



CONSTRUCTION EQUIPMENT

13918 AM HARDWOOD VOLVO L60H 622453 - DIESEL ENGINE



Sample No: VCP411508
Oil Type: SHELL 15W40
Job No: 13918 AM HARDWOOD



SAMPLE INFORMATION

Sample Number	VCP411508	VCP405018	VCP375951	VCP244540
Sample Date	04 Dec 2023	15 Mar 2023	11 Jul 2022	31 Mar 2022
Machine Hours	7950	6063	4133	3368
Oil Hours	2000	0	500	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.4	14.2	13.0	13.0
Base Number (BN)	mg KOH/g	4.1	7.2	7.3	10.5
Oxidation (PA)	%	71	91	67	90

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.9	1.1	0.6	0.5
Nitration (PA)	%	81	98	80	82
Sulfation (PA)	%	66	67	59	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	7	6
Sodium	ppm	0	1	2	2
Potassium	ppm	2	1	0	0



WEAR METALS

Iron	ppm	35	42	27	22
Copper	ppm	5	4	2	2
Lead	ppm	1	<1	<1	<1
Tin	ppm	0	1	1	1
Aluminum	ppm	6	▲ 12	5	6
Chromium	ppm	<1	1	1	2
Molybdenum	ppm	59	55	99	41
Nickel	ppm	0	1	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1691	1834	1975	1710
Magnesium	ppm	127	433	353	586
Zinc	ppm	1021	1176	1256	1139
Phosphorus	ppm	952	935	1030	1036
Barium	ppm	3	0	0	0
Boron	ppm	8	19	101	41

Depot: VOLVO8882
Unique No: 10778854
Signed: Wes Davis
Report Date: 09 Dec 2023



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GRAPHS

