



CONSTRUCTION EQUIPMENT

A12796 VOLVO L110H 632555 - DIESEL ENGINE



Sample No: VCP445226
Oil Type: MOBIL 15W40
Job No: A12796



SAMPLE INFORMATION

Sample Number	VCP445226	VCP407248	VCP428733	VCP430367
Sample Date	04 Jun 2024	06 Mar 2024	21 Dec 2023	03 Oct 2023
Machine Hours	4100	3345	2515	1760
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

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



OIL CONDITION

Visc @ 100°C	cSt	13.3	13.1	13.0	13.1
Base Number (BN)	mg KOH/g	6.6	6.4	6.6	6.7
Oxidation (PA)	%	47	44	43	50

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 %	%	0.2	0.2	0.1	0.2
Nitration (PA)	%	61	58	53	59
Sulfation (PA)	%	50	50	48	49
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	5	4	5
Sodium	ppm	3	2	<1	<1
Potassium	ppm	5	2	<1	2



WEAR METALS

Iron	ppm	7	12	9	16
Copper	ppm	<1	2	5	21
Lead	ppm	<1	<1	0	<1
Tin	ppm	<1	1	<1	1
Aluminum	ppm	5	7	5	5
Chromium	ppm	0	1	<1	<1
Molybdenum	ppm	6	9	12	23
Nickel	ppm	<1	<1	0	<1
Titanium	ppm	26	1	<1	<1
Silver	ppm	<1	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0



ADDITIVES

Calcium	ppm	2138	2192	2008	1821
Magnesium	ppm	209	100	174	270
Zinc	ppm	1182	1086	1081	1051
Phosphorus	ppm	975	916	893	856
Barium	ppm	0	0	0	3
Boron	ppm	35	6	6	7

Depot: HMRTOU
Unique No: 11088265
Signed: Wes Davis
Report Date: 21 Jun 2024



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VOLVO GRAPHS

