



# CONSTRUCTION EQUIPMENT

TRANSPORT LEASING VOLVO L220H 3569 - DIESEL ENGINE



**Sample No:** VCP440844  
**Oil Type:** MOBIL 15W40  
**Job No:** TRANSPORT LEASING



## SAMPLE INFORMATION

Sample Number	<b>VCP440844</b>	VCP401929	---	---
Sample Date	<b>01 Feb 2024</b>	18 Dec 2023	---	---
Machine Hours	<b>968</b>	544	---	---
Oil Hours	<b>0</b>	544	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>ATTENTION</b>	ABNORMAL	---	---

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## OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 12.1</b>	▲ 11.2	---	---
Base Number (BN)	mg KOH/g	<b>■ 7.2</b>	■ 6.2	---	---
Oxidation (PA)	%	<b>58</b>	61	---	---



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Soot %	%	<b>■ 0.2</b>	■ 0.2	---	---
Nitration (PA)	%	<b>63</b>	71	---	---
Sulfation (PA)	%	<b>52</b>	53	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>&lt;1.0</b>	■ 0.1	---	---
Silicon	ppm	<b>■ 9</b>	■ 22	---	---
Sodium	ppm	<b>■ 0</b>	■ 1	---	---
Potassium	ppm	<b>■ 2</b>	■ 4	---	---



## WEAR METALS

Iron	ppm	<b>■ 8</b>	■ 13	---	---
Copper	ppm	<b>▲ 65</b>	▲ 322	---	---
Lead	ppm	<b>■ 1</b>	■ <1	---	---
Tin	ppm	<b>■ 2</b>	■ 2	---	---
Aluminum	ppm	<b>■ 3</b>	■ 2	---	---
Chromium	ppm	<b>■ &lt;1</b>	■ <1	---	---
Molybdenum	ppm	<b>■ 82</b>	■ 85	---	---
Nickel	ppm	<b>■ 1</b>	■ <1	---	---
Titanium	ppm	<b>&lt;1</b>	0	---	---
Silver	ppm	<b>■ &lt;1</b>	■ 0	---	---
Manganese	ppm	<b>■ 2</b>	■ 2	---	---
Vanadium	ppm	<b>&lt;1</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>■ 1227</b>	■ 2115	---	---
Magnesium	ppm	<b>■ 796</b>	■ 53	---	---
Zinc	ppm	<b>■ 1141</b>	■ 1178	---	---
Phosphorus	ppm	<b>■ 958</b>	■ 950	---	---
Barium	ppm	<b>■ 0</b>	■ 0	---	---
Boron	ppm	<b>■ 31</b>	■ 47	---	---

## Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level has decreased, but is still abnormal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

**Depot:** VOLVO1835  
**Unique No:** 10869636  
**Signed:** Jonathan Hester  
**Report Date:** 09 Feb 2024



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## GRAPHS

