



# CONSTRUCTION EQUIPMENT

## 2176BO VOLVO EC220EL 314082 - FRONT RIGHT FINAL DRIVE



**Sample No:** VCP400589  
**Oil Type:** VOLVO PREMIUM GEAR OIL 85W-140 GL-5  
**Job No:** 2176BO



### SAMPLE INFORMATION

Sample Number	VCP400589	VCP270616	---	---
Sample Date	12 Jan 2023	04 Jun 2020	---	---
Machine Hours	6283	1966	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	NORMAL	---	---

**LCSWMA - LANCASTER COUNTY SOLID WASTE**  
 1299 HARRISBURG PIKE  
 LANCASTER, PA  
 US 17604  
 Contact: ROGER RUSSIN  
 russin@lcswma.org  
 T: (717)735-0166  
 F: (717)735-0197



### OIL CONDITION

Visc @ 40°C	cSt	▲ 94.4	■ 169	---	---
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### CONTAMINATION

Silicon	ppm	■ 4	■ 6	---	---
Sodium	ppm	■ <1	■ 4	---	---
Potassium	ppm	■ <1	■ 2	---	---



### WEAR METALS

Iron	ppm	■ 123	■ 259	---	---
Copper	ppm	■ <1	■ <1	---	---
Lead	ppm	■ <1	■ 0	---	---
Tin	ppm	■ <1	■ 0	---	---
Aluminum	ppm	■ <1	■ 1	---	---
Chromium	ppm	■ <1	■ 3	---	---
Molybdenum	ppm	■ <1	■ <1	---	---
Nickel	ppm	■ 0	0	---	---
Titanium	ppm	■ 0	<1	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	■ <1	■ 4	---	---
Vanadium	ppm	0	0	---	---



### ADDITIVES

Calcium	ppm	▲ 12	■ 7	---	---
Magnesium	ppm	■ 2	■ 1	---	---
Zinc	ppm	▲ 0	■ 20	---	---
Phosphorus	ppm	■ 804	■ 420	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 86	■ 2	---	---

### Diagnosis

The oil change at the time of sampling has been noted. 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 oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The condition of the oil is acceptable for the time in service.

**Depot:** LANLANPA  
**Unique No:** 10298920  
**Signed:** Don Baldrige  
**Report Date:** 23 Jan 2023



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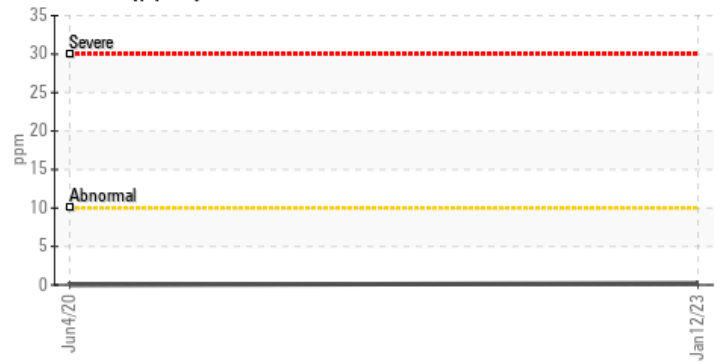


## GRAPHS

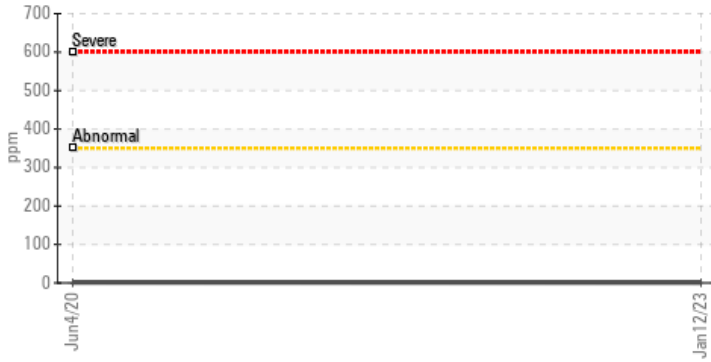
### Iron (ppm)



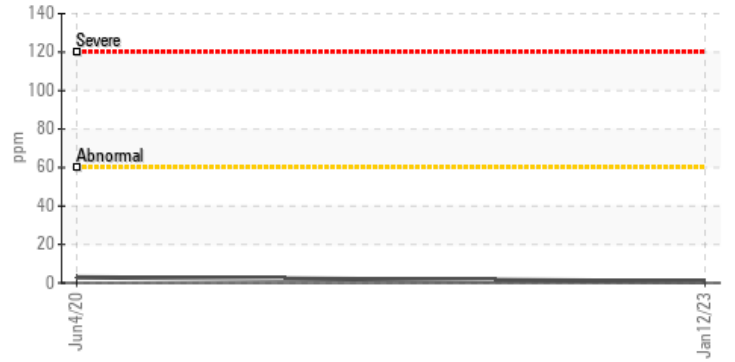
### Lead (ppm)



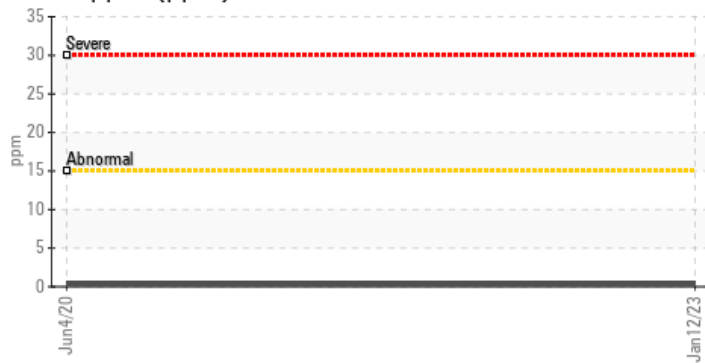
### Aluminum (ppm)



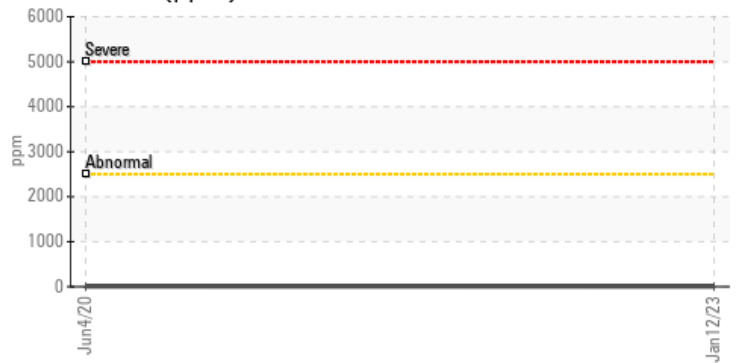
### Chromium (ppm)



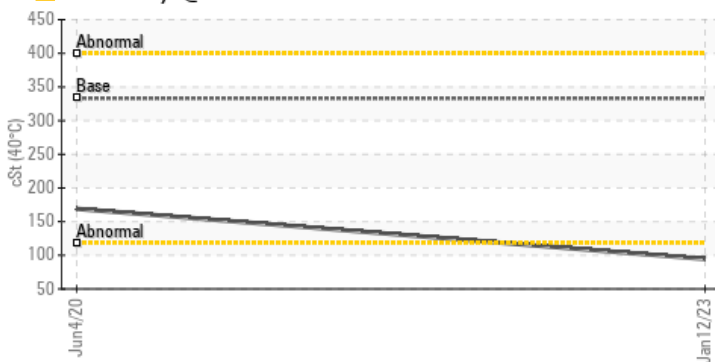
### Copper (ppm)



### Silicon (ppm)



### ▲ Viscosity @ 40°C



### ▲ Additives

