



CONSTRUCTION EQUIPMENT

SW-25691-2 MANHEIM VOLVO L90F 68702 - DIESEL ENGINE



Sample No: VCP443484
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-25691-2 MANHEIM



SAMPLE INFORMATION

Sample Number	VCP443484	VCP412991	VCP405842	VCP395571
Sample Date	25 Oct 2023	08 Sep 2023	28 Apr 2023	13 Jan 2023
Machine Hours	16793	16602	16049	15556
Oil Hours	200	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	14.3	13.4	13.4	13.1
Base Number (BN)	mg KOH/g	9.0	9.4	8.8	10.4
Oxidation (PA)	%	50	56	55	70

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 acceptable for the time in service.



CONTAMINATION

Soot %	%	0.1	0.2	0.2	0.3
Nitration (PA)	%	40	50	48	52
Sulfation (PA)	%	48	52	48	57
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	2	3	3	3
Sodium	ppm	2	2	<1	0
Potassium	ppm	1	0	<1	0



WEAR METALS

Iron	ppm	0	3	4	0
Copper	ppm	1	<1	<1	0
Lead	ppm	0	0	<1	0
Tin	ppm	0	<1	<1	0
Aluminum	ppm	1	2	<1	0
Chromium	ppm	0	0	<1	0
Molybdenum	ppm	58	60	62	45
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	996	1144	1235	1343
Magnesium	ppm	949	966	974	641
Zinc	ppm	1280	1217	1205	930
Phosphorus	ppm	1036	1034	1033	780
Barium	ppm	0	0	0	0
Boron	ppm	8	8	17	29

Depot: VOLVO8770
Unique No: 10722515
Signed: Sean Felton
Report Date: 01 Nov 2023



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VOLVO GRAPHS

