



# CONSTRUCTION EQUIPMENT

## SW1027987 DIAMOND VOLVO A40D 60013 - WET DISC BRAKE



**Sample No:** VCP369187  
**Oil Type:** VOLVO WB 102  
**Job No:** SW1027987 DIAMOND



### SAMPLE INFORMATION

Sample Number	<b>VCP369187</b>	VC027453	---	---
Sample Date	<b>20 Dec 2023</b>	29 Dec 2003	---	---
Machine Hours	<b>4671</b>	3263	---	---
Oil Hours	<b>0</b>	1263	---	---
Oil Changed	<b>N/A</b>	N/A	---	---
Sample Status	<b>ABNORMAL</b>	ABNORMAL	---	---

**ARNOLD MACHINERY COMPANY**  
 4323 EAST WINSLOW AVENUE  
 PHOENIX, AZ  
 US 85040  
 Contact: RANDY PRZEKURAT  
 randyp@arnoldmachinery.com  
 T:  
 F: (602)414-1904



### OIL CONDITION

Visc @ 40°C	cSt	<b>▲ 31.9</b>	51.26	---	---
-------------	-----	---------------	-------	-----	-----



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>■ 4</b>	11	---	---
Sodium	ppm	<b>■ 8</b>	11	---	---
Potassium	ppm	<b>■ 2</b>	13	---	---

### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.



### WEAR METALS

Iron	ppm	<b>■ 24</b>	32	---	---
Copper	ppm	<b>▲ 170</b>	128	---	---
Lead	ppm	<b>■ 3</b>	2	---	---
Tin	ppm	<b>■ 2</b>	<1	---	---
Aluminum	ppm	<b>■ 17</b>	<1	---	---
Chromium	ppm	<b>■ &lt;1</b>	<1	---	---
Molybdenum	ppm	<b>■ 1</b>	0	---	---
Nickel	ppm	<b>■ 0</b>	<1	---	---
Titanium	ppm	<b>&lt;1</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>■ &lt;1</b>	1	---	---
Vanadium	ppm	<b>0</b>	0	---	---



### ADDITIVES

Calcium	ppm	<b>■ 357</b>	3311	---	---
Magnesium	ppm	<b>■ 7</b>	14	---	---
Zinc	ppm	<b>■ 200</b>	1282	---	---
Phosphorus	ppm	<b>■ 431</b>	1092	---	---
Barium	ppm	<b>■ &lt;1</b>	0	---	---
Boron	ppm	<b>■ 34</b>	79	---	---

**Depot:** VOLVO6174  
**Unique No:** 10808695  
**Signed:** Don Baldrige  
**Report Date:** 02 Jan 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

