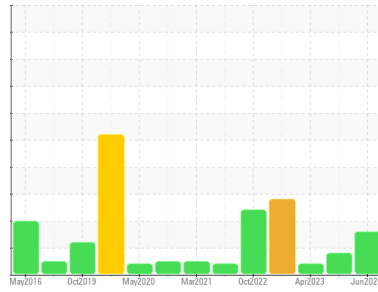




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**KAESER CSD 1005 5208261 (S/N 1076)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-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>KC129835</b>	KC124387	KC101470
Sample Date	Client Info	<b>10 Jun 2024</b>	04 Dec 2023	28 Apr 2023
Machine Age	hrs	<b>18002</b>	16154	15731
Oil Age	hrs	<b>2300</b>	0	9
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	Not Chngd
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>0</b>	1	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>8</b>	14	6
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	48
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m 90	<b>&lt;1</b>	15	59
Calcium	ppm	ASTM D5185m 2	<b>0</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Zinc	ppm	ASTM D5185m	<b>1</b>	9	0

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m	<b>2</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Water	%	ASTM D6304 >0.05	<b>0.037</b>	0.014	0.020
ppm Water	ppm	ASTM D6304 >500	<b>372</b>	140	209.6

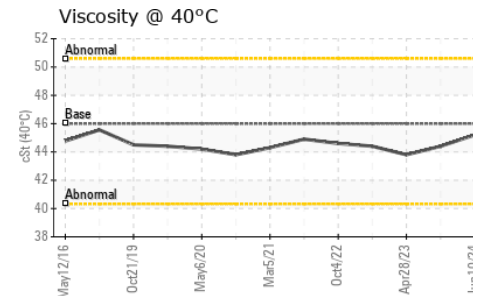
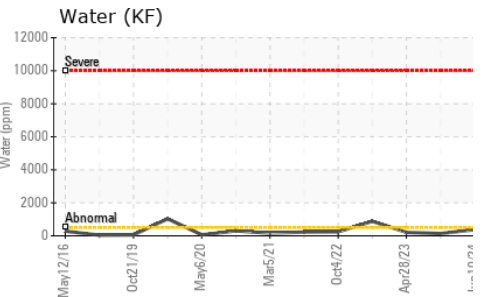
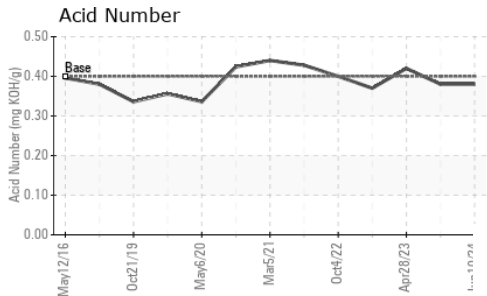
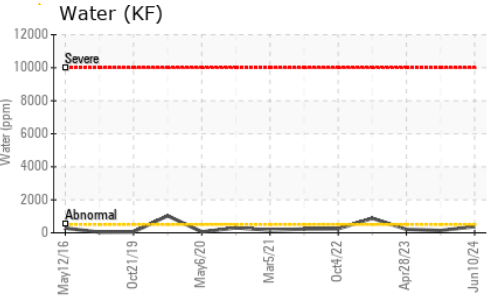
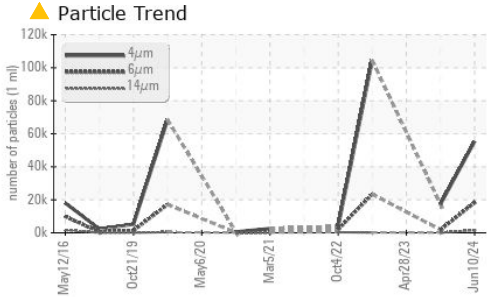
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>55375</b>	17341	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 18284</b>	● 1839	---
Particles >14µm	ASTM D7647 >80	<b>▲ 1647</b>	64	---
Particles >21µm	ASTM D7647 >20	<b>▲ 345</b>	20	---
Particles >38µm	ASTM D7647 >4	<b>3</b>	1	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 23/21/18</b>	● 21/18/13	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.38</b>	0.38	0.42

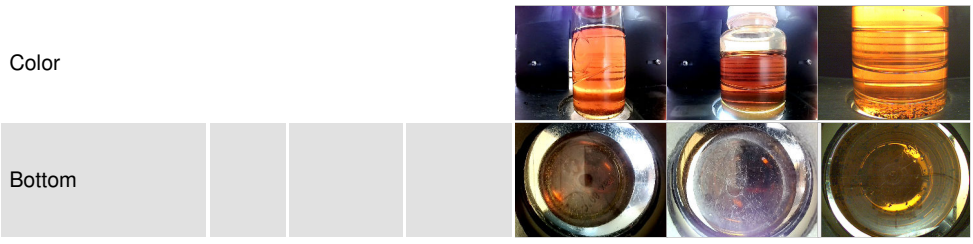
# OIL ANALYSIS REPORT



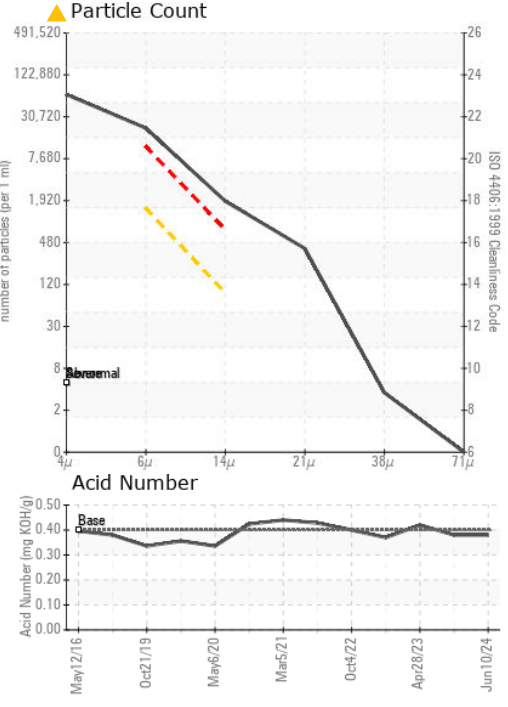
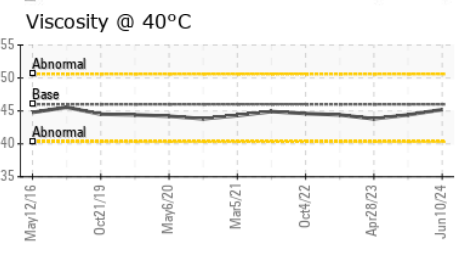
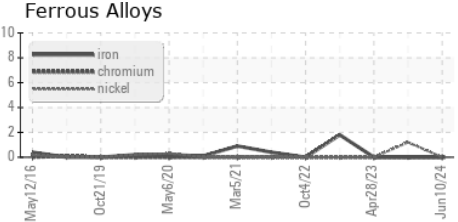
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.2	44.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC129835  
**Lab Number** : 06212371  
**Unique Number** : 11085235  
**Test Package** : IND 2  
**Received** : 17 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Don Baldrige

**OXFORD DEVELOPMENT**  
 3170 WILLIAM PITT WAY  
 PITTSBURGH, PA  
 US 15238  
 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)