



CONSTRUCTION EQUIPMENT

TRANSPORT LEASING VOLVO L220H 2432 - DIESEL ENGINE



Sample No: VCP429833
Oil Type: MOBIL 15W40
Job No: TRANSPORT LEASING



SAMPLE INFORMATION

Sample Number	VCP429833	VCP371237	VCP371225	VCP395449
Sample Date	01 Dec 2023	14 Feb 2023	09 Jan 2023	08 Dec 2022
Machine Hours	16092	15438	14949	14555
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.6	12.8	12.8	12.9
Base Number (BN)	mg KOH/g	8.6	8.6	9.2	9.5
Oxidation (PA)	%	57	61	57	65

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.3	0.3	0.5
Nitration (PA)	%	58	64	56	68
Sulfation (PA)	%	53	53	53	57
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	11	3	6	4
Sodium	ppm	8	0	0	2
Potassium	ppm	21	2	1	0

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. All other 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.

WEAR METALS

Iron	ppm	72	4	6	6
Copper	ppm	▲ 35	1	2	2
Lead	ppm	0	<1	1	<1
Tin	ppm	4	<1	<1	1
Aluminum	ppm	16	2	2	2
Chromium	ppm	2	0	<1	<1
Molybdenum	ppm	44	71	60	61
Nickel	ppm	<1	0	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	8	<1	<1	<1
Vanadium	ppm	0	0	<1	0

ADDITIVES

Calcium	ppm	1670	1155	1223	1207
Magnesium	ppm	560	720	932	847
Zinc	ppm	951	1020	1318	1200
Phosphorus	ppm	774	842	989	1013
Barium	ppm	0	0	0	0
Boron	ppm	31	23	12	26

Depot: VOLVO1835
Unique No: 10777240
Signed: Jonathan Hester
Report Date: 11 Dec 2023



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VOLVO GRAPHS

