



CONSTRUCTION EQUIPMENT

SWA536475-10 VOLVO L220H 2823 - HYDRAULIC SYSTEM



Sample No: VCP430292
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SWA536475-10



SAMPLE INFORMATION

Sample Number	VCP430292	VCP417803	VCP364971	VCP331224
Sample Date	10 Jun 2024	09 Sep 2023	16 Sep 2022	22 Feb 2022
Machine Hours	10963	9460	7531	6156
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	N/A
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL

CALLANAN
 RT 32 677 FLATBUSH RD
 EAST KINGSTON, NY
 US 12401
 Contact:

OIL CONDITION

Visc @ 40°C	cSt	39.7	39.5	39.6	39.7
Acid Number (AN)	mg KOH/g	0.59	0.46	0.49	0.39

T:
F:

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		21024	22128	48084	100840
Particles >6µm		▲ 5084	● 3111	■ 1687	▲ 16298
Particles >14µm		▲ 215	▲ 178	▲ 178	▲ 500
ISO 4406:1999 (c)		22/20/15	22/19/15	23/18/15	24/21/16
Silicon	ppm	12	11	6	6
Sodium	ppm	2	2	1	2
Potassium	ppm	2	<1	0	0

Diagnosis

The filter 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 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	17	17	13	9
Copper	ppm	3	2	3	3
Lead	ppm	<1	0	<1	<1
Tin	ppm	0	0	<1	<1
Aluminum	ppm	4	2	3	2
Chromium	ppm	2	2	2	2
Molybdenum	ppm	<1	0	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	0	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0

ADDITIVES

Calcium	ppm	504	463	394	442
Magnesium	ppm	6	10	1	2
Zinc	ppm	603	553	513	545
Phosphorus	ppm	454	334	415	472
Barium	ppm	0	0	0	0
Boron	ppm	9	12	11	13

Depot: CALEAS
Unique No: 11082866
Signed: Wes Davis
Report Date: 17 Jun 2024

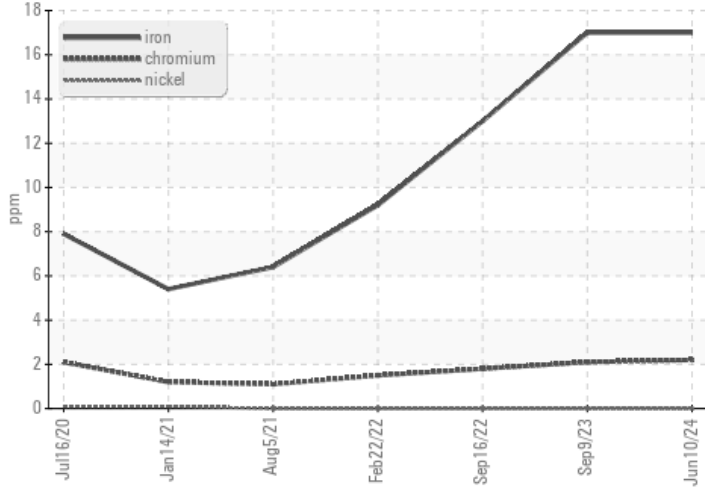


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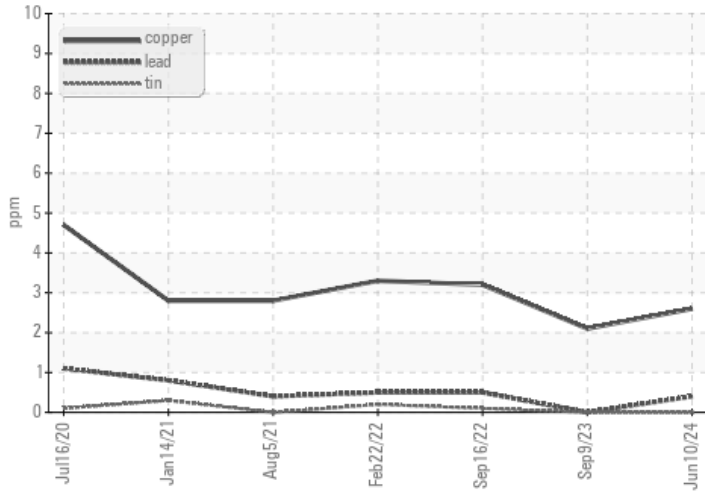


GRAPHS

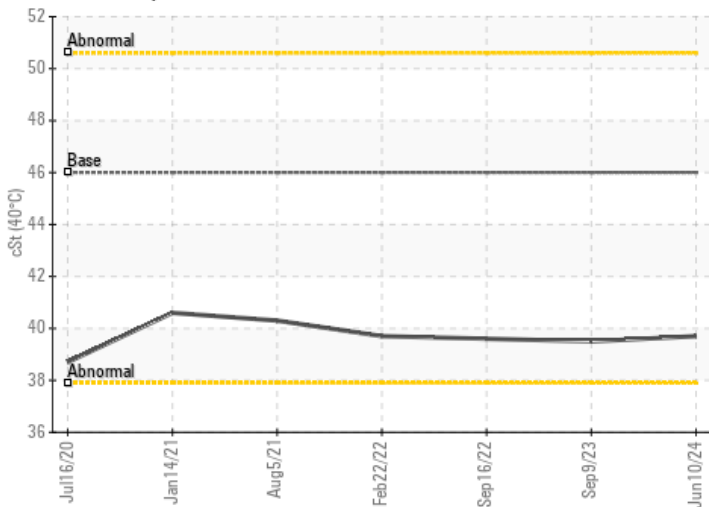
Ferrous Alloys



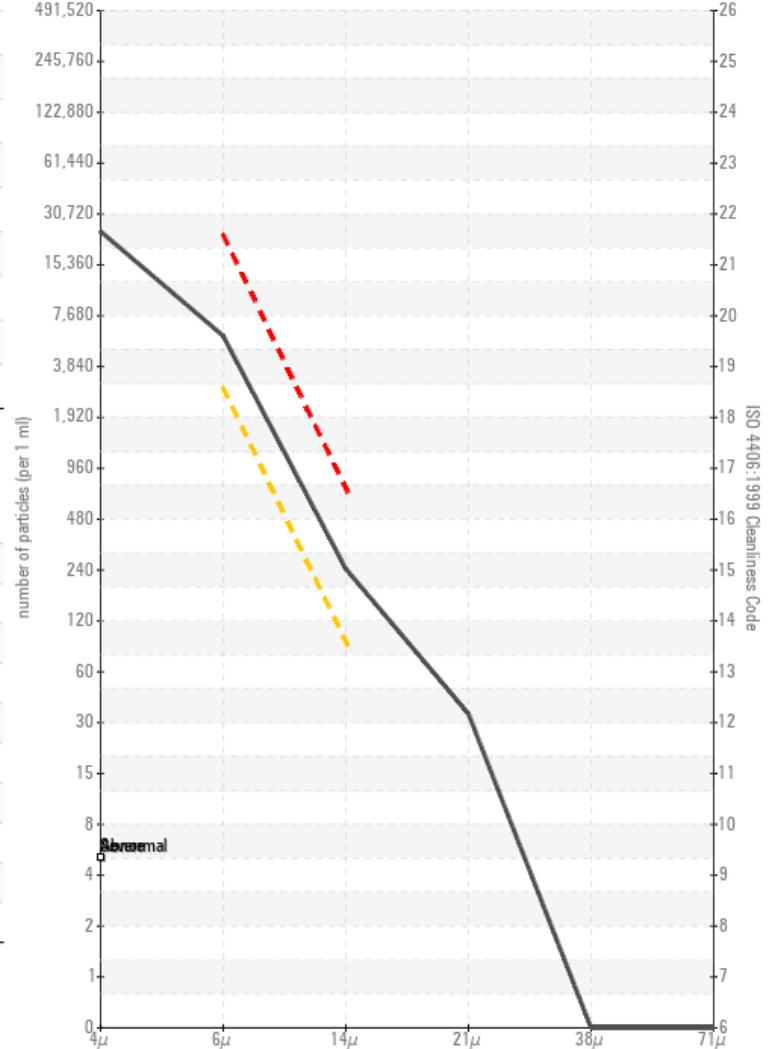
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

