



CONSTRUCTION EQUIPMENT

SW1028546 LKQ VOLVO L90H 624586 - DIESEL ENGINE



Sample No: VCP437526
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1028546 LKQ



SAMPLE INFORMATION

Sample Number	VCP437526	VCP413319	VCP354180	VCP337862
Sample Date	08 Jan 2024	30 Aug 2023	26 Apr 2023	07 Jul 2022
Machine Hours	7972	7364	6788	5662
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

ARNOLD MACHINERY COMPANY
 4323 EAST WINSLOW AVENUE
 PHOENIX, AZ
 US 85040
 Contact: RANDY PRZEKURAT
 randyp@arnoldmachinery.com
 T:
 F: (602)414-1904



OIL CONDITION

Visc @ 100°C	cSt	13.1	13.6	14.1	13.7
Base Number (BN)	mg KOH/g	9.3	9.7	6.9	11.1
Oxidation (PA)	%	65	69	69	87



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.6	0.6	0.3
Nitration (PA)	%	63	73	79	67
Sulfation (PA)	%	54	57	53	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	8	10	5
Sodium	ppm	2	2	1	2
Potassium	ppm	1	<1	0	0



WEAR METALS

Iron	ppm	9	17	35	7
Copper	ppm	<1	<1	2	<1
Lead	ppm	0	0	0	<1
Tin	ppm	<1	<1	<1	1
Aluminum	ppm	2	3	6	3
Chromium	ppm	<1	2	3	<1
Molybdenum	ppm	52	58	70	39
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	0	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1181	1331	1404	1611
Magnesium	ppm	860	891	1127	498
Zinc	ppm	1251	1292	1492	1089
Phosphorus	ppm	1072	1069	1137	885
Barium	ppm	<1	2	0	0
Boron	ppm	11	13	2	47

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: 10836668
Signed: Wes Davis
Report Date: 20 Jan 2024



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GRAPHS

