



CONSTRUCTION EQUIPMENT

SW-21056-2 CASTLE VA VOLVO ECR355E 314373 - DIESEL ENGINE



Sample No: VCP426861
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-21056-2 CASTLE VA



SAMPLE INFORMATION

Sample Number	VCP426861	VCP406775	VCP337848	---
Sample Date	05 Jul 2023	20 Apr 2023	29 Aug 2022	---
Machine Hours	1810	1347	840	---
Oil Hours	460	500	315	---
Oil Changed	Changed	Changed	Not Changd	---
Sample Status	NORMAL	ATTENTION	NORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.0	▲ 11.9	13.3	---
Base Number (BN)	mg KOH/g	9.9	9.5	11.4	---
Oxidation (PA)	%	63	72	86	---

Diagnosis

Oil and filter change at the time of sampling has been noted. 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.



CONTAMINATION

Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	52	52	63	---
Sulfation (PA)	%	54	60	66	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	0.5	0.5	---
Silicon	ppm	5	11	10	---
Sodium	ppm	2	2	2	---
Potassium	ppm	1	<1	2	---



WEAR METALS

Iron	ppm	6	12	139	---
Copper	ppm	3	8	8	---
Lead	ppm	<1	0	2	---
Tin	ppm	1	<1	2	---
Aluminum	ppm	2	3	4	---
Chromium	ppm	<1	<1	7	---
Molybdenum	ppm	62	48	37	---
Nickel	ppm	<1	0	2	---
Titanium	ppm	0	0	<1	---
Silver	ppm	<1	0	<1	---
Manganese	ppm	<1	2	4	---
Vanadium	ppm	0	0	<1	---



ADDITIVES

Calcium	ppm	1287	1491	1689	---
Magnesium	ppm	1007	713	451	---
Zinc	ppm	1350	1168	1131	---
Phosphorus	ppm	1095	939	941	---
Barium	ppm	0	0	2	---
Boron	ppm	16	100	48	---

Depot: VOLVO8770
Unique No: 10559756
Signed: Don Baldrige
Report Date: 17 Jul 2023



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GRAPHS

