



CONSTRUCTION EQUIPMENT

2 VOLVO L220E 2649 - DIESEL ENGINE



Sample No: VCP122166
Oil Type: GOLF 15W40
Job No: 2



SAMPLE INFORMATION

Sample Number	VCP122166	VCE74447	VCE74443	VC077890
Sample Date	11 Mar 2024	22 Feb 2023	19 Sep 2022	13 Jun 2022
Machine Hours	3847	0	33919	33570
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	N/A	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

WHIBCO INC
 377 PORT CUMBERLAND ROAD DRAWER E
 PORT ELIZABETH, NJ
 US 08348
 Contact: JOHN HUGHES
 jhughes@whibco.com
 T: (856)305-6602
 F: (856)825-4743



OIL CONDITION

Visc @ 100°C	cSt	12.6	12.7	13.2	13.2
Base Number (BN)	mg KOH/g	6.8	6.6	9.8	6.7
Oxidation (PA)	%	43	56	63	55

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	0.4	0.6	0.5
Nitration (PA)	%	60	77	62	74
Sulfation (PA)	%	48	52	58	52
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	4	4	3
Sodium	ppm	0	1	<1	2
Potassium	ppm	4	2	1	1



WEAR METALS

Iron	ppm	5	4	6	7
Copper	ppm	<1	0	<1	1
Lead	ppm	3	<1	<1	<1
Tin	ppm	2	<1	<1	<1
Aluminum	ppm	6	2	1	2
Chromium	ppm	<1	0	<1	<1
Molybdenum	ppm	14	81	63	89
Nickel	ppm	1	0	<1	0
Titanium	ppm	<1	0	0	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	<1	<1	0
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	2280	2184	1866	2226
Magnesium	ppm	55	60	360	48
Zinc	ppm	1071	1246	1236	1243
Phosphorus	ppm	900	954	1034	1031
Barium	ppm	1	0	0	0
Boron	ppm	11	59	94	71

Depot: WHIBRI
Unique No: 10940990
Signed: Wes Davis
Report Date: 26 Mar 2024



CONSTRUCTION EQUIPMENT



GRAPHS

