



CONSTRUCTION EQUIPMENT

W14607 VOLVO L220H 2597 - DIESEL ENGINE



Sample No: VCP405855
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W14607



SAMPLE INFORMATION

Sample Number	VCP405855	VCP405871	VCP367731	VCP333373
Sample Date	24 Aug 2023	31 May 2023	10 Jan 2023	13 Jan 2022
Machine Hours	9534	9049	8594	7580
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.2	12.4	12.8	12.3
Base Number (BN)	mg KOH/g	9.7	9.5	9.5	9.9
Oxidation (PA)	%	80	74	57	88



CONTAMINATION

Soot %	%	0.2	0.2	0.1	0.3
Nitration (PA)	%	60	62	48	78
Sulfation (PA)	%	60	59	51	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	9	4	3	11
Sodium	ppm	3	2	<1	1
Potassium	ppm	<1	0	<1	1



WEAR METALS

Iron	ppm	6	5	3	9
Copper	ppm	2	1	<1	2
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	2	1	<1	4
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	42	53	57	42
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1829	1538	1127	1604
Magnesium	ppm	547	707	905	516
Zinc	ppm	1091	1107	1263	1123
Phosphorus	ppm	873	880	987	930
Barium	ppm	0	0	0	<1
Boron	ppm	38	30	4	30

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: VOLVO0080
Unique No: 10632417
Signed: Wes Davis
Report Date: 05 Sep 2023



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GRAPHS

