



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 342 176 - BRAKE COOLING SYSTEM



**Sample No:** VCP437070  
**Oil Type:** VOLVO WB 102  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP437070</b>	VCP417013	VCP301360	VCP271177
Sample Date	<b>22 Mar 2024</b>	01 Aug 2023	28 Dec 2020	14 Apr 2020
Machine Hours	<b>8750</b>	7664	5299	4225
Oil Hours	<b>0</b>	0	1000	4225
Oil Changed	<b>Changed</b>	N/A	Not Changd	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	NORMAL	NORMAL

**RIPA AND ASSOCIATES**  
 10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: PM Services  
 PMServices@ripaconstruction.com  
 T:  
 F:



### OIL CONDITION

Visc @ 40°C	cSt	<b>42.5</b>	42.7	40.7	40.6
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### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	<b>11</b>	12	17	16
Sodium	ppm	<b>4</b>	0	8	5
Potassium	ppm	<b>&lt;1</b>	2	4	<1

**Diagnosis**  
 Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.



### WEAR METALS

Iron	ppm	<b>10</b>	15	18	18
Copper	ppm	<b>120</b>	140	135	263
Lead	ppm	<b>0</b>	<1	3	<1
Tin	ppm	<b>&lt;1</b>	<1	0	0
Aluminum	ppm	<b>1</b>	2	2	<1
Chromium	ppm	<b>0</b>	<1	<1	<1
Molybdenum	ppm	<b>&lt;1</b>	<1	<1	0
Nickel	ppm	<b>&lt;1</b>	1	1	8
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	<1	0
Manganese	ppm	<b>1</b>	<1	<1	1
Vanadium	ppm	<b>0</b>	0	0	<1



### ADDITIVES

Calcium	ppm	<b>3598</b>	3982	4031	3632
Magnesium	ppm	<b>21</b>	17	16	6
Zinc	ppm	<b>1506</b>	1581	1657	1428
Phosphorus	ppm	<b>1222</b>	1294	1321	1185
Barium	ppm	<b>&lt;1</b>	2	0	0
Boron	ppm	<b>122</b>	135	116	91

**Depot:** RIPTAM  
**Unique No:** 11044329  
**Signed:** Don Baldrige  
**Report Date:** 28 May 2024

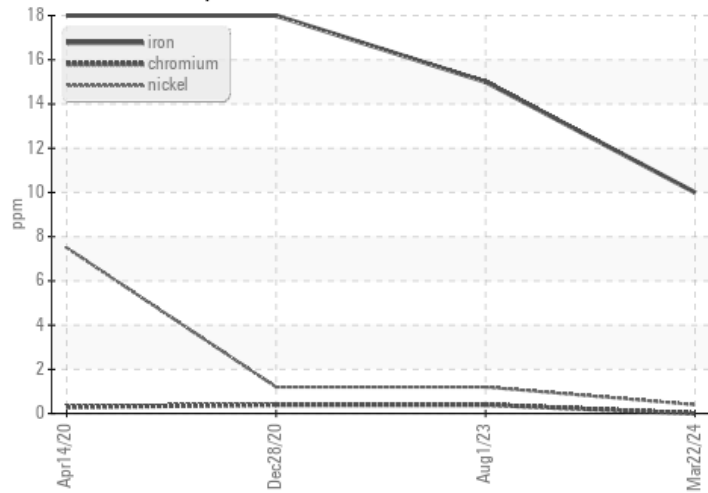


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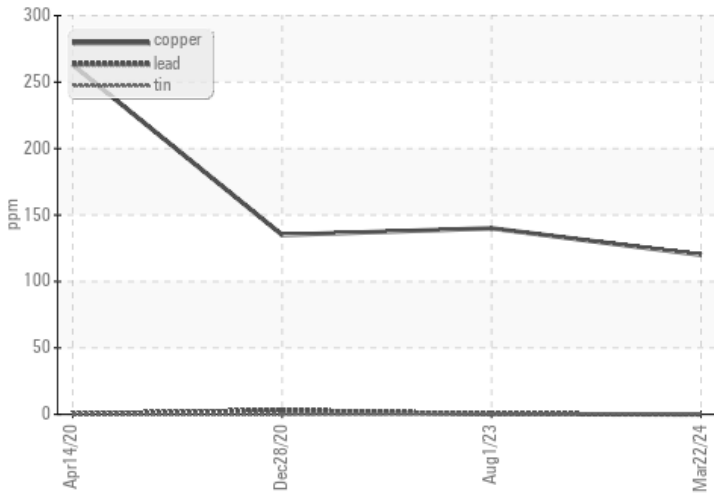


## GRAPHS

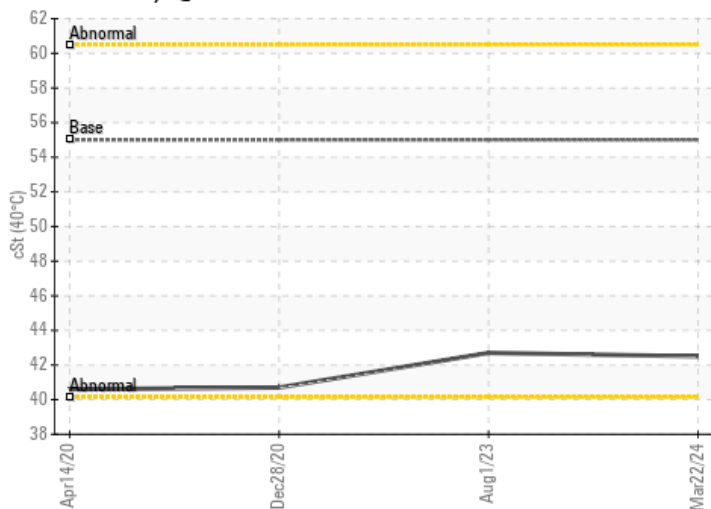
### Ferrous Alloys



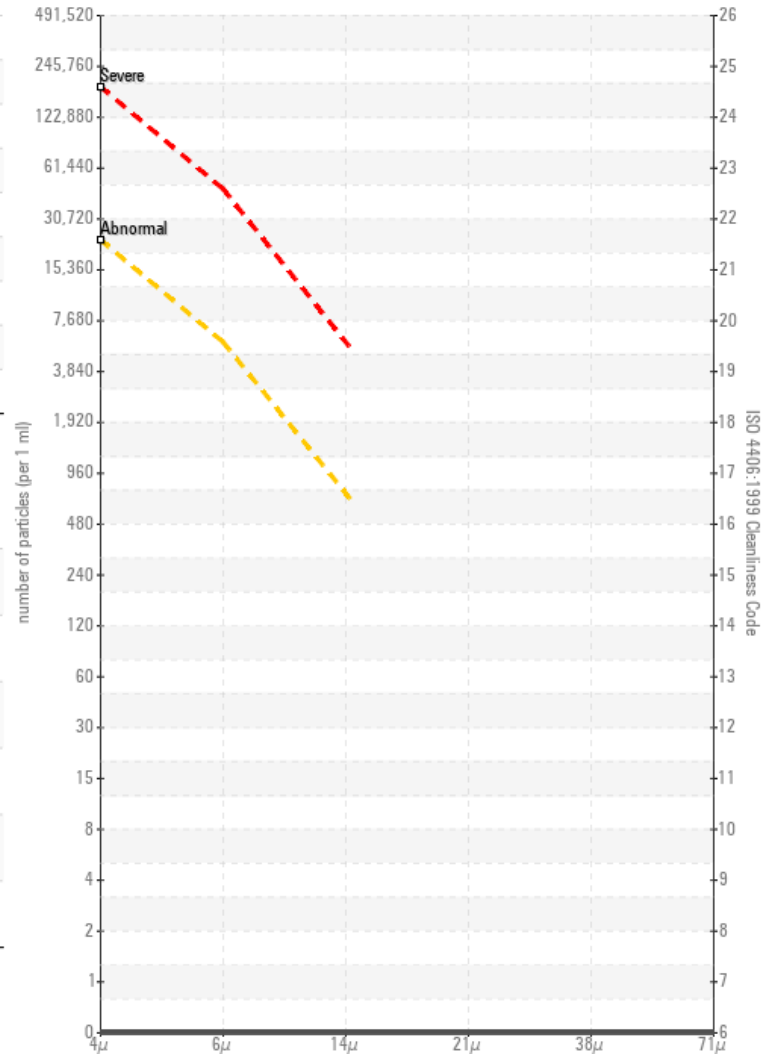
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

