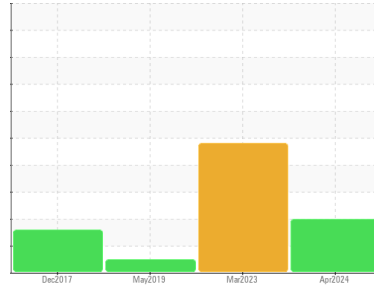




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SK 20T 4397557 (S/N 1082)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The 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 a high amount of particulates present 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>KCPA016044</b>	KCP54511	KCP18826
Sample Date	Client Info			<b>08 Apr 2024</b>	05 Mar 2023	01 May 2019
Machine Age	hrs	Client Info		<b>27162</b>	23282	20572
Oil Age	hrs	Client Info		<b>0</b>	1765	1448
Oil Changed	Client Info			<b>Not Chngd</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	2	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	21	8
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>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

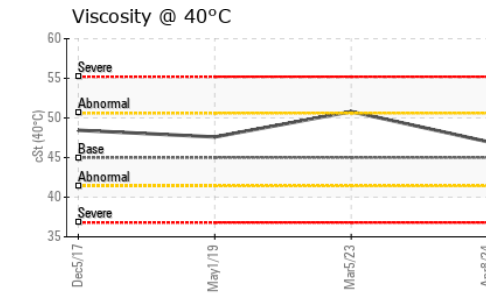
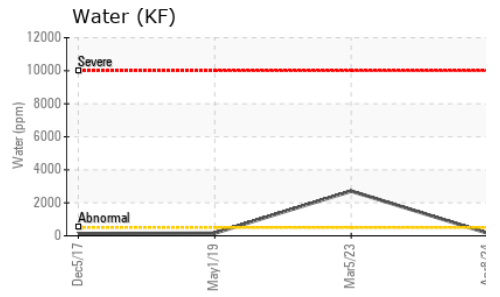
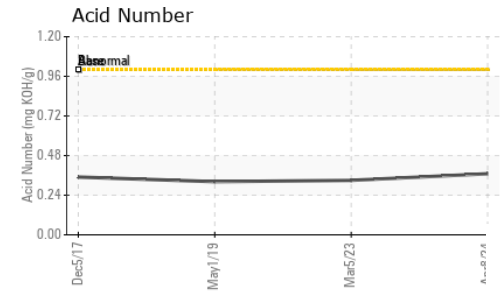
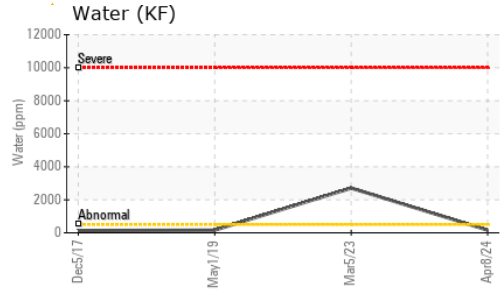
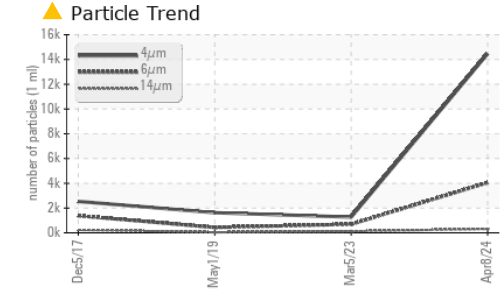
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	90	<b>46</b>	0	12
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>81</b>	5	60
Calcium	ppm	ASTM D5185m	0	<b>4</b>	1	<1
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	3	<1
Zinc	ppm	ASTM D5185m	0	<b>22</b>	40	9
Sulfur	ppm	ASTM D5185m	23500	<b>23788</b>	16401	24718

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>21</b>	6	17
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	<1	3
Water	%	ASTM D6304	>0.05	<b>0.016</b>	▲ 0.271	0.016
ppm Water	ppm	ASTM D6304	>500	<b>162</b>	▲ 2710	160

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>14460</b>	1270	1623
Particles >6µm		ASTM D7647	>1300	▲ <b>4057</b>	692	437
Particles >14µm		ASTM D7647	>80	▲ <b>315</b>	● 118	40
Particles >21µm		ASTM D7647	>20	▲ <b>81</b>	● 40	9
Particles >38µm		ASTM D7647	>4	▲ <b>5</b>	● 6	0
Particles >71µm		ASTM D7647	>3	▲ <b>1</b>	● 1	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>21/19/15</b>	● 17/17/14	16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.37</b>	0.33	0.322

# OIL ANALYSIS REPORT

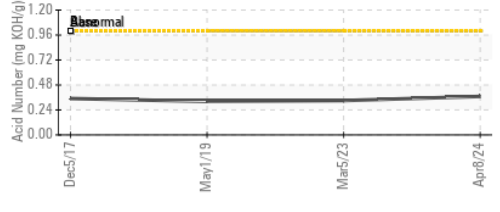
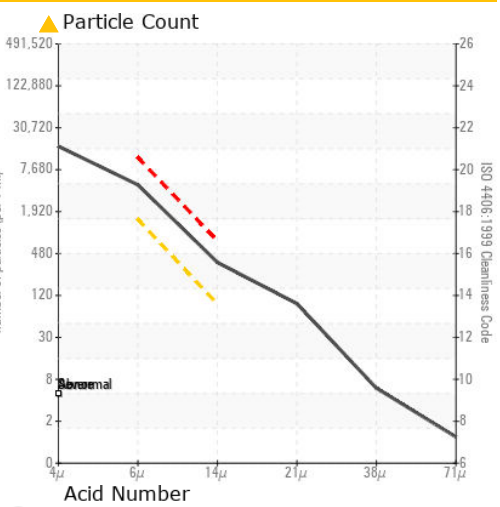
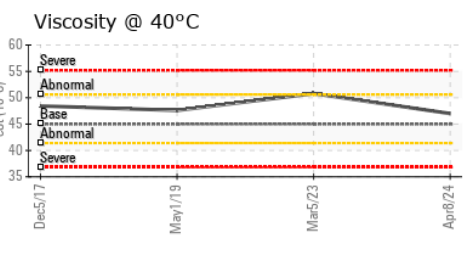
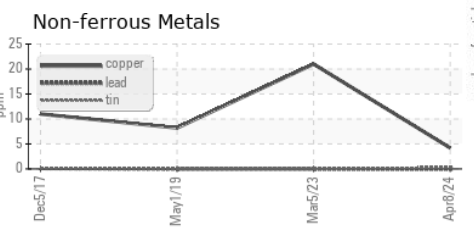
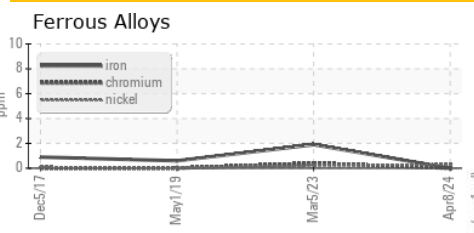


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	47.0	50.8	47.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA016044 **Received** : 16 Apr 2024  
**Lab Number** : 06151181 **Tested** : 19 Apr 2024  
**Unique Number** : 10981259 **Diagnosed** : 19 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**UPPER CAPE COD REGIONAL TECH SCHOOL**  
 220 SANDWICH RD  
 BOURNE, MA  
 US 02532  
 Contact: Service Manager  
 BMACUCH@UPPERCAPETECH.ORG

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)