



CONSTRUCTION EQUIPMENT

A11313 VOLVO L110F 4840 - DIESEL ENGINE



Sample No: VCP430659
Oil Type: MOBIL 15W40
Job No: A11313



SAMPLE INFORMATION

Sample Number	VCP430659	VCP371511	VCP326485	VCP307360
Sample Date	18 Oct 2023	19 Jul 2022	22 Nov 2021	02 Jun 2021
Machine Hours	27975	2752	27024	26458
Oil Hours	500	0	500	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

COVANTA INC
 1911 RIVER RD
 BAINBRIDGE, PA
 US 17502
 Contact: RON HENDERSHOT
 rhendershot@covantaenergy.com
 T: (717)426-4938
 F: (717)426-1970



OIL CONDITION

Visc @ 100°C	cSt	13.5	13.3	13.8	12.9
Base Number (BN)	mg KOH/g	9.6	10.9	10.7	---
Oxidation (PA)	%	82	87	81	79



CONTAMINATION

Soot %	%	0.3	0.3	0.3	0.6
Nitration (PA)	%	70	66	59	68
Sulfation (PA)	%	61	66	63	67
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	13	10	9	14
Sodium	ppm	4	2	<1	2
Potassium	ppm	0	0	0	<1



WEAR METALS

Iron	ppm	6	5	9	8
Copper	ppm	<1	<1	<1	4
Lead	ppm	0	<1	<1	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	2	2	0	0
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	44	47	42	45
Nickel	ppm	0	<1	0	<1
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	<1	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1743	1736	1840	1647
Magnesium	ppm	564	501	486	471
Zinc	ppm	1192	1074	1054	1040
Phosphorus	ppm	875	862	971	871
Barium	ppm	0	0	0	0
Boron	ppm	51	71	43	137

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: COVBAl
Unique No: 10711598
Signed: Wes Davis
Report Date: 26 Oct 2023



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GRAPHS

