



CONSTRUCTION EQUIPMENT

VOLVO L110H 631293 - DIESEL ENGINE



Sample No: VCP430173
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP430173	VCP400140	VCP355077	VCP363480
Sample Date	15 Nov 2023	19 Dec 2022	17 Aug 2022	13 May 2022
Machine Hours	8024	6979	6526	5964
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
 PMServices@ripaconstruction.com
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	12.6	13.3	13.1	13.9
Base Number (BN)	mg KOH/g	10.4	11.1	11.5	11.3
Oxidation (PA)	%	82	82	87	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 %	%	0.3	0.3	0.4	0.4
Nitration (PA)	%	66	67	78	72
Sulfation (PA)	%	60	60	65	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	6	6	7
Sodium	ppm	<1	2	<1	2
Potassium	ppm	2	0	0	<1



WEAR METALS

Iron	ppm	13	12	13	15
Copper	ppm	6	2	2	4
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	<1	<1	1
Aluminum	ppm	4	6	7	9
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	42	44	42	40
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	<1



ADDITIVES

Calcium	ppm	1598	1681	1569	1805
Magnesium	ppm	468	541	529	500
Zinc	ppm	1045	1143	1041	1186
Phosphorus	ppm	851	918	867	980
Barium	ppm	2	0	0	0
Boron	ppm	38	25	17	30

Depot: RIPTAM
Unique No: 10776020
Signed: Wes Davis
Report Date: 07 Dec 2023



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VOLVO GRAPHS

