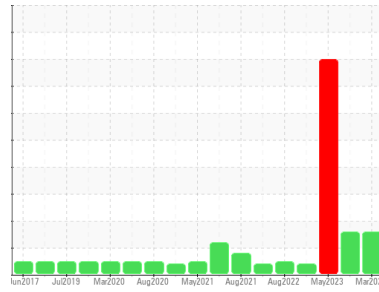




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SK 20 3765919 (S/N 1492)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. 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 a moderate 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>KCPA013449</b>	KCPA011199	KCPA001873
Sample Date	Client Info			<b>21 Mar 2024</b>	30 Nov 2023	24 May 2023
Machine Age	hrs	Client Info		<b>99999</b>	99999	99999
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ATTENTION	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	2
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	0	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	3
Copper	ppm	ASTM D5185m	>50	<1	<1	▲ 215
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	<1

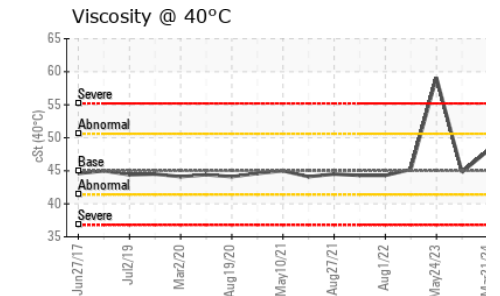
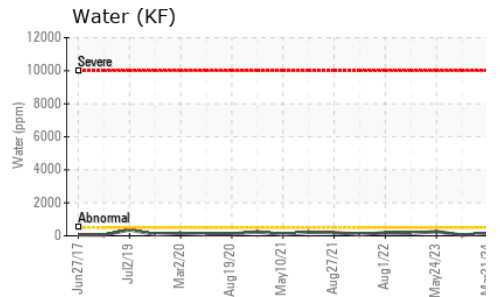
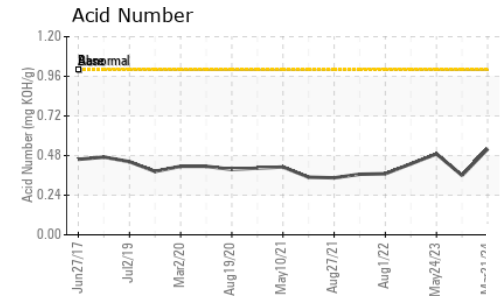
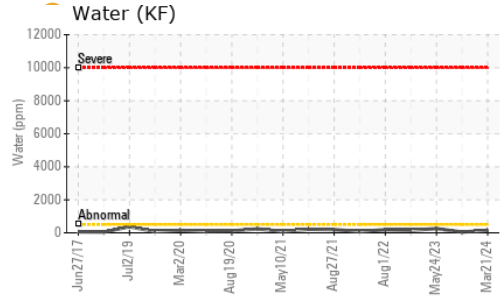
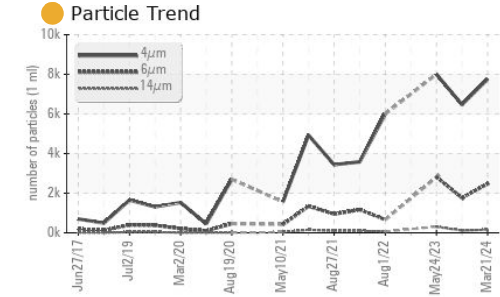
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>71</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>76</b>	1	39
Calcium	ppm	ASTM D5185m	0	<b>5</b>	0	13
Phosphorus	ppm	ASTM D5185m	0	<1	1	23
Zinc	ppm	ASTM D5185m	0	<b>4</b>	0	330
Sulfur	ppm	ASTM D5185m	23500	<b>21449</b>	16512	23240

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	2
Sodium	ppm	ASTM D5185m		<b>28</b>	1	7
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	1	3
Water	%	ASTM D6304	>0.05	<b>0.014</b>	0.004	0.025
ppm Water	ppm	ASTM D6304	>500	<b>145</b>	48	254.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>7757</b>	6472	8003
Particles >6µm		ASTM D7647	>1300	● <b>2481</b>	● 1764	▲ 2815
Particles >14µm		ASTM D7647	>80	● <b>158</b>	● 116	▲ 309
Particles >21µm		ASTM D7647	>20	● <b>32</b>	● 28	▲ 76
Particles >38µm		ASTM D7647	>4	<b>1</b>	1	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● <b>20/18/14</b>	● 20/18/14	▲ 20/19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.52</b>	0.36	0.49

# OIL ANALYSIS REPORT



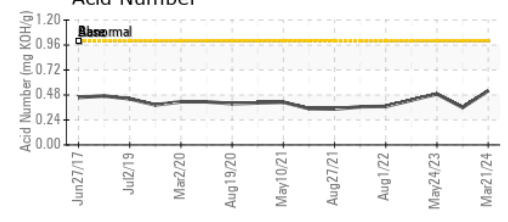
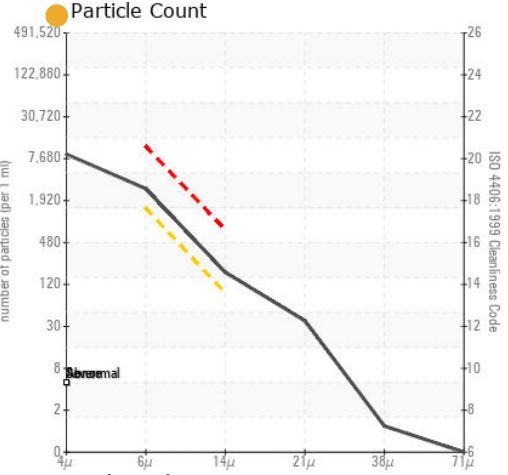
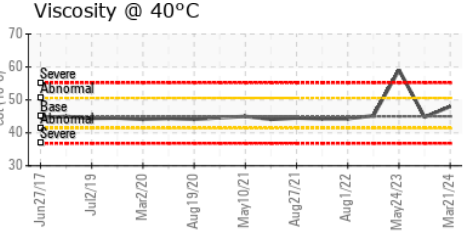
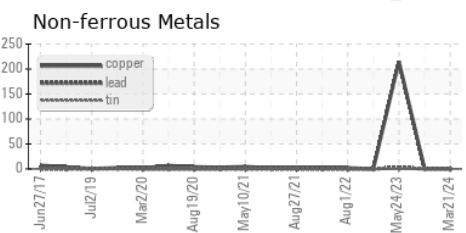
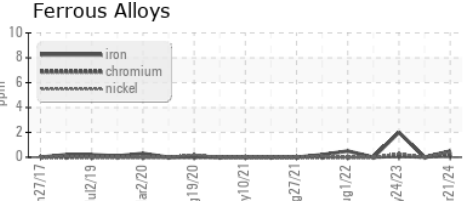
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	48.0	44.8 ▲ 59.1

**SAMPLE IMAGES**

method	limit/base	current	history1	history2
Color				
Bottom				

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA013449  
**Lab Number** : 06138056  
**Unique Number** : 10962864  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**ATCC/NCI**  
 4600 WEDGEWOOD BLVD STE H  
 FREDERICK, MD  
 UT 21703  
 Contact: W. GUTIERREZ  
 wgutierrez@atcc.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)