



CONSTRUCTION EQUIPMENT

VOLVO L110H 631332 - DIESEL ENGINE



Sample No: VCP440642
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP440642	VCP426190	VCP393527	VCP400138
Sample Date	13 Dec 2023	06 Sep 2023	08 May 2023	01 Dec 2022
Machine Hours	9794	9270	8702	8127
Oil Hours	0	500	0	500
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

RIPA AND ASSOCIATES

10149 FISHER AVENUE
 TAMPA, FL
 US 33619
 Contact: PM Services
 PMServices@ripaconstruction.com
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	13.3	13.4	13.1	13.5
Base Number (BN)	mg KOH/g	9.9	10.4	10.1	10.2
Oxidation (PA)	%	80	80	81	62

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

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.3	0.3	0.3	0.3
Nitration (PA)	%	63	68	68	65
Sulfation (PA)	%	60	61	61	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	6	6	4
Sodium	ppm	2	0	3	<1
Potassium	ppm	1	2	<1	0



WEAR METALS

Iron	ppm	10	16	17	12
Copper	ppm	<1	<1	1	<1
Lead	ppm	<1	<1	<1	1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	2	0	4	2
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	33	39	75	61
Nickel	ppm	0	<1	0	<1
Titanium	ppm	1	14	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1789	1624	1676	1270
Magnesium	ppm	444	476	633	980
Zinc	ppm	1210	1128	1244	1400
Phosphorus	ppm	910	933	1026	1090
Barium	ppm	0	1	0	0
Boron	ppm	47	32	30	2

Depot: RIPTAM
Unique No: 10823691
Signed: Wes Davis
Report Date: 12 Jan 2024



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VOLVO GRAPHS

