



# CONSTRUCTION EQUIPMENT

## A10644 FREEDOM VOLVO ECR145E 314328 - REAR RIGHT FINAL DRIVE



**Sample No:** VCP411869  
**Oil Type:** MOBIL MOBILUBE HD 80W90  
**Job No:** A10644 FREEDOM



### SAMPLE INFORMATION

Sample Number	<b>VCP411869</b>	VCP399140	VCP365745	VCP339224
Sample Date	<b>11 Jul 2023</b>	15 Feb 2023	05 Dec 2022	18 Feb 2022
Machine Hours	<b>5260</b>	4595	4345	3100
Oil Hours	<b>1000</b>	2000	0	1000
Oil Changed	<b>Not Changd</b>	Changed	Not Changd	Not Changd
Sample Status	<b>NORMAL</b>	ABNORMAL	ABNORMAL	NORMAL

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

Visc @ 40°C	cSt	<b>307</b>	250	249	250
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### CONTAMINATION

Silicon	ppm	<b>26</b>	86	77	52
Sodium	ppm	<b>&lt;1</b>	3	2	2
Potassium	ppm	<b>1</b>	3	2	2

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



### WEAR METALS

Iron	ppm	<b>224</b>	587	535	307
Copper	ppm	<b>1</b>	1	1	1
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>6</b>	19	17	13
Aluminum	ppm	<b>5</b>	16	18	11
Chromium	ppm	<b>4</b>	9	9	5
Molybdenum	ppm	<b>&lt;1</b>	<1	<1	<1
Nickel	ppm	<b>&lt;1</b>	2	3	1
Titanium	ppm	<b>&lt;1</b>	2	1	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>4</b>	7	6	4
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>60</b>	35	33	65
Magnesium	ppm	<b>2</b>	4	4	4
Zinc	ppm	<b>44</b>	35	32	31
Phosphorus	ppm	<b>872</b>	1092	1061	1242
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>30</b>	174	165	177

**Depot:** VOLVO8879  
**Unique No:** 10560356  
**Signed:** Don Baldrige  
**Report Date:** 17 Jul 2023



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## GRAPHS

