



CONSTRUCTION EQUIPMENT

RA47 VOLVO A40G 352354 - WET DISC BRAKE



Sample No: VCP432880
Oil Type: VOLVO WB 102
Job No: RA47



SAMPLE INFORMATION

Sample Number	VCP432880	VCP374263	VCP319660	VCP317431
Sample Date	16 Nov 2023	13 May 2022	02 Feb 2022	27 Aug 2021
Machine Hours	5488	2872	2226	1496
Oil Hours	500	500	2000	500
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 40°C	cSt	41.6	40.1	40.2	39.4
		■	■	■	■



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	■ 19	■ 19	▲ 21	▲ 20
Sodium	ppm	■ 8	■ 11	■ 11	■ 11
Potassium	ppm	■ 0	■ <1	■ 0	■ 12

Diagnosis
 No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. The copper level is abnormal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	▲ 29	▲ 22	▲ 23	■ 10
Copper	ppm	▲ 133	▲ 167	▲ 175	▲ 124
Lead	ppm	■ 2	■ <1	■ <1	■ 2
Tin	ppm	■ <1	■ <1	■ 0	■ 0
Aluminum	ppm	■ 1	■ 1	■ 1	■ <1
Chromium	ppm	■ 1	■ 1	■ 1	■ <1
Molybdenum	ppm	■ 0	■ <1	■ <1	■ 0
Nickel	ppm	■ 4	5	5	5
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	<1	0	0
Manganese	ppm	■ 1	■ 1	■ 1	■ <1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	■ 3306	■ 3707	■ 4264	■ 4062
Magnesium	ppm	■ 7	■ 12	■ 13	■ 10
Zinc	ppm	■ 1463	■ 1523	■ 1653	■ 1637
Phosphorus	ppm	■ 1199	■ 1317	■ 1448	■ 1405
Barium	ppm	■ 0	■ 0	■ 0	■ 0
Boron	ppm	■ 112	■ 119	■ 127	■ 119

Depot: VOLVO0080
Unique No: 10753507
Signed: Don Baldrige
Report Date: 24 Nov 2023

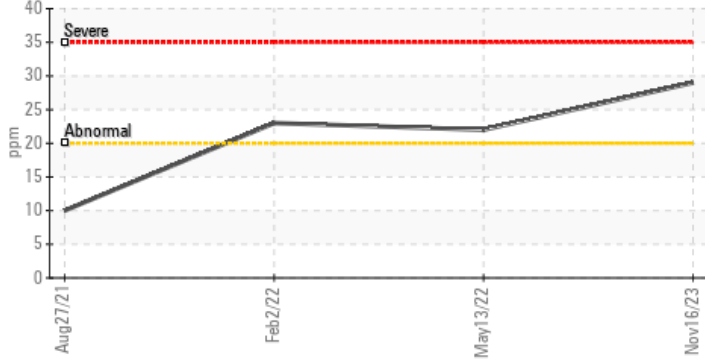


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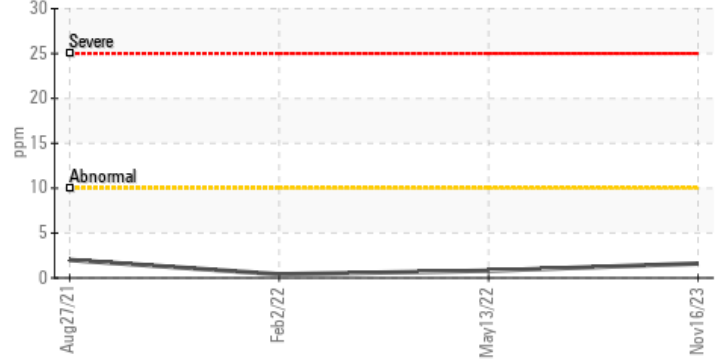


GRAPHS

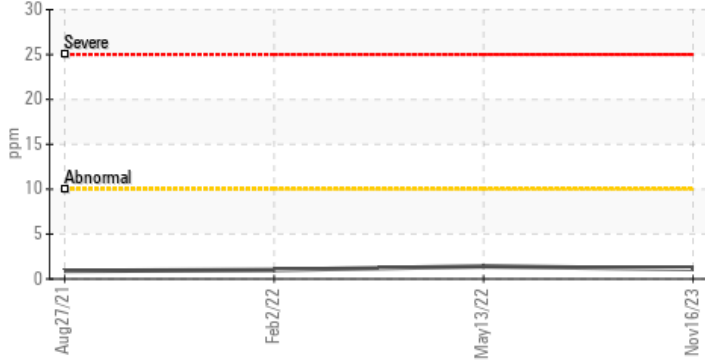
▲ Iron (ppm)



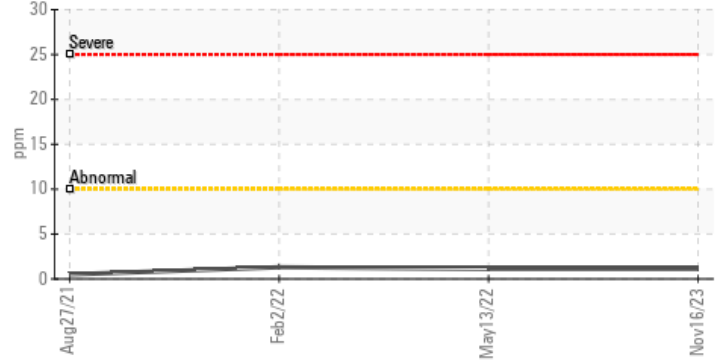
Lead (ppm)



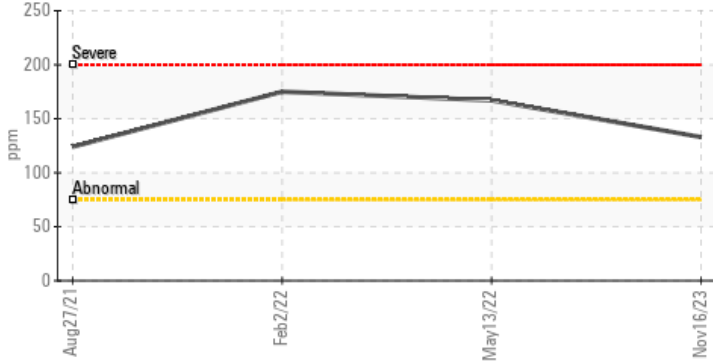
Aluminum (ppm)



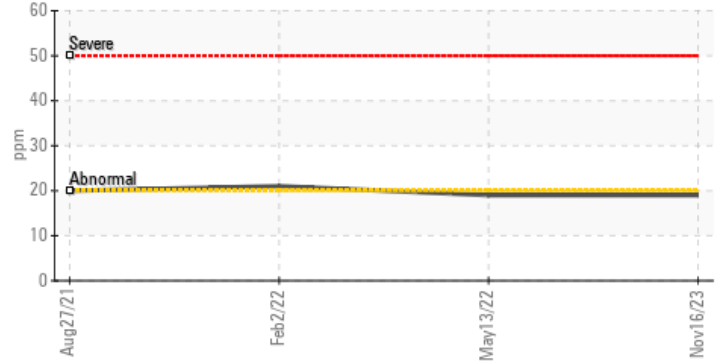
Chromium (ppm)



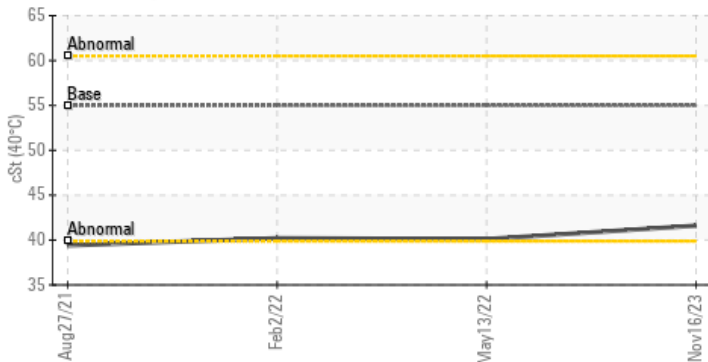
▲ Copper (ppm)



Silicon (ppm)



Viscosity @ 40°C



Additives

