



CONSTRUCTION EQUIPMENT

SW-20464-2 EVERGREEN VOLVO L110H 631705 - DIESEL ENGINE



Sample No: VCP419285
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-20464-2 EVERGREEN



SAMPLE INFORMATION

Sample Number	VCP419285	VCP397949	VCP355320	VCP346334
Sample Date	23 Jun 2023	17 Feb 2023	15 Sep 2022	15 Jun 2022
Machine Hours	6028	5566	5085	4651
Oil Hours	500	490	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.7	13.1	13.4	13.0
Base Number (BN)	mg KOH/g	9.8	10.3	11.1	10.7
Oxidation (PA)	%	68	73	68	78

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

Soot %	%	0.5	0.4	0.6	0.5
Nitration (PA)	%	66	61	63	58
Sulfation (PA)	%	58	60	61	64
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	4	6	14
Sodium	ppm	2	<1	2	4
Potassium	ppm	1	2	0	0



WEAR METALS

Iron	ppm	16	15	26	35
Copper	ppm	5	6	8	11
Lead	ppm	<1	1	2	3
Tin	ppm	2	2	2	3
Aluminum	ppm	3	4	4	4
Chromium	ppm	<1	<1	1	1
Molybdenum	ppm	69	52	56	42
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	<1	<1	<1	<1
Manganese	ppm	<1	<1	<1	2
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1285	1436	1264	1637
Magnesium	ppm	997	687	951	618
Zinc	ppm	1351	1071	1309	1166
Phosphorus	ppm	1078	883	1038	974
Barium	ppm	0	0	2	22
Boron	ppm	16	26	8	61

Depot: VOLVO8770
Unique No: 10539081
Signed: Doug Bogart
Report Date: 07 Jul 2023



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VOLVO GRAPHS

