



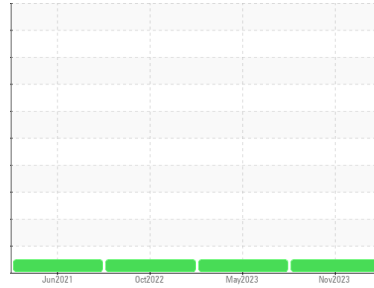
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**VOLVO EC220E 314315**  
 Component  
**Swing Drive**  
 Fluid  
**VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (--- GAL)**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0849212</b>	WC0804976	WC0728155
Sample Date	Client Info		<b>15 Nov 2023</b>	08 May 2023	21 Oct 2022
Machine Age	hrs	Client Info	<b>4030</b>	3101	2106
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.25	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>1200	<b>171</b>	121	356
Chromium	ppm	ASTM D5185(m)	>10	<b>1</b>	1	6
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>50	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>50	<b>5</b>	4	13
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

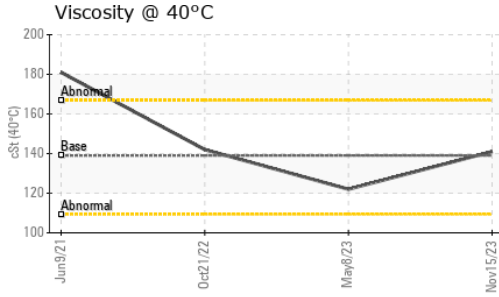
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	379	<b>163</b>	121	152
Barium	ppm	ASTM D5185(m)	0.0	<b>&lt;1</b>	0	1
Molybdenum	ppm	ASTM D5185(m)	0.8	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m)	0.0	<b>&lt;1</b>	1	5
Magnesium	ppm	ASTM D5185(m)	31	<b>1</b>	4	<1
Calcium	ppm	ASTM D5185(m)	38	<b>37</b>	261	31
Phosphorus	ppm	ASTM D5185(m)	1077	<b>1025</b>	1009	1838
Zinc	ppm	ASTM D5185(m)	46	<b>20</b>	110	19
Sulfur	ppm	ASTM D5185(m)	23526	<b>25595</b>	22399	22851
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>100	<b>9</b>	6	14
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1



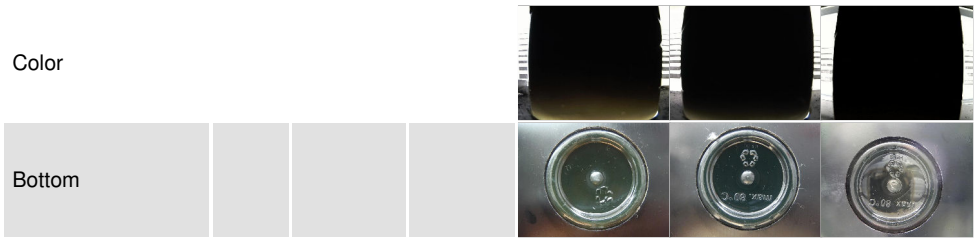
# OIL ANALYSIS REPORT



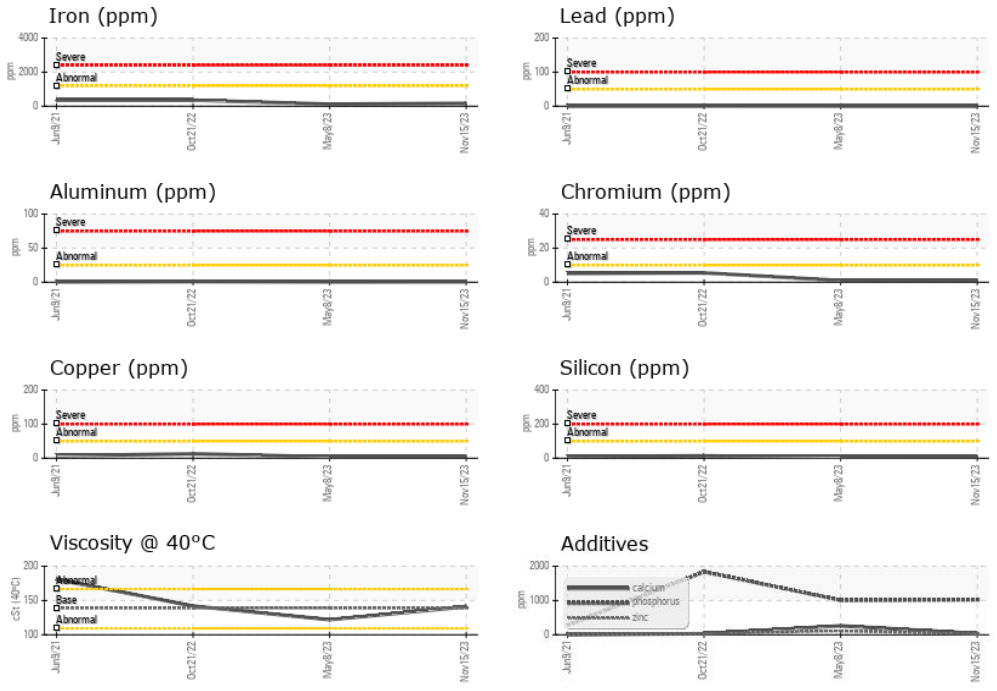
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.25	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	139	141	122

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0849212      **Received** : 12 Dec 2023  
**Lab Number** : 02602659      **Diagnosed** : 12 Dec 2023  
**Unique Number** : 5695744      **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**STRONGCO EQUIPMENT**  
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 Contact: Greg Ward  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.