



# CONSTRUCTION EQUIPMENT

## SW-28280-2 TNT VOLVO EC220EL 3 14182 - HYDRAULIC SYSTEM



**Sample No:** VCP435869  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SW-28280-2 TNT



### SAMPLE INFORMATION

Sample Number	VCP435869	---	---	---
Sample Date	23 Jan 2024	---	---	---
Machine Hours	2683	---	---	---
Oil Hours	2683	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

### ARNOLD MACHINERY COMPANY

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### OIL CONDITION

Visc @ 40°C	cSt	█ 40.2	---	---	---
Acid Number (AN)	mg KOH/g	█ 0.87	---	---	---



### CONTAMINATION

Water	%	▲ 0.209	---	---	---
Particles >4µm		█ 887	---	---	---
Particles >6µm		█ 483	---	---	---
Particles >14µm		█ 82	---	---	---
ISO 4406:1999 (c)		17/16/14	---	---	---
Silicon	ppm	█ 5	---	---	---
Sodium	ppm	█ 2	---	---	---
Potassium	ppm	█ <1	---	---	---

### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### WEAR METALS

Iron	ppm	█ 11	---	---	---
Copper	ppm	█ 24	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 1	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 0	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	<1	---	---	---



### ADDITIVES

Calcium	ppm	█ 127	---	---	---
Magnesium	ppm	█ <1	---	---	---
Zinc	ppm	█ 447	---	---	---
Phosphorus	ppm	█ 374	---	---	---
Barium	ppm	█ <1	---	---	---
Boron	ppm	█ 0	---	---	---

**Depot:** VOLVO8770  
**Unique No:** 10857753  
**Signed:** Jonathan Hester  
**Report Date:** 06 Feb 2024

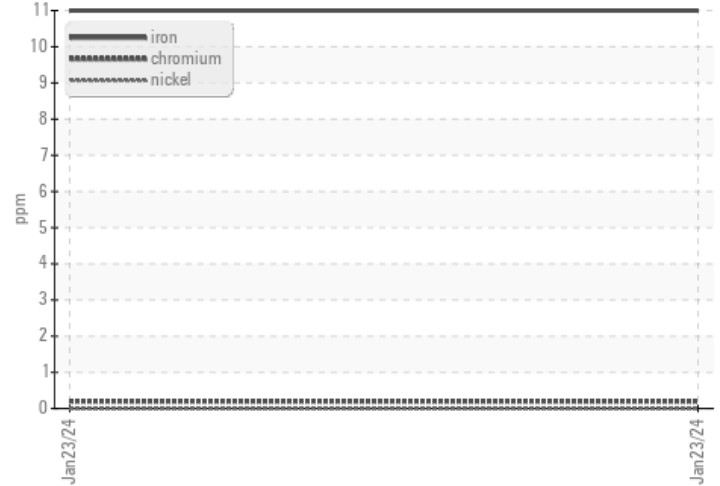


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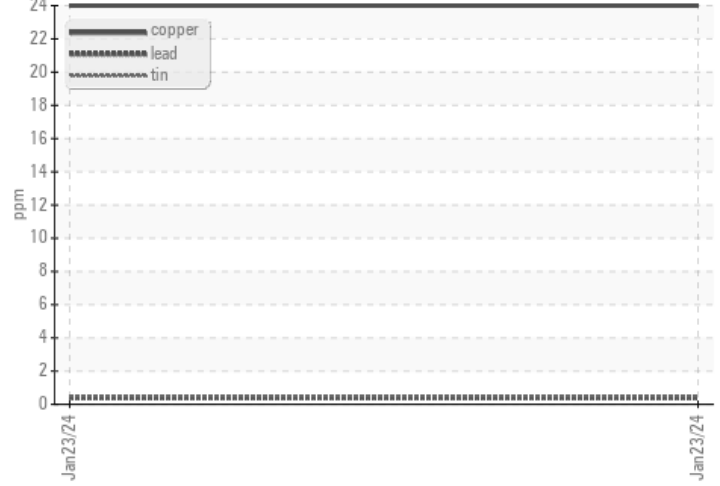


## GRAPHS

### Ferrous Alloys



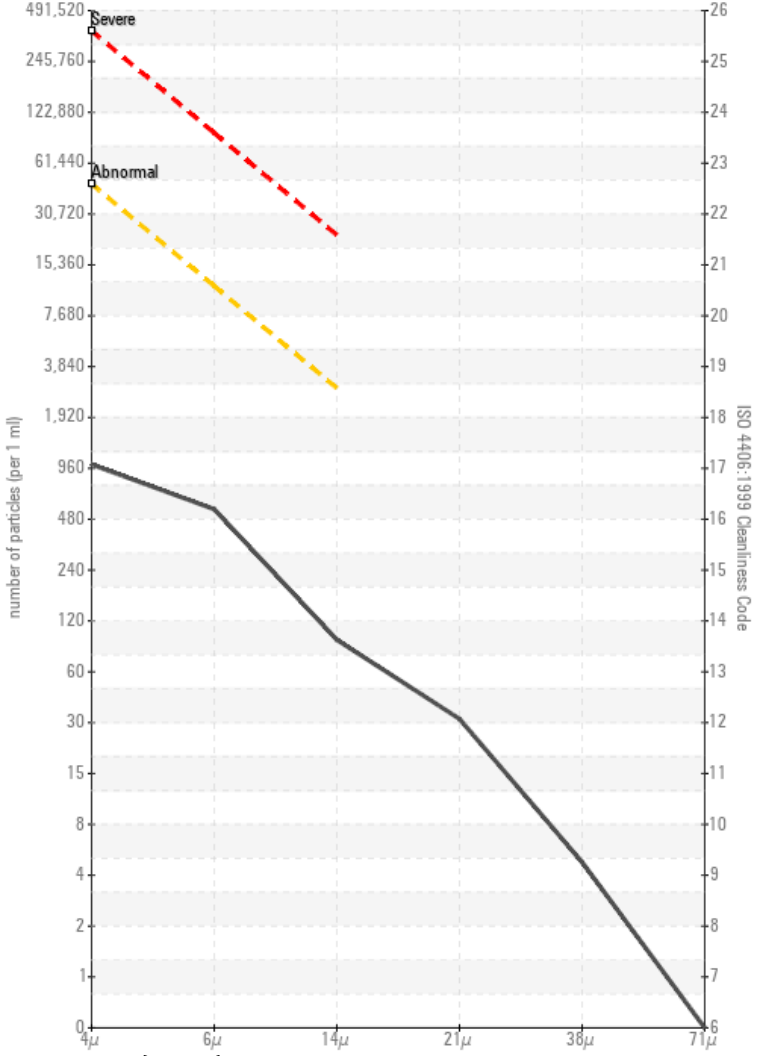
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

