



CONSTRUCTION EQUIPMENT

A10644 FREEDOM VOLVO ECR145E 314328 - REAR LEFT FINAL DRIVE



Sample No: VCP411857
Oil Type: MOBIL MOBILUBE HD 80W90
Job No: A10644 FREEDOM



SAMPLE INFORMATION

Sample Number	VCP411857	VCP400483	VCP365738	VCP335585
Sample Date	11 Jul 2023	15 Feb 2023	05 Dec 2022	18 Feb 2022
Machine Hours	5260	4595	4345	3100
Oil Hours	1000	2000	0	1000
Oil Changed	Not Chngd	Changed	Not Chngd	Not Chngd
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

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

Visc @ 40°C	cSt	302	249	249	250
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CONTAMINATION

Silicon	ppm	32	▲ 84	69	40
Sodium	ppm	1	3	2	2
Potassium	ppm	1	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	301	467	404	185
Copper	ppm	2	<1	<1	<1
Lead	ppm	<1	<1	0	0
Tin	ppm	8	18	16	13
Aluminum	ppm	6	▲ 15	16	10
Chromium	ppm	4	8	7	4
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	<1	3	3	2
Titanium	ppm	<1	1	1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	4	6	5	2
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	61	34	42	68
Magnesium	ppm	<1	4	4	4
Zinc	ppm	48	31	33	31
Phosphorus	ppm	917	1083	1046	1250
Barium	ppm	0	0	0	0
Boron	ppm	38	171	161	181

Depot: VOLVO8879
Unique No: 10560368
Signed: Don Baldrige
Report Date: 17 Jul 2023



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GRAPHS

