



CONSTRUCTION EQUIPMENT

A11894 VOLVO L220H 3380 - DIESEL ENGINE



Sample No: VCP434164
Oil Type: MOBIL 15W40
Job No: A11894



SAMPLE INFORMATION

Sample Number	VCP434164	VCP431259	VCP421952	VCP406475
Sample Date	10 Jan 2024	17 Oct 2023	21 Jun 2023	08 May 2023
Machine Hours	4610	4025	3180	2470
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

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	12.7	13.5	13.3	14.0
Base Number (BN)	mg KOH/g	6.5	9.4	7.2	6.1
Oxidation (PA)	%	41	61	43	96



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.3
Nitration (PA)	%	56	54	58	86
Sulfation (PA)	%	47	53	47	67
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	13	11	9	38
Sodium	ppm	0	3	2	2
Potassium	ppm	2	0	2	0



WEAR METALS

Iron	ppm	2	<1	3	15
Copper	ppm	1	<1	6	50
Lead	ppm	<1	0	0	1
Tin	ppm	<1	0	0	2
Aluminum	ppm	1	<1	<1	4
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	12	42	15	47
Nickel	ppm	<1	0	0	3
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1946	1513	2211	1778
Magnesium	ppm	189	519	146	452
Zinc	ppm	1133	1209	1139	1084
Phosphorus	ppm	954	921	935	808
Barium	ppm	0	0	0	0
Boron	ppm	10	37	6	18

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: 10836334
Signed: Wes Davis
Report Date: 19 Jan 2024



CONSTRUCTION EQUIPMENT



GRAPHS

