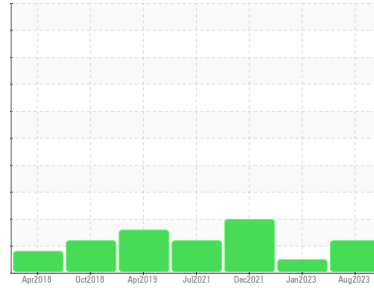


# PROBLEM SUMMARY

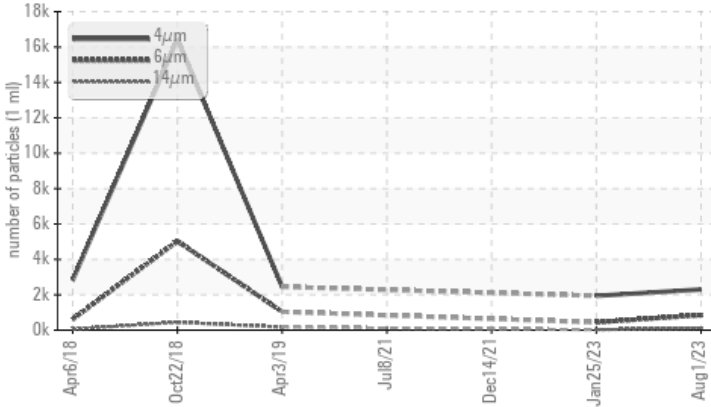
Sample Rating Trend



Machine Id  
**KAESER ASD 40ST 6046119 (S/N 1124)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) FG-460 (--- QTS)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	ABNORMAL
Particles >14µm	ASTM D7647	>80	▲ <b>116</b>	22	---
Particles >21µm	ASTM D7647	>20	▲ <b>32</b>	6	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>18/17/14</b>	18/16/12	---

Customer Id: FMBSIN  
Sample No.: KC108949  
Lab Number: 05937239  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 25 Jan 2023 Diag: Don Baldrige

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 14 Dec 2021 Diag: Doug Bogart

#### WATER



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 08 Jul 2021 Diag: Doug Bogart

#### WEAR



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. We were unable to perform a particle count due to a high concentration of particles present in this sample. The aluminum level has decreased, but is still abnormal. All other component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

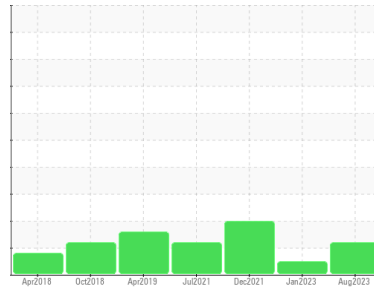
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER ASD 40ST 6046119 (S/N 1124)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) FG-460 (--- QTS)**

## DIAGNOSIS

### ▲ Recommendation

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 silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KC108949</b>	KC103164	KC94507
Sample Date	Client Info			<b>01 Aug 2023</b>	25 Jan 2023	14 Dec 2021
Machine Age	hrs	Client Info		<b>29217</b>	26658	21207
Oil Age	hrs	Client Info		<b>2559</b>	2671	3000
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	2
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	6	6	6
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	1	1	1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

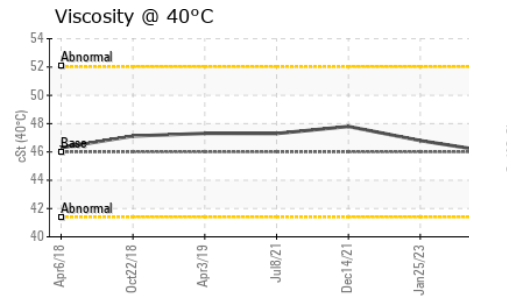
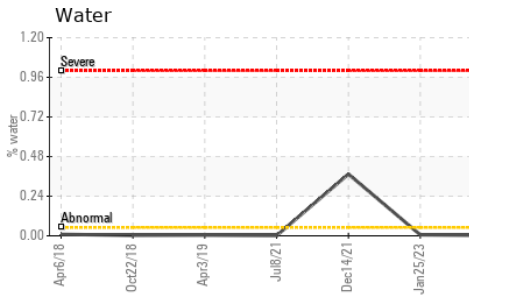
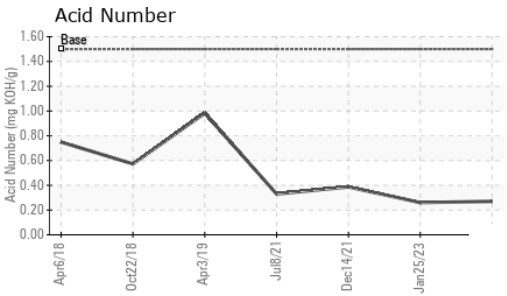
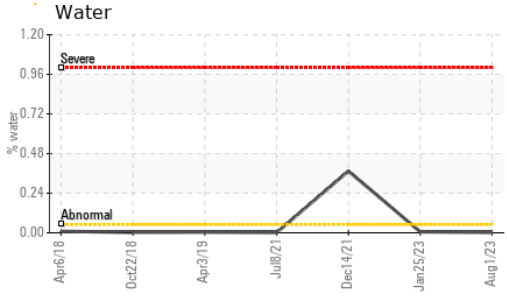
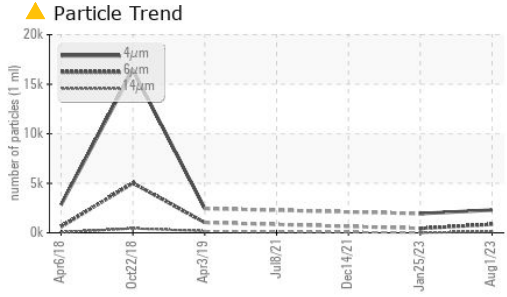
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		6	<1	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m	500	70	66	72
Zinc	ppm	ASTM D5185m		67	12	18

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Sodium	ppm	ASTM D5185m		2	<1	<1
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water	%	ASTM D6304	>0.05	<b>0.002</b>	0.006	▲ 0.374
ppm Water	ppm	ASTM D6304	>500	<b>19.8</b>	63.3	▲ 3740

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>2299</b>	1938	---
Particles >6µm		ASTM D7647	>1300	<b>852</b>	442	---
Particles >14µm		ASTM D7647	>80	▲ <b>116</b>	22	---
Particles >21µm		ASTM D7647	>20	▲ <b>32</b>	6	---
Particles >38µm		ASTM D7647	>4	<b>2</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>18/17/14</b>	18/16/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	<b>0.27</b>	0.26	0.387

# OIL ANALYSIS REPORT

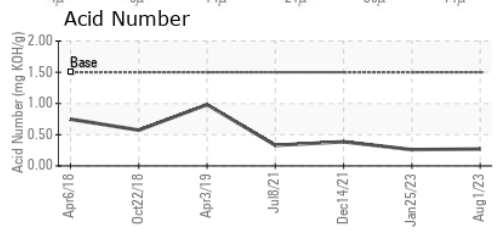
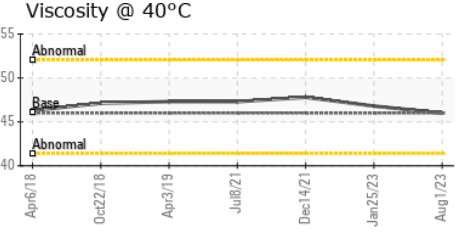
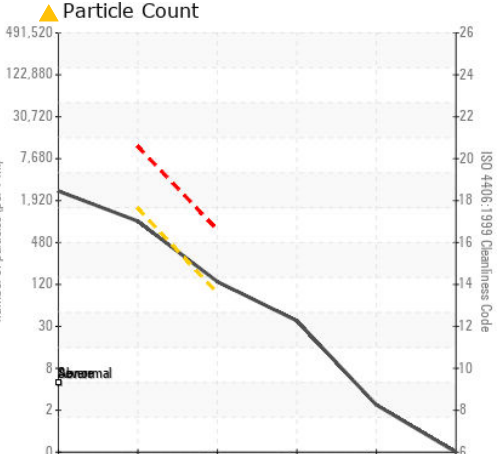
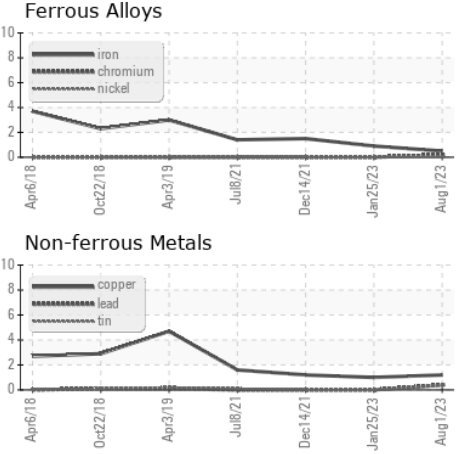


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	46.0	46.8	47.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC108949 **Received** : 29 Aug 2023  
**Lab Number** : 05937239 **Diagnosed** : 30 Aug 2023  
**Unique Number** : 10622510 **Diagnostician** : Angela Borella  
**Test Package** : IND 2

**FM BROWN**  
 1443 JAMES ST  
 SINKING SPRING, PA  
 US 19608  
 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)