



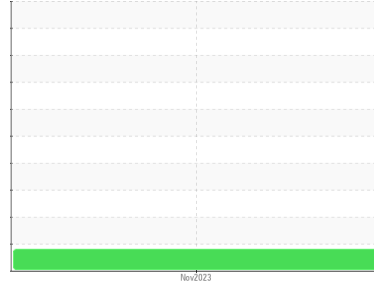
# PROBLEM SUMMARY

Sample Rating Trend

**WEAR**

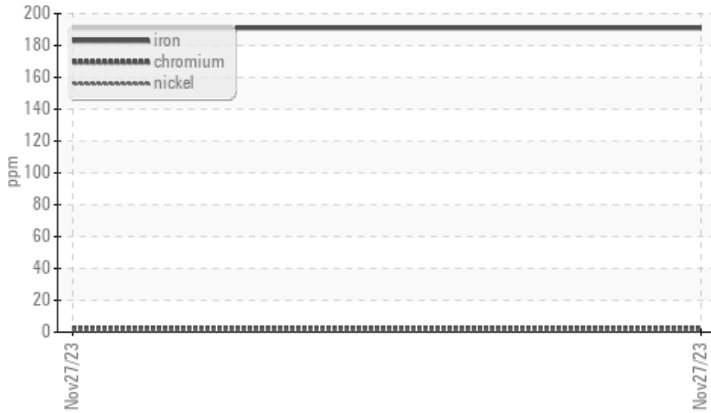


Area  
**ONE WORLD LOGISTICS [NSE207127]**  
 Machine Id  
**VOLVO OWL207127**  
 Component  
**Diesel Engine**  
 Fluid  
**NOT GIVEN (--- GAL)**



## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



## RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Iron	ppm	ASTM D5185m	>100	▲ 191	---	---

**Customer Id:** KIRRAI  
**Sample No.:** NL0001604  
**Lab Number:** 06025664  
**Test Package:** FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



Area  
**ONE WORLD LOGISTICS [NSE207127]**  
 Machine Id  
**VOLVO OWL207127**  
 Component  
**Diesel Engine**  
 Fluid  
**NOT GIVEN (--- GAL)**



## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### ▲ Wear

Cylinder, crank, or cam shaft wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>NL0001604</b>	---	---
Sample Date	Client Info		<b>27 Nov 2023</b>	---	---
Machine Age	mls Client Info		<b>414218</b>	---	---
Oil Age	mls Client Info		<b>411443</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<b>&lt;1.0</b>	---	---
Water	WC Method	>0.2	<b>NEG</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>100	<b>▲ 191</b>	---	---
Chromium	ppm ASTM D5185m	>20	<b>3</b>	---	---
Nickel	ppm ASTM D5185m	>2	<b>1</b>	---	---
Titanium	ppm ASTM D5185m		<b>0</b>	---	---
Silver	ppm ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m	>25	<b>4</b>	---	---
Lead	ppm ASTM D5185m	>40	<b>2</b>	---	---
Copper	ppm ASTM D5185m	>330	<b>23</b>	---	---
Tin	ppm ASTM D5185m	>15	<b>1</b>	---	---
Vanadium	ppm ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm ASTM D5185m		<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m		<b>0</b>	---	---
Barium	ppm ASTM D5185m		<b>3</b>	---	---
Molybdenum	ppm ASTM D5185m		<b>77</b>	---	---
Manganese	ppm ASTM D5185m		<b>1</b>	---	---
Magnesium	ppm ASTM D5185m		<b>1148</b>	---	---
Calcium	ppm ASTM D5185m		<b>1627</b>	---	---
Phosphorus	ppm ASTM D5185m		<b>1259</b>	---	---
Zinc	ppm ASTM D5185m		<b>1680</b>	---	---
Sulfur	ppm ASTM D5185m		<b>3021</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	<b>12</b>	---	---
Sodium	ppm ASTM D5185m		<b>4</b>	---	---
Potassium	ppm ASTM D5185m	>20	<b>7</b>	---	---

## INFRA-RED

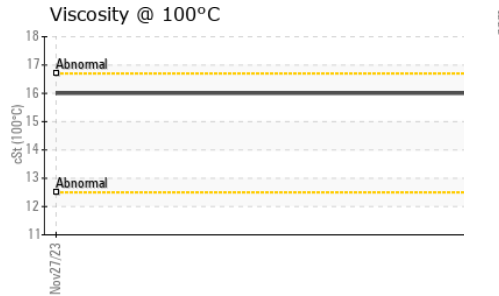
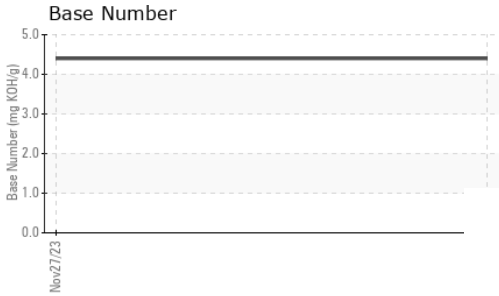
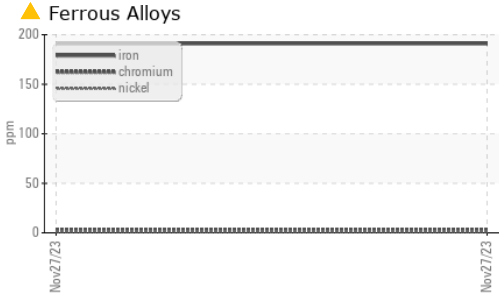
	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3	<b>2</b>	---	---
Nitration	Abs/cm *ASTM D7624	>20	<b>18.4</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	<b>36.1</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>38.2</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896		<b>4.4</b>	---	---



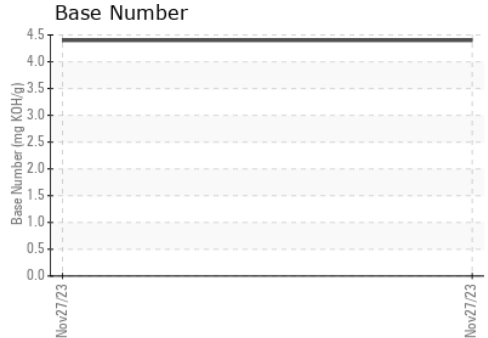
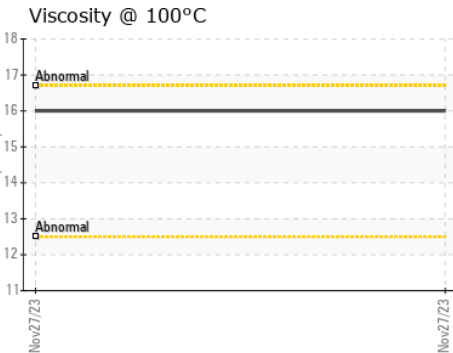
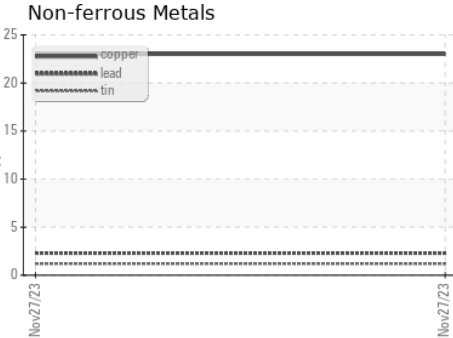
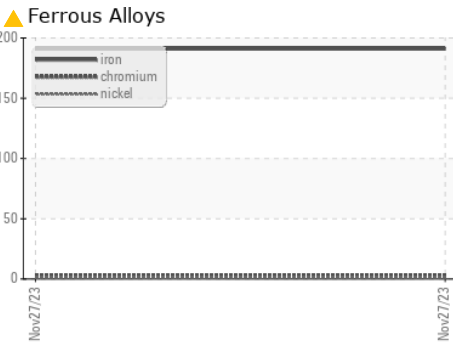
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	16.0	---	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : NL0001604 **Received** : 05 Dec 2023  
**Lab Number** : 06025664 **Diagnosed** : 07 Dec 2023  
**Unique Number** : 10770164 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**KIRK NATIONALEASE - SHOP 49**  
 601 England Rd.  
 Lincoln, AL  
 US 35096  
 Contact: Skip Womack  
 shop49@knl.cc  
 T: (205)548-3004  
 F: (205)548-3006

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)