



CONSTRUCTION EQUIPMENT

SPM579512 VOLVO EC480E 314792 - DIESEL ENGINE



Sample No: VCP409262
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SPM579512



SAMPLE INFORMATION

Sample Number	VCP409262	VCP05838951	VCP369247	VCP387489
Sample Date	07 Jul 2023	21 Apr 2023	26 Jan 2023	27 Oct 2022
Machine Hours	2503	1993	1441	951
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ATTENTION	ATTENTION	ATTENTION	ATTENTION

SIMS METAL MANAGEMENT

2500 S. PAULINA
 CHICAGO, IL
 US 60608
 Contact: RYAN WISE
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 T:
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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.1	▲ 12.0	▲ 11.9	▲ 12.1
Base Number (BN)	mg KOH/g	■ 7.7	■ 4.8	■ 7.1	■ 7.4
Oxidation (PA)	%	66	71	69	76

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

Soot %	%	■ 0.1	■ 0.1	■ 0.1	■ 0.1
Nitration (PA)	%	74	78	73	89
Sulfation (PA)	%	57	56	56	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	■ 8	■ 7	■ 5	■ 9
Sodium	ppm	■ <1	■ 1	■ 2	■ 2
Potassium	ppm	■ <1	■ <1	■ 0	■ 1



WEAR METALS

Iron	ppm	■ 9	■ 10	■ 7	■ 9
Copper	ppm	■ 11	■ 17	■ 23	■ 44
Lead	ppm	■ 2	■ 0	■ <1	■ 1
Tin	ppm	■ <1	■ <1	■ <1	■ 1
Aluminum	ppm	■ <1	■ <1	■ <1	■ 1
Chromium	ppm	■ <1	■ <1	■ <1	■ <1
Molybdenum	ppm	■ 60	■ 60	■ 56	■ 66
Nickel	ppm	■ 0	■ 0	■ 0	■ 0
Titanium	ppm	■ 0	■ 0	■ 0	■ 0
Silver	ppm	■ 0	■ 0	■ 0	<1
Manganese	ppm	■ <1	■ <1	■ <1	■ 1
Vanadium	ppm	0	0	0	<1



ADDITIVES

Calcium	ppm	■ 1115	■ 1155	■ 1114	■ 1207
Magnesium	ppm	■ 1031	■ 1008	■ 882	■ 839
Zinc	ppm	■ 1330	■ 1343	■ 1145	■ 1220
Phosphorus	ppm	■ 1041	■ 918	■ 897	■ 891
Barium	ppm	■ 0	■ 0	■ 0	■ 2
Boron	ppm	■ 2	■ 0	■ 1	■ 3

Depot: SIMCHIL
Unique No: 10560507
Signed: Jonathan Hester
Report Date: 18 Jul 2023



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VOLVO GRAPHS

