



CONSTRUCTION EQUIPMENT

VOLVO L110H 631298 - DIESEL ENGINE



Sample No: VCP454949
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP454949	VCP451151	VCP414216	VCP420212
Sample Date	20 May 2024	04 Apr 2024	18 Jul 2023	10 Apr 2023
Machine Hours	10020	8536	8405	7851
Oil Hours	0	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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	13.9	12.8	13.0	13.3
Base Number (BN)	mg KOH/g	6.7	9.6	10.1	9.0
Oxidation (PA)	%	69	75	80	79

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 %	%	0.4	0.3	0.3	0.3
Nitration (PA)	%	85	70	64	62
Sulfation (PA)	%	59	57	58	55
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	7	8	5
Sodium	ppm	3	2	3	<1
Potassium	ppm	2	2	1	1



WEAR METALS

Iron	ppm	18	15	21	11
Copper	ppm	2	13	2	2
Lead	ppm	1	<1	<1	<1
Tin	ppm	1	2	2	<1
Aluminum	ppm	7	7	5	<1
Chromium	ppm	<1	<1	1	<1
Molybdenum	ppm	67	49	46	50
Nickel	ppm	<1	<1	<1	0
Titanium	ppm	13	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	1990	1729	1786	1712
Magnesium	ppm	309	546	559	473
Zinc	ppm	1226	1200	1239	1139
Phosphorus	ppm	1040	1127	1015	928
Barium	ppm	0	<1	0	0
Boron	ppm	21	36	26	27

Depot: RIPTAM
Unique No: 11050445
Signed: Wes Davis
Report Date: 30 May 2024



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VOLVO GRAPHS

