



CONSTRUCTION EQUIPMENT

SW-27009-2 CASTLE VOLVO EC350EL 310786 - REAR LEFT FINAL DRIVE



Sample No: VCP414467
Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5
Job No: SW-27009-2 CASTLE



SAMPLE INFORMATION

Sample Number	VCP414467	VCP383492	VCP05497398	---
Sample Date	30 Nov 2023	06 Jan 2023	14 Mar 2022	---
Machine Hours	8434	6328	4344	---
Oil Hours	2000	2000	2000	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	SEVERE	SEVERE	ABNORMAL	---

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OIL CONDITION

Visc @ 40°C	cSt	159	146	137	---
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CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	298	314	86	---
Sodium	ppm	3	0	<1	---
Potassium	ppm	12	14	1	---

Diagnosis

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



WEAR METALS

Iron	ppm	1157	1307	586	---
Copper	ppm	3	3	2	---
Lead	ppm	0	<1	0	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	23	27	7	---
Chromium	ppm	21	19	10	---
Molybdenum	ppm	56	2	1	---
Nickel	ppm	<1	0	0	---
Titanium	ppm	1	1	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	9	10	5	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	14	25	16	---
Magnesium	ppm	1	3	4	---
Zinc	ppm	26	25	22	---
Phosphorus	ppm	907	1121	907	---
Barium	ppm	0	0	0	---
Boron	ppm	140	154	140	---

Depot: VOLVO8770
Unique No: 10776643
Signed: Jonathan Hester
Report Date: 08 Dec 2023



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GRAPHS

