



CONSTRUCTION EQUIPMENT

X21386 CRH VOLVO L220H 2898 - HYDRAULIC SYSTEM



Sample No: VCP409930
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: X21386 CRH



SAMPLE INFORMATION

Sample Number	VCP409930	VCP404653	VCP405867	VCP385025
Sample Date	26 Oct 2023	24 Aug 2023	31 May 2023	20 Oct 2022
Machine Hours	6315	6028	5556	4994
Oil Hours	0	2000	500	1000
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Not Chngd
Sample Status	NORMAL	ATTENTION	ABNORMAL	ATTENTION

HOUSBY HEAVY EQUIPMENT

PO BOX 1846
 CEDAR RAPIDS, IA
 US 52406

Contact: JUSTIN JOHNSON
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T:
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OIL CONDITION

Visc @ 40°C	cSt	41.2	41.2	41.5	42.0
Acid Number (AN)	mg KOH/g	0.30	0.35	0.33	0.37



CONTAMINATION

Particles >4µm		46382	4525	10492	8922
Particles >6µm		356	1350	2809	1956
Particles >14µm		7	117	110	150
ISO 4406:1999 (c)		23/16/10	19/18/14	21/19/14	20/18/14
Silicon	ppm	4	4	3	3
Sodium	ppm	3	0	1	0
Potassium	ppm	0	<1	<1	<1

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	7	7	6	5
Copper	ppm	5	5	3	4
Lead	ppm	0	<1	<1	<1
Tin	ppm	<1	0	0	0
Aluminum	ppm	<1	0	0	<1
Chromium	ppm	1	2	1	<1
Molybdenum	ppm	5	5	4	5
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	128	145	152	160
Magnesium	ppm	23	25	26	24
Zinc	ppm	433	466	496	466
Phosphorus	ppm	370	360	383	352
Barium	ppm	19	2	0	0
Boron	ppm	4	3	4	5

Depot: VOLVO0074
Unique No: 10722627
Signed: Don Baldrige
Report Date: 01 Nov 2023

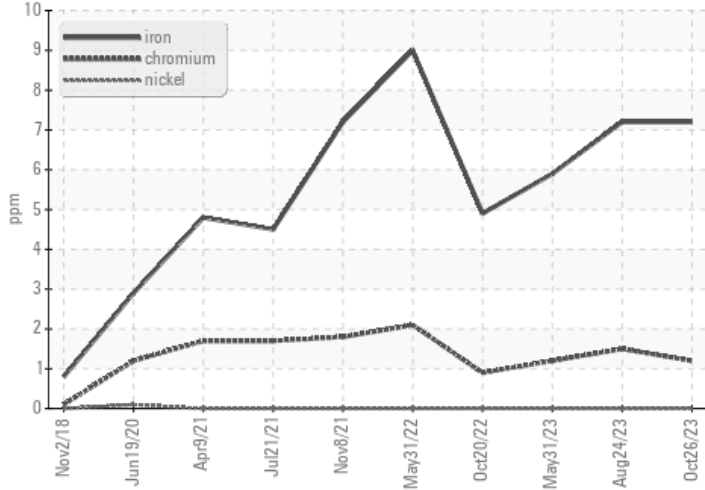


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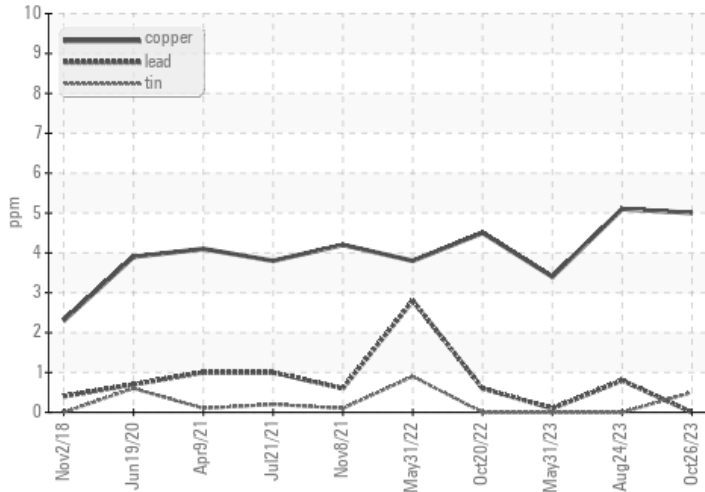


GRAPHS

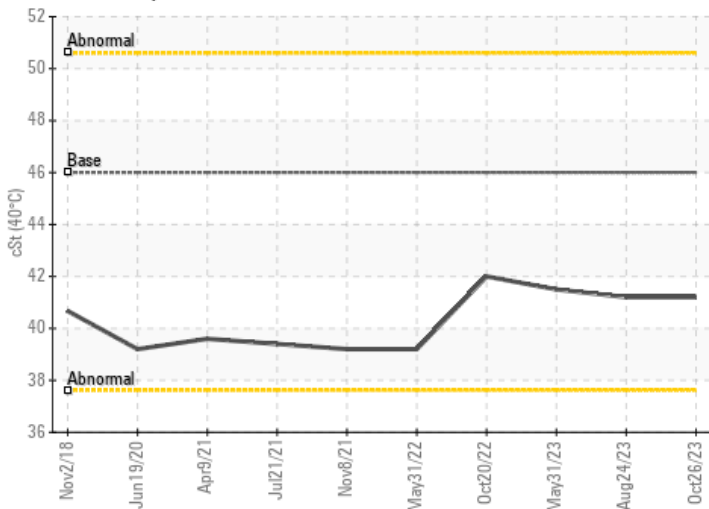
Ferrous Alloys



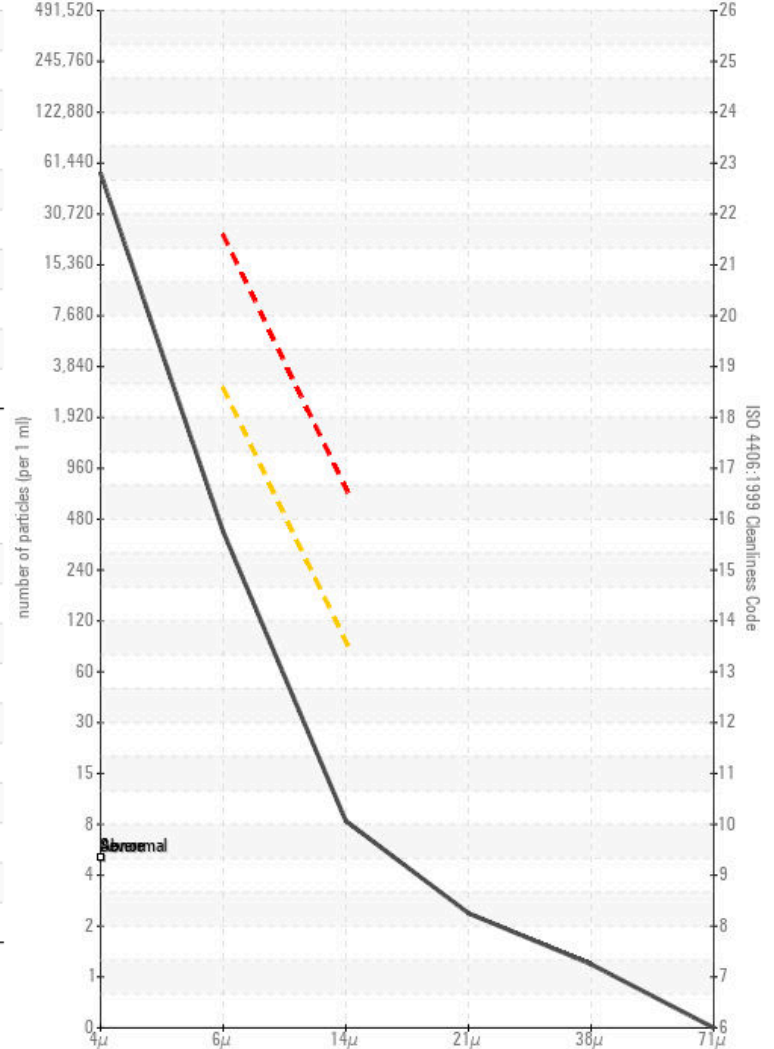
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

