



# VOLVO

## OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

**ATTENTION**  
**ABNORMAL**  
**NORMAL**



Area  
**[SPM645360]**  
Machine Id  
**VOLVO EC380EL 311492**  
Component  
**Right Final Drive**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

### CONTAMINATION

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

### FLUID CONDITION

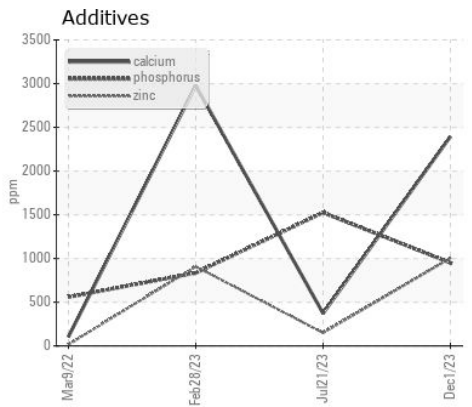
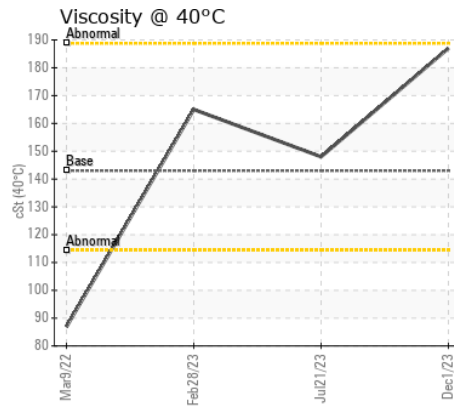
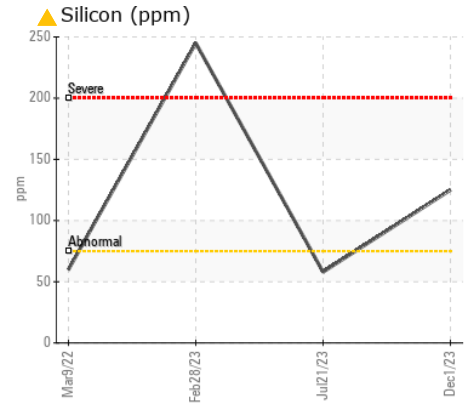
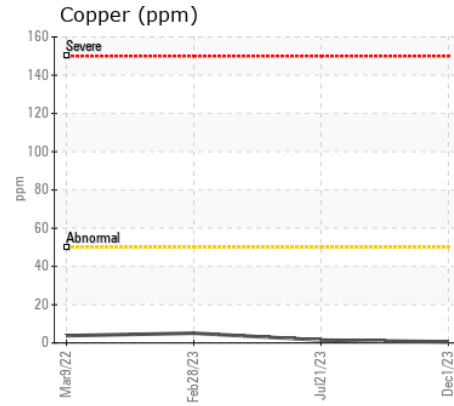
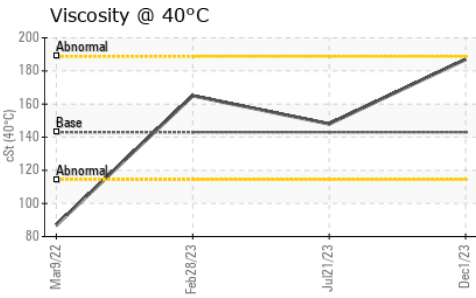
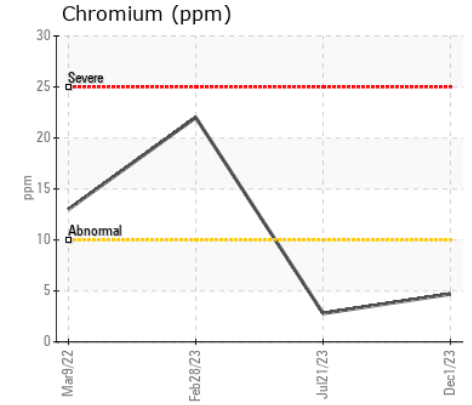
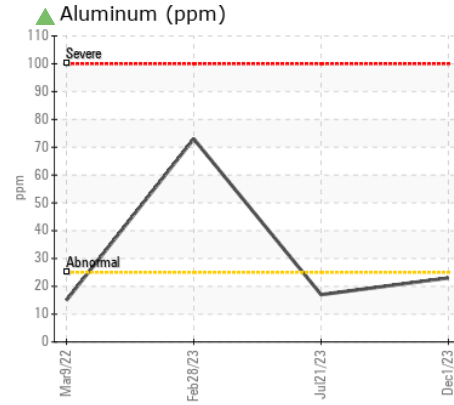
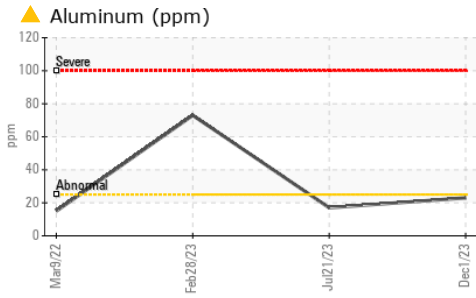
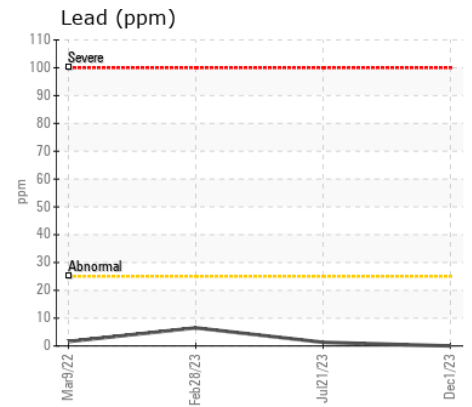
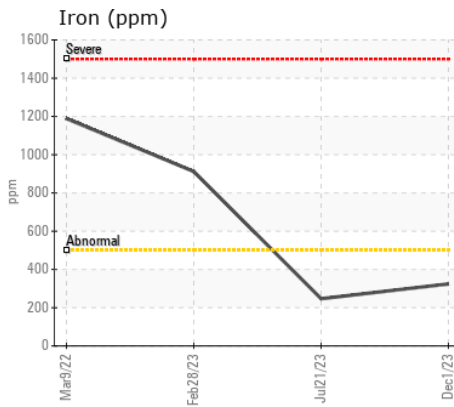
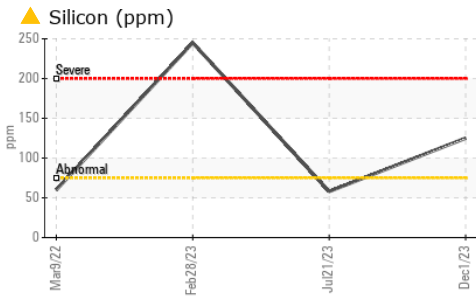
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP384552</b>	VCP414192	VCP403424
Sample Date		Client Info		<b>01 Dec 2023</b>	21 Jul 2023	28 Feb 2023
Machine Age	hrs	Client Info		<b>3109</b>	7780	6944
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>500	<b>324</b>	247	▲ 912
Chromium	ppm	ASTM D5185m	>10	<b>5</b>	3	▲ 22
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	7
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>▲ 23</b>	17	▲ 73
Lead	ppm	ASTM D5185m	>25	<b>0</b>	1	6
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	2	5
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

Silicon	ppm	ASTM D5185m	>75	<b>▲ 125</b>	58	▲ 245
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	3	15
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	0.2%	0.2%

Sodium	ppm	ASTM D5185m	>170	<b>3</b>	3	8
Boron	ppm	ASTM D5185m	400	<b>45</b>	47	8
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	12	<b>3</b>	<1	4
Manganese	ppm	ASTM D5185m		<b>4</b>	8	36
Magnesium	ppm	ASTM D5185m	12	<b>82</b>	27	160
Calcium	ppm	ASTM D5185m	150	<b>2395</b>	372	2979
Phosphorus	ppm	ASTM D5185m	1650	<b>951</b>	1525	835
Zinc	ppm	ASTM D5185m	125	<b>1005</b>	150	908
Sulfur	ppm	ASTM D5185m	22500	<b>12015</b>	18732	10490
Visc @ 40°C	cSt	ASTM D445	143	<b>187</b>	148	165



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP384552 **Received** : 12 Feb 2024  
**Lab Number** : 06086308 **Tested** : 13 Feb 2024  
**Unique Number** : 10873753 **Diagnosed** : 13 Feb 2024 - Sean Felton  
**Test Package** : MOB 1

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)

**BELSON STEEL**  
 1685 N STATE RTE 50  
 BOURBONNAIS, IL  
 US 60914  
 Contact: M. POZAN  
 mpozan@belsonsteel.com  
 T: (815)932-7416  
 F: