



CONSTRUCTION EQUIPMENT

365762 VOLVO EW220E 323034 - DIESEL ENGINE



Sample No: VC458398
Oil Type: BOSS LUBRICANTS BLUE RAM DIESEL 15W40
Job No: 365762



SAMPLE INFORMATION

Sample Number	VC458398	VCE179997	VC243962	VCE65669
Sample Date	03 Nov 2023	19 Apr 2023	25 Feb 2022	22 Feb 2021
Machine Hours	5381	3955	2973	1413
Oil Hours	600	250	0	250
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	14.1	14.2	14.4	14.3
Oxidation (PA)	%	57	58	41	39



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0	0	0	0
Nitration (PA)	%	62	46	57	57
Sulfation (PA)	%	50	52	50	47
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	3	5	4
Sodium	ppm	2	1	1	2
Potassium	ppm	<1	0	2	1

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 condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	3	3	5	4
Copper	ppm	<1	<1	1	<1
Lead	ppm	0	0	0	0
Tin	ppm	0	<1	<1	<1
Aluminum	ppm	2	1	2	1
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	78	58	1	3
Nickel	ppm	<1	<1	<1	<1
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1935	1933	2326	2413
Magnesium	ppm	241	378	12	21
Zinc	ppm	1191	1200	1025	1097
Phosphorus	ppm	1050	1121	944	896
Barium	ppm	0	0	0	<1
Boron	ppm	52	89	2	5

Depot: CITREG
Unique No: 5720862
Signed: Wes Davis
Report Date: 30 Jan 2024



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GRAPHS

