



CONSTRUCTION EQUIPMENT

RA41 VOLVO L220H 2884 - DIESEL ENGINE



Sample No: VCP435372
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: RA41



SAMPLE INFORMATION

Sample Number	VCP435372	VCP374123	VCP405888	VCP398350
Sample Date	15 Nov 2023	31 Aug 2023	02 Jun 2023	13 Feb 2023
Machine Hours	10048	9538	8994	8521
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	13.0	12.3	12.4	12.5
Base Number (BN)	mg KOH/g	9.0	9.1	9.9	8.3
Oxidation (PA)	%	73	73	82	64

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.2	0.1	0.1
Nitration (PA)	%	58	59	57	58
Sulfation (PA)	%	57	56	62	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.6	<1.0
Silicon	ppm	5	4	4	4
Sodium	ppm	2	3	2	3
Potassium	ppm	0	0	0	0

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.

WEAR METALS

Iron	ppm	3	3	3	4
Copper	ppm	2	<1	0	<1
Lead	ppm	<1	0	0	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	1	1	2	0
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	56	43	42	42
Nickel	ppm	<1	0	0	1
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0

ADDITIVES

Calcium	ppm	1466	1825	1766	1648
Magnesium	ppm	613	499	536	512
Zinc	ppm	1051	993	1094	910
Phosphorus	ppm	875	830	889	746
Barium	ppm	0	0	0	0
Boron	ppm	46	44	60	57

Depot: VOLVO0080
Unique No: 10752967
Signed: Wes Davis
Report Date: 22 Nov 2023



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VOLVO GRAPHS

