



CONSTRUCTION EQUIPMENT

W14367 VOLVO L220H 2821 - DIESEL ENGINE



Sample No: VCP404684
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W14367



SAMPLE INFORMATION

Sample Number	VCP404684	VCP405899	VCP398364	VCP385583
Sample Date	19 Jul 2023	15 May 2023	31 Jan 2023	26 Oct 2022
Machine Hours	8643	8210	7653	7146
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	12.5	12.4	12.7	12.9
Base Number (BN)	mg KOH/g	9.8	10.2	10.3	11.1
Oxidation (PA)	%	80	82	78	88



CONTAMINATION

Soot %	%	0.2	0.1	0.1	0.2
Nitration (PA)	%	53	54	52	59
Sulfation (PA)	%	61	62	60	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	0.3	<1.0	<1.0
Silicon	ppm	5	8	5	3
Sodium	ppm	2	4	1	2
Potassium	ppm	0	1	2	0



WEAR METALS

Iron	ppm	4	5	3	3
Copper	ppm	0	<1	<1	<1
Lead	ppm	0	0	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	1	<1	1	1
Chromium	ppm	<1	<1	<1	0
Molybdenum	ppm	44	50	42	38
Nickel	ppm	0	3	2	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	1807	1991	1598	1597
Magnesium	ppm	546	587	512	476
Zinc	ppm	1085	1284	1011	863
Phosphorus	ppm	883	1067	844	690
Barium	ppm	0	0	0	0
Boron	ppm	59	66	48	44

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: 10574161
Signed: Wes Davis
Report Date: 27 Jul 2023



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VOLVO GRAPHS

