



CONSTRUCTION EQUIPMENT

224972 WM VOLVO L220G 12593 - DIESEL ENGINE



Sample No: VCP403939
Oil Type: ? WM CANADA 15W40
Job No: 224972 WM



SAMPLE INFORMATION

Sample Number	VCP403939	VCP239103	VCP259186	VCP242104
Sample Date	12 Jul 2023	17 Aug 2020	14 Feb 2020	27 Feb 2019
Machine Hours	7856	6904	6528	5033
Oil Hours	0	0	0	400
Oil Changed	Not Chngd	Changed	Changed	Changed
Sample Status	ATTENTION	NORMAL	ATTENTION	NORMAL



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OIL CONDITION

Visc @ 100°C	cSt	▲ 11.6	■ 13.2	■ 13.8	■ 13.11
Base Number (BN)	mg KOH/g	■ 10.1	---	---	---
Oxidation (PA)	%	76	76	76	85



CONTAMINATION

Soot %	%	■ 0.3	■ 0.1	■ 0.6	■ 0.3
Nitration (PA)	%	51	43	80	70
Sulfation (PA)	%	60	62	59	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	■ 0.4	<1.0	<1.0	<1.0
Silicon	ppm	■ 6	■ 6	■ 4	■ 7
Sodium	ppm	■ 2	■ 6	▲ 96	■ 7
Potassium	ppm	■ <1	■ <1	■ 3	■ 0



WEAR METALS

Iron	ppm	■ 24	■ 4	■ 15	■ 10
Copper	ppm	■ 8	■ 1	■ 5	■ 7
Lead	ppm	■ <1	■ 0	■ <1	■ 0
Tin	ppm	■ <1	■ 0	■ <1	■ 0
Aluminum	ppm	■ 6	■ 0	■ 3	■ 3
Chromium	ppm	■ <1	■ 0	■ <1	■ <1
Molybdenum	ppm	■ 36	■ 35	■ 26	■ 40
Nickel	ppm	■ 3	■ <1	■ 2	■ <1
Titanium	ppm	0	<1	9	<1
Silver	ppm	■ 0	3	0	0
Manganese	ppm	<1	■ <1	■ <1	■ <1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	■ 1445	■ 1475	■ 1809	■ 1717
Magnesium	ppm	■ 423	■ 480	■ 361	■ 514
Zinc	ppm	■ 989	■ 944	■ 921	■ 840
Phosphorus	ppm	■ 817	■ 843	■ 799	■ 726
Barium	ppm	■ <1	■ 0	■ 0	■ 0
Boron	ppm	■ 64	132	■ 33	■ 30

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: VOLVO1271
Unique No: 10578793
Signed: Sean Felton
Report Date: 02 Aug 2023



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VOLVO GRAPHS

