



CONSTRUCTION EQUIPMENT

SW1023494 LKQ VOLVO L90H 624586 - DIESEL ENGINE



Sample No: VCP413319
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1023494 LKQ



SAMPLE INFORMATION

Sample Number	VCP413319	VCP354180	VCP337862	VCP346695
Sample Date	30 Aug 2023	26 Apr 2023	07 Jul 2022	09 Feb 2022
Machine Hours	7364	6788	5662	5035
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ATTENTION

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OIL CONDITION

Visc @ 100°C	cSt	13.6	14.1	13.7	13.5
Base Number (BN)	mg KOH/g	9.7	6.9	11.1	11.3
Oxidation (PA)	%	69	69	87	90



CONTAMINATION

Soot %	%	0.6	0.6	0.3	0.3
Nitration (PA)	%	73	79	67	67
Sulfation (PA)	%	57	53	63	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	10	5	7
Sodium	ppm	2	1	2	2
Potassium	ppm	<1	0	0	<1



WEAR METALS

Iron	ppm	17	35	7	8
Copper	ppm	<1	2	<1	▲ 19
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	1	<1
Aluminum	ppm	3	6	3	<1
Chromium	ppm	2	3	<1	<1
Molybdenum	ppm	58	70	39	39
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	0	<1	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1331	1404	1611	1895
Magnesium	ppm	891	1127	498	542
Zinc	ppm	1292	1492	1089	1100
Phosphorus	ppm	1069	1137	885	1002
Barium	ppm	2	0	0	0
Boron	ppm	13	2	47	49

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: 10633986
Signed: Wes Davis
Report Date: 07 Sep 2023



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GRAPHS

