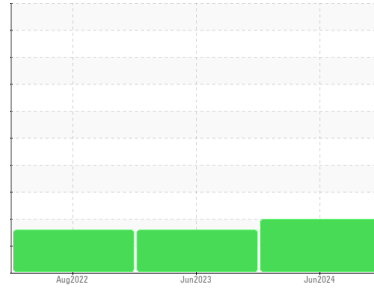




# OIL ANALYSIS REPORT

## Sample Rating Trend



**WATER**



Machine Id

**2248869 (S/N 1033)**

Component

**Compressor**

Fluid

**KAESER SIGMA (OEM) M-460 (--- QTS)**

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend an early resample in 500 hours to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

#### Fluid Condition

The AN level is acceptable for this fluid. 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>KCPA015004</b>	KCPA003953	KCP40639
Sample Date	Client Info		<b>03 Jun 2024</b>	08 Jun 2023	02 Aug 2022
Machine Age	hrs	Client Info	<b>57462</b>	55269	52521
Oil Age	hrs	Client Info	<b>3000</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0
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>	3
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0
Copper	ppm	ASTM D5185m	>50	<b>7</b>	8
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1
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>	5
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1
Magnesium	ppm	ASTM D5185m	100	<b>&lt;1</b>	2
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0
Phosphorus	ppm	ASTM D5185m	0	<b>2</b>	4
Zinc	ppm	ASTM D5185m	0	<b>2</b>	16
Sulfur	ppm	ASTM D5185m	23500	<b>18916</b>	20482

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1
Water	%	ASTM D6304	>0.05	<b>▲ 0.106</b>	0.007
ppm Water	ppm	ASTM D6304	>500	<b>▲ 1060</b>	71.3

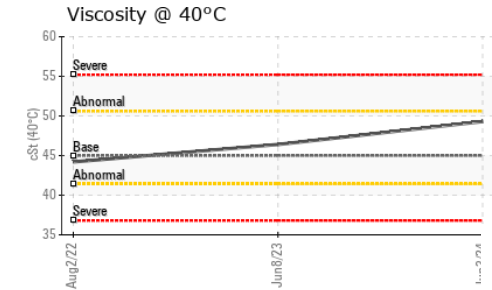
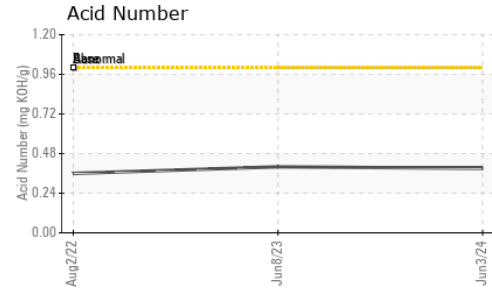
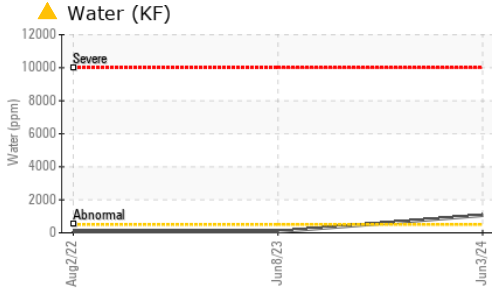
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	12091	6693
Particles >6µm	ASTM D7647	>1300	---	▲ 2963	● 2132
Particles >14µm	ASTM D7647	>80	---	▲ 125	▲ 217
Particles >21µm	ASTM D7647	>20	---	▲ 22	▲ 50
Particles >38µm	ASTM D7647	>4	---	2	5
Particles >71µm	ASTM D7647	>3	---	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	▲ 21/19/14	▲ 20/18/15

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.39</b>	0.40

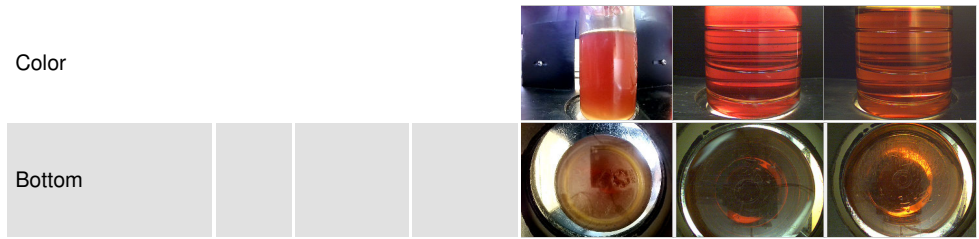
# OIL ANALYSIS REPORT



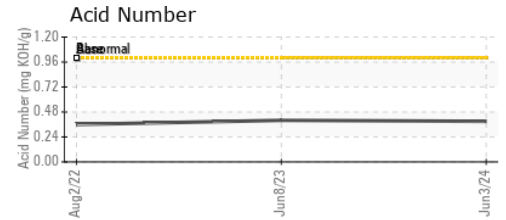
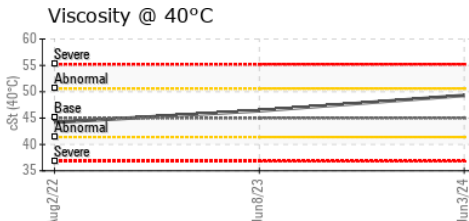
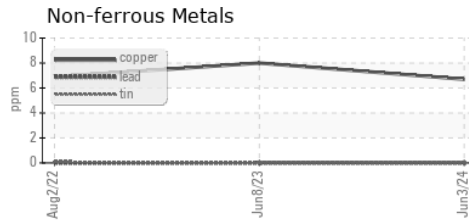
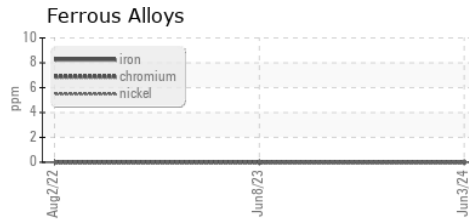
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	49.3	46.4

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA015004 **Received** : 06 Jun 2024  
**Lab Number** : 06202014 **Tested** : 10 Jun 2024  
**Unique Number** : 11069475 **Diagnosed** : 10 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

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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 bbell@cde.com

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