



CONSTRUCTION EQUIPMENT

HUNTSVILLE CITY VOLVO EC300 3 10950 - DIESEL ENGINE



Sample No: VCP442213
Oil Type: {unknown}
Job No: HUNTSVILLE CITY



COWIN EQUIPMENT COMPANY INC - GUNTSVILLE
15101 ALABAMA HWY 20
MADISON, AL
US 35756
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SAMPLE INFORMATION

Sample Number	VCP442213	---	---	---
Sample Date	09 Feb 2024	---	---	---
Machine Hours	4240	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---



OIL CONDITION

Visc @ 100°C	cSt	█ 12.7	---	---	---
Base Number (BN)	mg KOH/g	█ 8.6	---	---	---
Oxidation (PA)	%	71	---	---	---



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.3	---	---	---
Nitration (PA)	%	68	---	---	---
Sulfation (PA)	%	57	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 10	---	---	---
Sodium	ppm	█ 0	---	---	---
Potassium	ppm	█ 14	---	---	---



WEAR METALS

Iron	ppm	█ 11	---	---	---
Copper	ppm	█ 2	---	---	---
Lead	ppm	█ 1	---	---	---
Tin	ppm	█ 1	---	---	---
Aluminum	ppm	▲ 11	---	---	---
Chromium	ppm	█ 1	---	---	---
Molybdenum	ppm	█ 31	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	█ 1453	---	---	---
Magnesium	ppm	█ 560	---	---	---
Zinc	ppm	█ 982	---	---	---
Phosphorus	ppm	774	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 55	---	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: COWMAD
Unique No: 10885089
Signed: Jonathan Hester
Report Date: 20 Feb 2024



CONSTRUCTION EQUIPMENT



GRAPHS

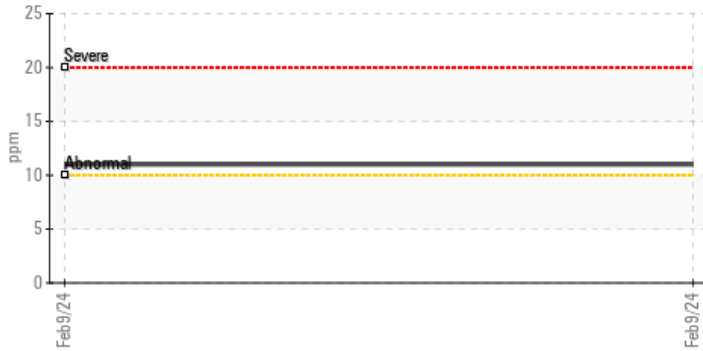
Iron (ppm)



Lead (ppm)



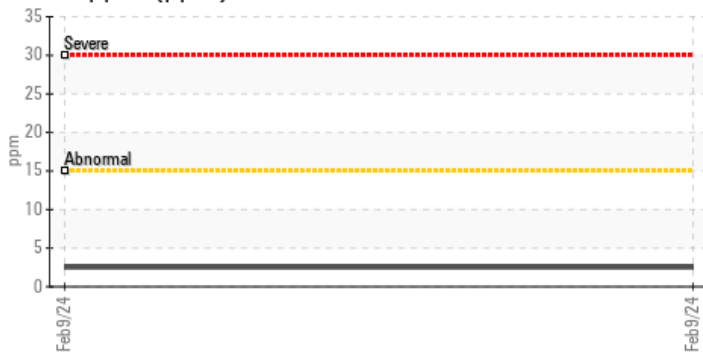
Aluminum (ppm)



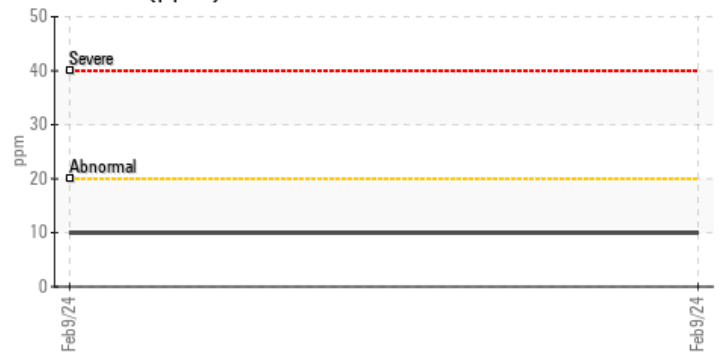
Chromium (ppm)



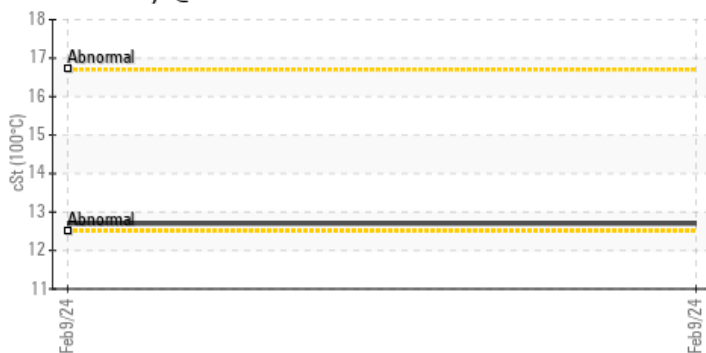
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



Base Number

