



# CONSTRUCTION EQUIPMENT

11387 FREEDOM CONSTR VOLVO ECR145E 315603 - SWING DRIVE



**Sample No:** VCP430921  
**Oil Type:** MOBIL MOBILUBE HD 80W90  
**Job No:** 11387 FREEDOM CONSTR



## SAMPLE INFORMATION

Sample Number	<b>VCP430921</b>	VCP394348	VCP376501	VCP358812
Sample Date	<b>03 Nov 2023</b>	28 Mar 2023	12 Jul 2022	20 Apr 2022
Machine Hours	<b>3308</b>	2335	1002	577
Oil Hours	<b>0</b>	1000	0	0
Oil Changed	<b>N/A</b>	Changed	Not Changd	Not Changd
Sample Status	<b>ATTENTION</b>	NORMAL	NORMAL	NORMAL

**HOFFMAN EQUIPMENT - LIONVILLE**  
 120 GORDON DRIVE  
 LIONVILLE, PA  
 US 19341  
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## OIL CONDITION

Visc @ 40°C	cSt	<b>▲ 270</b>	■ 168	■ 172	■ 172
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## CONTAMINATION

Silicon	ppm	■ <b>8</b>	■ 19	■ 9	■ 7
Sodium	ppm	■ <b>&lt;1</b>	■ <1	■ <1	■ <1
Potassium	ppm	■ <b>1</b>	■ <1	■ 0	■ 0



## WEAR METALS

Iron	ppm	■ <b>169</b>	■ 155	■ 70	■ 83
Copper	ppm	■ <b>6</b>	■ 16	■ 11	■ 10
Lead	ppm	■ <b>&lt;1</b>	■ 0	■ 0	■ 0
Tin	ppm	■ <b>&lt;1</b>	■ 0	0	0
Aluminum	ppm	■ <b>&lt;1</b>	■ 1	1	<1
Chromium	ppm	■ <b>2</b>	■ 2	<1	<1
Molybdenum	ppm	■ <b>0</b>	■ <1	■ <1	■ 0
Nickel	ppm	■ <b>&lt;1</b>	■ <1	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	■ <b>2</b>	■ 3	■ 2	■ <1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	■ <b>78</b>	■ 4	■ 10	■ 18
Magnesium	ppm	■ <b>2</b>	■ 0	■ 0	■ 0
Zinc	ppm	■ <b>48</b>	■ 16	■ 28	■ 15
Phosphorus	ppm	■ <b>806</b>	■ 373	■ 263	■ 333
Barium	ppm	■ <b>0</b>	■ 0	■ 1	■ 0
Boron	ppm	■ <b>10</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 oil viscosity is higher than normal. Confirm oil type. The condition of the oil is acceptable for the time in service.

**Depot:** VOLVO8879  
**Unique No:** 10737595  
**Signed:** Sean Felton  
**Report Date:** 14 Nov 2023



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## GRAPHS

