



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**[W07014112]**  
Machine Id  
**VOLVO L220H 3091**  
Component  
**Transmission (Auto)**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP447958</b>	---	---
Sample Date		Client Info		<b>10 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>11633</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

### WEAR

The iron level is severe.

Iron	ppm	ASTM D5185m	>160	<b>719</b>	---	---
Chromium	ppm	ASTM D5185m	>5	<b>5</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>50	<b>6</b>	---	---
Lead	ppm	ASTM D5185m	>50	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>225	<b>16</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

There is no indication of any contamination in the fluid.

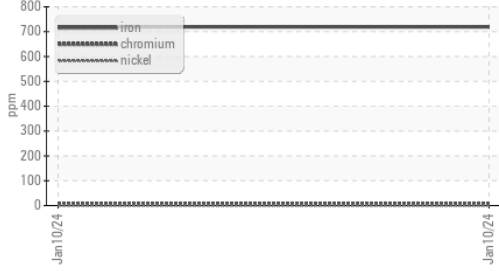
Silicon	ppm	ASTM D5185m	>20	<b>21</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---

### FLUID CONDITION

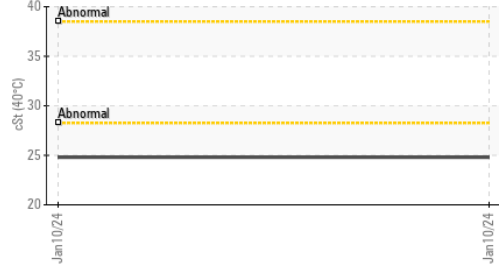
The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m		<b>2</b>	---	---
Boron	ppm	ASTM D5185m		<b>44</b>	---	---
Barium	ppm	ASTM D5185m		<b>6</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>15</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>1</b>	---	---
Calcium	ppm	ASTM D5185m		<b>90</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>225</b>	---	---
Zinc	ppm	ASTM D5185m		<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>1685</b>	---	---
Visc @ 40°C	cSt	ASTM D445		<b>24.8</b>	---	---

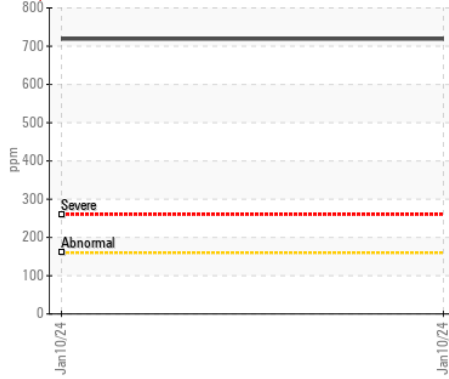
**Ferrous Alloys**



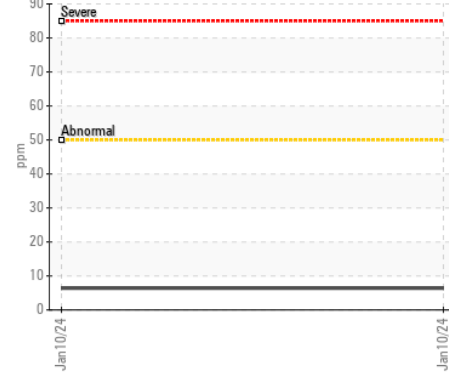
**Viscosity @ 40°C**



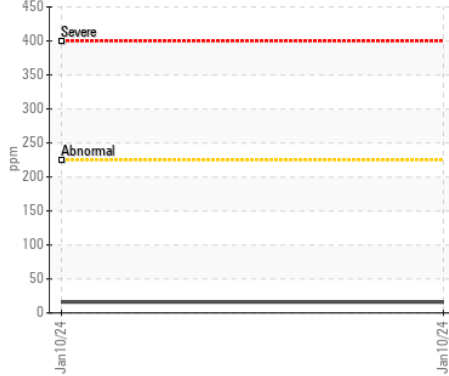
**Iron (ppm)**



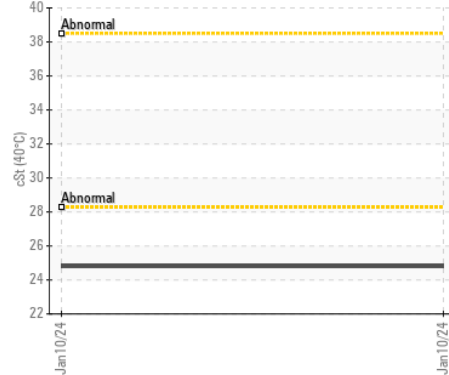
**Aluminum (ppm)**



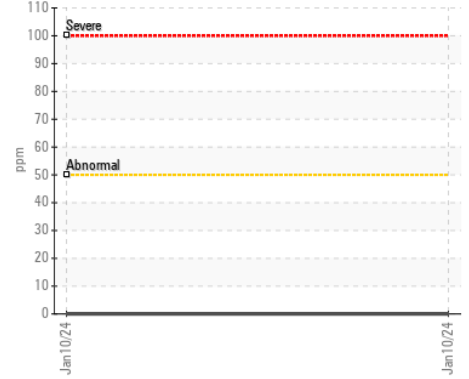
**Copper (ppm)**



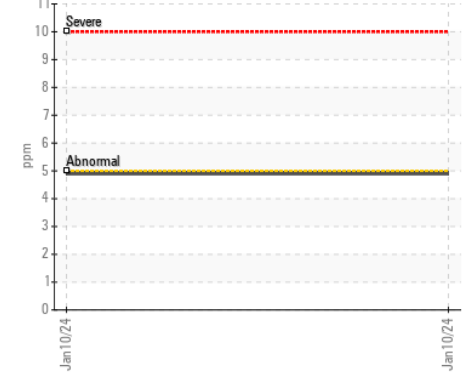
**Viscosity @ 40°C**



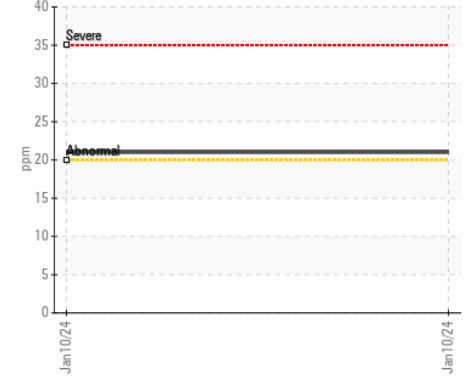
**Lead (ppm)**



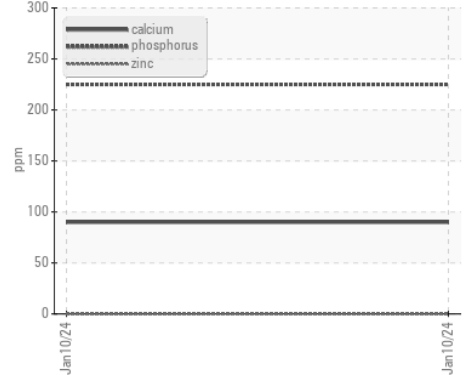
**Chromium (ppm)**



**Silicon (ppm)**



**Additives**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP447958 **Received** : 17 Jan 2024  
**Lab Number** : 06063234 **Diagnosed** : 19 Jan 2024  
**Unique Number** : 10834616 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1

**MORGAN LUMBER**  
 628 JEB STUART HWY  
 RED OAK, VA  
 US 23964  
 Contact: Service Manager

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)

T:  
F: