



CONSTRUCTION EQUIPMENT

SPM580866 PIONEER FI VOLVO L60H 622878 - HYDRAULIC SYSTEM



Sample No: VCP420651
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM580866 PIONEER FI



SAMPLE INFORMATION

Sample Number	VCP420651	VCP418585	VCP400984	VCP396813
Sample Date	04 Aug 2023	28 Apr 2023	24 Feb 2023	20 Dec 2022
Machine Hours	2513	1997	1507	933
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

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 F:

OIL CONDITION

Visc @ 40°C	cSt	42.9	43.0	43.4	43.9
Acid Number (AN)	mg KOH/g	0.26	0.18	0.30	0.38

CONTAMINATION

Particles >4µm		5234	654	1399	4857
Particles >6µm		1767	93	374	1362
Particles >14µm		▲ 181	10	25	61
ISO 4406:1999 (c)		20/18/15	17/14/10	18/16/12	19/18/13
Silicon	ppm	4	2	3	3
Sodium	ppm	2	0	1	0
Potassium	ppm	0	0	0	1

Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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	5	3	3	2
Copper	ppm	2	<1	1	1
Lead	ppm	0	0	0	<1
Tin	ppm	0	0	0	0
Aluminum	ppm	1	0	<1	0
Chromium	ppm	<1	0	<1	0
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	0	0	0
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	65	65	63	71
Magnesium	ppm	2	3	3	4
Zinc	ppm	370	355	349	384
Phosphorus	ppm	296	275	282	290
Barium	ppm	0	0	0	0
Boron	ppm	0	0	0	0

Depot: VOLVO8885
Unique No: 10602078
Signed: Wes Davis
Report Date: 14 Aug 2023

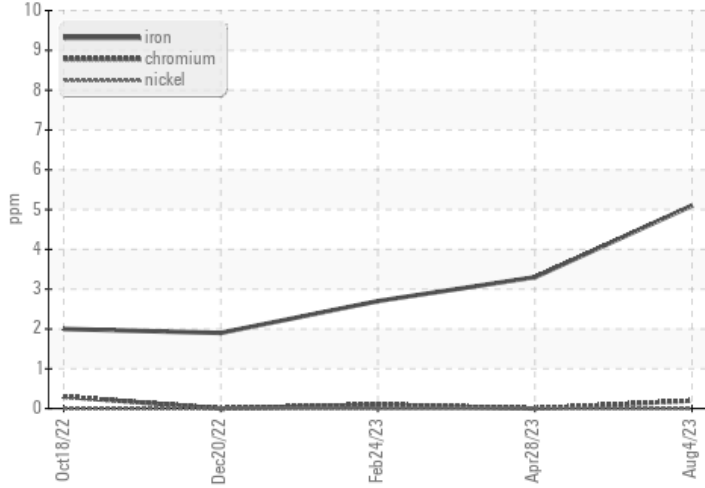


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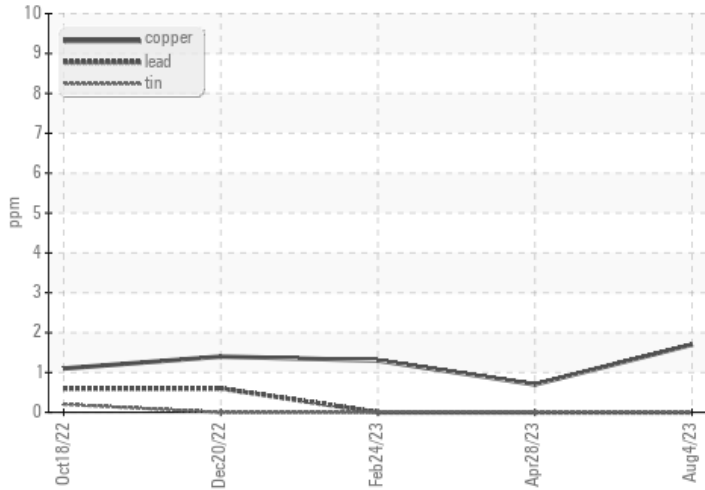


GRAPHS

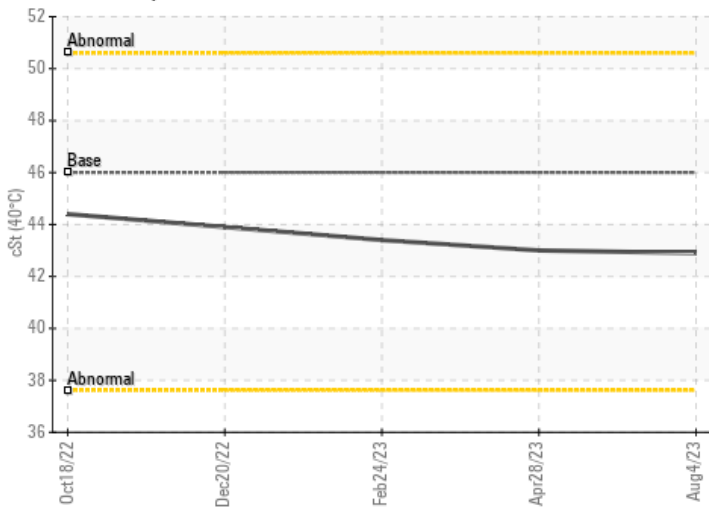
Ferrous Alloys



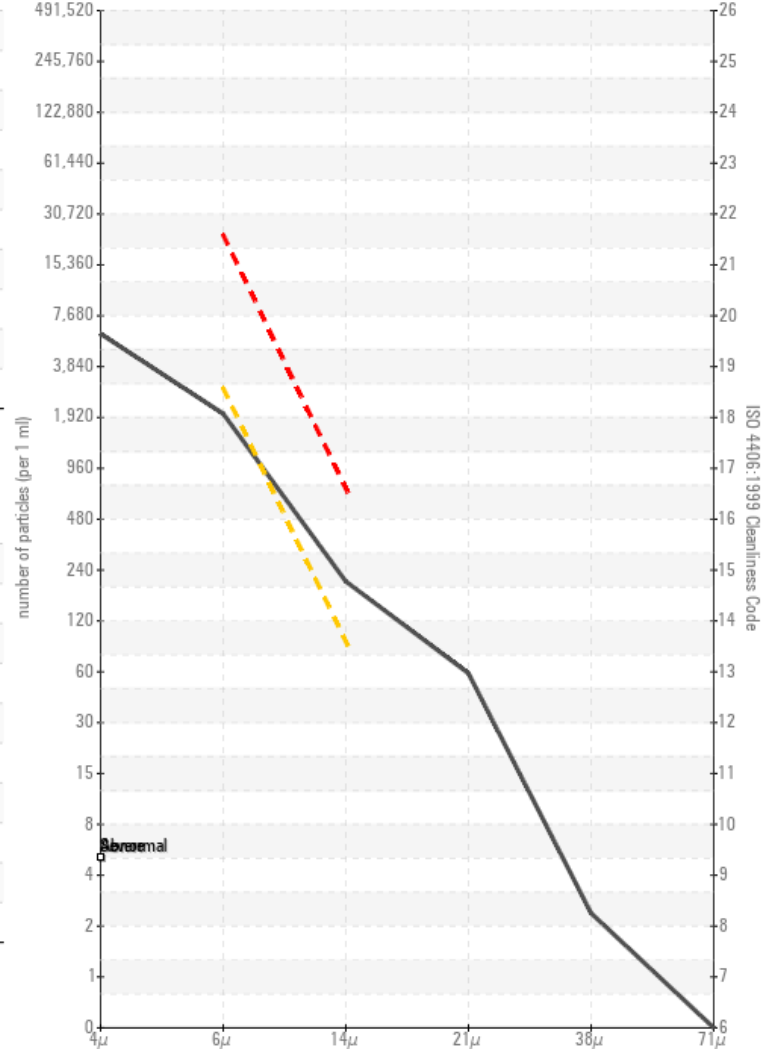
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

