



CONSTRUCTION EQUIPMENT

RA41 VOLVO L220H 2884 - HYDRAULIC SYSTEM



Sample No: VCP435353
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: RA41



SAMPLE INFORMATION

Sample Number	VCP435353	VCP374108	VCP405884	VCP381336
Sample Date	15 Nov 2023	31 Aug 2023	02 Jun 2023	13 Feb 2023
Machine Hours	10048	9538	8994	2521
Oil Hours	2000	500	1000	500
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Not Chngd
Sample Status	NORMAL	ATTENTION	ATTENTION	ATTENTION



HOUSBY HEAVY EQUIPMENT, LLC
 4410 SE 4 MILE DR
 ANKENY, IA
 US 50021
 Contact: RANDY VANDERLEEST
 rvanderleest@housby.com
 T:
 F: (515)964-2865



OIL CONDITION

Visc @ 40°C	cSt	42.5	42.3	43.2	43.9
Acid Number (AN)	mg KOH/g	0.28	0.25	0.31	0.28



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		2462	4548	5561	7093
Particles >6µm		780	1516	1888	1516
Particles >14µm		72	160	175	75
ISO 4406:1999 (c)		18/17/13	19/18/14	20/18/15	20/18/13
Silicon	ppm	3	2	2	2
Sodium	ppm	0	1	<1	0
Potassium	ppm	2	0	<1	0

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

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



ADDITIVES

Calcium	ppm	134	129	132	129
Magnesium	ppm	18	21	16	16
Zinc	ppm	467	437	478	437
Phosphorus	ppm	377	351	370	341
Barium	ppm	9	6	0	0
Boron	ppm	<1	<1	<1	0

Depot: VOLVO0080
Unique No: 10753100
Signed: Wes Davis
Report Date: 22 Nov 2023

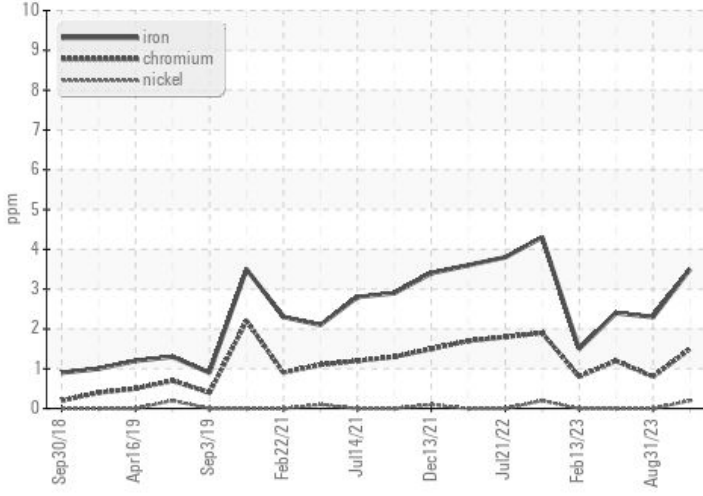


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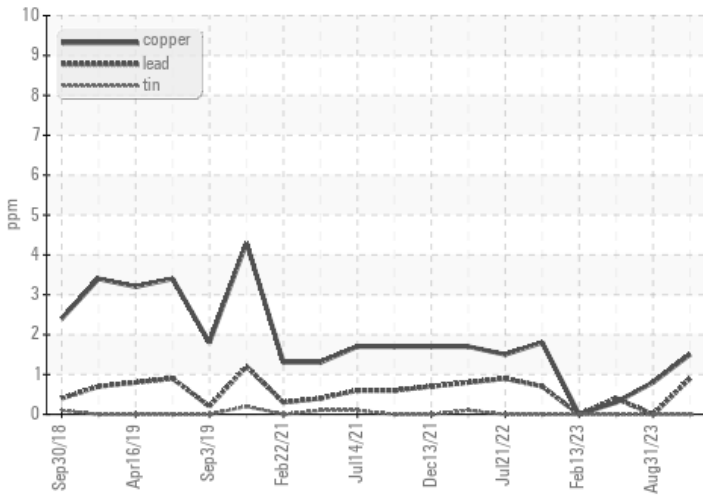


GRAPHS

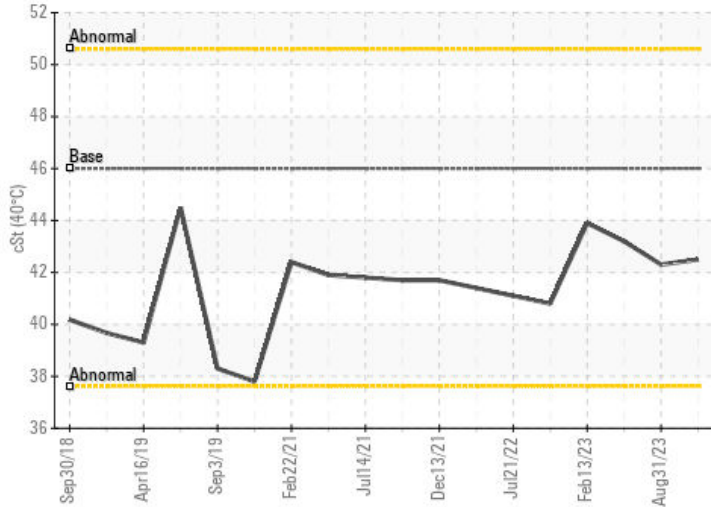
Ferrous Alloys



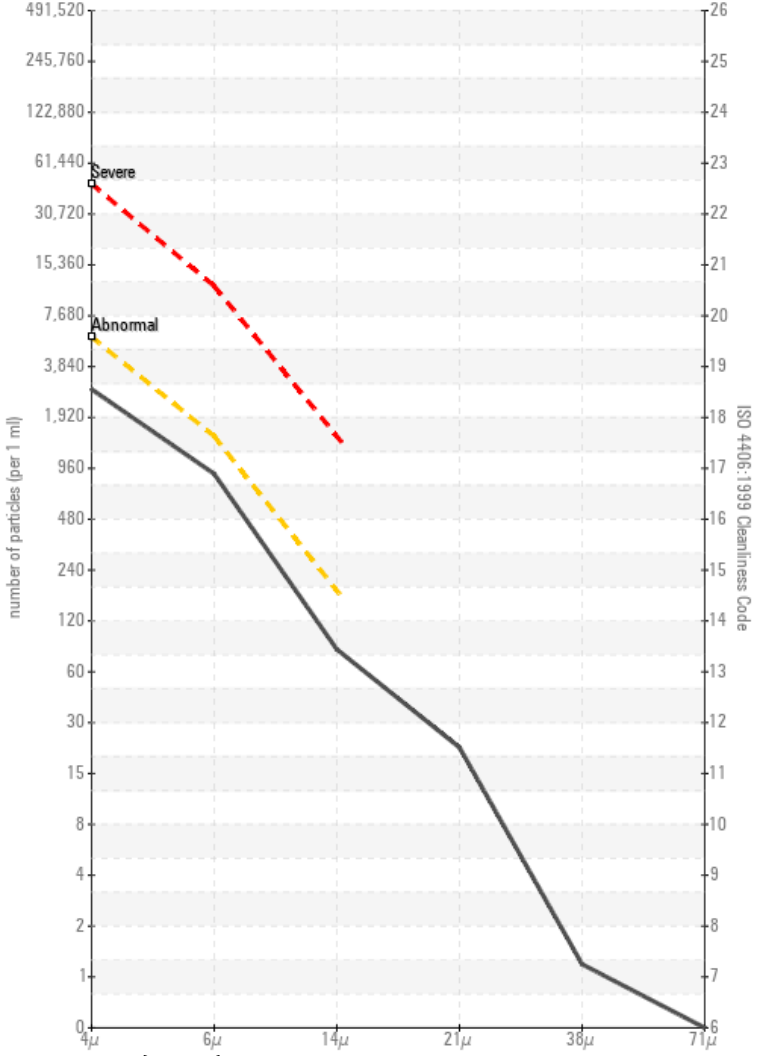
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

