



# CONSTRUCTION EQUIPMENT

## 703489 IHFT SENNEBOGEN 830R 2296 - REAR RIGHT FINAL DRIVE



**Sample No:** VCP454550  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 703489 IHFT



### SAMPLE INFORMATION

Sample Number	<b>VCP454550</b>	VCP431177	VCP399395	---
Sample Date	<b>24 May 2024</b>	05 Dec 2023	09 Feb 2023	---
Machine Hours	<b>3753</b>	2444	619	---
Oil Hours	<b>1000</b>	1000	2000	---
Oil Changed	<b>Changed</b>	N/A	Changed	---
Sample Status	<b>ABNORMAL</b>	SEVERE	ABNORMAL	---

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### OIL CONDITION

Visc @ 40°C	cSt	<span style="color: green;">■</span> <b>160</b>	<span style="color: green;">■</span> 194	<span style="color: orange;">●</span> 154	---
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### CONTAMINATION

Water	%	<span style="color: orange;">▲</span> <b>0.269</b>	NEG	NEG	---
Silicon	ppm	<span style="color: orange;">▲</span> <b>187</b>	<span style="color: red;">▲</span> 600	<span style="color: orange;">▲</span> 82	---
Sodium	ppm	<span style="color: green;">■</span> <b>6</b>	<span style="color: green;">■</span> 19	<span style="color: green;">■</span> <1	---
Potassium	ppm	<span style="color: green;">■</span> <b>10</b>	<span style="color: green;">■</span> 28	<span style="color: green;">■</span> 4	---

### Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The iron level has decreased, but is still abnormal. The copper level has decreased, but is still abnormal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil. The condition of the oil is acceptable for the time in service.



### WEAR METALS

Iron	ppm	<span style="color: orange;">▲</span> <b>1176</b>	<span style="color: red;">▲</span> 3290	<span style="color: orange;">▲</span> 723	---
Copper	ppm	<span style="color: orange;">▲</span> <b>82</b>	<span style="color: red;">▲</span> 186	<span style="color: orange;">▲</span> 51	---
Lead	ppm	<span style="color: green;">■</span> <b>5</b>	<span style="color: green;">■</span> 13	<span style="color: green;">■</span> 5	---
Tin	ppm	<span style="color: green;">■</span> <b>2</b>	<span style="color: orange;">▲</span> 10	<span style="color: green;">■</span> <1	---
Aluminum	ppm	<span style="color: orange;">●</span> <b>39</b>	<span style="color: orange;">●</span> 131	<span style="color: orange;">●</span> 18	---
Chromium	ppm	<span style="color: green;">■</span> <b>7</b>	<span style="color: orange;">▲</span> 23	<span style="color: green;">■</span> 5	---
Molybdenum	ppm	<span style="color: green;">■</span> <b>1</b>	<span style="color: green;">■</span> 1	<span style="color: green;">■</span> <1	---
Nickel	ppm	<span style="color: green;">■</span> <b>2</b>	<span style="color: green;">■</span> 3	0	---
Titanium	ppm	<b>3</b>	10	2	---
Silver	ppm	<b>&lt;1</b>	0	0	---
Manganese	ppm	<span style="color: green;">■</span> <b>14</b>	<span style="color: green;">■</span> 37	<span style="color: green;">■</span> 7	---
Vanadium	ppm	<b>&lt;1</b>	<b>&lt;1</b>	0	---



### ADDITIVES

Calcium	ppm	<span style="color: green;">■</span> <b>271</b>	<span style="color: green;">■</span> 796	<span style="color: green;">■</span> 129	---
Magnesium	ppm	<span style="color: green;">■</span> <b>61</b>	<span style="color: green;">■</span> 188	<span style="color: green;">■</span> 26	---
Zinc	ppm	<span style="color: green;">■</span> <b>32</b>	<span style="color: green;">■</span> 43	<span style="color: green;">■</span> 13	---
Phosphorus	ppm	<span style="color: green;">■</span> <b>1345</b>	<span style="color: green;">■</span> 587	<span style="color: green;">■</span> 1778	---
Barium	ppm	<span style="color: green;">■</span> <b>0</b>	<span style="color: green;">■</span> <1	<span style="color: green;">■</span> 2	---
Boron	ppm	<span style="color: green;">■</span> <b>79</b>	<span style="color: green;">■</span> 57	<span style="color: green;">■</span> 118	---

**Depot:** VOLVO2990  
**Unique No:** 11049300  
**Signed:** Don Baldrige  
**Report Date:** 30 May 2024



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## GRAPHS

