



CONSTRUCTION EQUIPMENT

SW-36429-2 MANHEIM VOLVO L90F 68702 - DIESEL ENGINE



Sample No: VCP454315
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-36429-2 MANHEIM



SAMPLE INFORMATION

Sample Number	VCP454315	VCP446580	VCP324494	VCP435843
Sample Date	21 Jun 2024	19 Apr 2024	23 Feb 2024	22 Dec 2023
Machine Hours	17851	17594	17345	17058
Oil Hours	500	250	300	250
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.8	13.6	13.9	14.1
Base Number (BN)	mg KOH/g	7.2	7.5	8.5	8.1
Oxidation (PA)	%	37	41	51	54

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 %	%	0.1	0.1	0.2	0.1
Nitration (PA)	%	48	47	48	52
Sulfation (PA)	%	44	45	48	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	2	4	2
Sodium	ppm	<1	<1	1	1
Potassium	ppm	2	<1	1	1



WEAR METALS

Iron	ppm	3	1	3	<1
Copper	ppm	<1	0	<1	<1
Lead	ppm	<1	0	0	<1
Tin	ppm	<1	0	0	<1
Aluminum	ppm	2	<1	2	2
Chromium	ppm	<1	0	<1	0
Molybdenum	ppm	16	31	61	63
Nickel	ppm	<1	0	0	0
Titanium	ppm	1	1	<1	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	0	0	<1
Vanadium	ppm	<1	<1	<1	0



ADDITIVES

Calcium	ppm	2132	1895	1238	1430
Magnesium	ppm	160	401	730	611
Zinc	ppm	1072	1156	1150	1265
Phosphorus	ppm	923	970	1053	1060
Barium	ppm	1	0	0	0
Boron	ppm	16	29	25	38

Depot: VOLVO8770
Unique No: 11101285
Signed: Wes Davis
Report Date: 28 Jun 2024



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GRAPHS

