CONSTRUCTION EQUIPMENT
VOLVO A45G 342321 - HYDRAULIC SYSTEM

Sample No: VCP416627
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No:

SAIIA CONSTRUCTION LLC
4400 LEWISBURG RD
BIRMINGHAM, AL
US 35207
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SAMPLE INFORMATION

Sample Number		**VCP416627**	VCP412978	VCP403656	VCP369487
Sample Date		**17 Oct 2023**	11 Jul 2023	22 Mar 2023	23 Nov 2022
Machine Hours		**8968**	8493	8012	7534
Oil Hours		**0**	0	0	0
Oil Changed		**Not Changd**	Not Changd	Changed	Not Changd
Sample Status		**ABNORMAL**	ABNORMAL	NORMAL	NORMAL

OIL CONDITION

Visc @ 40°C	cSt	**47.1**	42.3	42.7	42.3
Acid Number (AN)	mg KOH/g	**0.69**	0.38	0.41	0.38

CONTAMINATION

Particles >4µm		**7593**	38652	708	9120
Particles >6µm		**126**	▲ 14197	209	2509
Particles >14µm		**11**	▲ 759	28	96
ISO 4406:1999 (c)		**20/14/11**	22/21/17	17/15/12	20/19/14
Silicon	ppm	**13**	6	7	6
Sodium	ppm	**4**	0	3	<1
Potassium	ppm	**0**	1	0	1

WEAR METALS

Iron	ppm	**19**	7	11	11
Copper	ppm	▲ **159**	7	9	10
Lead	ppm	**<1**	2	3	4
Tin	ppm	**<1**	0	0	0
Aluminum	ppm	**1**	<1	2	2
Chromium	ppm	**<1**	<1	<1	<1
Molybdenum	ppm	**3**	3	4	4
Nickel	ppm	**3**	0	0	0
Titanium	ppm	**<1**	0	0	0
Silver	ppm	**0**	0	0	0
Manganese	ppm	**<1**	0	<1	0
Vanadium	ppm	**0**	0	0	0

ADDITIVES

Calcium	ppm	**2396**	133	124	128
Magnesium	ppm	**8**	14	12	14
Zinc	ppm	**1099**	472	460	454
Phosphorus	ppm	**888**	356	358	340
Barium	ppm	**0**	2	0	0
Boron	ppm	**79**	2	3	4

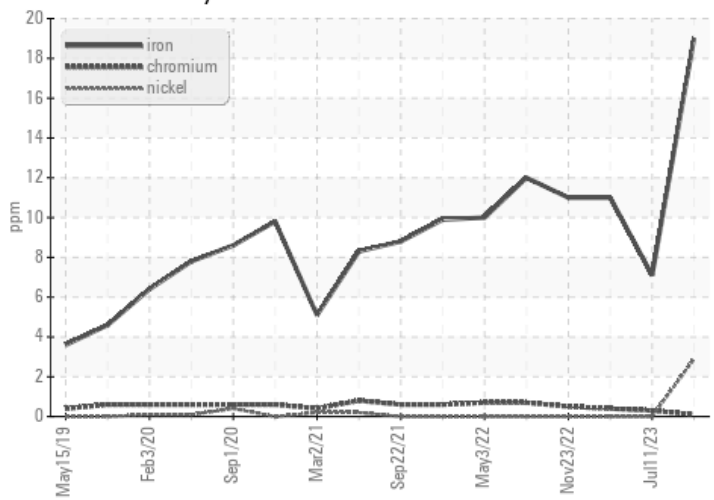
Diagnosis

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.An increase in the copper level is noted. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

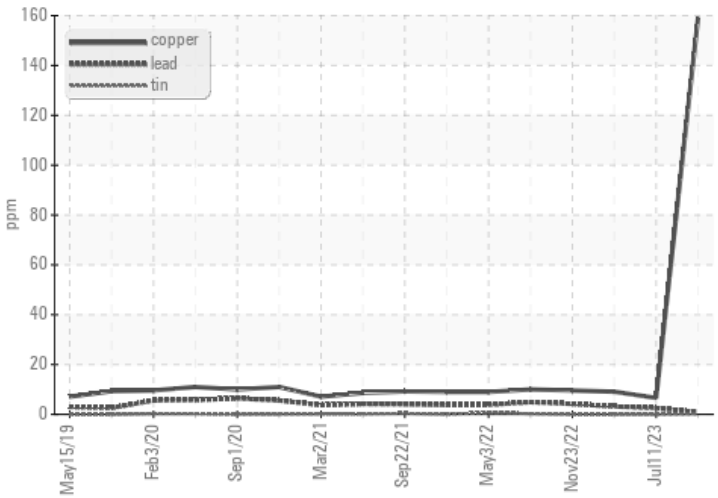
Depot: SAIBIR
Unique No: 10714769
Signed: Don Baldridge
Report Date: 31 Oct 2023

GRAPHS

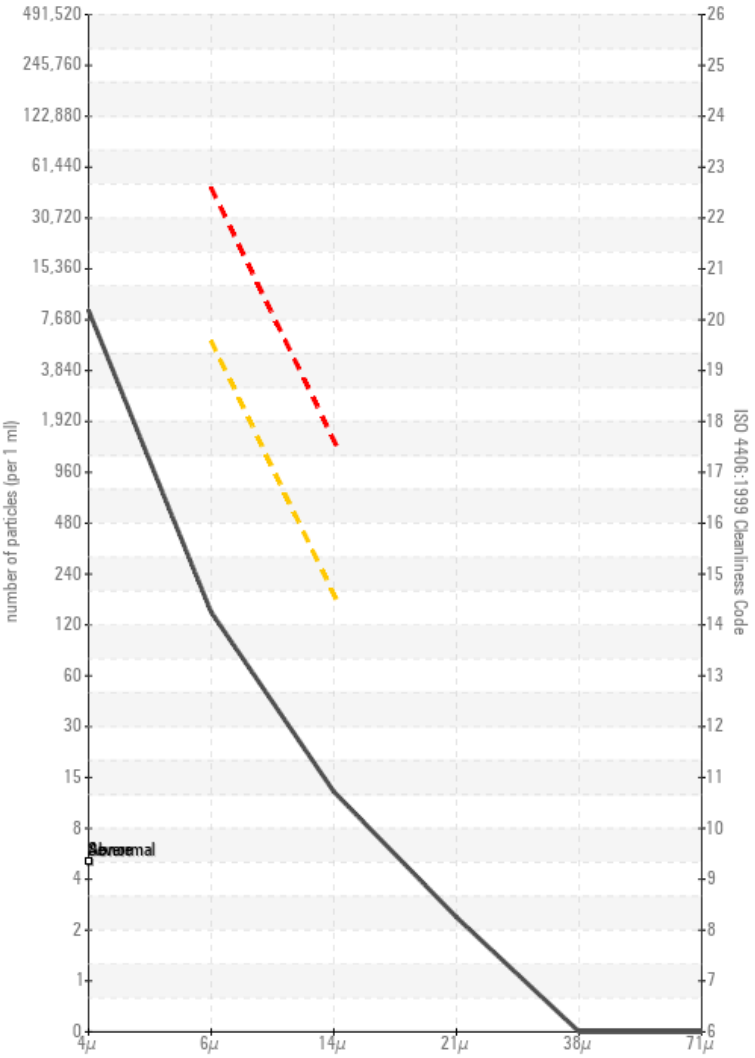
Ferrous Alloys



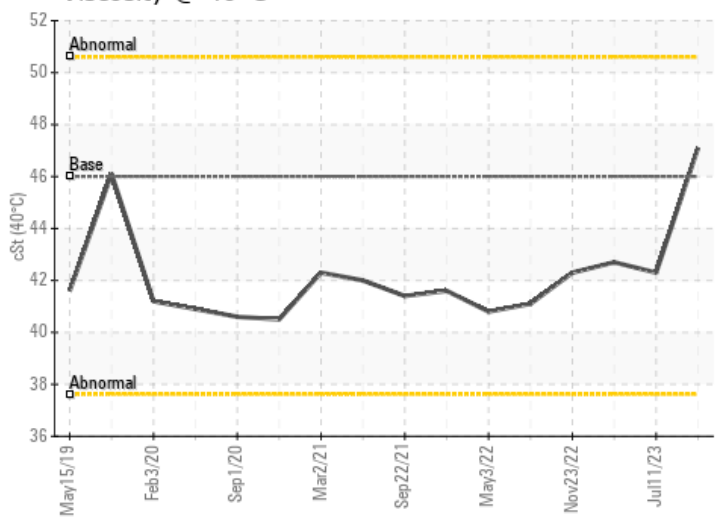
Non-ferrous Metals



Particle Count



Viscosity @ 40°C



Acid Number