



CONSTRUCTION EQUIPMENT

660036 VOLVO L110H 631294 - DIESEL ENGINE



Sample No: VCP452337
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 660036



SAMPLE INFORMATION

Sample Number	VCP452337	VCP424508	VCP386116	VCP364359
Sample Date	10 Jan 2024	30 May 2023	22 Nov 2022	25 Aug 2022
Machine Hours	10887	10414	9308	8820
Oil Hours	500	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
 PMServices@ripaconstruction.com
 T:
 F:

OIL CONDITION

Visc @ 100°C	cSt	12.9	13.3	12.8	13.2
Base Number (BN)	mg KOH/g	10.4	9.5	11.0	10.2
Oxidation (PA)	%	80	85	86	92

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.3	0.2	0.4
Nitration (PA)	%	68	71	68	88
Sulfation (PA)	%	60	60	65	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	10	5	5	5
Sodium	ppm	2	2	2	3
Potassium	ppm	0	<1	0	0

WEAR METALS

Iron	ppm	31	11	8	12
Copper	ppm	1	<1	<1	<1
Lead	ppm	0	0	<1	0
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	9	3	2	6
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	42	50	41	48
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1677	1785	1571	1749
Magnesium	ppm	506	466	529	472
Zinc	ppm	1140	1135	1145	1133
Phosphorus	ppm	974	947	889	943
Barium	ppm	<1	0	0	<1
Boron	ppm	29	28	24	23

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.

Depot: RIPTAM
Unique No: 10861618
Signed: Wes Davis
Report Date: 06 Feb 2024



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GRAPHS

