



# CONSTRUCTION EQUIPMENT

## 470397 VOLVO A30G 742550 - DIESEL ENGINE



**Sample No:** VCP441538

**Oil Type:** {unknown}

**Job No:** 470397



### SAMPLE INFORMATION

Sample Number	<b>VCP441538</b>	VCP315989	---	---
Sample Date	<b>07 Feb 2024</b>	29 Jun 2021	---	---
Machine Hours	<b>3960</b>	1310	---	---
Oil Hours	<b>0</b>	500	---	---
Oil Changed	<b>N/A</b>	Changed	---	---
Sample Status	<b>ABNORMAL</b>	ABNORMAL	---	---



### FREDERICK DERR AND COMPANY

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.4</b>	11.4	---	---
Base Number (BN)	mg KOH/g	<b>3.9</b>	---	---	---
Oxidation (PA)	%	<b>63</b>	82	---	---



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Soot %	%	<b>1.3</b>	0.5	---	---
Nitration (PA)	%	<b>85</b>	70	---	---
Sulfation (PA)	%	<b>68</b>	66	---	---
Glycol	%	<b>NEG</b>	NEG	---	---
Fuel	%	<b>3.2</b>	3.6	---	---
Silicon	ppm	<b>4</b>	5	---	---
Sodium	ppm	<b>2</b>	2	---	---
Potassium	ppm	<b>&lt;1</b>	0	---	---



### WEAR METALS

Iron	ppm	<b>23</b>	8	---	---
Copper	ppm	<b>2</b>	15	---	---
Lead	ppm	<b>&lt;1</b>	<1	---	---
Tin	ppm	<b>2</b>	<1	---	---
Aluminum	ppm	<b>2</b>	<1	---	---
Chromium	ppm	<b>&lt;1</b>	<1	---	---
Molybdenum	ppm	<b>83</b>	41	---	---
Nickel	ppm	<b>0</b>	0	---	---
Titanium	ppm	<b>&lt;1</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>&lt;1</b>	<1	---	---
Vanadium	ppm	<b>&lt;1</b>	0	---	---



### ADDITIVES

Calcium	ppm	<b>1972</b>	1728	---	---
Magnesium	ppm	<b>111</b>	542	---	---
Zinc	ppm	<b>1200</b>	1093	---	---
Phosphorus	ppm	<b>959</b>	975	---	---
Barium	ppm	<b>0</b>	0	---	---
Boron	ppm	<b>9</b>	22	---	---

### Diagnosis

The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The BN level is low. The condition of the oil is acceptable for the time in service.

**Depot:** FRESAR  
**Unique No:** 10871597  
**Signed:** Jonathan Hester  
**Report Date:** 13 Feb 2024



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## GRAPHS

