



# CONSTRUCTION EQUIPMENT

580221 VOLVO L110H 631108 - FRONT AXLE



**Sample No:** VCP393507  
**Oil Type:** VOLVO WB 102  
**Job No:** 580221



## SAMPLE INFORMATION

Sample Number	<b>VCP393507</b>	VCP385313	VCP297935	VCP293545
Sample Date	<b>20 Jul 2023</b>	27 Oct 2022	29 Jun 2021	19 Dec 2020
Machine Hours	<b>12148</b>	11060	9223	7981
Oil Hours	<b>4000</b>	1000	1000	2000
Oil Changed	<b>Changed</b>	Not Chngd	Not Chngd	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	NORMAL

### RIPA AND ASSOCIATES

10149 FISHER AVENUE  
TAMPA, FL  
US 33619  
Contact: ROBERT TURNER  
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## OIL CONDITION

Visc @ 40°C	cSt	<b>42.0</b>	42.6	41.5	40.5
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## CONTAMINATION

Silicon	ppm	<b>▲ 54</b>	26	10	9
Sodium	ppm	<b>2</b>	4	7	3
Potassium	ppm	<b>1</b>	0	<1	<1



## WEAR METALS

Iron	ppm	<b>210</b>	61	14	19
Copper	ppm	<b>1</b>	<1	<1	<1
Lead	ppm	<b>0</b>	<1	0	0
Tin	ppm	<b>0</b>	0	0	0
Aluminum	ppm	<b>4</b>	2	0	<1
Chromium	ppm	<b>3</b>	<1	<1	<1
Molybdenum	ppm	<b>&lt;1</b>	<1	2	<1
Nickel	ppm	<b>2</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>2</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>4071</b>	4083	3860	3950
Magnesium	ppm	<b>18</b>	17	20	20
Zinc	ppm	<b>1603</b>	1522	1390	1480
Phosphorus	ppm	<b>1308</b>	1240	1246	1291
Barium	ppm	<b>1</b>	0	0	0
Boron	ppm	<b>154</b>	153	144	130

### Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The condition of the oil is acceptable for the time in service.

**Depot:** RIPTAM  
**Unique No:** 10602480  
**Signed:** Sean Felton  
**Report Date:** 14 Aug 2023



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## VOLVO GRAPHS

