



CONSTRUCTION EQUIPMENT

SW-33842-2 CASTLE VA VOLVO EC355 314020 - DIESEL ENGINE



Sample No: VCP397010
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-33842-2 CASTLE VA



SAMPLE INFORMATION

Sample Number	VCP397010	VCP406960	---	---
Sample Date	03 May 2024	19 Aug 2023	---	---
Machine Hours	3270	2708	---	---
Oil Hours	560	475	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	ABNORMAL	---	---

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OIL CONDITION

Visc @ 100°C	cSt	● 12.2	▲ 12.2	---	---
Base Number (BN)	mg KOH/g	■ 7.5	■ 8.8	---	---
Oxidation (PA)	%	61	62	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.2	■ 0.1	---	---
Nitration (PA)	%	68	61	---	---
Sulfation (PA)	%	53	53	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	▲ 3.1	---	---
Silicon	ppm	■ 6	■ 4	---	---
Sodium	ppm	■ 0	■ 2	---	---
Potassium	ppm	■ 2	■ <1	---	---



WEAR METALS

Iron	ppm	■ 8	■ 5	---	---
Copper	ppm	■ 9	■ 9	---	---
Lead	ppm	■ <1	■ <1	---	---
Tin	ppm	■ 1	■ <1	---	---
Aluminum	ppm	■ 2	■ 1	---	---
Chromium	ppm	■ <1	■ <1	---	---
Molybdenum	ppm	■ 69	■ 59	---	---
Nickel	ppm	■ 2	■ 0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	■ 0	■ <1	---	---
Manganese	ppm	■ <1	■ <1	---	---
Vanadium	ppm	<1	<1	---	---



ADDITIVES

Calcium	ppm	■ 1123	■ 1207	---	---
Magnesium	ppm	■ 945	■ 949	---	---
Zinc	ppm	■ 1239	■ 1208	---	---
Phosphorus	ppm	■ 1112	■ 994	---	---
Barium	ppm	■ 2	■ 0	---	---
Boron	ppm	■ 3	■ 4	---	---

Depot: VOLVO8770
Unique No: 11022896
Signed: Sean Felton
Report Date: 14 May 2024



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GRAPHS

