



CONSTRUCTION EQUIPMENT

VOLVO L90F 68992 - DIESEL ENGINE



Sample No: VCP409680

Oil Type: GULF SUPER DUTY + 15W40

Job No:



SAMPLE INFORMATION

Sample Number	VCP409680	VCP409666	VCP409667	VCP371833
Sample Date	05 Nov 2023	03 Sep 2023	27 Jul 2023	04 May 2023
Machine Hours	21763	21090	21162	20586
Oil Hours	263	290	300	330
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	NORMAL

WE CARE ORGANICS

800 CO CO LN
COLUMBUS, NJ
US 08022
Contact: Owen Sheehan
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OIL CONDITION

Visc @ 100°C	cSt	14.4	14.0	14.6	14.0
Base Number (BN)	mg KOH/g	6.4	7.1	6.8	6.7
Oxidation (PA)	%	68	56	80	59



CONTAMINATION

Soot %	%	0.4	0.2	0.6	0.3
Nitration (PA)	%	83	68	88	72
Sulfation (PA)	%	57	52	63	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	18	12	▲ 24	13
Sodium	ppm	2	3	3	2
Potassium	ppm	<1	0	2	2



WEAR METALS

Iron	ppm	6	4	13	5
Copper	ppm	1	<1	3	<1
Lead	ppm	2	1	8	0
Tin	ppm	0	<1	<1	0
Aluminum	ppm	2	2	1	2
Chromium	ppm	0	0	<1	0
Molybdenum	ppm	90	82	91	89
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	<1	0
Silver	ppm	0	0	<1	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	<1	<1	0



ADDITIVES

Calcium	ppm	2192	2150	2343	2255
Magnesium	ppm	50	89	134	179
Zinc	ppm	1364	1183	1387	1430
Phosphorus	ppm	1059	985	1059	1107
Barium	ppm	0	0	0	0
Boron	ppm	39	65	32	56

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: SYNCOL
Unique No: 10736441
Signed: Wes Davis
Report Date: 10 Nov 2023



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GRAPHS

