



CONSTRUCTION EQUIPMENT

TP021224 LKQ VOLVO L90E 71073 - DIESEL ENGINE



Sample No: VCP307510
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: TP021224 LKQ



SAMPLE INFORMATION

Sample Number	VCP307510	VCP437533	VCP237017	---
Sample Date	12 Feb 2024	09 Jan 2024	17 Apr 2019	---
Machine Hours	16847	6986	4566	---
Oil Hours	109	0	0	---
Oil Changed	Not Chngd	Changed	Changed	---
Sample Status	MARGINAL	SEVERE	NORMAL	---



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OIL CONDITION

Visc @ 100°C	cSt	12.7	11.3	13.2	---
Base Number (BN)	mg KOH/g	9.9	8.8	---	---
Oxidation (PA)	%	64	81	78	---



CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.2	0.7	0.1	---
Nitration (PA)	%	47	73	45	---
Sulfation (PA)	%	54	61	60	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	4.0	14.8	<1.0	---
Silicon	ppm	4	11	12	---
Sodium	ppm	1	3	15	---
Potassium	ppm	0	1	0	---



WEAR METALS

Iron	ppm	4	21	14	---
Copper	ppm	0	2	1	---
Lead	ppm	<1	2	2	---
Tin	ppm	<1	<1	0	---
Aluminum	ppm	<1	2	3	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	47	40	33	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	0	<1	<1	---
Vanadium	ppm	0	<1	0	---



ADDITIVES

Calcium	ppm	1224	1484	1429	---
Magnesium	ppm	656	521	456	---
Zinc	ppm	1081	1096	742	---
Phosphorus	ppm	926	924	610	---
Barium	ppm	0	<1	0	---
Boron	ppm	35	39	52	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: VOLVO6174
Unique No: 10886748
Signed: Don Baldrige
Report Date: 21 Feb 2024



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GRAPHS

