



CONSTRUCTION EQUIPMENT

9535 VOLVO ECR235EL 310385 - REAR RIGHT FINAL DRIVE



Sample No: VCP413602
Oil Type: CHEVRON DELO GEAR ESI OIL 85W140
Job No: 9535



SAMPLE INFORMATION

Sample Number	VCP413602	VCP272103	VCP235045	VCP194989
Sample Date	28 Aug 2023	13 Jun 2020	17 Nov 2018	11 Jan 2018
Machine Hours	4209	2176	1016	485
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	SEVERE	SEVERE	SEVERE	ABNORMAL

DIRT PLUS
 1001 PRINCE GEORGES BLVD
 UPPER MARLBORO, MD
 US 20772
 Contact: MARCO DECESARIS
 mdecesaris@dirtyplus.biz
 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	1676	211	65.37	178.4
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CONTAMINATION

Water	%	▲ 0.632	---	---	---
Silicon	ppm	◆ 4350	◆ 1449	◆ 355	▲ 192
Sodium	ppm	■ 13	■ 6	■ 2	■ 3
Potassium	ppm	■ 192	■ 39	■ 18	■ 12



WEAR METALS

Iron	ppm	◆ 7287	◆ 2770	▲ 1262	■ 199
Copper	ppm	■ 4	■ 2	■ 1	■ <1
Lead	ppm	■ <1	■ <1	■ 0	■ 0
Tin	ppm	■ 1	■ 1	■ 0	■ 0
Aluminum	ppm	▲ 428	▲ 167	▲ 82	▲ 66
Chromium	ppm	◆ 83	◆ 30	▲ 12	■ 3
Molybdenum	ppm	■ 10	■ 0	0	<1
Nickel	ppm	■ 8	2	<1	<1
Titanium	ppm	■ 60	■ 23	6	4
Silver	ppm	0	0	0	0
Manganese	ppm	■ 54	■ 22	10	3
Vanadium	ppm	2	<1	<1	<1



ADDITIVES

Calcium	ppm	■ 140	■ 57	13	16
Magnesium	ppm	■ 102	■ 15	6	4
Zinc	ppm	■ 32	■ 36	22	16
Phosphorus	ppm	■ 993	■ 1059	1826	425
Barium	ppm	■ 2	■ <1	<1	3
Boron	ppm	■ 161	■ 116	88	<1

Diagnosis

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that there was too much contamination present in the oil to perform an accurate viscosity test. Gear wear is indicated. There is a moderate concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

Depot: DIRUPP
Unique No: 10635508
Signed: Don Baldrige
Report Date: 10 Sep 2023



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VOLVO GRAPHS

