



CONSTRUCTION EQUIPMENT

A1136 FREEDOM VOLVO EC160E 314382 - REAR RIGHT FINAL DRIVE



Sample No: VCP434142
Oil Type: MOBIL MOBILUBE HD 80W90
Job No: A11336 FREEDOM



HOFFMAN EQUIPMENT - LIONVILLE
 120 GORDON DRIVE
 LIONVILLE, PA
 US 19341
 Contact: JIM FEHR
 jim.fehr@hoffmanequip.com
 T: (610)363-9200
 F: (610)594-0829



SAMPLE INFORMATION

Sample Number	VCP434142	VCP409810	VCP386047	VCP364102
Sample Date	27 Oct 2023	27 Mar 2023	14 Nov 2022	24 Aug 2022
Machine Hours	3255	2125	1146	512
Oil Hours	1000	1500	0	0
Oil Changed	Not Chngd	Changed	N/A	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	320	298	303	173
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CONTAMINATION

Silicon	ppm	0	172	6	9
Sodium	ppm	0	2	0	0
Potassium	ppm	0	10	1	2



WEAR METALS

Iron	ppm	0	517	86	118
Copper	ppm	0	1	<1	<1
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	0
Aluminum	ppm	0	39	0	1
Chromium	ppm	0	6	2	2
Molybdenum	ppm	0	<1	<1	<1
Nickel	ppm	0	3	0	0
Titanium	ppm	0	3	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	6	2	4
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	23	18	6	6
Magnesium	ppm	2	9	<1	<1
Zinc	ppm	17	0	4	6
Phosphorus	ppm	1041	313	280	292
Barium	ppm	0	0	0	3
Boron	ppm	12	2	4	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.

Depot: VOLVO8879
Unique No: 10738476
Signed: Sean Felton
Report Date: 14 Nov 2023



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GRAPHS

