



CONSTRUCTION EQUIPMENT

SW-35458-2 MAVERICK VOLVO L220H 3371 - DIESEL ENGINE



Sample No: VCP454192
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-35458-2 MAVERICK



SAMPLE INFORMATION

Sample Number	VCP454192	VCP324493	VCP443480	VCP418718
Sample Date	10 Jun 2024	27 Feb 2024	02 Nov 2023	11 Jul 2023
Machine Hours	3913	3279	2742	2147
Oil Hours	440	550	550	600
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.7	13.3	12.9	12.5
Base Number (BN)	mg KOH/g	7.9	6.8	8.3	7.4
Oxidation (PA)	%	58	60	62	68



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.2	0.2	0.2	0.3
Nitration (PA)	%	63	68	63	76
Sulfation (PA)	%	53	52	56	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	5	4	7
Sodium	ppm	4	3	2	2
Potassium	ppm	6	2	1	2



WEAR METALS

Iron	ppm	5	5	6	10
Copper	ppm	2	6	37	158
Lead	ppm	<1	0	0	2
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	2	2	3	2
Chromium	ppm	<1	<1	<1	0
Molybdenum	ppm	18	71	62	63
Nickel	ppm	1	<1	<1	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	0	0	1
Vanadium	ppm	<1	0	<1	<1



ADDITIVES

Calcium	ppm	1838	1470	1109	1382
Magnesium	ppm	385	561	925	813
Zinc	ppm	1051	1225	1247	1231
Phosphorus	ppm	895	1101	1036	995
Barium	ppm	<1	0	7	0
Boron	ppm	80	26	2	20

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: VOLVO8770
Unique No: 11085930
Signed: Wes Davis
Report Date: 19 Jun 2024



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GRAPHS

