



CONSTRUCTION EQUIPMENT

580811 CARLETON SENNEBOGEN 825 825.0.3362 - HYDRAULIC SYSTEM



Sample No: VCP415292
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 580811 CARLETON



SAMPLE INFORMATION

Sample Number	VCP415292	VCP294218	VCP294219	VCP293804
Sample Date	08 Aug 2023	13 Feb 2021	12 Feb 2021	02 Feb 2021
Machine Hours	2035	0	487	464
Oil Hours	2035	40	6	2
Oil Changed	Not Chngd	Not Chngd	Changed	Changed
Sample Status	ABNORMAL	NORMAL	ABNORMAL	ABNORMAL

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56195 PONTIAC TRAIL
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OIL CONDITION

Visc @ 40°C	cSt	42.0	44.6	45.4	42.8
Acid Number (AN)	mg KOH/g	0.58	0.697	0.750	0.865

CONTAMINATION

Water	%	---	---	---	0.255
Particles >4µm		19561	2387	11709	---
Particles >6µm		5507	568	1278	---
Particles >14µm		437	54	35	---
ISO 4406:1999 (c)		21/20/16	18/16/13	21/17/12	---
Silicon	ppm	2	<1	0	2
Sodium	ppm	28	24	12	53
Potassium	ppm	2	1	<1	<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 system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. 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	7	2	1	4
Copper	ppm	3	<1	<1	2
Lead	ppm	3	<1	<1	<1
Tin	ppm	0	0	<1	0
Aluminum	ppm	<1	<1	<1	0
Chromium	ppm	0	0	0	<1
Molybdenum	ppm	2	3	4	1
Nickel	ppm	0	<1	<1	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	<1	<1	<1
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	173	248	196	387
Magnesium	ppm	36	38	55	16
Zinc	ppm	473	518	480	552
Phosphorus	ppm	384	408	382	461
Barium	ppm	0	0	0	<1
Boron	ppm	<1	4	6	0

Depot: VOLVO2990
Unique No: 10604746
Signed: Wes Davis
Report Date: 16 Aug 2023

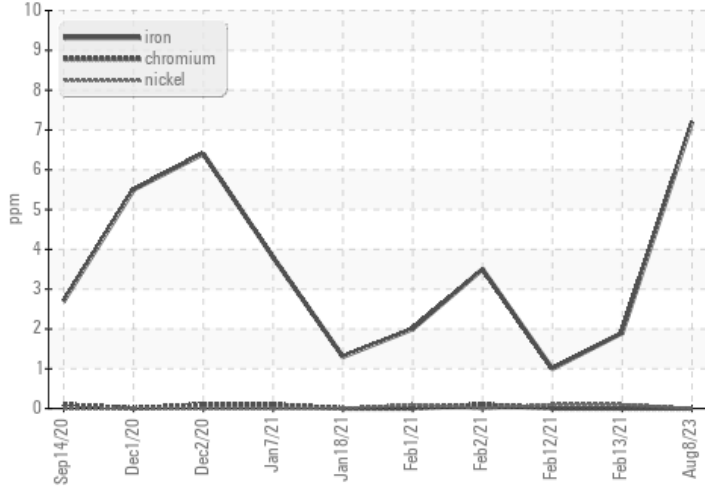


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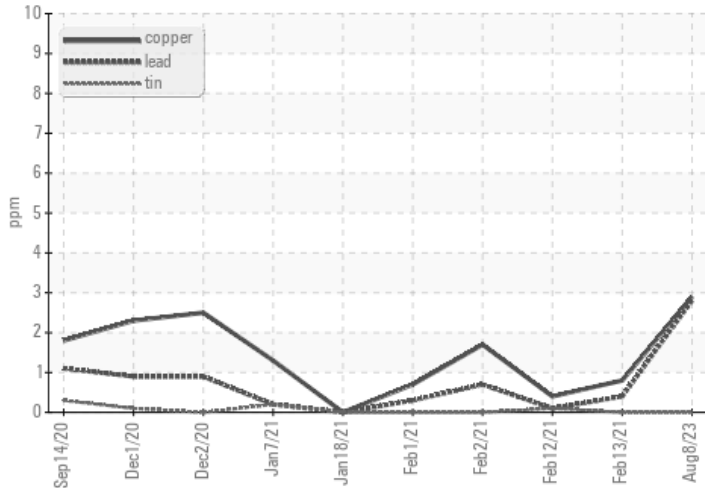


GRAPHS

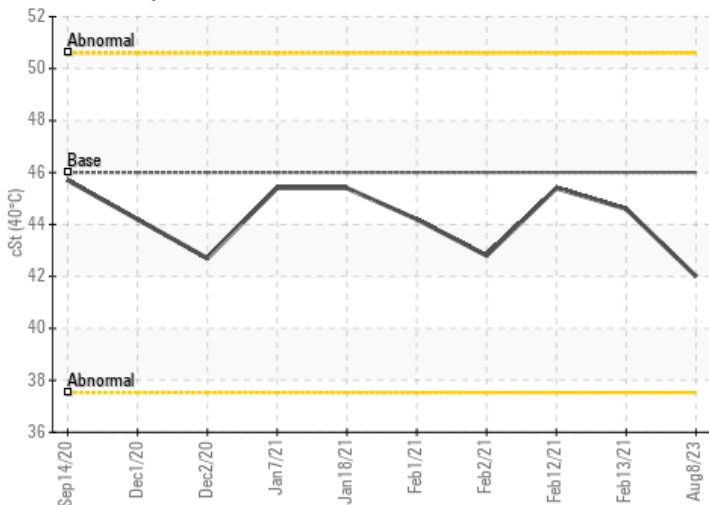
Ferrous Alloys



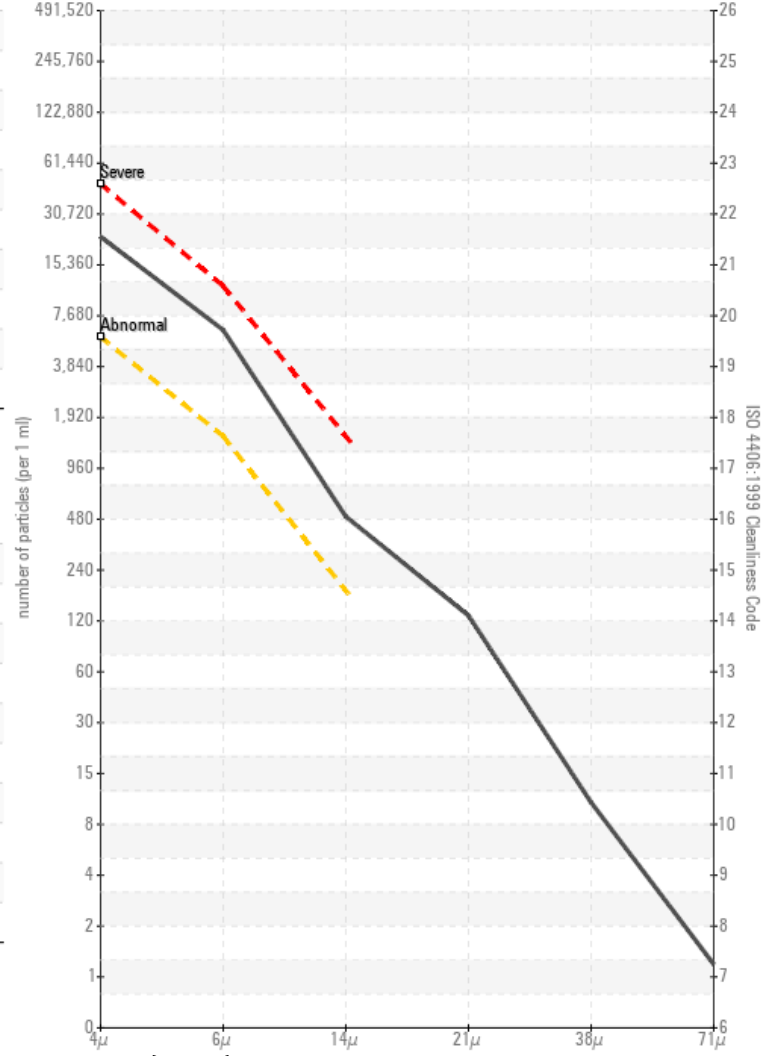
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

