



CONSTRUCTION EQUIPMENT

X21402 CRH VOLVO L220H 2821 - HYDRAULIC SYSTEM



Sample No: VCP410541
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: X21402 CRH



SAMPLE INFORMATION

Sample Number	VCP410541	VCP374109	VCP404674	VCP426788
Sample Date	30 Oct 2023	21 Sep 2023	19 Jul 2023	15 May 2023
Machine Hours	9286	9058	8643	8210
Oil Hours	0	1000	0	2000
Oil Changed	N/A	Not Changd	Not Changd	Changed
Sample Status	ABNORMAL	NORMAL	ABNORMAL	NORMAL

HOUSBY HEAVY EQUIPMENT

PO BOX 1846
 CEDAR RAPIDS, IA
 US 52406

Contact: JUSTIN JOHNSON
 jjohnson@housby.com

T:
 F: (319)365-2525



OIL CONDITION

Visc @ 40°C	cSt	43.5	42.1	42.7	41.1
Acid Number (AN)	mg KOH/g	0.42	0.37	0.36	0.29



CONTAMINATION

Particles >4µm		▲ 8999	2452	▲ 15016	2266
Particles >6µm		▲ 2503	632	▲ 4595	788
Particles >14µm		■ 120	13	▲ 199	95
ISO 4406:1999 (c)		20/19/14	18/16/11	21/19/15	18/17/14
Silicon	ppm	■ 2	1	2	2
Sodium	ppm	■ 0	1	0	2
Potassium	ppm	■ 1	0	1	0

Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 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	■ 0	2	2	2
Copper	ppm	■ 0	2	1	2
Lead	ppm	■ 0	0	<1	0
Tin	ppm	■ 0	0	0	0
Aluminum	ppm	■ <1	0	0	<1
Chromium	ppm	■ <1	<1	<1	1
Molybdenum	ppm	■ 0	<1	<1	<1
Nickel	ppm	■ 0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	■ 0	<1	0	<1
Vanadium	ppm	0	<1	0	0



ADDITIVES

Calcium	ppm	■ 61	121	126	135
Magnesium	ppm	■ <1	7	10	13
Zinc	ppm	■ 441	437	470	466
Phosphorus	ppm	■ 328	357	358	384
Barium	ppm	■ 0	0	1	0
Boron	ppm	■ 0	0	<1	1

Depot: VOLVO0074
Unique No: 10724987
Signed: Wes Davis
Report Date: 03 Nov 2023

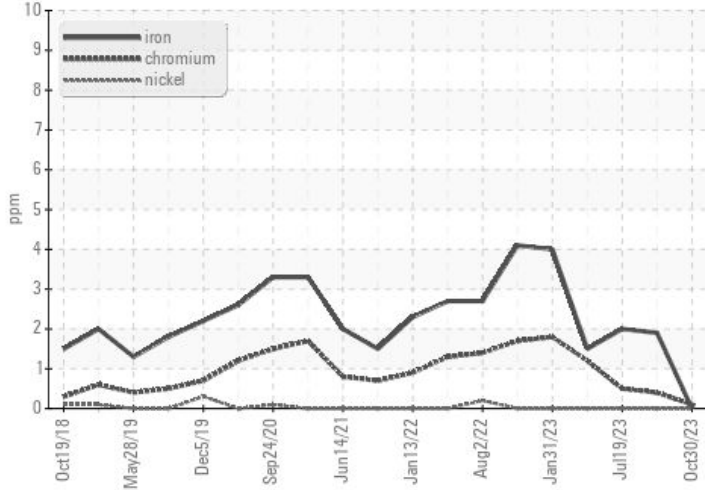


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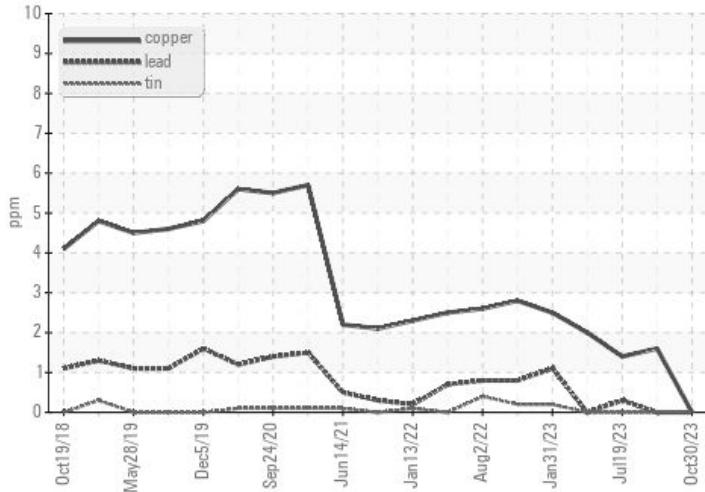


GRAPHS

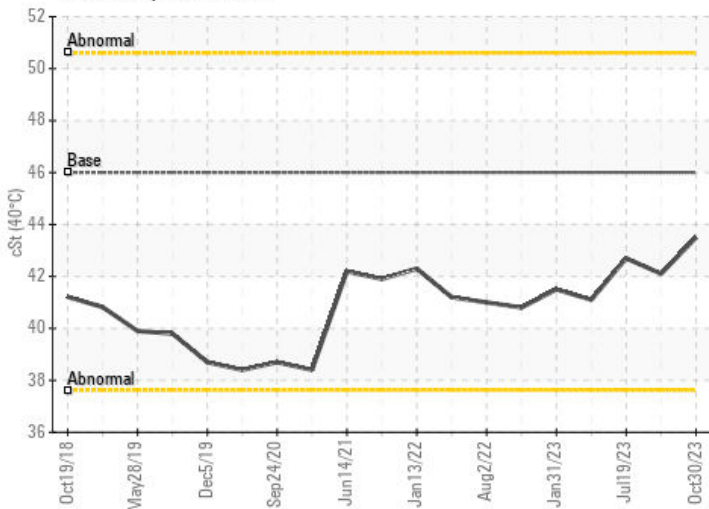
Ferrous Alloys



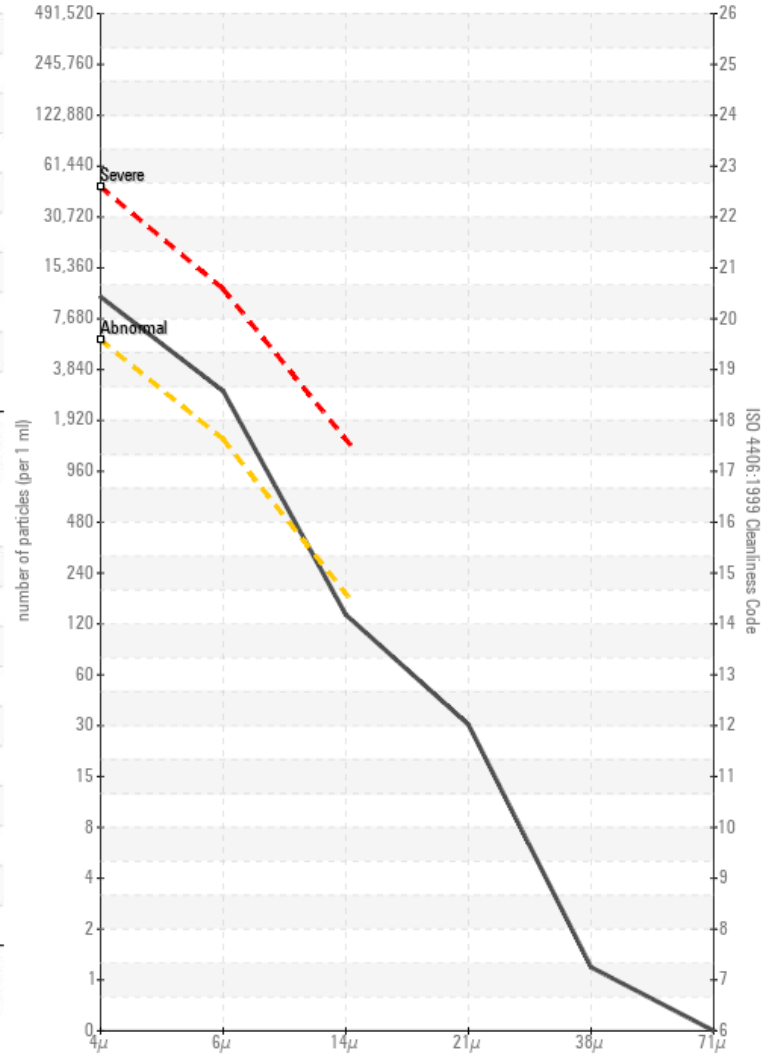
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

