



# CONSTRUCTION EQUIPMENT

## SWA240247 VOLVO EC220E 314443 - REAR RIGHT FINAL DRIVE



**Sample No:** VCP405692  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA240247



### SAMPLE INFORMATION

Sample Number	<b>VCP405692</b>	VCP347802	VCP327588	VCP300599
Sample Date	<b>25 Apr 2023</b>	12 Jan 2022	27 Sep 2021	29 Jun 2021
Machine Hours	<b>3763</b>	1501	1027	504
Oil Hours	<b>0</b>	0	0	500
Oil Changed	<b>Not Chngd</b>	N/A	Changed	Not Chngd
Sample Status	<b>ABNORMAL</b>	ABNORMAL	NORMAL	NORMAL

### ALTA EQUIPMENT

5985 COURT STREET ROAD  
 SYRACUSE, NY  
 US 13206  
 Contact: JIM STRIGLE  
 JIM.STRIGLE@ALTG.COM  
 T: (315)437-2611  
 F: (315)434-9471



### OIL CONDITION

Visc @ 40°C	cSt	<b>151</b>	146	162	168
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### CONTAMINATION

Water	%	<b>0.160</b>	---	---	---
Silicon	ppm	<b>2624</b>	427	25	6
Sodium	ppm	<b>52</b>	8	3	1
Potassium	ppm	<b>192</b>	45	5	2



### WEAR METALS

Iron	ppm	<b>4816</b>	710	146	54
Copper	ppm	<b>5</b>	<1	<1	<1
Lead	ppm	<b>0</b>	0	<1	0
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>489</b>	136	7	0
Chromium	ppm	<b>38</b>	10	2	1
Molybdenum	ppm	<b>5</b>	<1	1	<1
Nickel	ppm	<b>14</b>	3	<1	0
Titanium	ppm	<b>47</b>	8	<1	0
Silver	ppm	<b>&lt;1</b>	0	<1	<1
Manganese	ppm	<b>45</b>	10	4	2
Vanadium	ppm	<b>2</b>	<1	<1	0



### ADDITIVES

Calcium	ppm	<b>121</b>	25	8	35
Magnesium	ppm	<b>81</b>	20	2	<1
Zinc	ppm	<b>18</b>	<1	8	5
Phosphorus	ppm	<b>962</b>	992	312	303
Barium	ppm	<b>3</b>	<1	0	<1
Boron	ppm	<b>158</b>	180	8	4

### Diagnosis

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

**Depot:** VOLV00142  
**Unique No:** 10446478  
**Signed:** Jonathan Hester  
**Report Date:** 02 May 2023

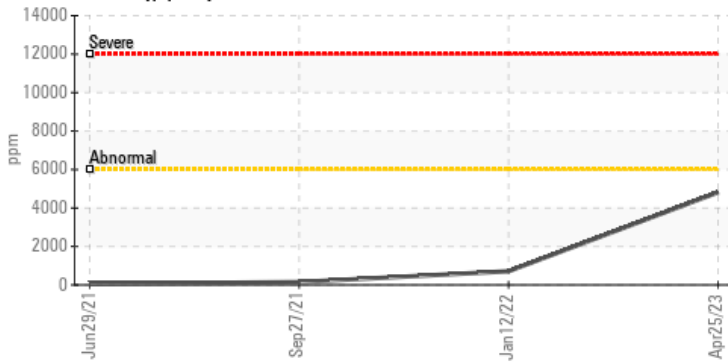


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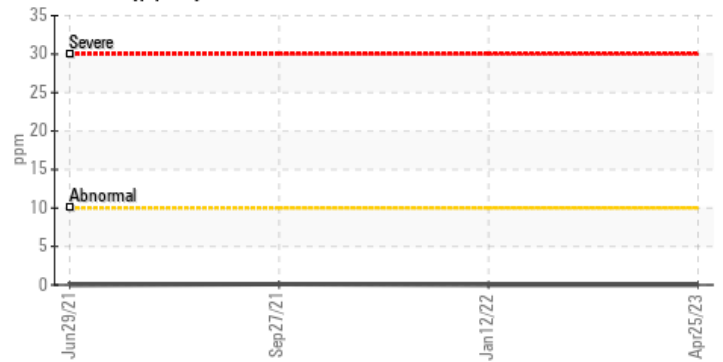


## GRAPHS

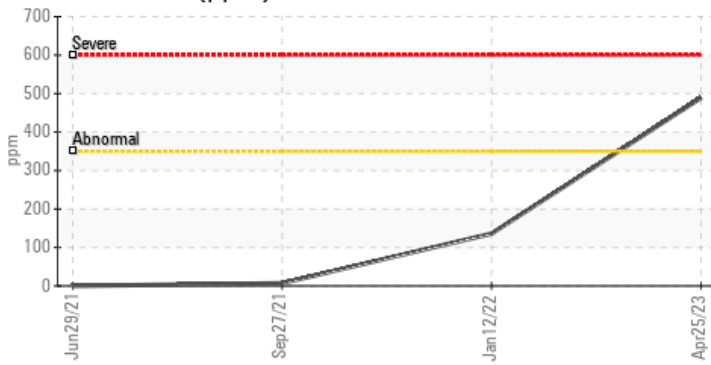
### ▲ Iron (ppm)



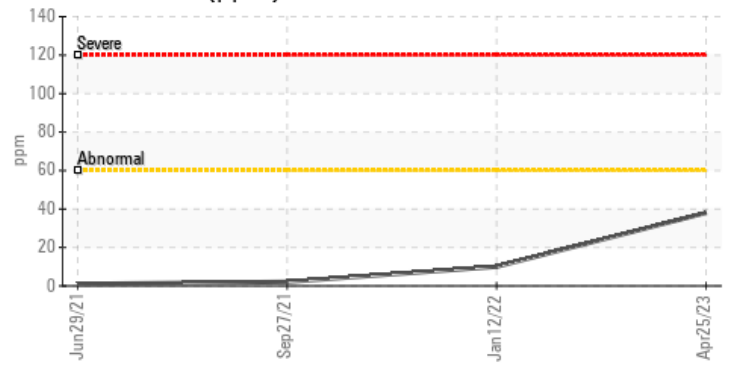
### Lead (ppm)



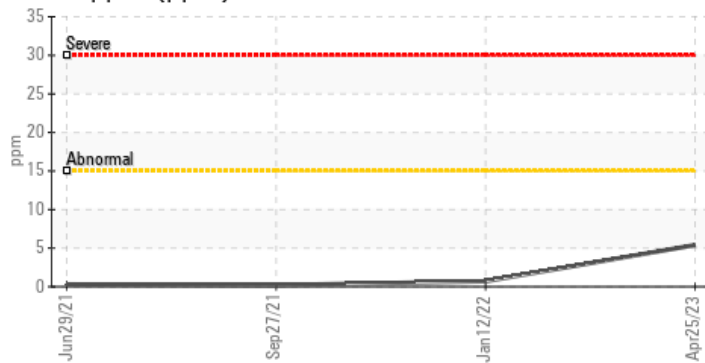
### ▲ Aluminum (ppm)



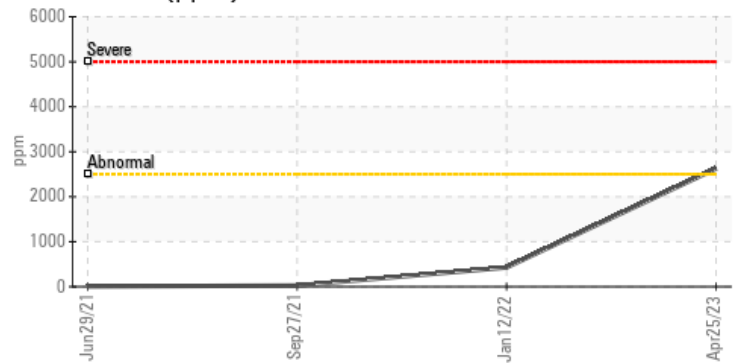
### ▲ Chromium (ppm)



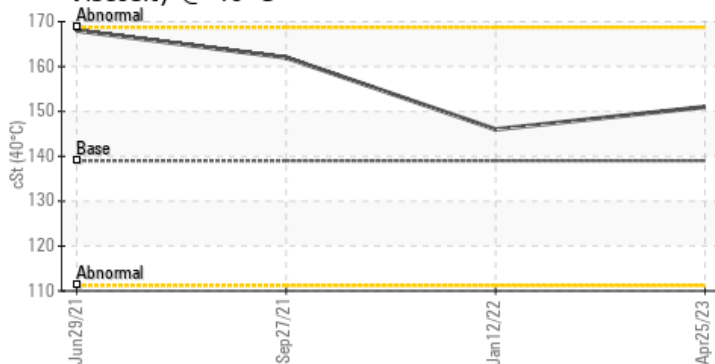
### Copper (ppm)



### ▲ Silicon (ppm)



### Viscosity @ 40°C



### ▲ Water

