



CONSTRUCTION EQUIPMENT

VOLVO L110H 631215 - DIESEL ENGINE



Sample No: VCP454953
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



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SAMPLE INFORMATION

Sample Number	VCP454953	VCP428657	VCP433373	VCP393514
Sample Date	23 May 2024	21 Feb 2024	03 Nov 2023	07 Mar 2023
Machine Hours	13545	13022	12508	11469
Oil Hours	0	0	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 100°C	cSt	13.1	12.9	12.8	12.9
Base Number (BN)	mg KOH/g	9.8	10.0	10.0	10.0
Oxidation (PA)	%	81	75	79	87



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.3	0.2	0.3	0.3
Nitration (PA)	%	68	63	68	78
Sulfation (PA)	%	59	56	58	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	7	4	4	6
Sodium	ppm	2	2	2	2
Potassium	ppm	2	<1	<1	0



WEAR METALS

Iron	ppm	12	6	7	12
Copper	ppm	2	3	<1	1
Lead	ppm	<1	0	0	0
Tin	ppm	1	<1	<1	<1
Aluminum	ppm	5	4	4	5
Chromium	ppm	1	0	<1	<1
Molybdenum	ppm	44	47	44	42
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	0	0	<1
Silver	ppm	1	0	0	0
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	1657	1662	1576	1617
Magnesium	ppm	550	601	488	503
Zinc	ppm	1151	1174	1112	1058
Phosphorus	ppm	958	1031	913	878
Barium	ppm	1	0	0	0
Boron	ppm	29	30	22	23

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: VOLVO0093
Unique No: 11048574
Signed: Wes Davis
Report Date: 29 May 2024



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GRAPHS

