



# PROBLEM SUMMARY

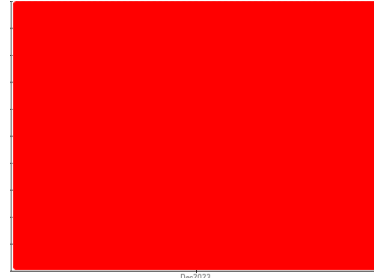
Sample Rating Trend

WEAR

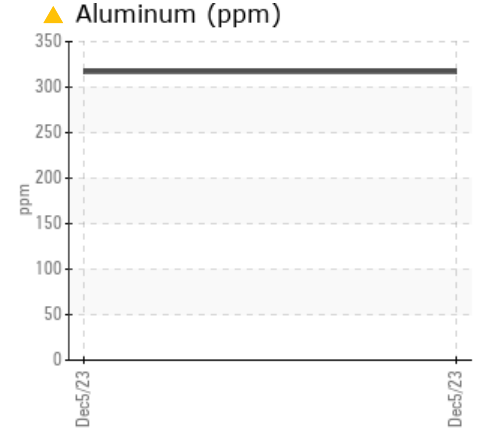
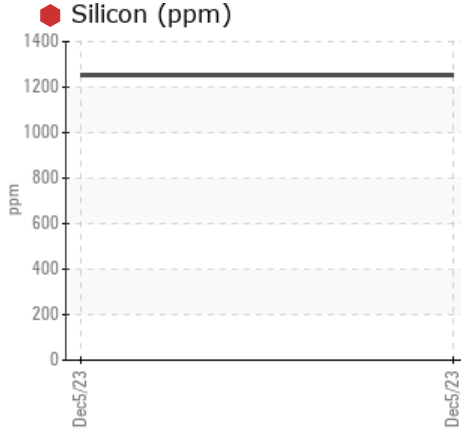
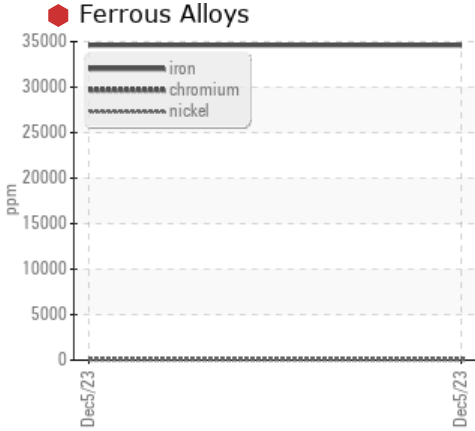


Machine Id  
**L91 (S/N 3007795956-300)**

Component  
**Circulating System**  
Fluid  
**NOT GIVEN (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Microscope image review: Sludge is primarily abrasives (dirt) and ferrous debris. Wear present seems to have significant thermal discoloration suggesting extreme temperatures during formation. Wear modes were not readily available from the extreme amount of contamination, but larger debris appeared to be fatigue or sliding wear most likely.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	34611	---	---	---
Chromium	ppm	ASTM D5185m	120	---	---	---
Nickel	ppm	ASTM D5185m	105	---	---	---
Titanium	ppm	ASTM D5185m	20	---	---	---
Aluminum	ppm	ASTM D5185m	317	---	---	---
Silicon	ppm	ASTM D5185m	1253	---	---	---
PrtFilter				no image	no image	no image

Customer Id: SIEKAN  
Sample No.: WC0811633  
Lab Number: 06029022  
Test Package: IND 1



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Aaron Black +1  
[aaron.black@wearcheck.com](mailto:aaron.black@wearcheck.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 Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

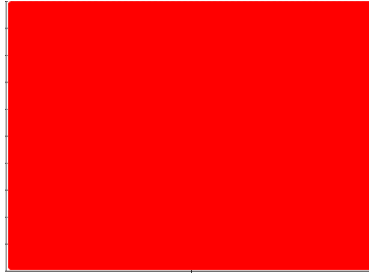
Sample Rating Trend

WEAR



Machine Id  
**L91 (S/N 3007795956-300)**

Component  
**Circulating System**  
Fluid  
**NOT GIVEN (--- GAL)**



## DIAGNOSIS

### Recommendation

Microscope image review: Sludge is primarily abrasives (dirt) and ferrous debris. Wear present seems to have significant thermal discoloration suggesting extreme temperatures during formation. Wear modes were not readily available from the extreme amount of contamination, but larger debris appeared to be fatigue or sliding wear most likely.

### Wear

Chromium and nickel, titanium and iron ppm levels are severe. Aluminum ppm levels are abnormal.

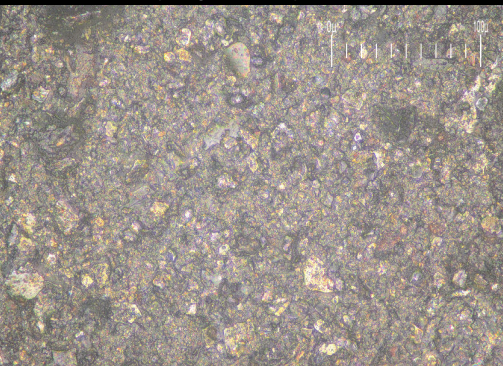
### Contamination

High concentration of dirt present in the oil. High amount of ingressed dirt has caused abrasive wear to the component.

### Fluid Condition

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

Particle Filter (Magn: 500 x)



## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0811633</b>	---	---
Sample Date	Client Info		<b>05 Dec 2023</b>	---	---
Machine Age	mls	Client Info	<b>0</b>	---	---
Oil Age	mls	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	<b>34611</b>	---	---
Chromium	ppm	ASTM D5185m	<b>120</b>	---	---
Nickel	ppm	ASTM D5185m	<b>105</b>	---	---
Titanium	ppm	ASTM D5185m	<b>20</b>	---	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	<b>317</b>	---	---
Lead	ppm	ASTM D5185m	<b>9</b>	---	---
Copper	ppm	ASTM D5185m	<b>146</b>	---	---
Tin	ppm	ASTM D5185m	<b>11</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>14</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>9</b>	---	---

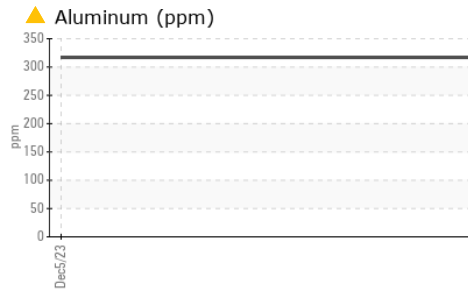
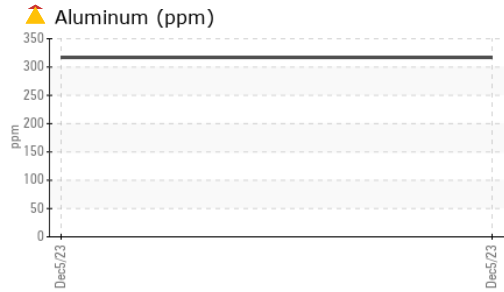
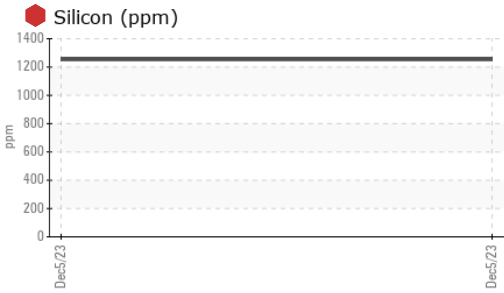
## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>23</b>	---	---
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>134</b>	---	---
Manganese	ppm	ASTM D5185m	<b>710</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>107</b>	---	---
Calcium	ppm	ASTM D5185m	<b>667</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>27</b>	---	---
Zinc	ppm	ASTM D5185m	<b>4</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>52</b>	---	---

## CONTAMINANTS

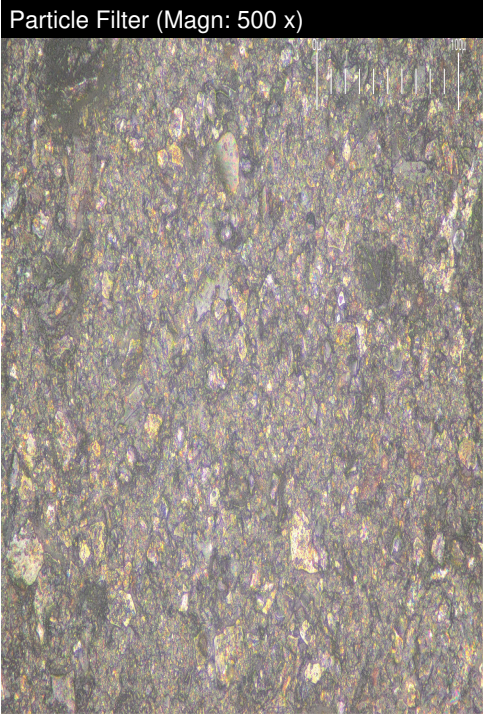
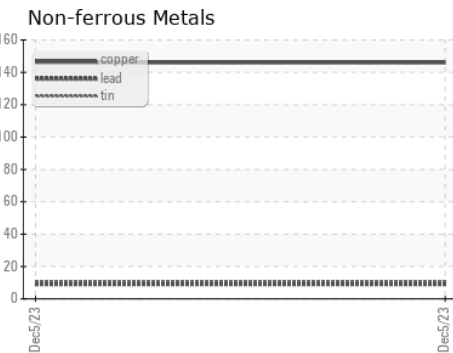
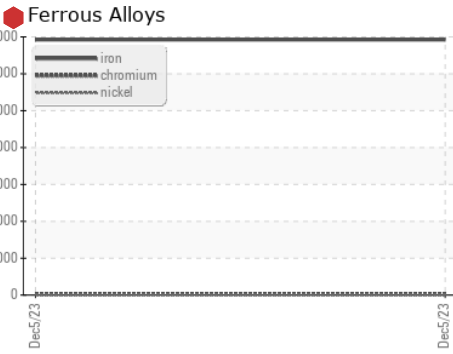
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<b>1253</b>	---	---
Sodium	ppm	ASTM D5185m	<b>40</b>	---	---
Potassium	ppm	ASTM D5185m	<b>7</b>	---	---

# OIL ANALYSIS REPORT



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image
PrtFilter				no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0811633      **Received** : 07 Dec 2023  
**Lab Number** : 06029022      **Diagnosed** : 13 Dec 2023  
**Unique Number** : 10778813      **Diagnostician** : Aaron Black  
**Test Package** : IND 1 ( Additional Tests: PrtFilter, PRTFILTERPIC )

**SIEMENS INDUSTRY INC.**  
 4140 E. FRONT ST.  
 KANSAS CITY, MO  
 US 64120  
 Contact: BRIAN JOHNSON

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)

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F: