



# PROBLEM SUMMARY

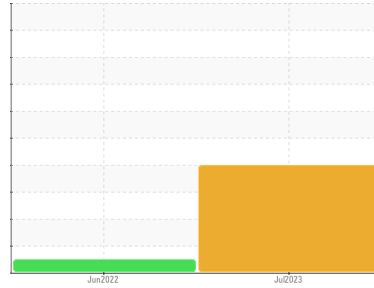
Area  
**[J85397]**

Machine Id  
**1171**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-460 (2 QTS)**

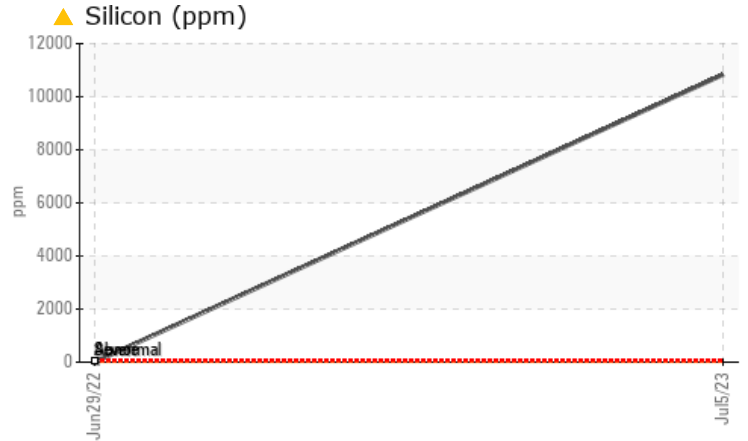
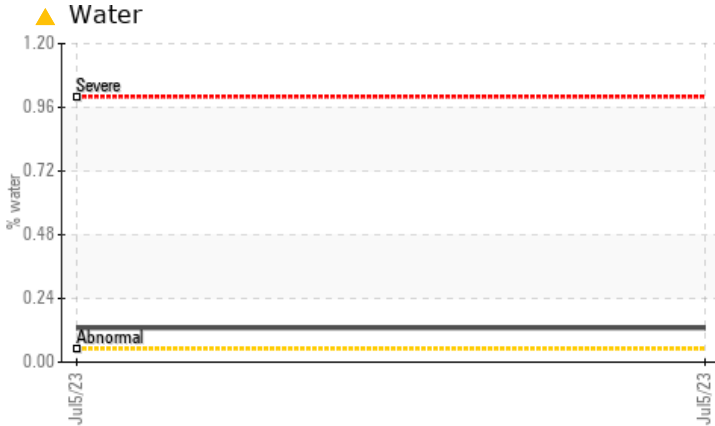
Sample Rating Trend



**WATER**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	---
Silicon	ppm	ASTM D5185m	>25	▲ <b>10835</b>	<1	---
Water	%	ASTM D6304	>0.05	▲ <b>0.129</b>	---	---
ppm Water	ppm	ASTM D6304	>500	▲ <b>1290</b>	---	---
Appearance	scalar	*Visual	NORML	▲ <b>HAZY</b>	NORML	---

Customer Id: THENORMA  
 Sample No.: WC0772051  
 Lab Number: 05924928  
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@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.
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

29 Jun 2022 Diag: Jonathan Hester

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

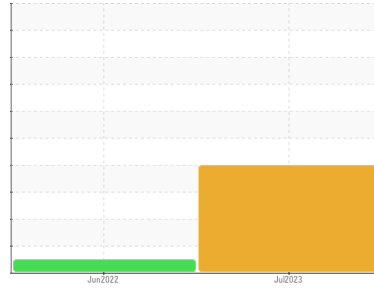
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**[J85397]**  
 Machine Id  
**1171**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (2 QTS)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

Appearance is hazy. There is a light concentration of water present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

### Fluid Condition

Confirm oil type. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0772051</b>	WC0692347	---
Sample Date	Client Info		<b>05 Jul 2023</b>	29 Jun 2022	---
Machine Age	hrs	Client Info	<b>4815</b>	4147	---
Oil Age	hrs	Client Info	<b>1800</b>	1147	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >50	<b>3</b>	4	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 90	<b>71</b>	33	---
Calcium	ppm	ASTM D5185m 2	<b>&lt;1</b>	<1	---
Phosphorus	ppm	ASTM D5185m	<b>3</b>	8	---
Zinc	ppm	ASTM D5185m	<b>17</b>	15	---
Sulfur	ppm	ASTM D5185m	<b>22199</b>	18206	---

## CONTAMINANTS

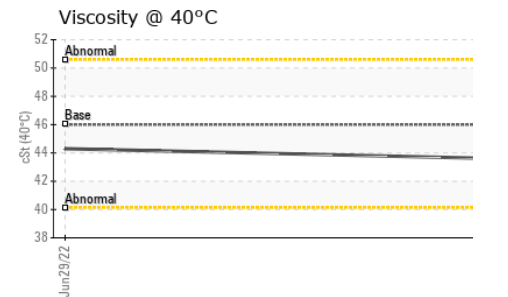
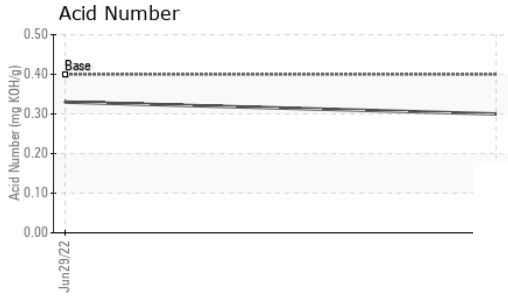
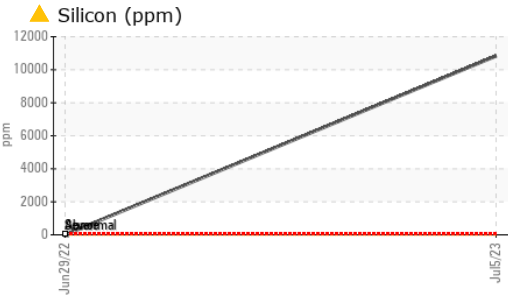
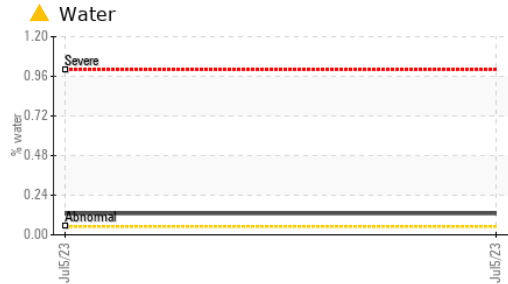
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>▲ 10835</b>	<1	---
Sodium	ppm	ASTM D5185m	<b>23</b>	10	---
Potassium	ppm	ASTM D5185m >20	<b>5</b>	0	---
Water	%	ASTM D6304 >0.05	<b>▲ 0.129</b>	---	---
ppm Water	ppm	ASTM D6304 >500	<b>▲ 1290</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.30</b>	0.33	---



# 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	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	▲ HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	43.6	44.3

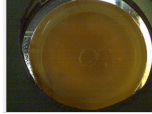

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

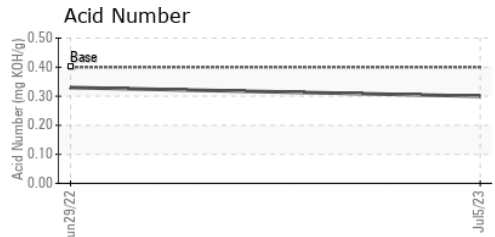
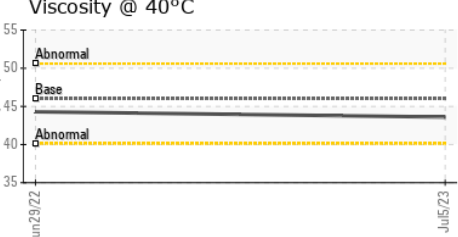
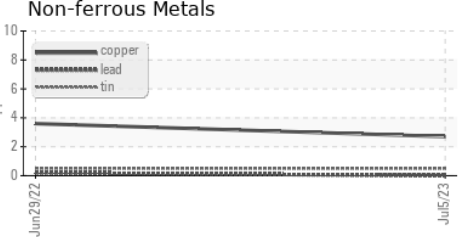
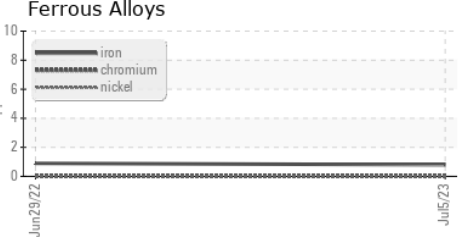
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0772051      **Received** : 15 Aug 2023  
**Lab Number** : 05924928      **Diagnosed** : 16 Aug 2023  
**Unique Number** : 10604875      **Diagnostician** : Jonathan Hester  
**Test Package** : PLANT

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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