



CONSTRUCTION EQUIPMENT

A12264 VOLVO L110H 632525 - DIESEL ENGINE



Sample No: VCP440354
Oil Type: MOBIL 15W40
Job No: A12264



SAMPLE INFORMATION

Sample Number	VCP440354	VCP432253	VCP412604	VCBM001627
Sample Date	06 Mar 2024	20 Dec 2023	03 Oct 2023	22 Jun 2023
Machine Hours	3145	2440	1785	975
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HMR ASSOCIATES
 PO BOX 485
 TOUGHKENAMON, PA
 US 19374
 Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 100°C	cSt	13.4	13.3	13.3	13.3
Base Number (BN)	mg KOH/g	6.9	6.8	5.2	6.9
Oxidation (PA)	%	58	54	66	54

T:
 F: (610)268-2225

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	0.2	0.3	0.2
Nitration (PA)	%	65	61	67	66
Sulfation (PA)	%	58	55	60	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	4	6	5
Sodium	ppm	2	2	0	2
Potassium	ppm	2	<1	2	2



WEAR METALS

Iron	ppm	21	14	22	15
Copper	ppm	2	2	7	18
Lead	ppm	<1	<1	3	0
Tin	ppm	1	<1	1	<1
Aluminum	ppm	4	3	0	5
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	18	24	32	17
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	<1	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	2186	1900	1813	2250
Magnesium	ppm	210	331	369	205
Zinc	ppm	1135	1152	1143	1202
Phosphorus	ppm	962	964	926	969
Barium	ppm	0	0	2	0
Boron	ppm	13	7	6	7

Depot: HMRTOU
Unique No: 10937581
Signed: Wes Davis
Report Date: 21 Mar 2024



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GRAPHS

