



CONSTRUCTION EQUIPMENT

SW-23802-2 CASTLE VA VOLVO EC480E 314667 - DIESEL ENGINE



Sample No: VCP411628
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-23802-2 CASTLE VA



SAMPLE INFORMATION

Sample Number	VCP411628	VCP419293	VCP400928	VCP399508
Sample Date	11 Sep 2023	25 Jul 2023	24 Apr 2023	13 Feb 2023
Machine Hours	4022	3680	3144	2648
Oil Hours	400	530	500	514
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ATTENTION

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OIL CONDITION

Visc @ 100°C	cSt	12.5	12.5	12.6	▲ 12.3
Base Number (BN)	mg KOH/g	8.4	8.1	7.4	9.0
Oxidation (PA)	%	60	66	61	62

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 %	%	0.2	0.3	0.2	0.1
Nitration (PA)	%	58	70	67	51
Sulfation (PA)	%	53	55	50	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	0.8
Silicon	ppm	4	4	3	4
Sodium	ppm	2	7	3	4
Potassium	ppm	1	0	0	0



WEAR METALS

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



ADDITIVES

Calcium	ppm	1240	1143	1151	1116
Magnesium	ppm	1087	974	944	967
Zinc	ppm	1350	1204	1222	1256
Phosphorus	ppm	1090	985	997	1002
Barium	ppm	0	0	0	0
Boron	ppm	6	6	10	2

Depot: VOLVO8770
Unique No: 10649632
Signed: Sean Felton
Report Date: 20 Sep 2023



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GRAPHS

