Sample No: VCP260788

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

Job No: 238406

SAMPLE INFORMATION

Sample Number	VCP260788	---	---	---
Sample Date	30 Mar 2020	---	---	---
Machine Hours	4011	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

OIL CONDITION

Visc @ 40°C	cSt	▲ 326	---	---	---

CONTAMINATION

Silicon	ppm	▲ 1314	---	---	---
Sodium	ppm	☐ 31	---	---	---
Potassium	ppm	☐ 69	---	---	---

WEAR METALS

PQ		☐ 1071	---	---	---
Iron	ppm	☐ 2149	---	---	---
Copper	ppm	☐ 6	---	---	---
Lead	ppm	☐ 4	---	---	---
Tin	ppm	☐ 0	---	---	---
Aluminum	ppm	▲ 252	---	---	---
Chromium	ppm	☐ 29	---	---	---
Molybdenum	ppm	☐ 3	---	---	---
Nickel	ppm	2	---	---	---
Titanium	ppm	▲ 17	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	51	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	702	---	---	---
Magnesium	ppm	138	---	---	---
Zinc	ppm	☐ 52	---	---	---
Phosphorus	ppm	☐ 987	---	---	---
Barium	ppm	☐ 3	---	---	---
Boron	ppm	☐ 141	---	---	---

STRONGCO EQUIPMENT--CALGARY
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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. Aluminum ppm levels are noted. Titanium ppm levels are marginal. All other component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Viscosity of sample indicates oil is within SAE 90W140 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 due to the presence of contaminants.

Depot:	VOLVO3909
Unique No:	5031160
Signed:	Kevin Marson
Report Date:	08 Apr 2020

GRAPHS

Iron (ppm)

Lead (ppm)

▲ Aluminum (ppm)

Chromium (ppm)

Copper (ppm)

▲ Silicon (ppm)

▲ Viscosity @ 40°C

PQ