



CONSTRUCTION EQUIPMENT

S50401991 LKQ TN VOLVO L90H 626248 - DIESEL ENGINE



Sample No: VCP434466
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: S50401991 LKQ TN



SAMPLE INFORMATION

Sample Number	VCP434466	VCP403999	VCP404250	VCP381147
Sample Date	06 Nov 2023	11 Sep 2023	15 Feb 2023	06 Dec 2022
Machine Hours	3100	2760	1536	1042
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	12.8	14.1	13.2	12.5
Base Number (BN)	mg KOH/g	9.3	8.6	10.5	9.8
Oxidation (PA)	%	80	88	80	95



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.7	0.3	0.2
Nitration (PA)	%	47	81	53	78
Sulfation (PA)	%	60	63	62	68
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	8	5	10
Sodium	ppm	<1	6	0	3
Potassium	ppm	2	5	2	<1



WEAR METALS

Iron	ppm	5	14	8	12
Copper	ppm	<1	13	0	4
Lead	ppm	0	<1	0	3
Tin	ppm	<1	<1	0	<1
Aluminum	ppm	2	1	2	2
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	40	33	42	40
Nickel	ppm	<1	<1	0	2
Titanium	ppm	<1	17	0	<1
Silver	ppm	0	0	0	2
Manganese	ppm	<1	1	0	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	1635	1551	1658	1639
Magnesium	ppm	490	782	448	494
Zinc	ppm	1099	842	1080	1110
Phosphorus	ppm	958	719	901	866
Barium	ppm	12	0	<1	0
Boron	ppm	58	66	52	22

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: VOLVO4486
Unique No: 10790349
Signed: Wes Davis
Report Date: 15 Dec 2023



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GRAPHS

