



CONSTRUCTION EQUIPMENT

SW1023494 LKQ VOLVO L90H 624179 - DIESEL ENGINE



Sample No: VCP413320
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1023494 LKQ



SAMPLE INFORMATION

Sample Number	VCP413320	VCP354178	VCP337837	VCP346694
Sample Date	30 Aug 2023	21 Jun 2023	07 Jul 2022	02 Feb 2022
Machine Hours	9608	9093	1793	5572
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.0	13.5	13.6	13.2
Base Number (BN)	mg KOH/g	10.4	6.3	10.6	10.9
Oxidation (PA)	%	77	83	87	90



CONTAMINATION

Soot %	%	0.3	0.7	0.3	0.2
Nitration (PA)	%	57	87	69	70
Sulfation (PA)	%	60	64	62	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	8	7	7
Sodium	ppm	2	2	2	2
Potassium	ppm	<1	<1	0	<1



WEAR METALS

Iron	ppm	10	41	12	11
Copper	ppm	<1	5	<1	2
Lead	ppm	0	0	<1	0
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	10	4	1
Chromium	ppm	1	3	1	1
Molybdenum	ppm	44	63	40	38
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1615	1211	1657	1813
Magnesium	ppm	598	992	509	533
Zinc	ppm	1149	1335	1115	1094
Phosphorus	ppm	958	1017	908	971
Barium	ppm	2	0	0	0
Boron	ppm	40	3	43	44

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: VOLVO6174
Unique No: 10633987
Signed: Wes Davis
Report Date: 07 Sep 2023



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GRAPHS

