



CONSTRUCTION EQUIPMENT

11387 FREEDOM CONSTR VOLVO ECR145E 315603 - DIESEL ENGINE



Sample No: VCP430920
Oil Type: MOBIL 15W40
Job No: 11387 FREEDOM CONSTR



SAMPLE INFORMATION

Sample Number	VCP430920	VCP408980	VCP399159	VCP398693
Sample Date	03 Nov 2023	05 Jul 2023	28 Mar 2023	19 Dec 2022
Machine Hours	3308	2810	2335	1880
Oil Hours	0	0	500	500
Oil Changed	N/A	N/A	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HOFFMAN EQUIPMENT - LIONVILLE
 120 GORDON DRIVE
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OIL CONDITION

Visc @ 100°C	cSt	13.3	13.5	13.6	14.1
Base Number (BN)	mg KOH/g	10.1	7.3	7.8	7.6
Oxidation (PA)	%	78	46	51	82



CONTAMINATION

Soot %	%	0.3	0.2	0.2	0.3
Nitration (PA)	%	63	65	63	84
Sulfation (PA)	%	60	50	50	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	4	6	8
Sodium	ppm	3	1	<1	3
Potassium	ppm	<1	2	2	6



WEAR METALS

Iron	ppm	14	11	12	19
Copper	ppm	1	1	1	2
Lead	ppm	<1	<1	0	0
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	2	3	2	4
Chromium	ppm	<1	<1	<1	1
Molybdenum	ppm	40	15	27	18
Nickel	ppm	<1	<1	<1	2
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	<1	0	<1



ADDITIVES

Calcium	ppm	1808	2136	1872	2328
Magnesium	ppm	435	161	355	72
Zinc	ppm	1166	1063	1141	1269
Phosphorus	ppm	947	848	962	1007
Barium	ppm	0	0	2	0
Boron	ppm	32	5	10	72

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: VOLVO8879
Unique No: 10737068
Signed: Wes Davis
Report Date: 10 Nov 2023



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GRAPHS

