



CONSTRUCTION EQUIPMENT

405708 CATERPILLAR 299C 908593 - DIESEL ENGINE



Sample No: VCP393179
Oil Type: CAT DIESEL ENGINE OIL 10W30
Job No: 405708



SAMPLE INFORMATION

Sample Number	VCP393179	---	---	---
Sample Date	23 May 2024	---	---	---
Machine Hours	490	---	---	---
Oil Hours	490	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

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OIL CONDITION

Visc @ 100°C	cSt	▲ 14.2	---	---	---
Oxidation (PA)	%	118	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.8	---	---	---
Nitration (PA)	%	133	---	---	---
Sulfation (PA)	%	69	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	■ 16	---	---	---
Sodium	ppm	■ 16	---	---	---
Potassium	ppm	■ 5	---	---	---

WEAR METALS

Iron	ppm	■ 72	---	---	---
Copper	ppm	■ 82	---	---	---
Lead	ppm	■ 1	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 4	---	---	---
Chromium	ppm	■ 1	---	---	---
Molybdenum	ppm	■ 59	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	■ 0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	1122	---	---	---
Magnesium	ppm	■ 867	---	---	---
Zinc	ppm	■ 1117	---	---	---
Phosphorus	ppm	■ 877	---	---	---
Barium	ppm	■ 2	---	---	---
Boron	ppm	8	---	---	---

Diagnosis

We advise that you check for faulty combustion and a possible overheat condition. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as CAT DIESEL ENGINE OIL 10W30, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade on your next sample. Metal levels are typical for a components first oil change. There is no indication of any contamination in the oil. A small degree of oil oxidation was indicated. Viscosity of sample indicates oil is within SAE 40 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.

Depot: VOLVO3908
Unique No: 5798551
Signed: Kevin Marson
Report Date: 11 Jun 2024



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GRAPHS

