



CONSTRUCTION EQUIPMENT

VOLVO L110H 631123 - DIESEL ENGINE



Sample No: VCP446472
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP446472	VCP444130	VCP431770	VCP422765
Sample Date	10 Jul 2024	04 Mar 2024	06 Oct 2023	14 Jul 2023
Machine Hours	9296	8776	2606	7249
Oil Hours	0	500	0	0
Oil Changed	Changed	Changed	N/A	N/A
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	12.6	13.0	12.6	12.6
Base Number (BN)	mg KOH/g	9.8	10.4	10.3	10.3
Oxidation (PA)	%	73	80	80	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 %	%	0.3	0.2	0.3	0.3
Nitration (PA)	%	68	64	67	64
Sulfation (PA)	%	57	59	59	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	6	4	4
Sodium	ppm	2	3	3	2
Potassium	ppm	0	2	2	<1



WEAR METALS

Iron	ppm	11	12	10	8
Copper	ppm	<1	2	1	<1
Lead	ppm	0	<1	0	<1
Tin	ppm	0	1	<1	<1
Aluminum	ppm	4	6	5	4
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	42	45	48	42
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	<1	<1	0
Silver	ppm	0	<1	0	0
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	0	<1	<1	0



ADDITIVES

Calcium	ppm	1661	1731	1649	1693
Magnesium	ppm	615	521	516	534
Zinc	ppm	1140	1139	1168	1200
Phosphorus	ppm	974	981	978	974
Barium	ppm	0	0	<1	0
Boron	ppm	21	35	22	26

Depot: RIPTAM
Unique No: 11124259
Signed: Wes Davis
Report Date: 15 Jul 2024



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GRAPHS

