



CONSTRUCTION EQUIPMENT

SW-32466-2 CMC ROCK VOLVO EC480EL 315023 - DIESEL ENGINE



Sample No: VCP446568
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SW-32466-2 CMC ROCK



SAMPLE INFORMATION

Sample Number	VCP446568	VCP412549	VCP412537	VCP419279
Sample Date	04 Apr 2024	04 Jan 2024	08 Sep 2023	16 Jun 2023
Machine Hours	2942	2330	1576	1010
Oil Hours	620	800	560	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	11.3	11.0	12.1	12.2
Base Number (BN)	mg KOH/g	6.0	5.3	7.4	7.7
Oxidation (PA)	%	58	61	65	67

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 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	0.1
Nitration (PA)	%	71	69	66	60
Sulfation (PA)	%	53	54	56	56
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	0.7	<1.0	0.4
Silicon	ppm	4	8	8	8
Sodium	ppm	3	5	3	1
Potassium	ppm	0	1	<1	1



WEAR METALS

Iron	ppm	6	8	7	7
Copper	ppm	4	6	13	90
Lead	ppm	1	1	1	1
Tin	ppm	0	<1	<1	1
Aluminum	ppm	1	<1	<1	<1
Chromium	ppm	<1	0	0	<1
Molybdenum	ppm	46	56	60	62
Nickel	ppm	<1	0	0	0
Titanium	ppm	<1	<1	6	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	<1	0



ADDITIVES

Calcium	ppm	1259	955	1299	1248
Magnesium	ppm	703	825	1064	953
Zinc	ppm	1016	1144	1364	1358
Phosphorus	ppm	878	888	1069	1041
Barium	ppm	0	0	0	0
Boron	ppm	5	4	5	5

Depot: VOLVO8770
Unique No: 10968737
Signed: Jonathan Hester
Report Date: 11 Apr 2024



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GRAPHS

