



CONSTRUCTION EQUIPMENT

VOLVO L110H 631239 - DIESEL ENGINE



Sample No: VCP441515
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP441515	VCP407844	VCP381372	VCP390705
Sample Date	07 Feb 2024	27 Jun 2023	09 Feb 2023	25 Oct 2022
Machine Hours	9786	9267	8759	8302
Oil Hours	0	500	500	500
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	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	12.8	11.6	12.7	13.2
Base Number (BN)	mg KOH/g	10.2	10.1	10.1	11.7
Oxidation (PA)	%	81	78	82	91

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	0.4
Nitration (PA)	%	65	66	63	80
Sulfation (PA)	%	60	58	61	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	3.7	<1.0	<1.0
Silicon	ppm	7	3	3	6
Sodium	ppm	2	2	<1	3
Potassium	ppm	3	2	2	0



WEAR METALS

Iron	ppm	17	3	12	16
Copper	ppm	7	4	1	2
Lead	ppm	2	0	<1	<1
Tin	ppm	2	0	<1	<1
Aluminum	ppm	9	6	7	11
Chromium	ppm	2	0	<1	<1
Molybdenum	ppm	46	50	45	43
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	1	0	<1	<1
Vanadium	ppm	<1	0	<1	0



ADDITIVES

Calcium	ppm	1452	2008	1659	1766
Magnesium	ppm	440	543	485	531
Zinc	ppm	1029	1284	1122	1147
Phosphorus	ppm	851	1082	917	945
Barium	ppm	1	12	2	0
Boron	ppm	40	61	32	26

Depot: RIPTAM
Unique No: 10900462
Signed: Wes Davis
Report Date: 28 Feb 2024



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GRAPHS

