



CONSTRUCTION EQUIPMENT

VOLVO L220H 3589 - DIESEL ENGINE



Sample No: VCP441804
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP441804	---	---	---
Sample Date	31 Jan 2024	---	---	---
Machine Hours	108	---	---	---
Oil Hours	108	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

COVANTA ENERGY

141 CRANBERRY HWY
 WEST WAREHAM, MA
 US 02576

Contact: SAWYER
 ssawyer@woodcomachinery.com
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	▲ 11.4	---	---	---
Base Number (BN)	mg KOH/g	■ 7.3	---	---	---
Oxidation (PA)	%	54	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Fuel content negligible. 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	---	---	---
Soot %	%	■ 0.1	---	---	---
Nitration (PA)	%	60	---	---	---
Sulfation (PA)	%	48	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.3	---	---	---
Silicon	ppm	■ 19	---	---	---
Sodium	ppm	■ 0	---	---	---
Potassium	ppm	■ 3	---	---	---



WEAR METALS

Iron	ppm	■ 8	---	---	---
Copper	ppm	■ 62	---	---	---
Lead	ppm	■ 2	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 87	---	---	---
Nickel	ppm	■ 1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 3	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	■ 1976	---	---	---
Magnesium	ppm	51	---	---	---
Zinc	ppm	■ 1204	---	---	---
Phosphorus	ppm	■ 905	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 75	---	---	---

Depot: COVWES
Unique No: 10860872
Signed: Don Baldrige
Report Date: 06 Feb 2024



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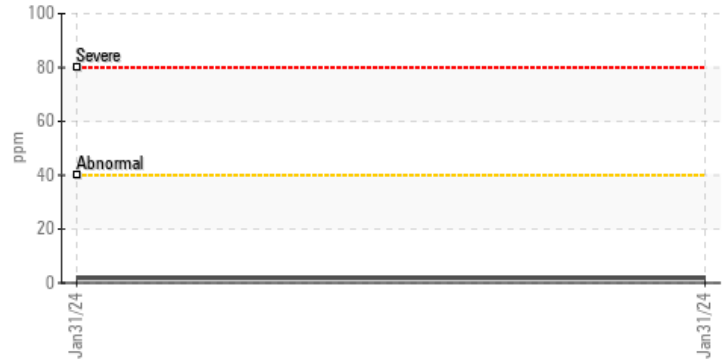


GRAPHS

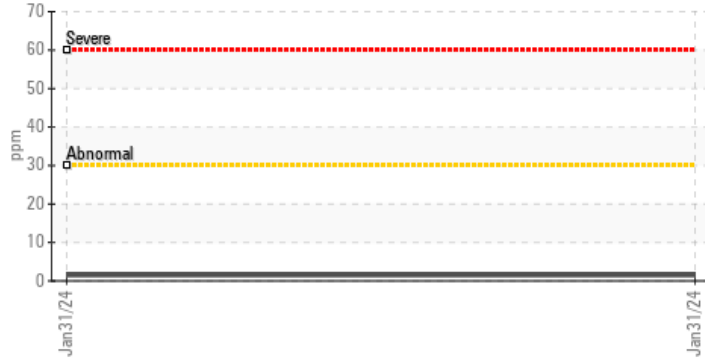
Iron (ppm)



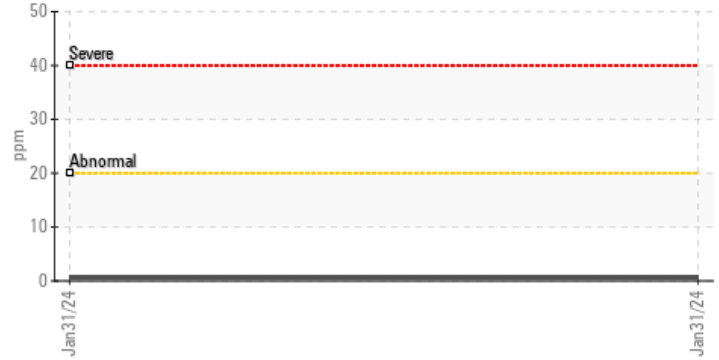
Lead (ppm)



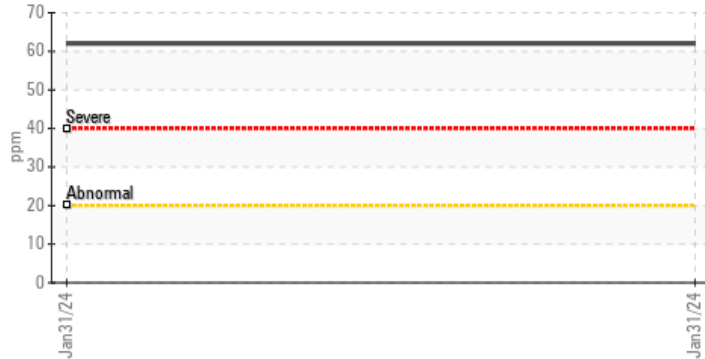
Aluminum (ppm)



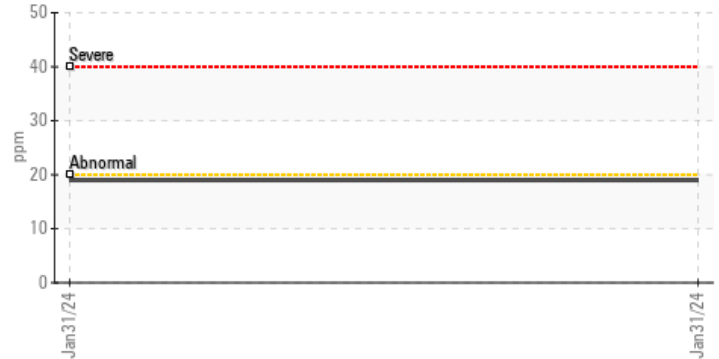
Chromium (ppm)



Copper (ppm)



Silicon (ppm)



▲ Viscosity @ 100°C



Base Number

