



CONSTRUCTION EQUIPMENT

CANNINGTON 8-375957 VOLVO ECR305C 110771 (S/N 10217) - REAR LEFT FINAL DRIVE



Sample No: VCP394509
Oil Type: GEAR OIL SAE 80W90
Job No: 8-375957



SAMPLE INFORMATION

Sample Number	VCP394509	VCP222947	VCP222950	---
Sample Date	22 Aug 2023	19 Mar 2019	11 Mar 2019	---
Machine Hours	3955	960	8960	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	SEVERE	ABNORMAL	NORMAL	---

STRONGCO EQUIPMENT INC.

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OIL CONDITION

Visc @ 40°C	cSt	▲ 271	■ 174	■ 174	---
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CONTAMINATION

Silicon	ppm	● 5092	▲ 287	■ 140	---
Sodium	ppm	■ 273	■ 14	■ 9	---
Potassium	ppm	■ 384	■ 34	■ 17	---



WEAR METALS

PQ		▲ 1003	---	---	---
Iron	ppm	● 9041	■ 300	■ 193	---
Copper	ppm	■ 18	■ <1	■ <1	---
Lead	ppm	■ 2	■ <1	■ <1	---
Tin	ppm	■ 0	■ 0	■ 0	---
Aluminum	ppm	▲ 1036	▲ 88	■ 43	---
Chromium	ppm	● 112	■ 9	■ 6	---
Molybdenum	ppm	■ 11	■ <1	■ <1	---
Nickel	ppm	■ 3	<1	<1	---
Titanium	ppm	▲ 59	5	2	---
Silver	ppm	0	0	0	---
Manganese	ppm	■ 74	■ 6	■ 4	---
Vanadium	ppm	2	<1	<1	---



ADDITIVES

Calcium	ppm	3008	■ 51	■ 25	---
Magnesium	ppm	357	■ 22	■ 11	---
Zinc	ppm	■ 22	■ 13	■ 13	---
Phosphorus	ppm	■ 763	■ 422	■ 440	---
Barium	ppm	■ 13	■ 5	■ 3	---
Boron	ppm	■ 83	■ <1	■ <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. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Chromium and iron ppm levels are severe. PQ levels are abnormal. Titanium ppm levels are abnormal. Aluminum ppm levels are noted. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. Viscosity of sample indicates oil is within SAE 80W140 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: SHEMIS
Unique No: 5631597
Signed: Kevin Marson
Report Date: 28 Aug 2023



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GRAPHS

