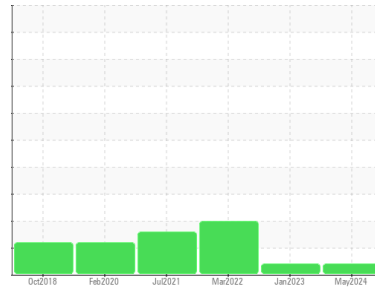




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**KAESER SM 15T 5401461 (S/N 1278)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### 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>KCPA012596</b>	KCP52216	KCP44210
Sample Date	Client Info			<b>02 May 2024</b>	16 Jan 2023	28 Mar 2022
Machine Age	hrs	Client Info		<b>46118</b>	41320	36972
Oil Age	hrs	Client Info		<b>4798</b>	0	3821
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	2
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>2</b>	16	38
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

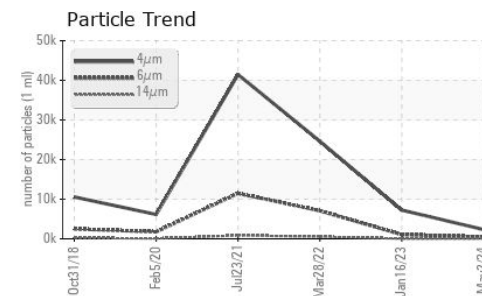
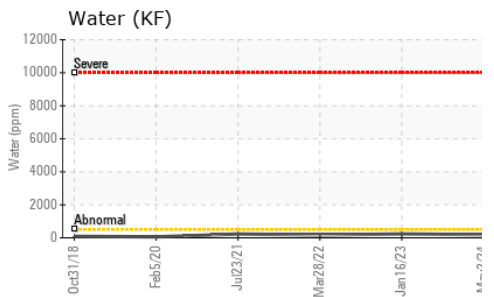
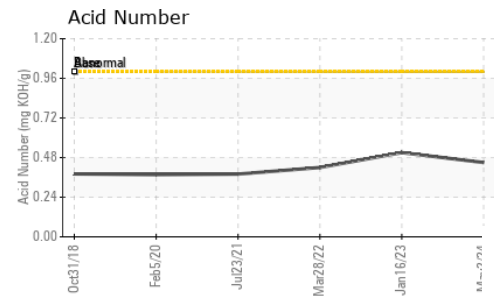
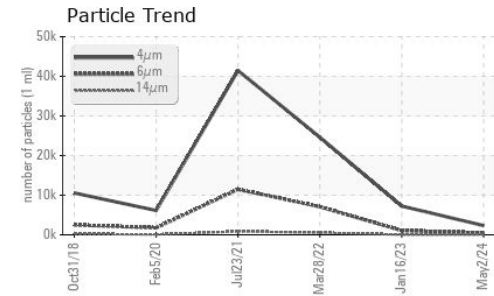
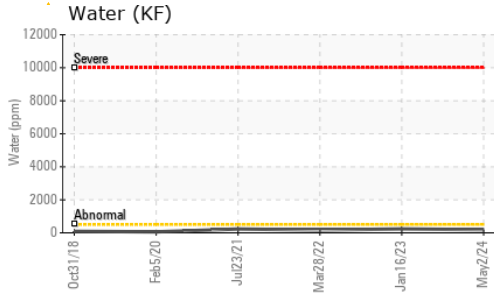
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>31</b>	6	5
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>67</b>	37	35
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	6	10
Zinc	ppm	ASTM D5185m	0	<b>13</b>	96	127
Sulfur	ppm	ASTM D5185m	23500	<b>25546</b>	22330	16955

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	1
Sodium	ppm	ASTM D5185m		<b>7</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	1
Water	%	ASTM D6304	>0.05	<b>0.018</b>	0.023	0.016
ppm Water	ppm	ASTM D6304	>500	<b>188</b>	237.5	167.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>2331</b>	7246	24622
Particles >6µm		ASTM D7647	>1300	<b>444</b>	1073	▲ 7081
Particles >14µm		ASTM D7647	>80	<b>31</b>	37	▲ 535
Particles >21µm		ASTM D7647	>20	<b>8</b>	5	▲ 100
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	▲ 6
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>18/16/12</b>	20/17/12	▲ 20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.45</b>	0.51	0.42

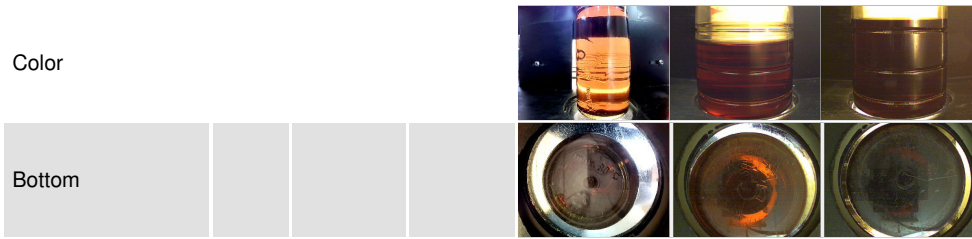
# OIL ANALYSIS REPORT



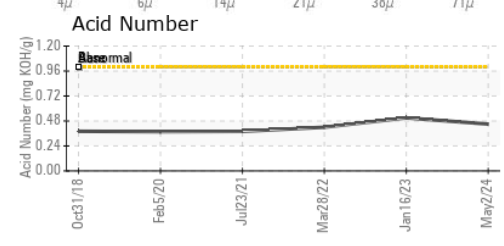
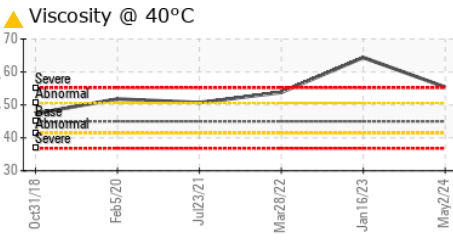
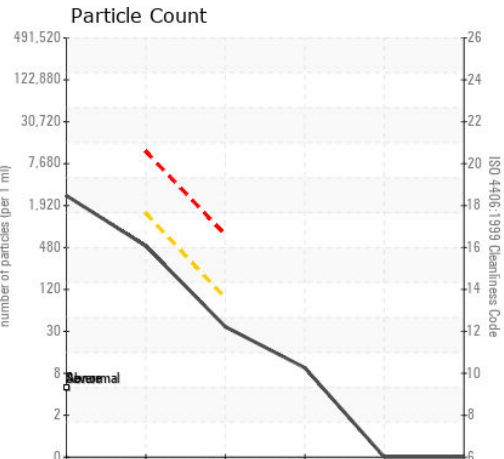
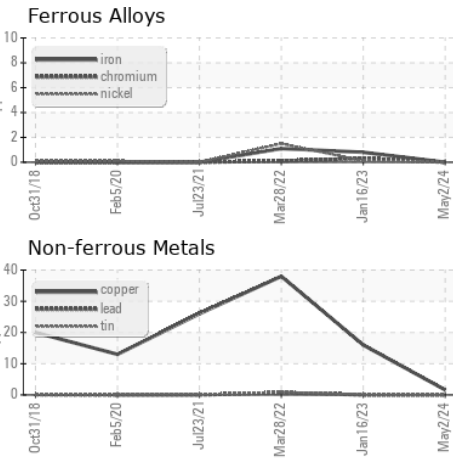
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	▲ 55.4	▲ 64.39

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA012596 **Received** : 09 May 2024  
**Lab Number** : 06174637 **Tested** : 13 May 2024  
**Unique Number** : 11020690 **Diagnosed** : 13 May 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**BLUE RING STENCILS**  
 140 MT HOLLY BYPASS  
 LUMBERTON, NJ  
 US 08046  
 Contact: J. HERNANDEZ  
 jhernandez@blueringstencils.com

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)