



CONSTRUCTION EQUIPMENT

VOLVO L110H 631237 - DIESEL ENGINE



Sample No: VCP444056
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP444056	VCP414660	VCP388913	VCP373215
Sample Date	22 Apr 2024	06 Sep 2023	02 Nov 2022	17 Jun 2022
Machine Hours	10448	9324	8131	7658
Oil Hours	0	0	500	1500
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
 PMServices@ripaconstruction.com
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	13.2	13.0	13.5	13.4
Base Number (BN)	mg KOH/g	7.1	10.2	12.2	11.9
Oxidation (PA)	%	59	77	89	87

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	0.5	0.4
Nitration (PA)	%	78	69	72	68
Sulfation (PA)	%	52	58	67	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	6	5	5
Sodium	ppm	2	4	2	1
Potassium	ppm	0	<1	0	<1



WEAR METALS

Iron	ppm	14	13	14	11
Copper	ppm	1	4	1	2
Lead	ppm	0	0	<1	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	7	7	8	5
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	76	48	41	42
Nickel	ppm	0	0	0	0
Titanium	ppm	0	1	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	2076	1808	1741	1699
Magnesium	ppm	266	484	508	505
Zinc	ppm	1222	1268	1120	1163
Phosphorus	ppm	1042	1039	928	966
Barium	ppm	0	0	0	0
Boron	ppm	17	26	32	36

Depot: RIPTAM
Unique No: 11029631
Signed: Wes Davis
Report Date: 14 May 2024



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GRAPHS

