



# CONSTRUCTION EQUIPMENT

SW1026383 UPPER VALL VOLVO EC160D 220030 - HYDRAULIC SYSTEM



**Sample No:** VCP435299  
**Oil Type:** AW HYDRAULIC OIL ISO 46  
**Job No:** SW1026383 UPPER VALL



## SAMPLE INFORMATION

Sample Number	VCP435299	---	---	---
Sample Date	13 Nov 2023	---	---	---
Machine Hours	5506	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	NORMAL	---	---	---

**ARNOLD MACHINERY COMPANY**  
 3330 NORTH YELLOWSTONE HIGHWAY  
 IDAHO FALLS, ID  
 US 83401  
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## OIL CONDITION

Visc @ 40°C	cSt	█ 45.9	---	---	---
Acid Number (AN)	mg KOH/g	█ 0.12	---	---	---



## CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		█ 1839	---	---	---
Particles >6µm		█ 272	---	---	---
Particles >14µm		█ 16	---	---	---
ISO 4406:1999 (c)		18/15/11	---	---	---
Silicon	ppm	█ 3	---	---	---
Sodium	ppm	█ 0	---	---	---
Potassium	ppm	█ 2	---	---	---

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



## WEAR METALS

Iron	ppm	█ 3	---	---	---
Copper	ppm	█ 35	---	---	---
Lead	ppm	█ 1	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ 2	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ <1	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	█ 0	---	---	---
Vanadium	ppm	0	---	---	---



## ADDITIVES

Calcium	ppm	█ 38	---	---	---
Magnesium	ppm	█ 2	---	---	---
Zinc	ppm	█ 103	---	---	---
Phosphorus	ppm	█ 158	---	---	---
Barium	ppm	█ 9	---	---	---
Boron	ppm	█ 0	---	---	---

**Depot:** VOLVO0077  
**Unique No:** 10753101  
**Signed:** Don Baldrige  
**Report Date:** 23 Nov 2023

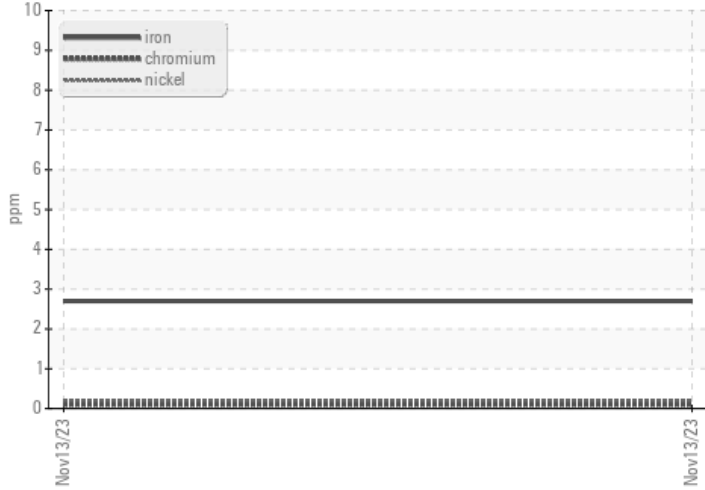


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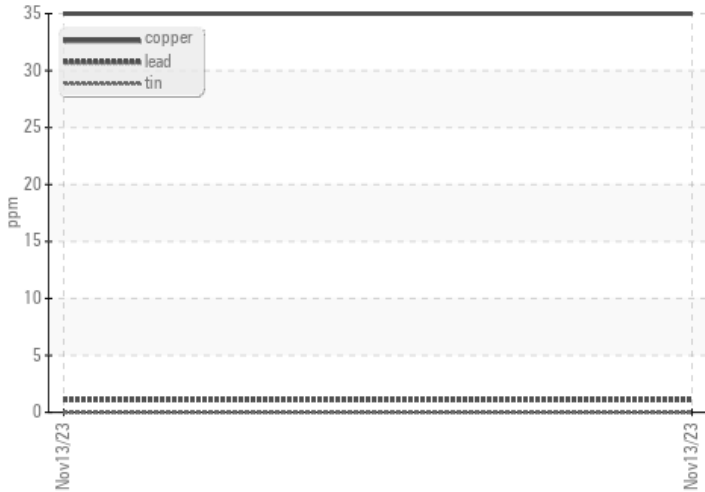


## GRAPHS

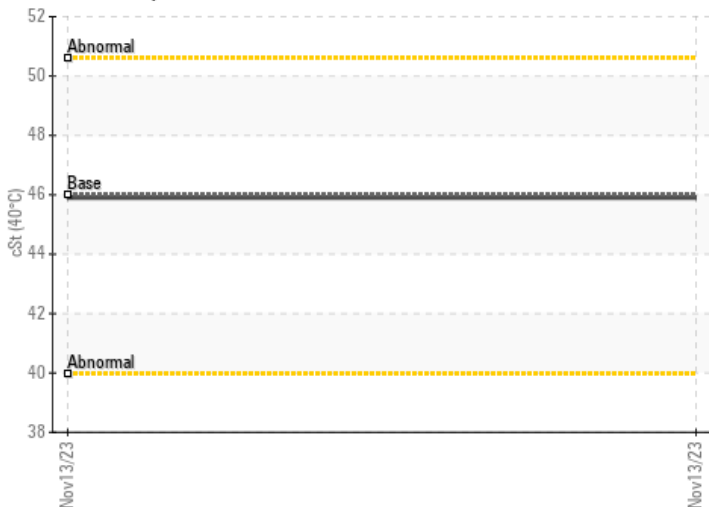
### Ferrous Alloys



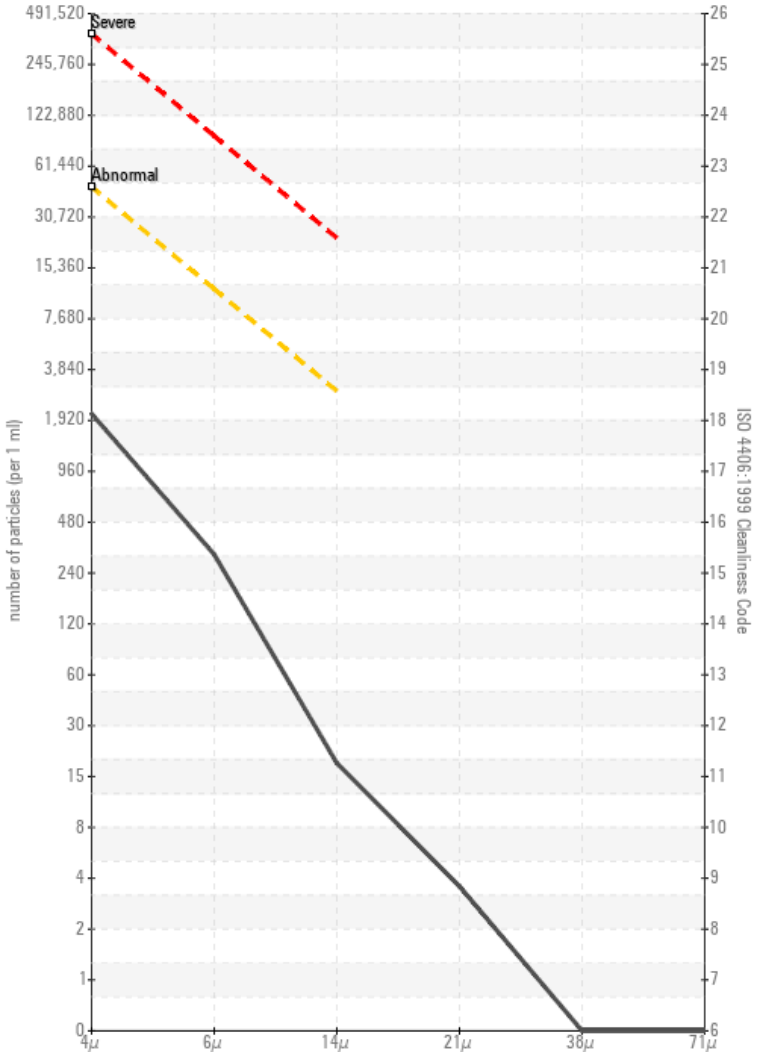
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

