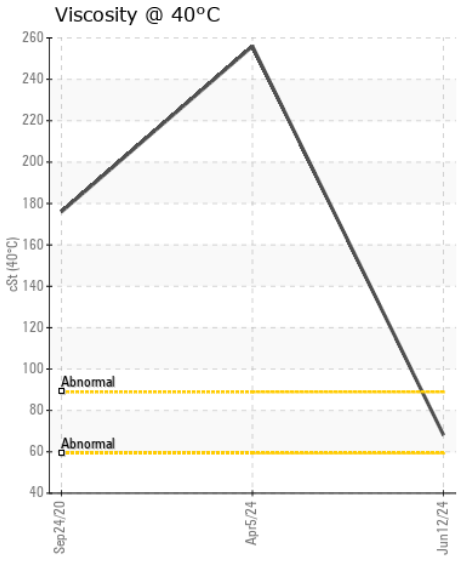
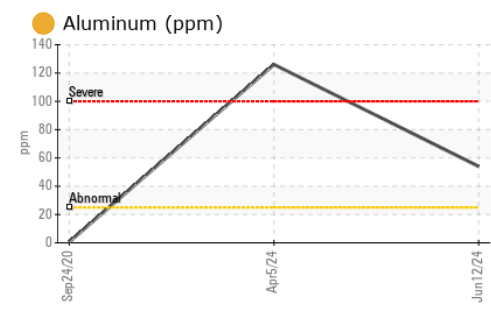
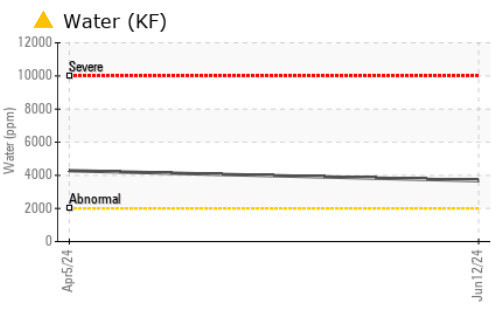
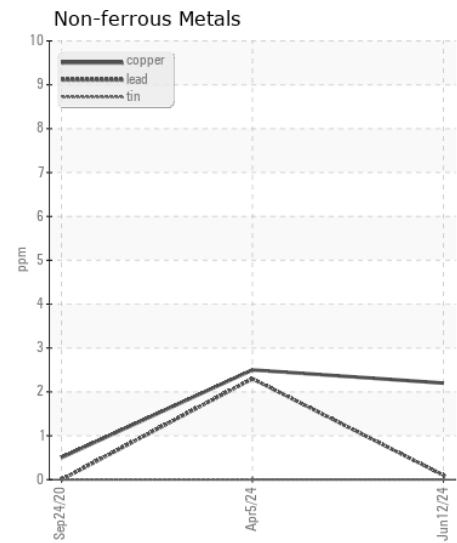
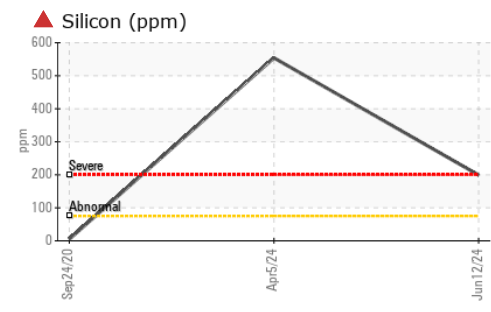
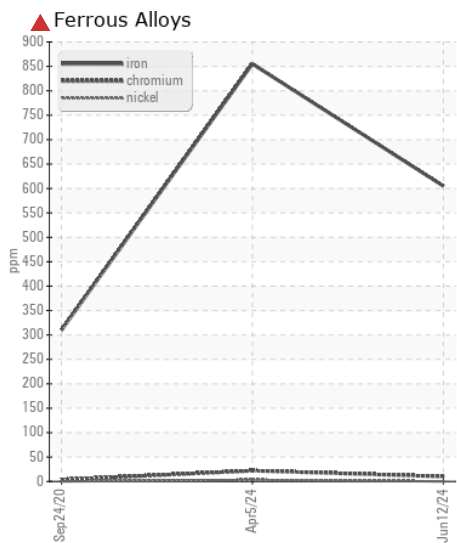
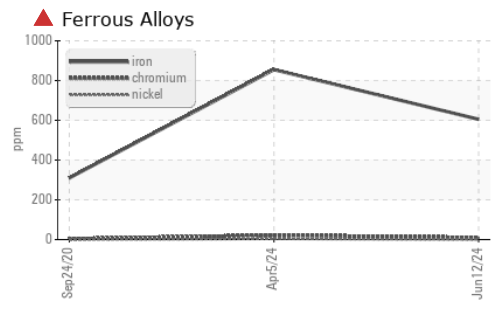
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ML0001801	ML0001449	VCP293406
Sample Date		Client Info		12 Jun 2024	05 Apr 2024	24 Sep 2020
Machine Age	hrs	Client Info		2347	2260	1019
Oil Age	hrs	Client Info		87	1000	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	NORMAL

Iron	ppm	ASTM D5185m	>500	▲ 605	▲ 855	310
Chromium	ppm	ASTM D5185m	>10	▲ 10	▲ 22	4
Nickel	ppm	ASTM D5185m	>10	0	3	0
Titanium	ppm	ASTM D5185m		4	8	0
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>25	● 54	● 126	<1
Lead	ppm	ASTM D5185m	>25	<1	2	0
Copper	ppm	ASTM D5185m	>50	2	2	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>75	▲ 199	▲ 554	5
Potassium	ppm	ASTM D5185m	>20	15	51	2
Water	%	ASTM D6304	>0.2	▲ 0.368	▲ 0.428	---
ppm Water	ppm	ASTM D6304	>2000	▲ 3680	▲ 4280	---
Silt	scalar	*Visual	NONE	MODER	MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	▲ 0.2%	NEG

Sodium	ppm	ASTM D5185m		7	26	2
Boron	ppm	ASTM D5185m		98	100	14
Barium	ppm	ASTM D5185m		0	3	0
Molybdenum	ppm	ASTM D5185m		<1	2	<1
Manganese	ppm	ASTM D5185m		7	12	3
Magnesium	ppm	ASTM D5185m		5	18	2
Calcium	ppm	ASTM D5185m		70	94	34
Phosphorus	ppm	ASTM D5185m		1943	987	413
Zinc	ppm	ASTM D5185m		72	38	26
Sulfur	ppm	ASTM D5185m		27583	37178	15793
Visc @ 40°C	cSt	ASTM D445		68.2	● 256	176



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001801 **Received** : 14 Jun 2024
Lab Number : 06210976 **Tested** : 18 Jun 2024
Unique Number : 11083840 **Diagnosed** : 18 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: KF)

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Certificate L2367
 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)