



CONSTRUCTION EQUIPMENT

568112 LKQ VOLVO L90F 68771 - DIESEL ENGINE



Sample No: VCP416244
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 568112 LKQ



SAMPLE INFORMATION

Sample Number	VCP416244	VCP391273	VCP303706	---
Sample Date	07 Jul 2023	16 Oct 2022	16 Aug 2021	---
Machine Hours	11899	11437	10040	---
Oil Hours	500	500	500	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	ABNORMAL	---



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OIL CONDITION

Visc @ 100°C	cSt	15.0	14.1	▲ 12.3	---
Base Number (BN)	mg KOH/g	8.5	10.9	---	---
Oxidation (PA)	%	76	71	76	---



CONTAMINATION

Soot %	%	0.8	0.5	0.2	---
Nitration (PA)	%	85	70	48	---
Sulfation (PA)	%	63	61	63	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	0.0	---
Silicon	ppm	4	7	▲ 21	---
Sodium	ppm	1	2	9	---
Potassium	ppm	3	3	27	---



WEAR METALS

Iron	ppm	28	17	19	---
Copper	ppm	7	3	15	---
Lead	ppm	0	2	1	---
Tin	ppm	2	1	2	---
Aluminum	ppm	1	0	0	---
Chromium	ppm	<1	3	1	---
Molybdenum	ppm	61	58	41	---
Nickel	ppm	0	0	<1	---
Titanium	ppm	0	0	<1	---
Silver	ppm	0	<1	0	---
Manganese	ppm	<1	<1	2	---
Vanadium	ppm	<1	<1	0	---



ADDITIVES

Calcium	ppm	1138	1172	2118	---
Magnesium	ppm	1035	913	463	---
Zinc	ppm	1297	1248	1056	---
Phosphorus	ppm	1047	985	990	---
Barium	ppm	0	0	0	---
Boron	ppm	0	<1	108	---

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 acceptable for the time in service.

Depot: VOLVO2990
Unique No: 10551687
Signed: Don Baldrige
Report Date: 13 Jul 2023



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GRAPHS

