



CONSTRUCTION EQUIPMENT

W07014299 VOLVO EC460CL 110437 - DIESEL ENGINE



Sample No: ML0000677
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W07014299



SAMPLE INFORMATION

Sample Number	ML0000677	VCP250277	VCP290606	VCP206778
Sample Date	08 Feb 2024	29 Sep 2021	06 Jan 2021	28 Mar 2017
Machine Hours	0	6354	6082	5004
Oil Hours	0	250	0	0
Oil Changed	Not Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

MCCLUNG-LOGAN EQUIPMENT CO - RICHMOND
 1345 MOUNTAIN ROAD
 GLEN ALLEN, VA
 US 23060
 Contact: KYLE RATLIFFE
 KRATLIFFE@MCCLUNG-LOGAN.COM
 T:
 F: (804)266-1611

OIL CONDITION

Visc @ 40°C	cSt	---	---	---	█ 97.2
Visc @ 100°C	cSt	█ 13.1	█ 12.6	█ 12.4	█ 13.89
Viscosity Index (VI)	Scale	---	---	---	█ 145
Base Number (BN)	mg KOH/g	█ 8.0	---	---	---
Oxidation (PA)	%	74	68	87	█ 72

Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	█ 2	█ 1	█ 1.9	█ 1.9
Nitration (PA)	%	95	67	84	█ 83
Sulfation (PA)	%	66	66	70	█ 66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	█ 13	█ 8	█ 12	█ 7
Sodium	ppm	█ 2	█ 2	█ <1	█ 4
Potassium	ppm	█ 2	█ 3	█ <1	█ <1

WEAR METALS

Iron	ppm	█ 24	█ 11	█ 27	█ 52
Copper	ppm	█ 3	█ <1	█ 2	█ 4
Lead	ppm	█ 4	█ 2	█ 3	█ 9
Tin	ppm	█ 0	█ 0	█ <1	█ 5
Aluminum	ppm	█ 2	█ 3	█ 0	█ 3
Chromium	ppm	█ <1	█ <1	█ <1	█ <1
Molybdenum	ppm	█ 56	█ 102	█ 35	█ 72
Nickel	ppm	█ 0	█ <1	█ <1	█ <1
Titanium	ppm	<1	<1	<1	█ 12
Silver	ppm	█ 0	0	0	0
Manganese	ppm	█ 0	█ <1	█ <1	█ 2
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	█ 1115	█ 1539	█ 1732	█ 1535
Magnesium	ppm	█ 755	█ 674	█ 416	█ 657
Zinc	ppm	█ 918	█ 800	█ 876	█ 1100
Phosphorus	ppm	█ 829	█ 728	█ 754	█ 930
Barium	ppm	█ 0	█ 0	█ 0	█ 0
Boron	ppm	█ 49	█ 206	█ 27	█ 99

Depot: VOLVO8882
Unique No: 10874287
Signed: Sean Felton
Report Date: 14 Feb 2024

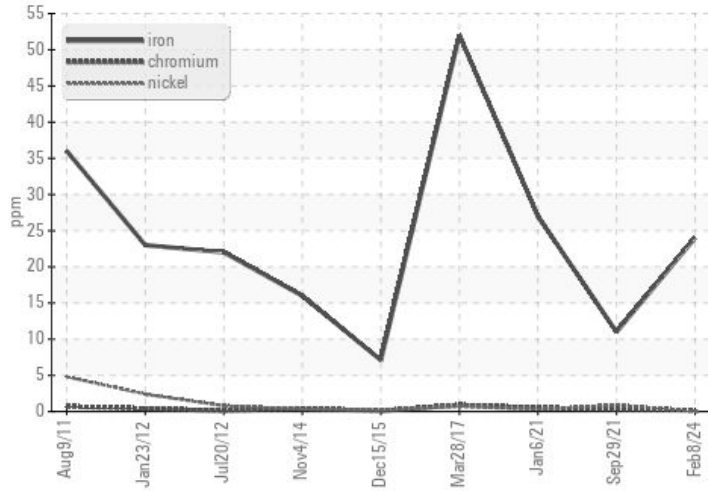


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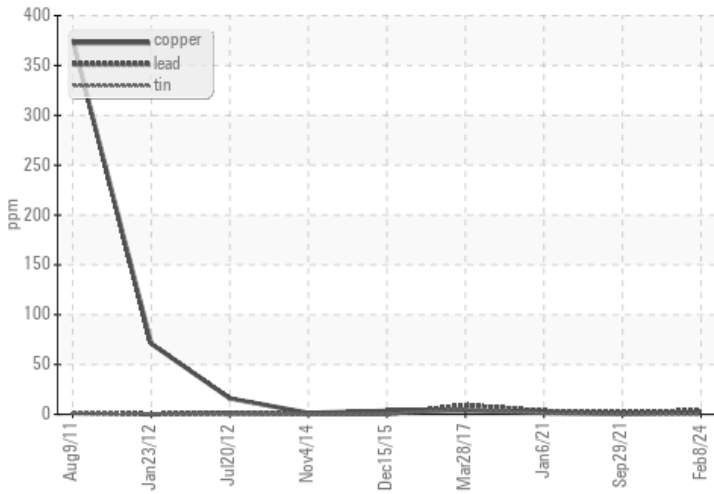


GRAPHS

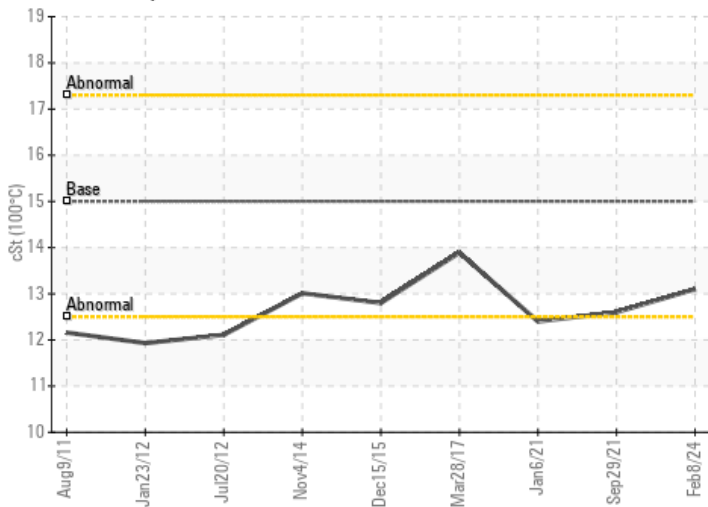
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

