



CONSTRUCTION EQUIPMENT

VOLVO A30G 753363 - DIESEL ENGINE



Sample No: VCP430273
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP430273	VCP408521	---	---
Sample Date	02 Nov 2023	02 Jun 2023	---	---
Machine Hours	751	0	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	ABNORMAL	---	---

COWIN EQUIPMENT COMPANY

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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.2	▲ 10.9	---	---
Base Number (BN)	mg KOH/g	■ 9.5	■ 6.9	---	---
Oxidation (PA)	%	77	56	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.2	■ 0.2	---	---
Nitration (PA)	%	62	72	---	---
Sulfation (PA)	%	60	52	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 1.0	---	---
Silicon	ppm	■ 10	▲ 40	---	---
Sodium	ppm	■ 2	■ 0	---	---
Potassium	ppm	■ 0	■ 4	---	---



WEAR METALS

Iron	ppm	■ 11	■ 17	---	---
Copper	ppm	■ 25	▲ 96	---	---
Lead	ppm	■ 0	■ <1	---	---
Tin	ppm	■ 2	■ 2	---	---
Aluminum	ppm	■ 1	■ <1	---	---
Chromium	ppm	■ <1	■ <1	---	---
Molybdenum	ppm	■ 50	■ 82	---	---
Nickel	ppm	■ 1	■ <1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	■ <1	■ 1	---	---
Manganese	ppm	■ 1	■ 4	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	■ 1700	■ 2122	---	---
Magnesium	ppm	■ 452	49	---	---
Zinc	ppm	■ 1118	■ 1140	---	---
Phosphorus	ppm	■ 949	■ 972	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 51	■ 65	---	---

Depot: VOLVO8532
Unique No: 10871887
Signed: Don Baldrige
Report Date: 12 Feb 2024

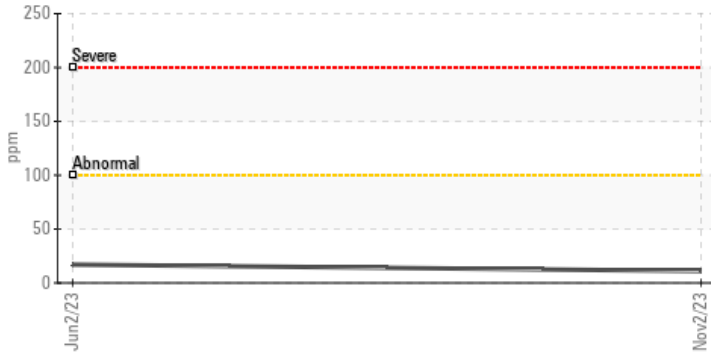


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GRAPHS

Iron (ppm)



Lead (ppm)



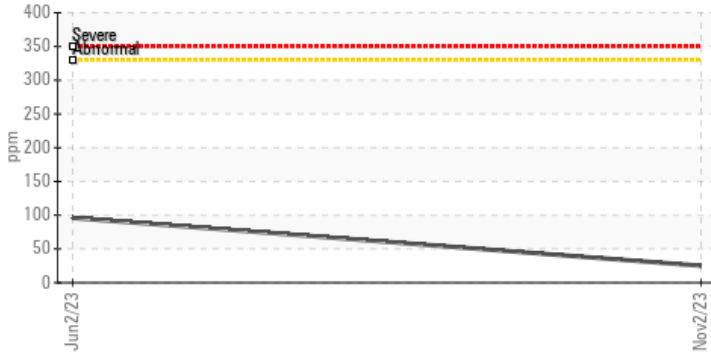
Aluminum (ppm)



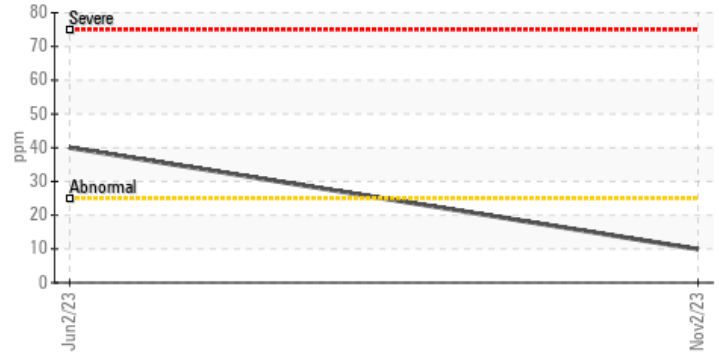
Chromium (ppm)



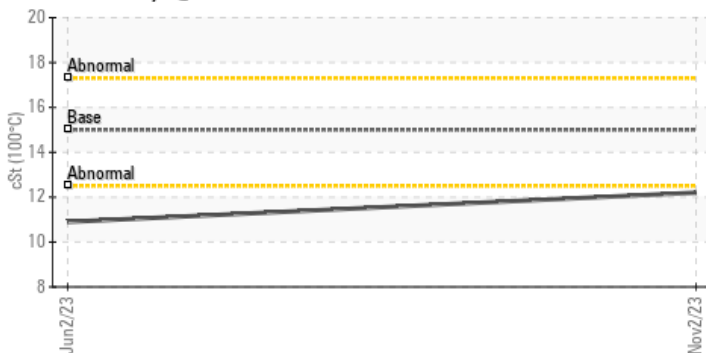
Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Base Number

