



# CONSTRUCTION EQUIPMENT

## SWA401486 ACTION ENV VOLVO EC220DL 210391 - HYDRAULIC SYSTEM



**Sample No:** VCP436188  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWA401486 ACTION ENV



ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC  
 8418 PALM RIVER ROAD  
 TAMPA, FL  
 US 33619  
 Contact: JOHN FARDELLA  
 john.fardella@altg.com  
 T: (813)630-0077  
 F: (813)630-2233

### SAMPLE INFORMATION

Sample Number	VCP436188	---	---	---
Sample Date	01 Nov 2023	---	---	---
Machine Hours	4003	---	---	---
Oil Hours	2000	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	NORMAL	---	---	---

### OIL CONDITION

Visc @ 40°C	cSt	█ 42.2	---	---	---
Acid Number (AN)	mg KOH/g	█ 0.39	---	---	---

### CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		█ 9109	---	---	---
Particles >6µm		█ 1953	---	---	---
Particles >14µm		█ 130	---	---	---
ISO 4406:1999 (c)		20/18/14	---	---	---
Silicon	ppm	█ 10	---	---	---
Sodium	ppm	█ 6	---	---	---
Potassium	ppm	█ 9	---	---	---

### WEAR METALS

Iron	ppm	█ 16	---	---	---
Copper	ppm	█ 27	---	---	---
Lead	ppm	█ <1	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 2	---	---	---
Chromium	ppm	█ 3	---	---	---
Molybdenum	ppm	█ 5	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	0	---	---	---

### ADDITIVES

Calcium	ppm	█ 226	---	---	---
Magnesium	ppm	█ 12	---	---	---
Zinc	ppm	█ 446	---	---	---
Phosphorus	ppm	█ 356	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 5	---	---	---

### Diagnosis

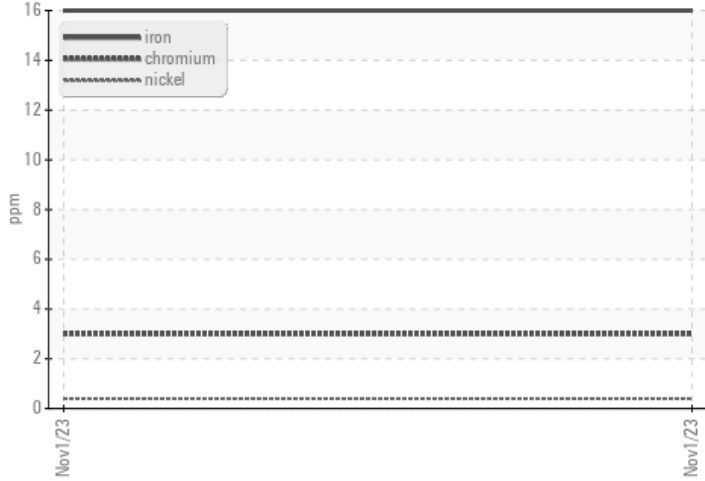
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**Depot:** VOLVO0093  
**Unique No:** 10764998  
**Signed:** Wes Davis  
**Report Date:** 30 Nov 2023

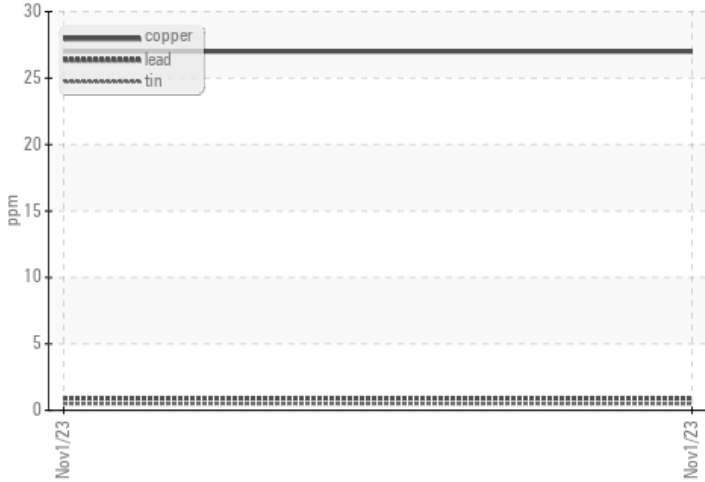


## GRAPHS

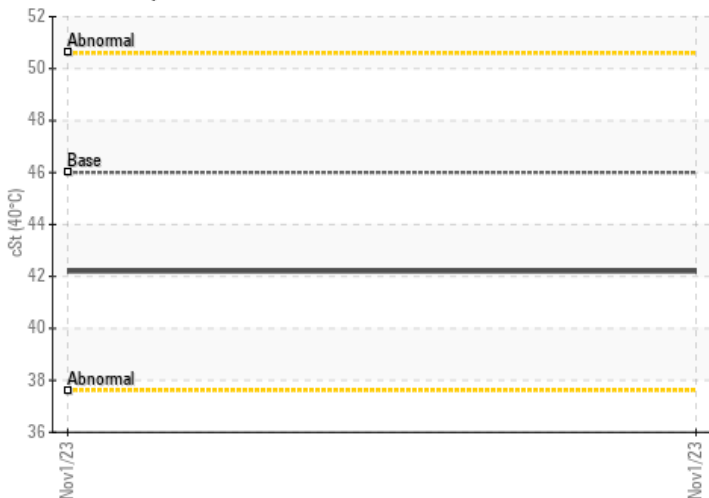
### Ferrous Alloys



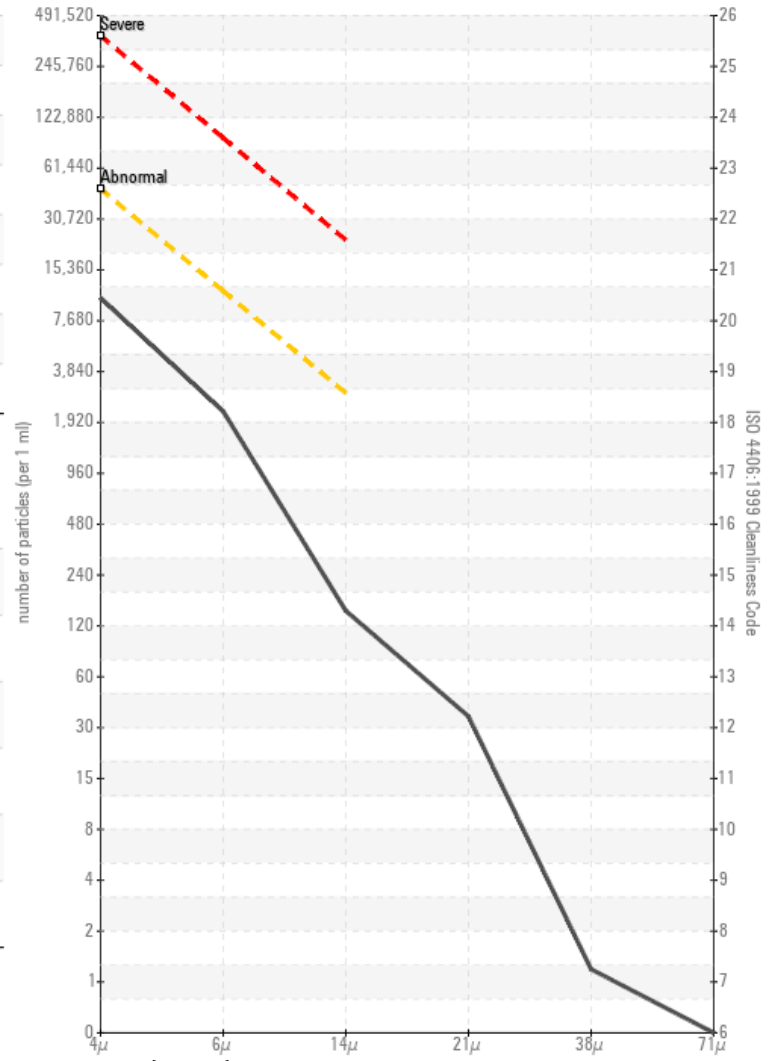
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

