



CONSTRUCTION EQUIPMENT

SW-33330-2 CASTLE VA VOLVO EC480E 314667 - DIESEL ENGINE



Sample No: VCP395776
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-33330-2 CASTLE VA



SAMPLE INFORMATION

Sample Number	VCP395776	VCP440148	VCP443486	VCP411628
Sample Date	02 May 2024	19 Feb 2024	27 Nov 2023	11 Sep 2023
Machine Hours	0	5031	4494	4022
Oil Hours	0	230	490	400
Oil Changed	Not Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	11.7	11.9	12.4	12.5
Base Number (BN)	mg KOH/g	6.2	6.0	7.3	8.4
Oxidation (PA)	%	53	61	62	60

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.2
Nitration (PA)	%	75	76	69	58
Sulfation (PA)	%	58	54	53	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	1.0	0.5	<1.0	<1.0
Silicon	ppm	7	4	4	4
Sodium	ppm	12	2	<1	2
Potassium	ppm	0	1	<1	1



WEAR METALS

Iron	ppm	3	5	5	4
Copper	ppm	<1	1	<1	1
Lead	ppm	0	<1	0	<1
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	<1	2	2	<1
Chromium	ppm	0	<1	<1	0
Molybdenum	ppm	32	60	62	67
Nickel	ppm	0	<1	<1	0
Titanium	ppm	1	1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	0	<1
Vanadium	ppm	0	<1	0	<1



ADDITIVES

Calcium	ppm	1924	1154	1169	1240
Magnesium	ppm	388	723	745	1087
Zinc	ppm	991	1122	1151	1350
Phosphorus	ppm	884	863	925	1090
Barium	ppm	0	34	2	0
Boron	ppm	17	10	15	6

Depot: VOLVO8770
Unique No: 11019675
Signed: Don Baldrige
Report Date: 15 May 2024



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GRAPHS

