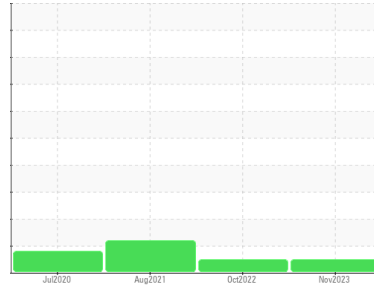




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**KAESER ASD 40T 3203109 (S/N 1128)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-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>KCPA010848</b>	KCP40296D	KCP41558
Sample Date	Client Info			<b>29 Nov 2023</b>	28 Oct 2022	18 Aug 2021
Machine Age	hrs	Client Info		<b>35663</b>	33234	30498
Oil Age	hrs	Client Info		<b>0</b>	2736	2400
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>1</b>	1	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	4	4
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

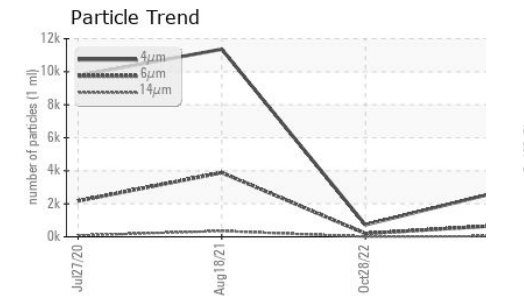
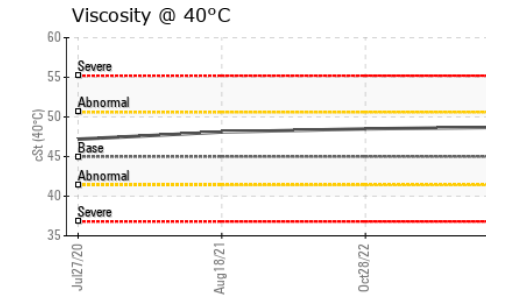
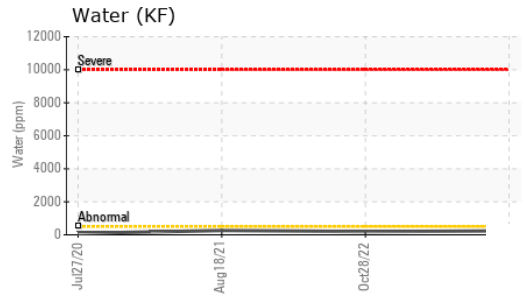
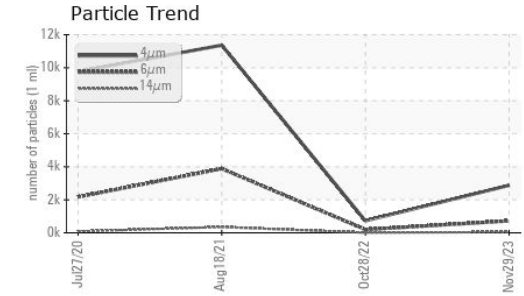
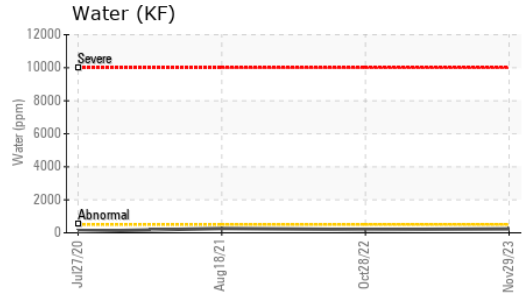
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	17
Barium	ppm	ASTM D5185m	90	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>65</b>	53	34
Calcium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>22</b>	2	1
Zinc	ppm	ASTM D5185m	0	<b>6</b>	28	41
Sulfur	ppm	ASTM D5185m	23500	<b>25171</b>	23717	19900

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>2</b>	3	0
Sodium	ppm	ASTM D5185m		<b>26</b>	21	14
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	2
Water	%	ASTM D6304	>0.05	<b>0.023</b>	0.019	0.026
ppm Water	ppm	ASTM D6304	>500	<b>235</b>	194.8	263.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>2877</b>	728	11363
Particles >6µm		ASTM D7647	>1300	<b>724</b>	197	▲ 3888
Particles >14µm		ASTM D7647	>80	<b>44</b>	10	▲ 351
Particles >21µm		ASTM D7647	>20	<b>10</b>	1	▲ 49
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	3
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	17/15/10	▲ 19/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.31</b>	0.38	0.368

# OIL ANALYSIS REPORT

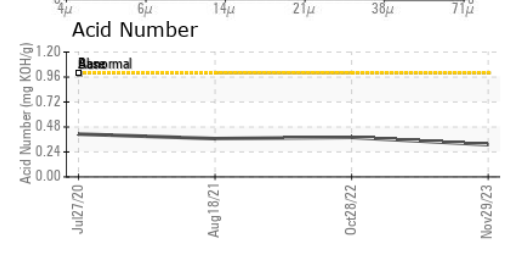
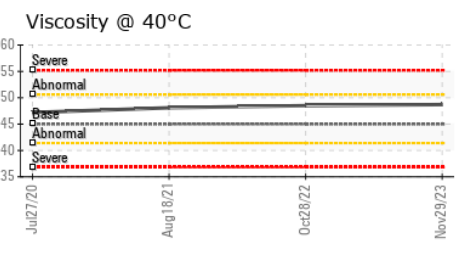
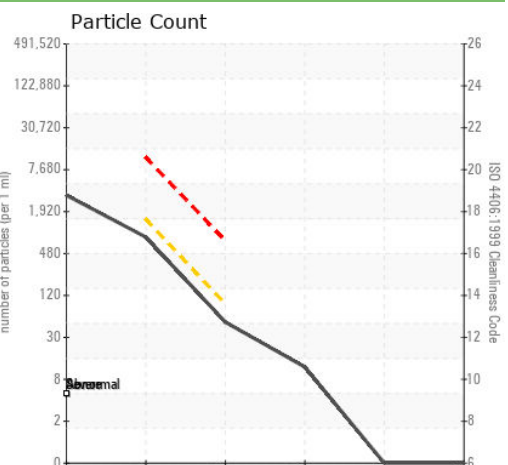
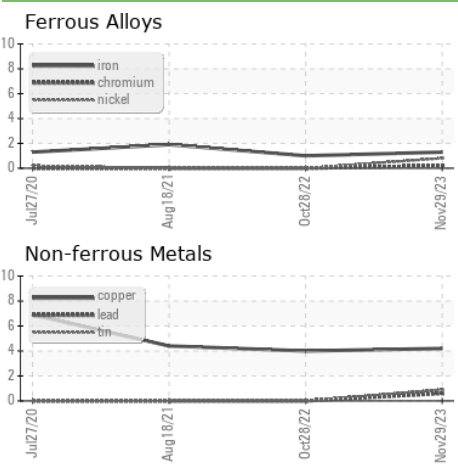


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	48.7	48.5	48.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010848 **Received** : 08 Jan 2024  
**Lab Number** : 06054942 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10820891 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**CAPITAL GRANITE AND MARBLE**  
 25325 HWY 23  
 ST CLOUD, MN  
 US 56301  
 Contact:

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)

T:  
F: