



# CONSTRUCTION EQUIPMENT

SW1029866 HADCO CONS VOLVO EC200E 314315 - DIESEL ENGINE



**Sample No:** VCP440152  
**Oil Type:** {unknown}  
**Job No:** SW1029866 HADCO CONS



**ARNOLD MACHINERY COMPANY**  
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## SAMPLE INFORMATION

Sample Number	VCP440152	---	---	---
Sample Date	08 Feb 2024	---	---	---
Machine Hours	2924	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---



## OIL CONDITION

Visc @ 100°C	cSt	▲ 22.8	---	---	---
Base Number (BN)	mg KOH/g	■ 70.3	---	---	---
Oxidation (PA)	%	92	---	---	---



## CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.6	---	---	---
Nitration (PA)	%	198	---	---	---
Sulfation (PA)	%	5	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	▲ 21	---	---	---
Sodium	ppm	▲ 1706	---	---	---
Potassium	ppm	▲ 228	---	---	---



## WEAR METALS

Iron	ppm	■ 17	---	---	---
Copper	ppm	■ 5	---	---	---
Lead	ppm	■ 1	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	▲ 14	---	---	---
Chromium	ppm	■ 2	---	---	---
Molybdenum	ppm	■ 8	---	---	---
Nickel	ppm	■ 2	---	---	---
Titanium	ppm	■ 72	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	2	---	---	---
Vanadium	ppm	1	---	---	---



## ADDITIVES

Calcium	ppm	■ 1374	---	---	---
Magnesium	ppm	■ 349	---	---	---
Zinc	ppm	■ 1053	---	---	---
Phosphorus	ppm	■ 872	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 159	---	---	---

## Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

**Depot:** VOLV08770  
**Unique No:** 10876033  
**Signed:** Jonathan Hester  
**Report Date:** 19 Feb 2024



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## GRAPHS

