



CONSTRUCTION EQUIPMENT

A11336 FREEDOM VOLVO EC160E 314382 - REAR LEFT FINAL DRIVE



Sample No: VCP430940
Oil Type: MOBIL MOBILUBE HD 80W90
Job No: A11336 FREEDOM



HOFFMAN EQUIPMENT - LIONVILLE
 120 GORDON DRIVE
 LIONVILLE, PA
 US 19341
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SAMPLE INFORMATION

Sample Number	VCP430940	VCP399931	VCP367468	VCP364100
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	Changed	Changed
Sample Status	NORMAL	ATTENTION	ATTENTION	NORMAL



OIL CONDITION

Visc @ 40°C	cSt	319	▲ 302	▲ 303	■ 177
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CONTAMINATION

Silicon	ppm	■ <1	■ 62	■ 7	■ 8
Sodium	ppm	■ 0	■ <1	■ 0	■ 0
Potassium	ppm	■ 2	■ 7	■ 3	■ 1



WEAR METALS

Iron	ppm	■ 3	■ 344	■ 132	■ 107
Copper	ppm	■ 0	■ <1	■ <1	■ <1
Lead	ppm	■ 0	■ 0	■ 0	■ 0
Tin	ppm	■ 0	■ 0	■ 0	■ 0
Aluminum	ppm	■ <1	■ 13	■ 0	■ <1
Chromium	ppm	■ 0	■ 6	■ 3	■ 2
Molybdenum	ppm	■ <1	■ <1	<1	<1
Nickel	ppm	■ 0	2	■ 0	0
Titanium	ppm	<1	1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	■ 0	■ 4	2	3
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	■ 60	■ 10	6	6
Magnesium	ppm	■ 0	■ 4	2	<1
Zinc	ppm	■ 0	■ 0	5	5
Phosphorus	ppm	■ 1022	■ 313	274	299
Barium	ppm	■ 0	■ 0	0	3
Boron	ppm	■ 9	■ 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. Confirm oil type. The condition of the oil is acceptable for the time in service.

Depot: VOLVO8879
Unique No: 10738399
Signed: Don Baldrige
Report Date: 14 Nov 2023



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GRAPHS

