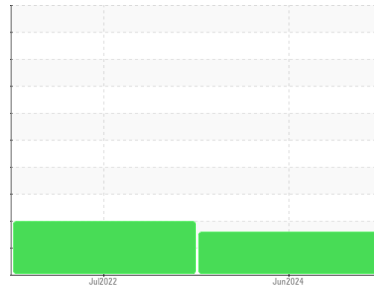




# OIL ANALYSIS REPORT

## Sample Rating Trend



## SEDIMENT



Machine Id  
**1420664 (S/N 01812759)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- QTS)**

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of visible silt present in the sample.

#### Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA018111</b>	KCP40549	---
Sample Date	Client Info			<b>03 Jun 2024</b>	11 Jul 2022	---
Machine Age	hrs	Client Info		<b>58025</b>	47002	---
Oil Age	hrs	Client Info		<b>5000</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>3</b>	6	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</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>32</b>	23	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

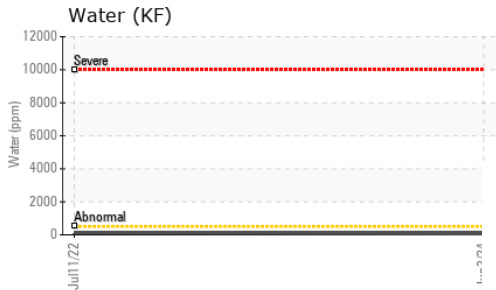
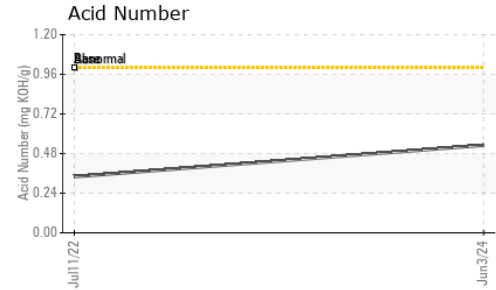
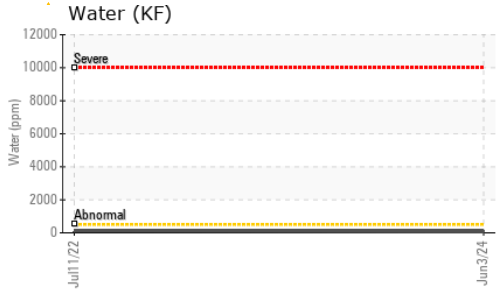
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	100	<b>0</b>	1	---
Calcium	ppm	ASTM D5185m	0	<b>1</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>4</b>	24	---
Zinc	ppm	ASTM D5185m	0	<b>0</b>	4	---
Sulfur	ppm	ASTM D5185m	23500	<b>13073</b>	11494	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>3</b>	0	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Water	%	ASTM D6304	>0.05	<b>0.007</b>	0.012	---
ppm Water	ppm	ASTM D6304	>500	<b>74</b>	125.4	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	157297	---
Particles >6µm		ASTM D7647	>1300	---	<b>57962</b>	---
Particles >14µm		ASTM D7647	>80	---	<b>1992</b>	---
Particles >21µm		ASTM D7647	>20	---	<b>256</b>	---
Particles >38µm		ASTM D7647	>4	---	<b>9</b>	---
Particles >71µm		ASTM D7647	>3	---	<b>0</b>	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	<b>24/23/18</b>	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.53</b>	0.34	---

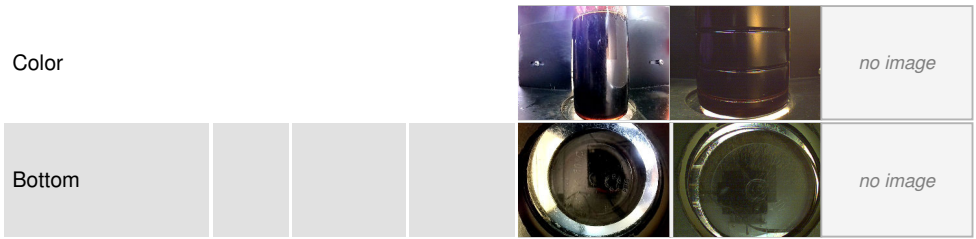
# OIL ANALYSIS REPORT



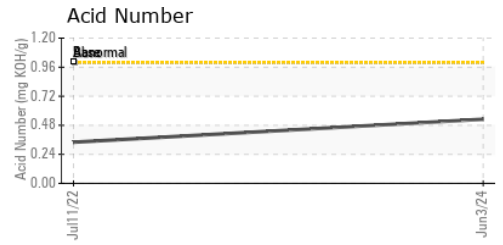
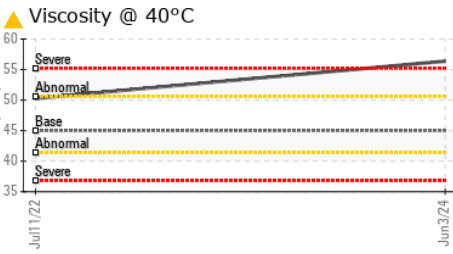
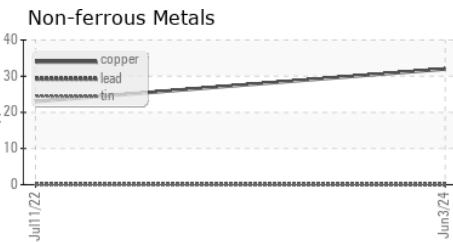
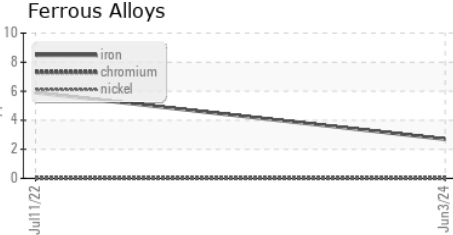
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	▲ 56.38	50.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018111 **Received** : 10 Jun 2024  
**Lab Number** : 06205419 **Tested** : 18 Jun 2024  
**Unique Number** : 11072880 **Diagnosed** : 18 Jun 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**WEST MARINE PRODUCTS**  
 860 MARINE DR  
 ROCK HILL, SC  
 US 29730  
 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)