



# CONSTRUCTION EQUIPMENT

5025 RITCHIE BROS VOLVO L90F 68727 - DIESEL ENGINE



**Sample No:** VCP430535  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** 5025 RITCHIE BROS



## SAMPLE INFORMATION

Sample Number	<b>VCP430535</b>	VCP146007	VCP117969	---
Sample Date	<b>30 Nov 2023</b>	05 Mar 2013	12 Jun 2012	---
Machine Hours	<b>14949</b>	7258	6078	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Not Changed</b>	Changed	Changed	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---



**HIGHWAY EQUIPMENT & SUPPLY CO MAIN**  
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## OIL CONDITION

Visc @ 100°C	cSt	<b>13.5</b>	15.33	13.37	---
Base Number (BN)	mg KOH/g	<b>9.6</b>	---	---	---
Oxidation (PA)	%	<b>85</b>	60	28	---



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.3</b>	0.2	0	---
Nitration (PA)	%	<b>58</b>	58	33	---
Sulfation (PA)	%	<b>63</b>	53	39	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	---
Silicon	ppm	<b>9</b>	4	4	---
Sodium	ppm	<b>0</b>	4	3	---
Potassium	ppm	<b>2</b>	13	1	---



## WEAR METALS

Iron	ppm	<b>9</b>	8	6	---
Copper	ppm	<b>&lt;1</b>	<1	<1	---
Lead	ppm	<b>0</b>	<1	<1	---
Tin	ppm	<b>0</b>	0	<1	---
Aluminum	ppm	<b>1</b>	1	1	---
Chromium	ppm	<b>&lt;1</b>	<1	<1	---
Molybdenum	ppm	<b>43</b>	40	37	---
Nickel	ppm	<b>0</b>	<1	<1	---
Titanium	ppm	<b>&lt;1</b>	<1	0	---
Silver	ppm	<b>0</b>	0	0	---
Manganese	ppm	<b>0</b>	0	<1	---
Vanadium	ppm	<b>0</b>	0	0	---



## ADDITIVES

Calcium	ppm	<b>1674</b>	1525	1351	---
Magnesium	ppm	<b>531</b>	771	596	---
Zinc	ppm	<b>1118</b>	1088	881	---
Phosphorus	ppm	<b>944</b>	942	846	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>50</b>	31	32	---

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

**Depot:** VOLVO0025  
**Unique No:** 10769478  
**Signed:** Wes Davis  
**Report Date:** 06 Dec 2023



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## GRAPHS

