



CONSTRUCTION EQUIPMENT

VOLVO L110H 05632247 - HYDRAULIC SYSTEM



Sample No: VCP438672
Oil Type: VALVOLINE ALLFLEET 10W
Job No:



SAMPLE INFORMATION

Sample Number	VCP438672	VCP407159	VCP407934	VCP407668
Sample Date	12 Feb 2024	16 Oct 2023	09 Aug 2023	17 May 2023
Machine Hours	0	5396	4793	4033
Oil Hours	0	0	0	947
Oil Changed	Changed	Changed	Not Changd	Not Changd
Sample Status	ABNORMAL	NORMAL	NORMAL	ATTENTION

CITY CARTING
 221 OLD GATE LN
 MILFORD, CT
 US 06460
 Contact: TAVINS BANKS
 tavins@citycart.net
 T: (203)223-3885
 F:

OIL CONDITION

Visc @ 40°C	cSt	41.1	42.3	41.0	41.1
Acid Number (AN)	mg KOH/g	1.00	0.24	0.42	0.36

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		27122	1181	2040	6058
Particles >6µm		▲ 8524	165	432	1659
Particles >14µm		▲ 543	11	48	▲ 115
ISO 4406:1999 (c)		22/20/16	17/15/11	18/16/13	20/18/14
Silicon	ppm	6	4	3	3
Sodium	ppm	3	0	0	<1
Potassium	ppm	3	2	<1	1

Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

WEAR METALS

Iron	ppm	3	8	7	6
Copper	ppm	4	3	2	2
Lead	ppm	2	2	2	1
Tin	ppm	<1	0	0	0
Aluminum	ppm	1	2	<1	0
Chromium	ppm	2	3	2	2
Molybdenum	ppm	44	18	17	17
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	0	0
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	1393	811	800	823
Magnesium	ppm	137	58	58	58
Zinc	ppm	812	633	615	625
Phosphorus	ppm	688	508	505	495
Barium	ppm	0	3	0	0
Boron	ppm	38	16	15	14

Depot: CITMILCON
Unique No: 10886439
Signed: Wes Davis
Report Date: 20 Feb 2024

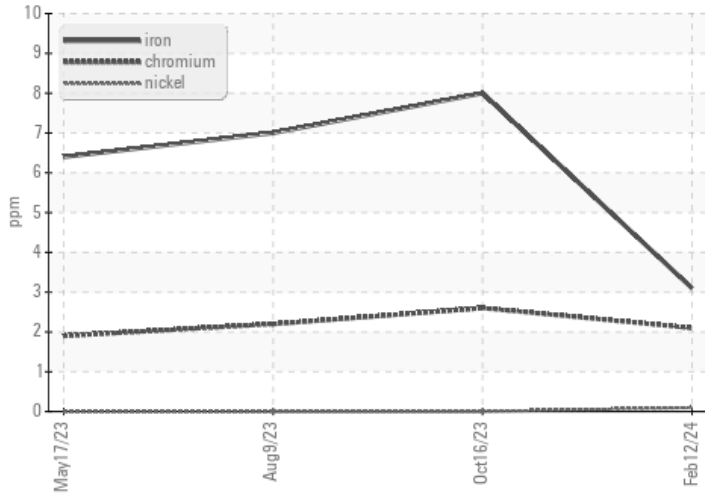


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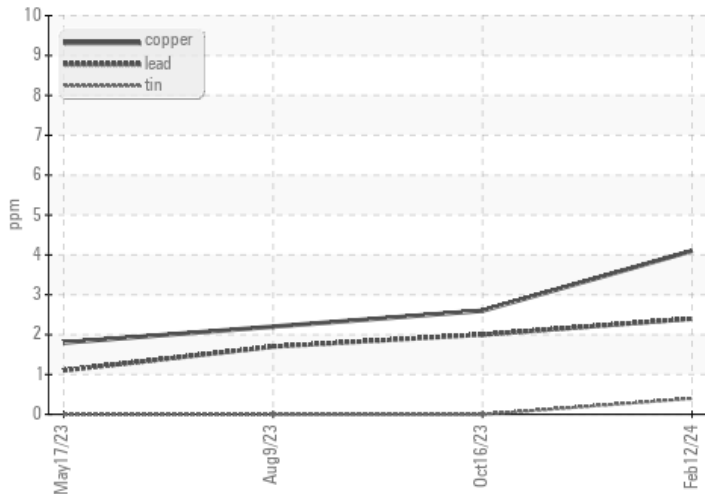


GRAPHS

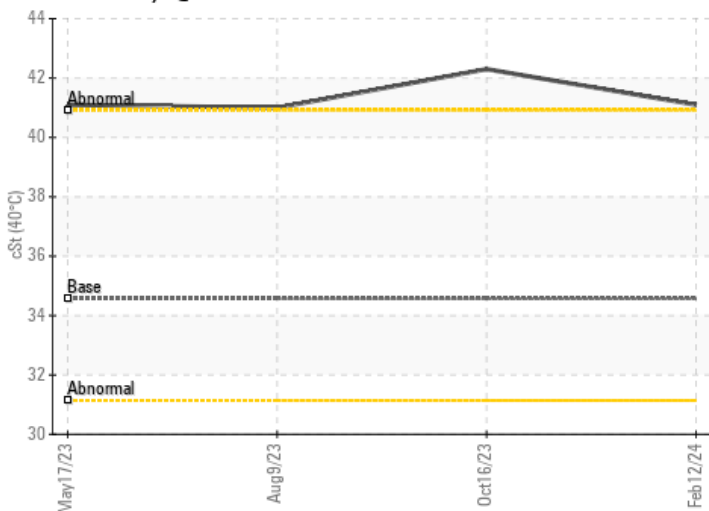
Ferrous Alloys



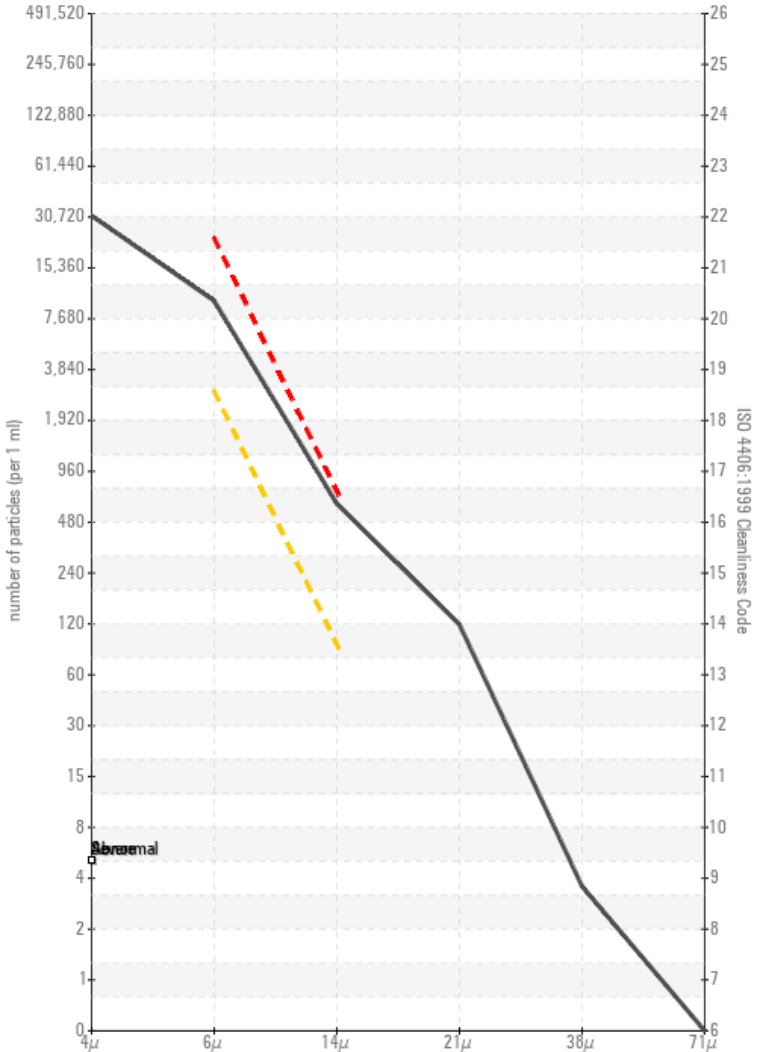
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

