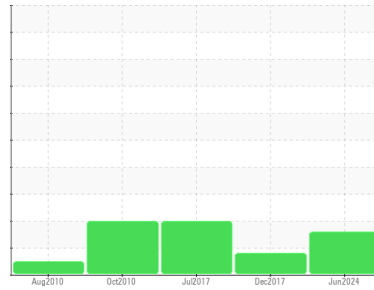


# OIL ANALYSIS REPORT

## Sample Rating Trend



**DEGRADATION**



Machine Id  
**KAESER ESD 300 1873977 (S/N 1004)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for a possible overheat condition. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

### 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 AN level is above the recommended limit. The oil viscosity is higher than normal.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA018792</b>	KCP05497	KCP02701
Sample Date	Client Info		<b>25 Jun 2024</b>	13 Dec 2017	31 Jul 2017
Machine Age	hrs	Client Info	<b>66767</b>	36208	34232
Oil Age	hrs	Client Info	<b>3000</b>	1216	3000
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	ATTENTION	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>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>1</b>	<1	0
Copper	ppm	ASTM D5185m >50	<b>13</b>	6	10
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>23</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 90	<b>1</b>	<1	0
Calcium	ppm	ASTM D5185m 2	<b>2</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>14</b>	<1	<1
Zinc	ppm	ASTM D5185m	<b>23</b>	<1	<1
Sulfur	ppm	ASTM D5185m	<b>70</b>	12948	11832

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>4</b>	<1	<1
Water	%	ASTM D6304 >0.05	<b>0.049</b>	0.004	0.006
ppm Water	ppm	ASTM D6304 >500	<b>495</b>	40	60

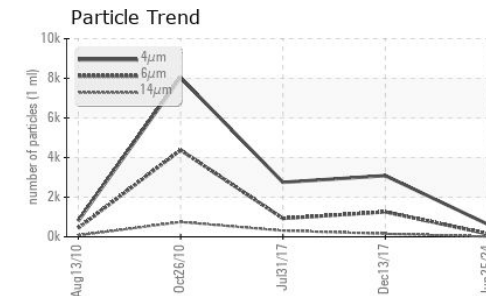
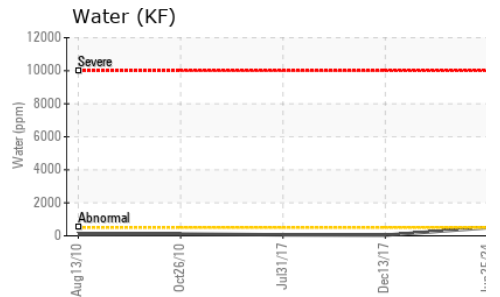
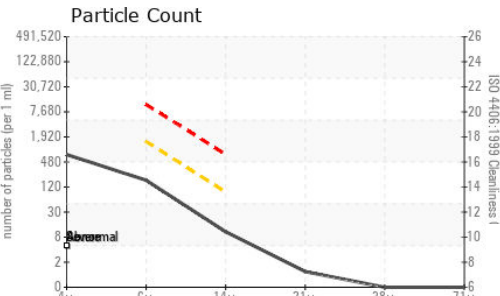
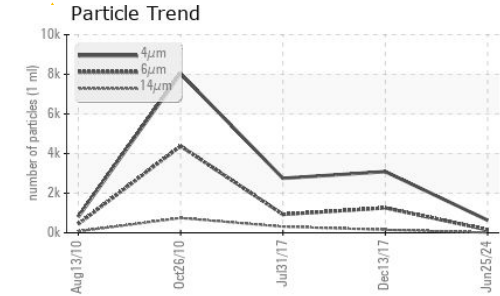
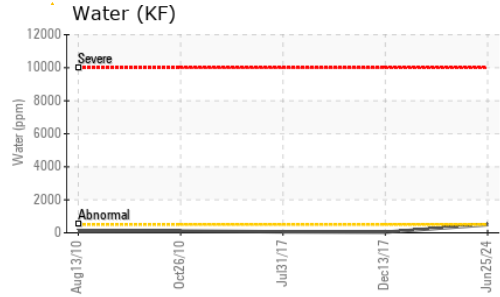
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>636</b>	3089	2750
Particles >6µm	ASTM D7647 >1300		<b>154</b>	1260	929
Particles >14µm	ASTM D7647 >80		<b>9</b>	152	310
Particles >21µm	ASTM D7647 >20		<b>1</b>	25	176
Particles >38µm	ASTM D7647 >4		<b>0</b>	0	38
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	5
Oil Cleanliness	ISO 4406 (c) >--/17/13		<b>16/14/10</b>	17/14	17/15

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>1.98</b>	0.524	0.456

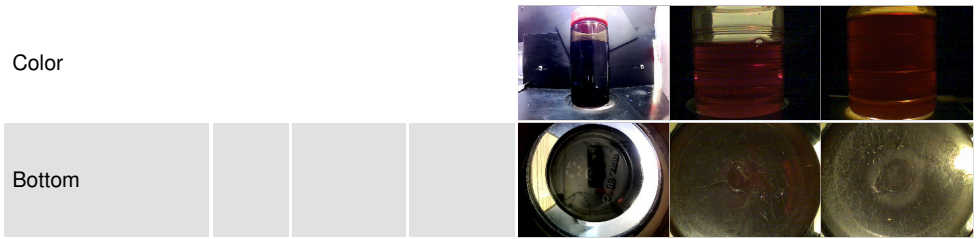
# OIL ANALYSIS REPORT



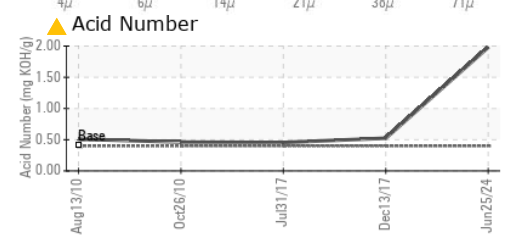
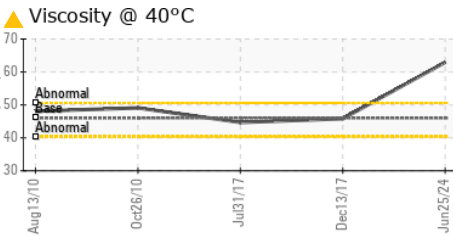
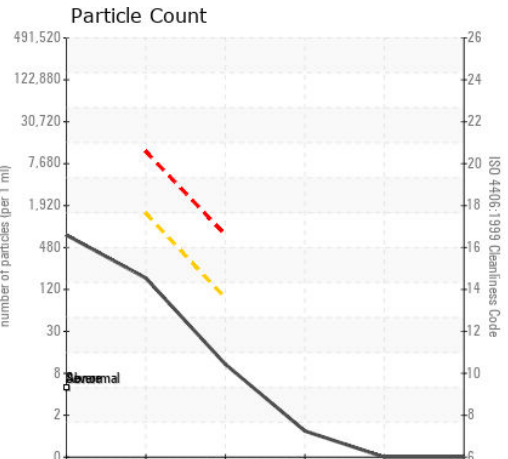
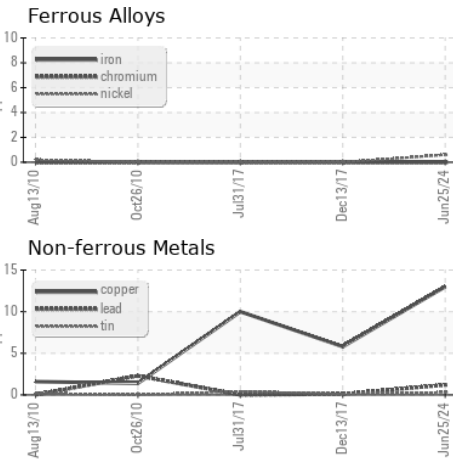
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 ▲ 62.95	45.81	44.68

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018792 **Received** : 15 Jul 2024  
**Lab Number** : 06235979 **Tested** : 18 Jul 2024  
**Unique Number** : 11124813 **Diagnosed** : 19 Jul 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**HONEYWELL**  
 830 E ARAPHO RD  
 RICHARDSON, TX  
 US 75081  
 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)