



# CONSTRUCTION EQUIPMENT

## 594651 VOLVO EW180 320056 - SWING DRIVE



**Sample No:** VCP412534  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 594651



### SAMPLE INFORMATION

Sample Number	<b>VCP412534</b>	VCP372643	VCP310139	VCP302077
Sample Date	<b>17 Aug 2023</b>	27 Jun 2022	26 Jun 2021	28 Jan 2021
Machine Hours	<b>3505</b>	6528	2404	2156
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Not Chngd	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**HUBBARD CONSTRUCTION**  
 303 WEST LANDSTREET ROAD  
 ORLANDO, FL  
 US 32824  
 Contact: RAY BIRKO  
 ray.birko@hubbard.com  
 T: (407)855-3535  
 F: (407)857-1282



### OIL CONDITION

Visc @ 40°C	cSt	<b>234</b>	235	240	290
-------------	-----	------------	-----	-----	-----



### CONTAMINATION

Water	%	<b>0.114</b>	---	---	---
Silicon	ppm	<b>4</b>	2	4	3
Sodium	ppm	<b>0</b>	<1	<1	<1
Potassium	ppm	<b>0</b>	0	0	0

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



### WEAR METALS

Iron	ppm	<b>24</b>	16	19	18
Copper	ppm	<b>3</b>	2	2	2
Lead	ppm	<b>0</b>	0	<1	0
Tin	ppm	<b>&lt;1</b>	0	0	0
Aluminum	ppm	<b>1</b>	<1	0	<1
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>9</b>	7	8	2
Nickel	ppm	<b>0</b>	0	<1	<1
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	<1	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>363</b>	266	305	60
Magnesium	ppm	<b>103</b>	75	85	9
Zinc	ppm	<b>254</b>	183	207	26
Phosphorus	ppm	<b>1003</b>	703	851	824
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>185</b>	120	247	135

**Depot:** HUBORL  
**Unique No:** 10617635  
**Signed:** Jonathan Hester  
**Report Date:** 25 Aug 2023



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

