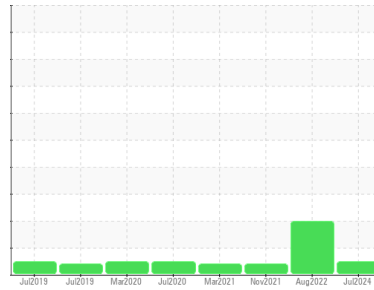




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER BSD 60T 6421616 (S/N 1237)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

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

#### Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA020079</b>	KCP28502	KCP43977
Sample Date	Client Info			<b>11 Jul 2024</b>	29 Aug 2022	15 Nov 2021
Machine Age	hrs	Client Info		<b>20814</b>	14341	10411
Oil Age	hrs	Client Info		<b>1947</b>	3930	5943
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>7</b>	13	14
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

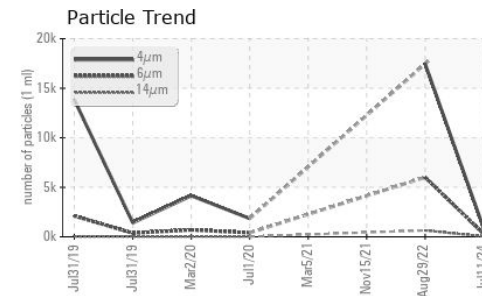
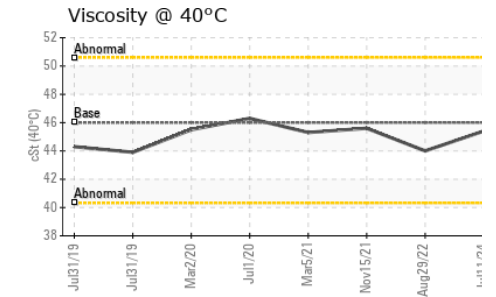
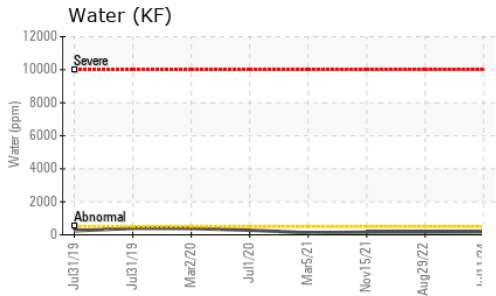
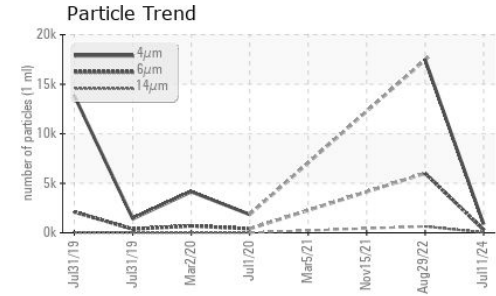
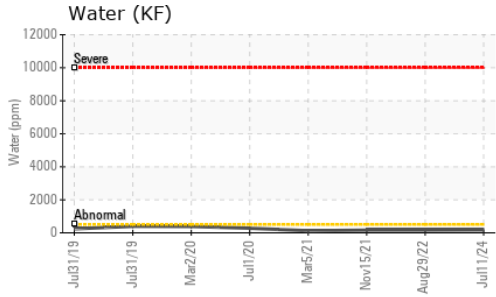
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	90	<b>19</b>	14	11
Calcium	ppm	ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>3</b>	0	0
Zinc	ppm	ASTM D5185m		<b>13</b>	18	32
Sulfur	ppm	ASTM D5185m		<b>21015</b>	16266	16246

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Sodium	ppm	ASTM D5185m		<b>5</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	5	2
Water	%	ASTM D6304	>0.05	<b>0.017</b>	0.016	0.016
ppm Water	ppm	ASTM D6304	>500	<b>175</b>	161.6	160.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>876</b>	17462	---
Particles >6µm		ASTM D7647	>1300	<b>305</b>	▲ 6012	---
Particles >14µm		ASTM D7647	>80	<b>39</b>	▲ 641	---
Particles >21µm		ASTM D7647	>20	<b>11</b>	▲ 185	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	▲ 7	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>17/15/12</b>	▲ 21/20/17	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.36</b>	0.32	0.353

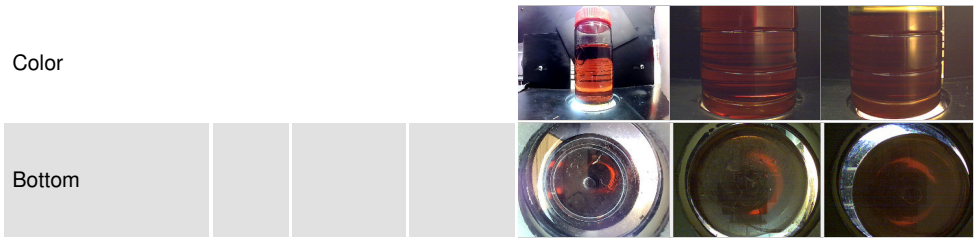
# OIL ANALYSIS REPORT



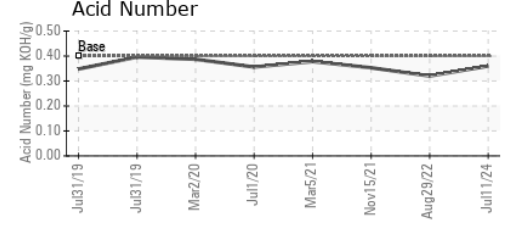
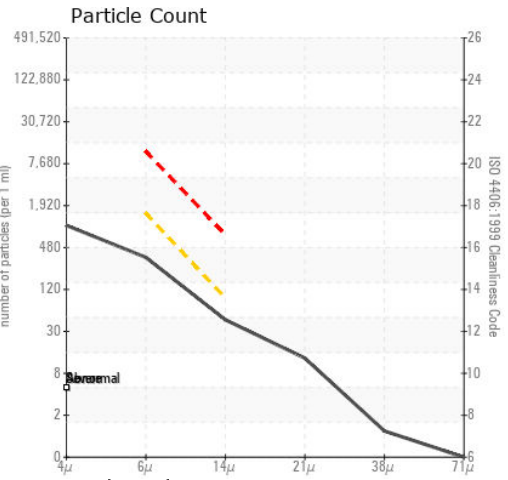
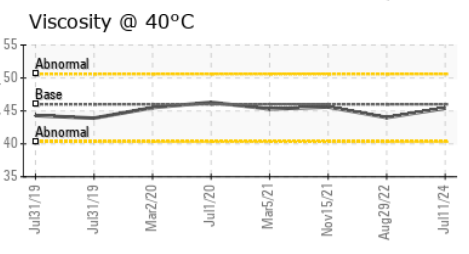
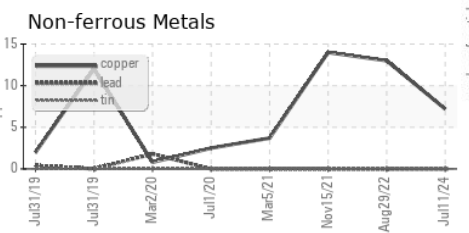
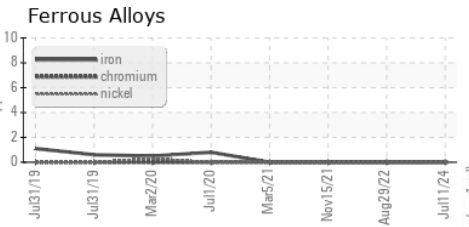
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT ▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	45.4	44.0

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA020079 **Received** : 16 Jul 2024  
**Lab Number** : 06238421 **Tested** : 17 Jul 2024  
**Unique Number** : 11127255 **Diagnosed** : 18 Jul 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**M & M INDUSTRIES INC**  
 1435 E 14TH ST  
 CHATTANOOGA, TN  
 US 37404  
 Contact: J. PILGRIM  
 jpilgrim@mmcontainer.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)