



# CONSTRUCTION EQUIPMENT

S50402010 TYTAN MET SENNEBOGEN 840 840.0.2002 - DIESEL ENGINE



**Sample No:** VCP434473  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** S50402010 TYTAN MET



## SAMPLE INFORMATION

Sample Number	VCP434473	---	---	---
Sample Date	25 Oct 2023	---	---	---
Machine Hours	21961	---	---	---
Oil Hours	150	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	SEVERE	---	---	---

**VCES- VOLVO CONSTRUCTION EQUIPMENT**  
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## OIL CONDITION

Visc @ 100°C	cSt	▲ 7.2	---	---	---
Base Number (BN)	mg KOH/g	■ 5.9	---	---	---
Oxidation (PA)	%	■ 58	---	---	---

## CONTAMINATION

Soot %	%	■ 0.2	---	---	---
Nitration (PA)	%	■ 68	---	---	---
Sulfation (PA)	%	■ 50	---	---	---
Glycol	%	■ NEG	---	---	---
Fuel	%	● 30.0	---	---	---
Silicon	ppm	■ 10	---	---	---
Sodium	ppm	■ 5	---	---	---
Potassium	ppm	■ 3	---	---	---

### Diagnosis

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

## WEAR METALS

Iron	ppm	■ 8	---	---	---
Copper	ppm	■ <1	---	---	---
Lead	ppm	■ 0	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 3	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 30	---	---	---
Nickel	ppm	■ <1	---	---	---
Titanium	ppm	■ <1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 0	---	---	---
Vanadium	ppm	■ <1	---	---	---

## ADDITIVES

Calcium	ppm	■ 913	---	---	---
Magnesium	ppm	■ 481	---	---	---
Zinc	ppm	■ 567	---	---	---
Phosphorus	ppm	■ 517	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 118	---	---	---

**Depot:** VOLVO4486  
**Unique No:** 10713538  
**Signed:** Jonathan Hester  
**Report Date:** 31 Oct 2023

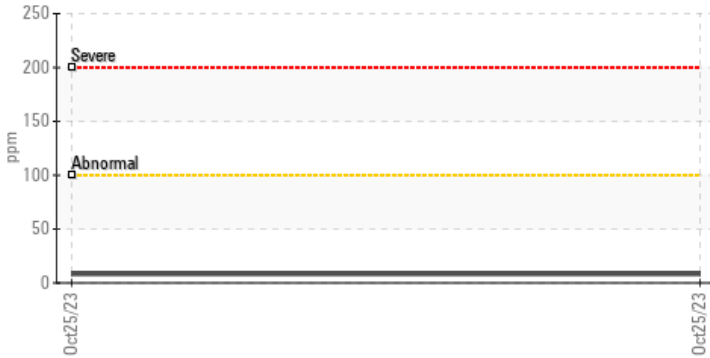


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## GRAPHS

### Iron (ppm)



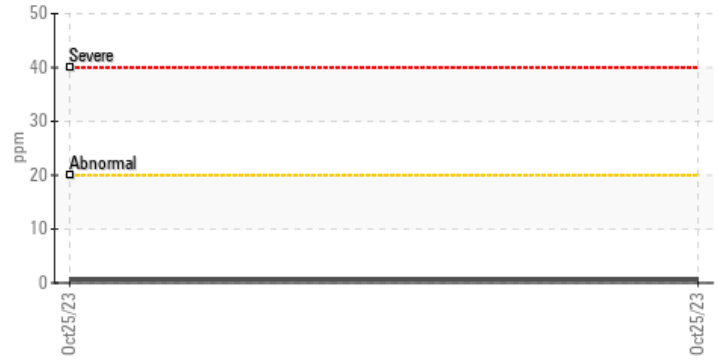
### Lead (ppm)



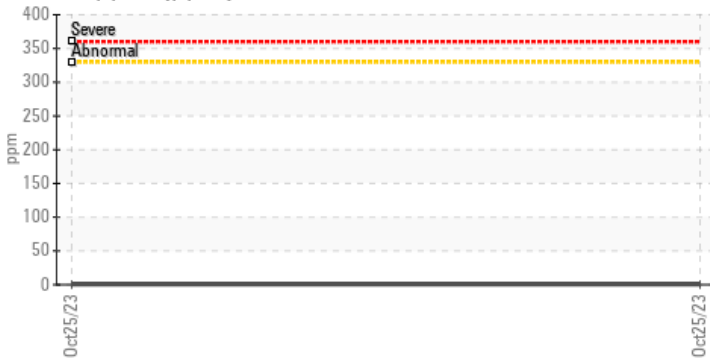
### Aluminum (ppm)



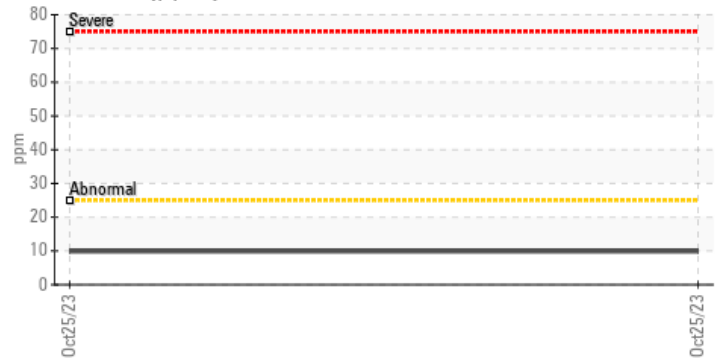
### Chromium (ppm)



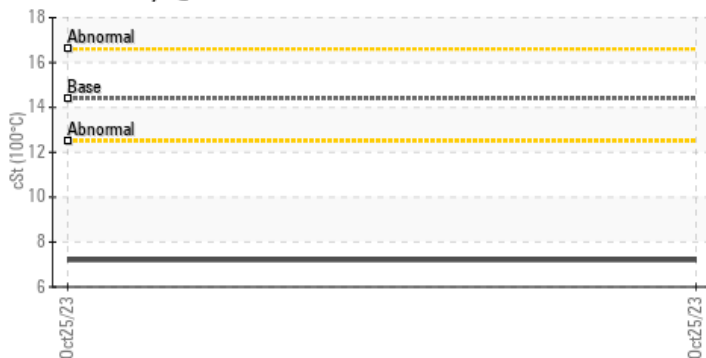
### Copper (ppm)



### Silicon (ppm)



### ▲ Viscosity @ 100°C



### Base Number

