



CONSTRUCTION EQUIPMENT

VOLVO L110H 632271 - DIESEL ENGINE



Sample No: VCP451154
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP451154	VCP398078	VCP386635	VCP348811
Sample Date	06 May 2024	03 Mar 2023	18 Nov 2022	11 Aug 2022
Machine Hours	3861	1542	984	452
Oil Hours	0	1542	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	SEVERE

RIPA AND ASSOCIATES

10149 FISHER AVENUE
TAMPA, FL
US 33619
Contact: PM Services
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T:
F:



OIL CONDITION

Visc @ 100°C	cSt	13.1	12.6	13.3	12.7
Base Number (BN)	mg KOH/g	9.9	10.2	11.3	10.9
Oxidation (PA)	%	79	82	86	81

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 %	%	0.2	0.3	0.3	0.3
Nitration (PA)	%	58	65	68	65
Sulfation (PA)	%	59	62	67	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	6	6	16
Sodium	ppm	3	2	2	4
Potassium	ppm	0	0	0	2



WEAR METALS

Iron	ppm	7	14	16	26
Copper	ppm	<1	3	5	11
Lead	ppm	0	0	2	3
Tin	ppm	0	1	1	2
Aluminum	ppm	3	7	19	▲ 85
Chromium	ppm	<1	1	2	5
Molybdenum	ppm	41	66	42	36
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	<1	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	1	<1	3
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	1836	1578	1578	1525
Magnesium	ppm	519	506	578	616
Zinc	ppm	1131	1063	1157	1163
Phosphorus	ppm	970	850	900	968
Barium	ppm	0	0	0	11
Boron	ppm	33	36	32	55

Depot: RIPTAM
Unique No: 11029628
Signed: Wes Davis
Report Date: 14 May 2024



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GRAPHS

