CONSTRUCTION EQUIPMENT

593927 VOLVO A30G 752151 - HYDRAULIC SYSTEM

Sample No: VCP414208

Oil Type: VOLVO SUPER HYDRAULIC OIL 46

Job No: 593927

RIPA AND ASSOCIATES
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US 33619
Contact: PM Services
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SAMPLE INFORMATION

Sample Number		**VCP414208**	VCP397426	VCP332726	VCP326716
Sample Date		**14 Aug 2023**	16 Jan 2023	15 Mar 2022	15 Sep 2021
Machine Hours		**5197**	4145	2275	1165
Oil Hours		**1197**	4145	2275	1500
Oil Changed		**Not Changd**	Changed	Not Changd	Not Changd
Sample Status		**ABNORMAL**	ABNORMAL	ABNORMAL	ABNORMAL

OIL CONDITION

Visc @ 40°C	cSt	**45.7**	46.5	45.9	46.5
Acid Number (AN)	mg KOH/g	**0.37**	0.41	0.40	0.507

CONTAMINATION

Particles >4µm		**41721**	10687	167557	---
Particles >6µm		**15347**	3378	87263	---
Particles >14µm		**1235**	442	15431	---
ISO 4406:1999 (c)		**23/21/17**	21/19/16	25/24/21	---
Silicon	ppm	**4**	5	5	4
Sodium	ppm	**2**	<1	<1	2
Potassium	ppm	**0**	<1	0	0

WEAR METALS

Iron	ppm	**10**	14	10	6
Copper	ppm	**2**	4	4	4
Lead	ppm	**1**	3	2	5
Tin	ppm	**0**	<1	0	0
Aluminum	ppm	**3**	2	2	<1
Chromium	ppm	**0**	<1	<1	<1
Molybdenum	ppm	**<1**	<1	<1	0
Nickel	ppm	**0**	0	0	<1
Titanium	ppm	**0**	<1	<1	0
Silver	ppm	**0**	0	0	<1
Manganese	ppm	**0**	0	0	0
Vanadium	ppm	**<1**	0	0	0

ADDITIVES

Calcium	ppm	**107**	73	71	67
Magnesium	ppm	**9**	4	1	2
Zinc	ppm	**472**	433	433	430
Phosphorus	ppm	**373**	333	383	356
Barium	ppm	**0**	0	0	<1
Boron	ppm	**0**	0	0	3

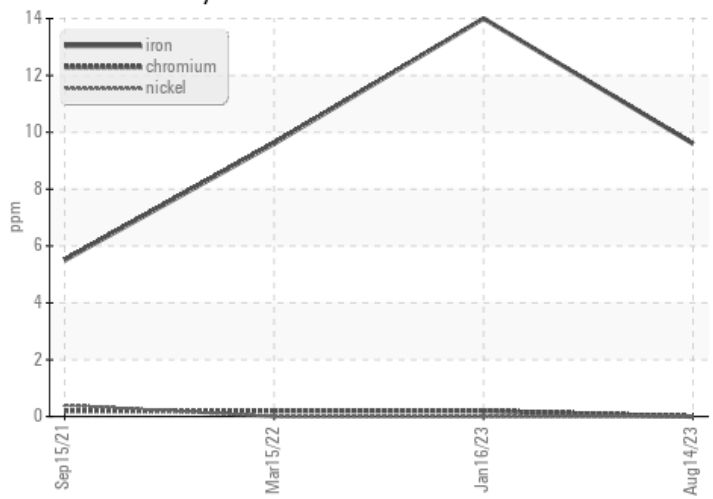
Diagnosis

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.

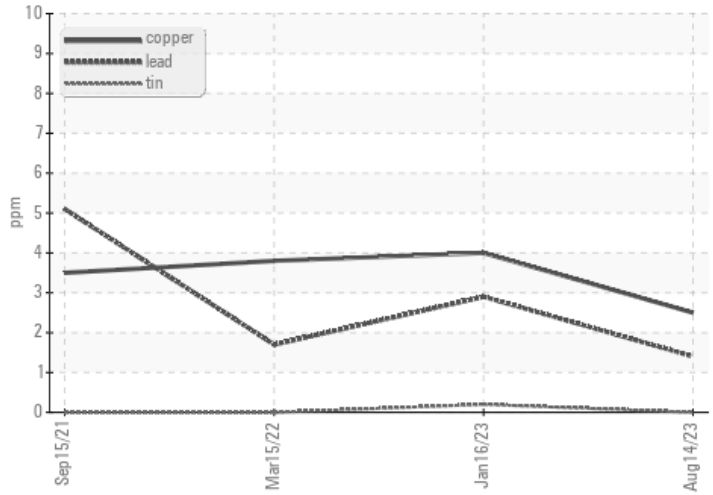
Depot: RIPTAM
Unique No: 10636248
Signed: Wes Davis
Report Date: 11 Sep 2023

GRAPHS

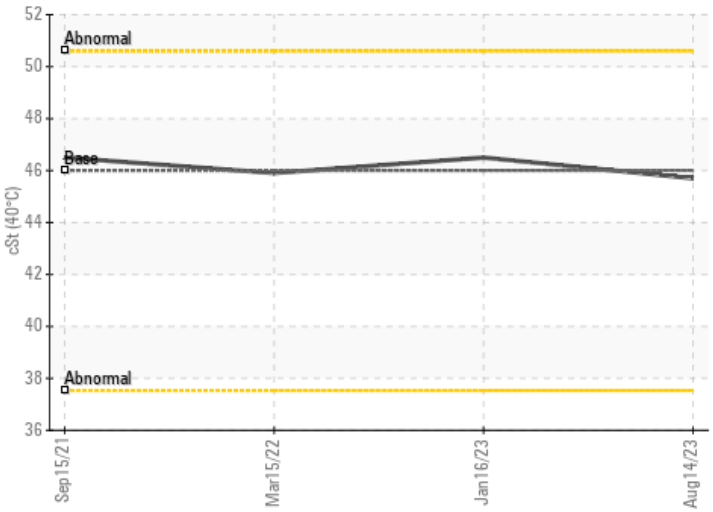
Ferrous Alloys



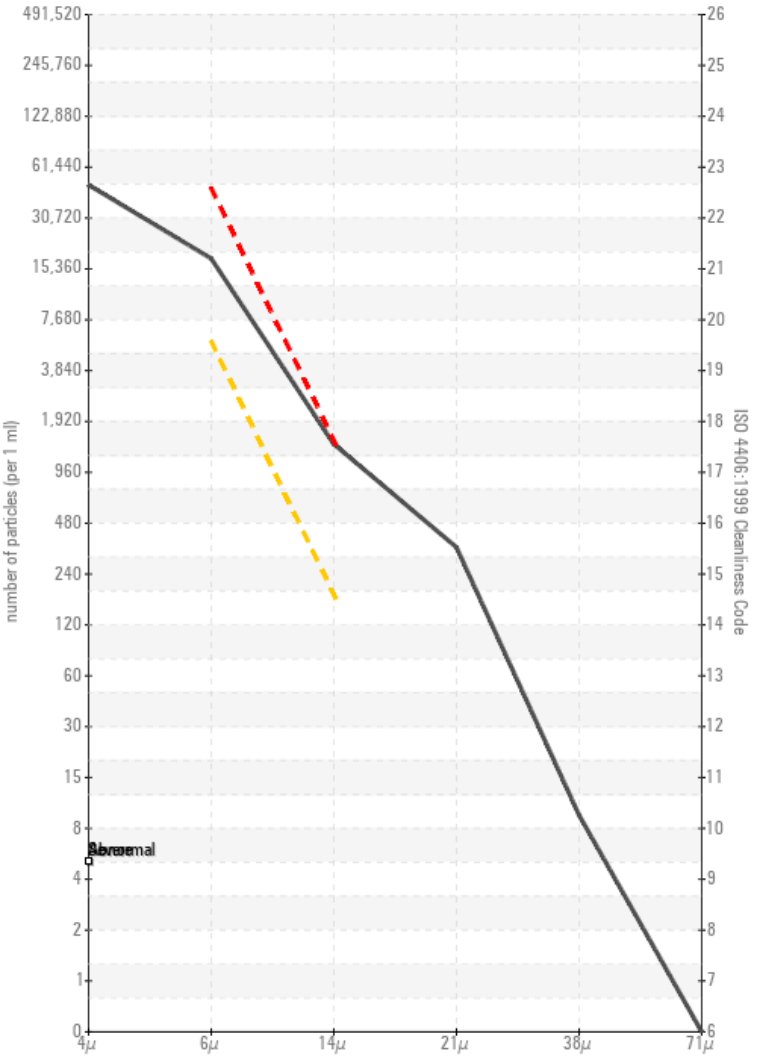
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number