



CONSTRUCTION EQUIPMENT

524790 VOLVO SD115B 236585 - HYDRAULIC SYSTEM



Sample No: VCP392745
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 524790



SAMPLE INFORMATION

Sample Number	VCP392745	VCP364315	VCP364393	VCP311893
Sample Date	03 Mar 2023	01 Sep 2022	31 Aug 2022	11 Jun 2021
Machine Hours	3195	2647	2647	1644
Oil Hours	1100	500	500	1644
Oil Changed	N/A	Not Changd	Not Changd	Not Changd
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

RIPA AND ASSOCIATES

10149 FISHER AVENUE
TAMPA, FL
US 33619
Contact: ROBERT TURNER
rturner@ripatampa.com
T:
F:



OIL CONDITION

Visc @ 40°C	cSt	50.3	45.6	43.6	43.2
Acid Number (AN)	mg KOH/g	0.33	0.44	0.29	0.129



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		▲ 17951	2470	1605	3676
Particles >6µm		■ 842	298	231	325
Particles >14µm		■ 17	11	8	30
ISO 4406:1999 (c)		21/17/11	18/15/11	18/15/10	19/16/12
Silicon	ppm	■ 2	2	2	3
Sodium	ppm	■ <1	<1	0	2
Potassium	ppm	■ <1	0	0	<1

Diagnosis

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The iron level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	▲ 30	16	12	15
Copper	ppm	■ 6	<1	5	1
Lead	ppm	■ 3	0	3	8
Tin	ppm	■ 0	0	<1	0
Aluminum	ppm	■ <1	<1	<1	0
Chromium	ppm	■ 0	0	0	<1
Molybdenum	ppm	■ <1	<1	0	<1
Nickel	ppm	■ 0	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	■ <1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	■ 71	98	67	114
Magnesium	ppm	■ 3	0	0	<1
Zinc	ppm	■ 394	460	311	87
Phosphorus	ppm	■ 372	371	357	394
Barium	ppm	■ 0	<1	0	0
Boron	ppm	■ 0	1	0	2

Depot: RIPTAM
Unique No: 10402620
Signed: Don Baldrige
Report Date: 30 Mar 2023

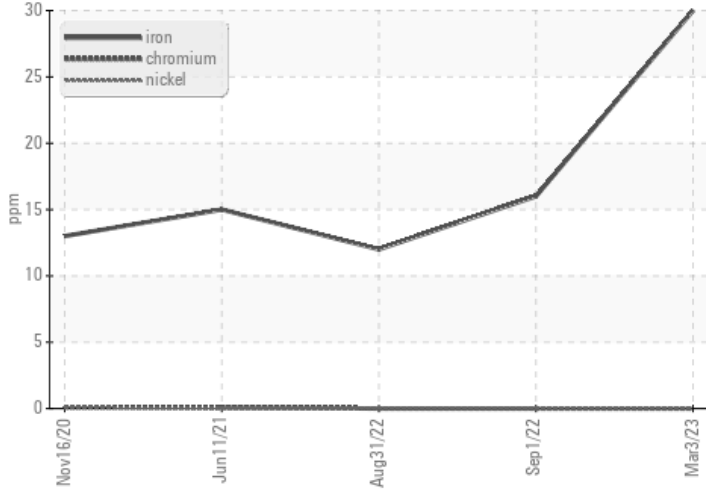


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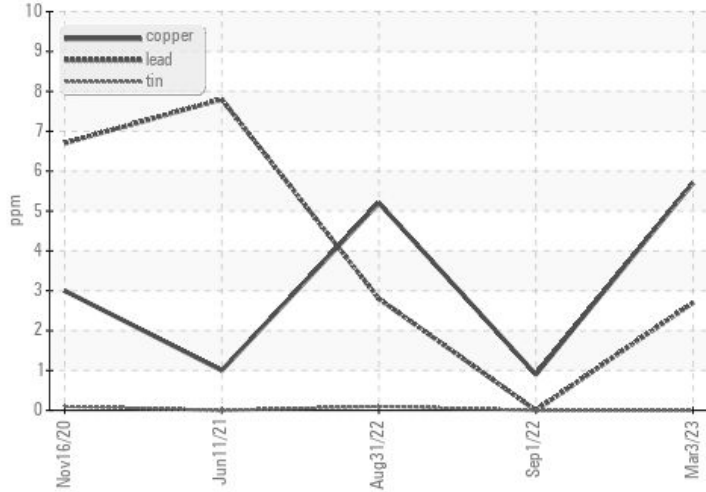


GRAPHS

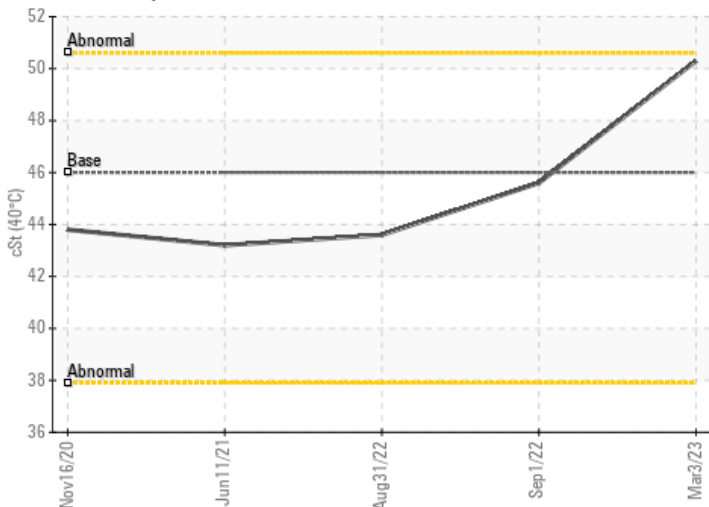
▲ Ferrous Alloys



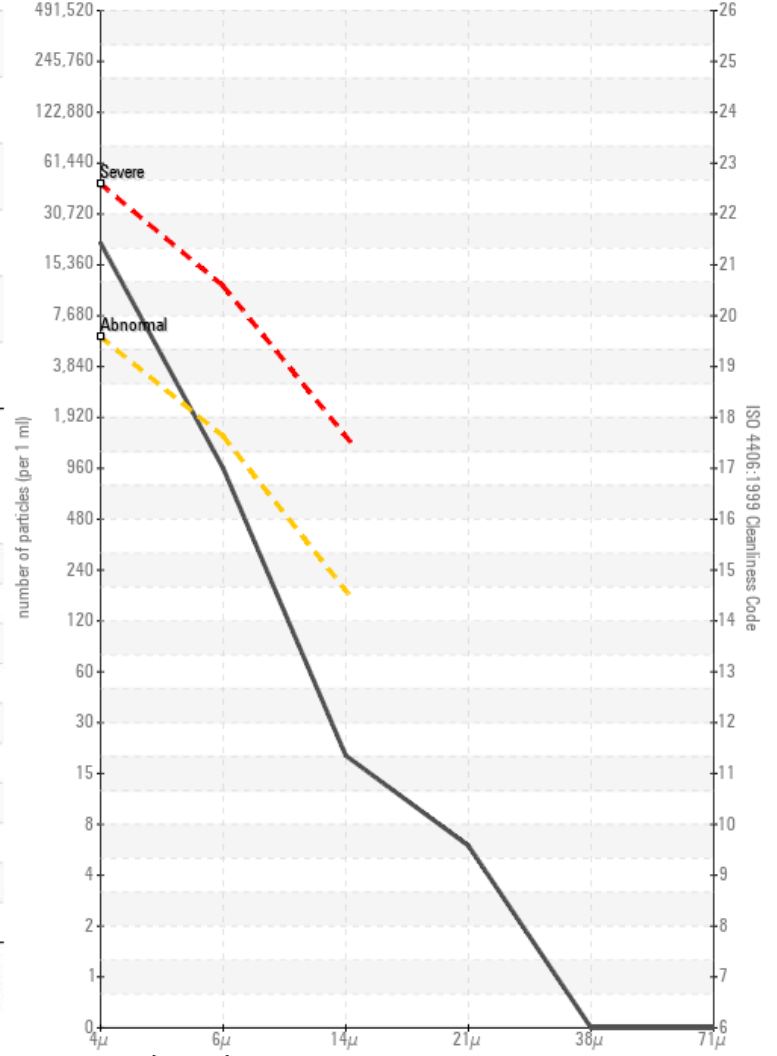
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Acid Number

