



CONSTRUCTION EQUIPMENT

SW-26983-2 CASTLE VA VOLVO EC480E 314667 - DIESEL ENGINE



Sample No: VCP443486
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-26983-2 CASTLE VA



SAMPLE INFORMATION

Sample Number	VCP443486	VCP411628	VCP419293	VCP400928
Sample Date	27 Nov 2023	11 Sep 2023	25 Jul 2023	24 Apr 2023
Machine Hours	4494	4022	3680	3144
Oil Hours	490	400	530	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	12.4	12.5	12.5	12.6
Base Number (BN)	mg KOH/g	7.3	8.4	8.1	7.4
Oxidation (PA)	%	62	60	66	61

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.2	0.3	0.2
Nitration (PA)	%	69	58	70	67
Sulfation (PA)	%	53	53	55	50
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	4	4	3
Sodium	ppm	<1	2	7	3
Potassium	ppm	<1	1	0	0



WEAR METALS

Iron	ppm	5	4	7	7
Copper	ppm	<1	1	3	1
Lead	ppm	0	<1	<1	0
Tin	ppm	<1	<1	0	0
Aluminum	ppm	2	<1	2	<1
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	62	67	61	64
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	<1	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	<1	<1	0



ADDITIVES

Calcium	ppm	1169	1240	1143	1151
Magnesium	ppm	745	1087	974	944
Zinc	ppm	1151	1350	1204	1222
Phosphorus	ppm	925	1090	985	997
Barium	ppm	2	0	0	0
Boron	ppm	15	6	6	10

Depot: VOLVO8770
Unique No: 10767965
Signed: Sean Felton
Report Date: 05 Dec 2023



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GRAPHS

