



CONSTRUCTION EQUIPMENT

VOLVO EC380EL 31 1273 - REAR LEFT FINAL DRIVE



Sample No: VCP433666

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No:



SAMPLE INFORMATION

Sample Number	VCP433666	VCP371320	VCP379117	VCP340602
Sample Date	14 Jun 2024	06 Feb 2023	10 Aug 2022	31 Mar 2022
Machine Hours	6605	5125	4625	4160
Oil Hours	0	0	1000	500
Oil Changed	Not Changd	Not Changd	Not Changd	Not Changd
Sample Status	SEVERE	SEVERE	SEVERE	SEVERE

LEONARDS CONTRACTING
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 MADISON HEIGHTS, MI
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OIL CONDITION

Visc @ 40°C	cSt	267	144	122	125
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CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	▲ 1611	▲ 400	▲ 794	▲ 1118
Sodium	ppm	■ 46	■ 11	■ 22	■ 35
Potassium	ppm	■ 82	■ 35	■ 37	■ 64



WEAR METALS

Iron	ppm	▲ 4527	■ 436	▲ 1375	▲ 1795
Copper	ppm	■ 10	■ <1	■ 2	■ 5
Lead	ppm	■ 0	■ 0	■ <1	■ 1
Tin	ppm	■ 0	■ 0	■ 0	■ 1
Aluminum	ppm	● 220	● 100	● 95	● 177
Chromium	ppm	▲ 32	■ 4	■ 8	▲ 20
Molybdenum	ppm	■ 5	■ <1	■ 1	■ 4
Nickel	ppm	■ 5	■ 1	■ <1	■ 6
Titanium	ppm	■ 13	■ 4	■ 5	■ 11
Silver	ppm	■ 0	■ 0	■ 0	■ <1
Manganese	ppm	■ 28	■ 4	■ 8	■ 14
Vanadium	ppm	<1	■ <1	■ <1	■ <1



ADDITIVES

Calcium	ppm	■ 501	■ 172	■ 1340	■ 2318
Magnesium	ppm	■ 99	■ 35	■ 50	■ 67
Zinc	ppm	■ 44	■ 14	■ 751	■ 868
Phosphorus	ppm	■ 1714	■ 1591	■ 733	■ 884
Barium	ppm	■ 2	■ 0	■ 2	■ 0
Boron	ppm	■ 100	■ 99	■ 20	■ 46

Diagnosis

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Depot: LEOMAD
Unique No: 11087939
Signed: Sean Felton
Report Date: 21 Jun 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

