



CONSTRUCTION EQUIPMENT

9535 VOLVO ECR235EL 310385 - REAR LEFT FINAL DRIVE



Sample No: VCP413939
Oil Type: CHEVRON DELO GEAR ESI OIL 85W140
Job No: 9535



SAMPLE INFORMATION

Sample Number	VCP413939	VCP272107	VCP220408	VCP214643
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	2482	438	70.2	178.7
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CONTAMINATION

Water	%	0.873	0.227	---	---
Silicon	ppm	10000	2760	428	190
Sodium	ppm	31	9	3	3
Potassium	ppm	480	66	20	15

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.



WEAR METALS

Iron	ppm	10000	4364	1310	202
Copper	ppm	9	4	1	<1
Lead	ppm	2	1	0	0
Tin	ppm	3	<1	0	0
Aluminum	ppm	841	313	102	60
Chromium	ppm	149	49	13	3
Molybdenum	ppm	20	0	0	<1
Nickel	ppm	15	3	<1	<1
Titanium	ppm	143	43	8	4
Silver	ppm	0	0	0	0
Manganese	ppm	90	34	10	3
Vanadium	ppm	5	2	<1	<1



ADDITIVES

Calcium	ppm	265	68	15	8
Magnesium	ppm	244	36	7	4
Zinc	ppm	49	32	23	12
Phosphorus	ppm	973	952	1710	408
Barium	ppm	6	1	<1	3
Boron	ppm	167	126	82	<1

Depot: DIRUPP
Unique No: 10635507
Signed: Don Baldrige
Report Date: 10 Sep 2023



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GRAPHS

