



CONSTRUCTION EQUIPMENT

SPM659560-10 KPI FT42500C 420623 - DIESEL ENGINE



Sample No: VCP449263
Oil Type: {unknown}
Job No: SPM659560-10



SAMPLE INFORMATION

Sample Number	VCP449263	---	---	---
Sample Date	19 Jan 2024	---	---	---
Machine Hours	519	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

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T:
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OIL CONDITION

Visc @ 100°C	cSt	10.5	---	---	---
Base Number (BN)	mg KOH/g	9.1	---	---	---
Oxidation (PA)	%	88	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	0.1	---	---	---
Nitration (PA)	%	74	---	---	---
Sulfation (PA)	%	63	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	2.1	---	---	---
Silicon	ppm	78	---	---	---
Sodium	ppm	5	---	---	---
Potassium	ppm	6	---	---	---



WEAR METALS

Iron	ppm	17	---	---	---
Copper	ppm	577	---	---	---
Lead	ppm	9	---	---	---
Tin	ppm	9	---	---	---
Aluminum	ppm	3	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	39	---	---	---
Nickel	ppm	<1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	2	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	1569	---	---	---
Magnesium	ppm	494	---	---	---
Zinc	ppm	1105	---	---	---
Phosphorus	ppm	937	---	---	---
Barium	ppm	8	---	---	---
Boron	ppm	32	---	---	---

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in. Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: VOLVO0090
Unique No: 10857570
Signed: Jonathan Hester
Report Date: 02 Feb 2024



CONSTRUCTION EQUIPMENT

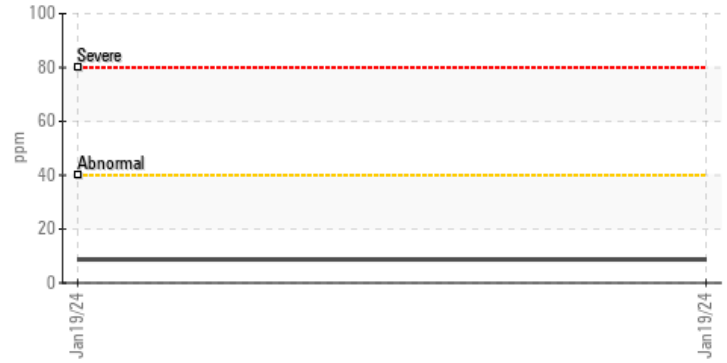


GRAPHS

Iron (ppm)



Lead (ppm)



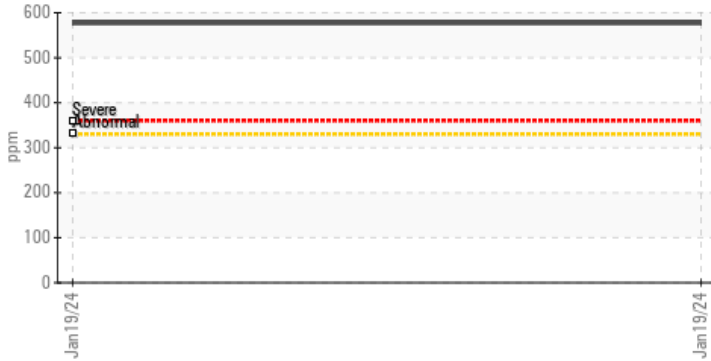
Aluminum (ppm)



Chromium (ppm)



▲ Copper (ppm)



▲ Silicon (ppm)



Viscosity @ 100°C



Base Number

