



CONSTRUCTION EQUIPMENT

SW-25230-2 CASTLE VA VOLVO L220H 3119 - DIESEL ENGINE



Sample No: VCP442161
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-25230-2 CASTLE VA



SAMPLE INFORMATION

Sample Number	VCP442161	VCP345450	VCP340958	---
Sample Date	10 Oct 2023	28 Dec 2021	08 Dec 2021	---
Machine Hours	1915	1428	1405	---
Oil Hours	500	23	500	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	ABNORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	12.9	13.5	12.9	---
Base Number (BN)	mg KOH/g	10.2	11.5	9.4	---
Oxidation (PA)	%	81	78	72	---

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.



CONTAMINATION

Soot %	%	0.3	0.1	0.3	---
Nitration (PA)	%	59	43	65	---
Sulfation (PA)	%	61	62	59	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	6	11	29	---
Sodium	ppm	3	2	3	---
Potassium	ppm	0	0	3	---



WEAR METALS

Iron	ppm	9	7	36	---
Copper	ppm	8	2	16	---
Lead	ppm	0	<1	3	---
Tin	ppm	<1	0	3	---
Aluminum	ppm	<1	1	7	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	37	40	32	---
Nickel	ppm	0	0	1	---
Titanium	ppm	0	<1	<1	---
Silver	ppm	0	0	<1	---
Manganese	ppm	<1	<1	2	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	1615	1668	1799	---
Magnesium	ppm	426	495	480	---
Zinc	ppm	969	1146	951	---
Phosphorus	ppm	814	953	828	---
Barium	ppm	0	0	0	---
Boron	ppm	61	69	51	---

Depot: VOLVO8770
Unique No: 10698243
Signed: Wes Davis
Report Date: 17 Oct 2023



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GRAPHS

