



# CONSTRUCTION EQUIPMENT

8-393399 VOLVO EC220E 310830 - REAR RIGHT FINAL DRIVE



**Sample No:** VCP449360  
**Oil Type:** GEAR OIL SAE 80W90  
**Job No:** 8-393399



## SAMPLE INFORMATION

Sample Number	<b>VCP449360</b>	VCP352183	VCP252116	---
Sample Date	<b>02 Feb 2024</b>	10 Jun 2022	24 Apr 2020	---
Machine Hours	<b>6000</b>	3980	2002	---
Oil Hours	<b>2000</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	---

### STRONGCO EQUIPMENT INC.

1640 ENTERPRISE ROAD  
MISSISSAUGA, ON  
CA L4W 4L4

Contact: Janice Cripps  
jcripps@strongco.com  
T: (905)565-3876  
F: (905)670-2338



## OIL CONDITION

Visc @ 40°C	cSt	<b>▲ 54.9</b>	■ 219	■ 147	---
-------------	-----	---------------	-------	-------	-----



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Silicon	ppm	■ <b>499</b>	■ 607	■ 139	---
Sodium	ppm	■ <b>37</b>	■ 32	■ 11	---
Potassium	ppm	■ <b>36</b>	■ 37	■ 11	---



## WEAR METALS

PQ		■ <b>1165</b>	■ 1213	■ 208	---
Iron	ppm	■ <b>2553</b>	■ 1135	■ 517	---
Copper	ppm	■ <b>5</b>	■ 2	■ 1	---
Lead	ppm	■ <b>&lt;1</b>	■ <1	■ <1	---
Tin	ppm	■ <b>0</b>	■ 0	■ 0	---
Aluminum	ppm	■ <b>80</b>	■ 96	■ 27	---
Chromium	ppm	■ <b>15</b>	■ 9	■ 6	---
Molybdenum	ppm	■ <b>&lt;1</b>	■ <1	■ <1	---
Nickel	ppm	■ <b>6</b>	■ 5	■ 5	---
Titanium	ppm	■ <b>5</b>	■ 7	■ 2	---
Silver	ppm	■ <b>0</b>	■ 0	■ 0	---
Manganese	ppm	■ <b>18</b>	■ 10	■ 6	---
Vanadium	ppm	■ <b>0</b>	■ <1	■ <1	---



## ADDITIVES

Calcium	ppm	■ <b>391</b>	■ 484	■ 144	---
Magnesium	ppm	■ <b>83</b>	■ 105	■ 27	---
Zinc	ppm	■ <b>32</b>	■ 6	■ 16	---
Phosphorus	ppm	■ <b>2235</b>	■ 414	■ 937	---
Barium	ppm	■ <b>0</b>	■ <1	■ <1	---
Boron	ppm	■ <b>189</b>	■ 9	■ 103	---

## Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within SAE 75W80 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

**Depot:** SHEMIS  
**Unique No:** 5724223  
**Signed:** Kevin Marson  
**Report Date:** 14 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

