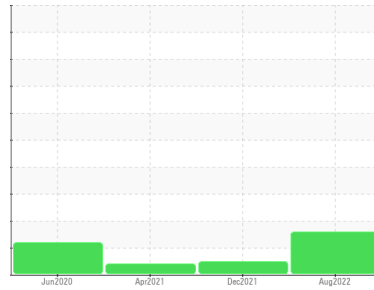


# PROBLEM SUMMARY

## Sample Rating Trend



ISO



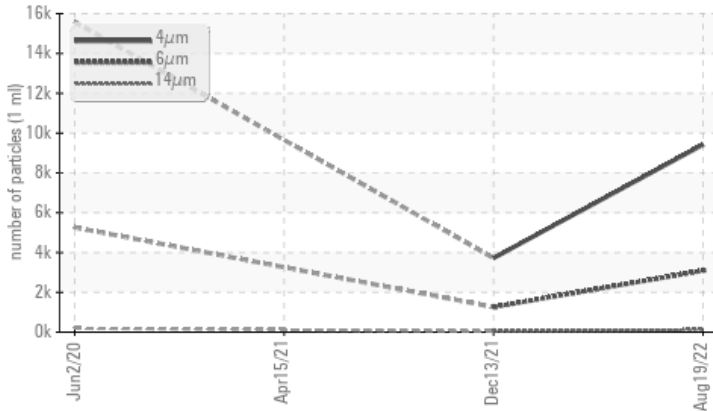
Machine Id  
**7087945 (S/N 1398)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>3087</b>	1260	---
Particles >14µm	ASTM D7647	>80	▲ <b>122</b>	39	---
Particles >21µm	ASTM D7647	>20	▲ <b>23</b>	7	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/19/14</b>	17/12	---

Customer Id: NPIPLA  
Sample No.: KCP50233  
Lab Number: 05626812  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@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

### 13 Dec 2021 Diag: Doug Bogart

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](#)



### 15 Apr 2021 Diag: Doug Bogart

VIS DEBRIS



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. All 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](#)



### 02 Jun 2020 Diag: Don Baldrige

ISO



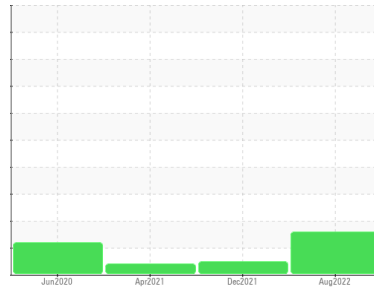
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**7087945 (S/N 1398)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) FG-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 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 history 1 history 2

Sample Number				<b>KCP50233</b>	KCP43928	KCP35655
Sample Date				<b>19 Aug 2022</b>	13 Dec 2021	15 Apr 2021
Machine Age	hrs			<b>12621</b>	10052	7637
Oil Age	hrs			<b>2567</b>	2416	4380
Oil Changed				<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	ABNORMAL

**WEAR METALS** method limit/base current history 1 history 2

Iron	ppm	ASTM D5185m	>50	<b>3</b>	2	1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>5</b>	3	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>50	<b>9</b>	16	12
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

**ADDITIVES** method limit/base current history 1 history 2

Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	500	<b>344</b>	327	197
Zinc	ppm	ASTM D5185m		<b>295</b>	389	202
Sulfur	ppm	ASTM D5185m		<b>1458</b>	1472	2018

**CONTAMINANTS** method limit/base current history 1 history 2

Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	1
Sodium	ppm	ASTM D5185m		<b>0</b>	1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water	%	ASTM D6304	>0.05	<b>0.005</b>	0.001	0.004
ppm Water	ppm	ASTM D6304	>500	<b>55.7</b>	3.0	49.1

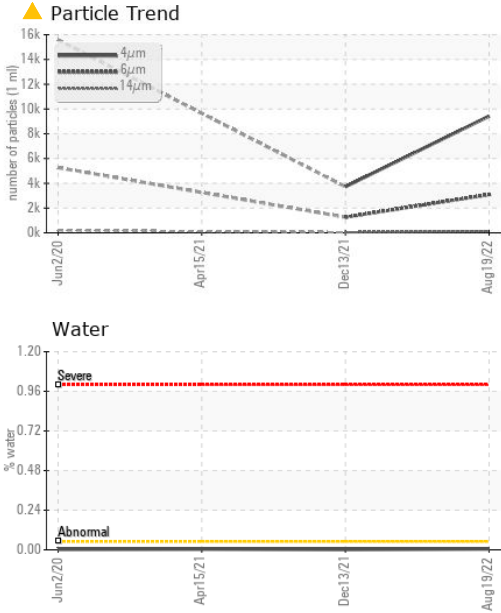
**FLUID CLEANLINESS** method limit/base current history 1 history 2

Particles >4µm		ASTM D7647		<b>9421</b>	3724	---
Particles >6µm		ASTM D7647	>1300	▲ <b>3087</b>	1260	---
Particles >14µm		ASTM D7647	>80	▲ <b>122</b>	39	---
Particles >21µm		ASTM D7647	>20	▲ <b>23</b>	7	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>20/19/14</b>	17/12	---

**FLUID DEGRADATION** method limit/base current history 1 history 2

Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	<b>0.75</b>	0.545	0.465
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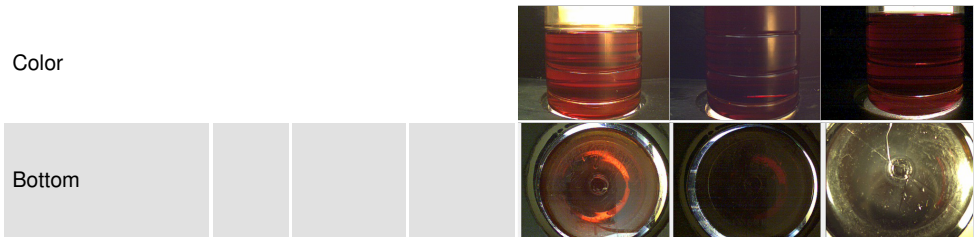
# OIL ANALYSIS REPORT



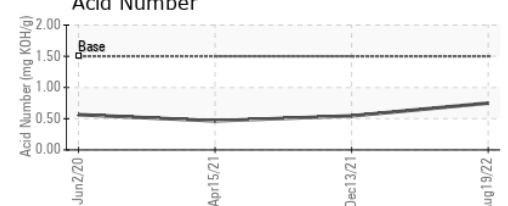
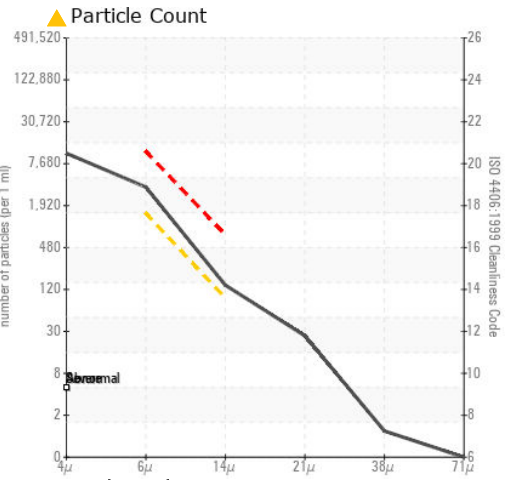
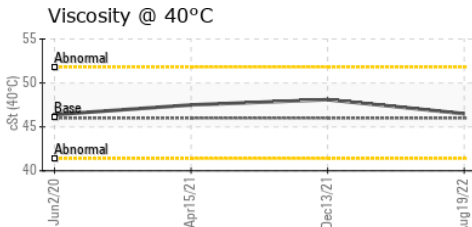
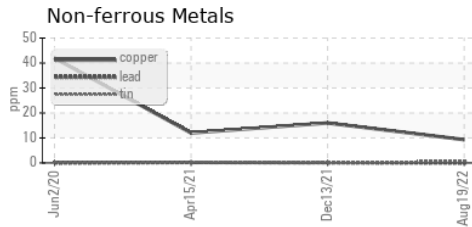
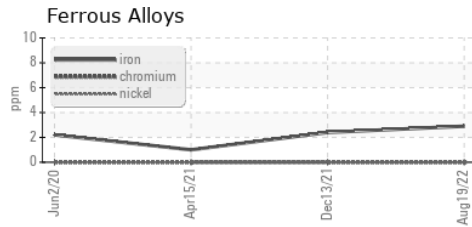
PARAMETER	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	46.5	48.1	47.5

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP50233 **Received** : 25 Aug 2022  
**Lab Number** : 05626812 **Diagnosed** : 26 Aug 2022  
**Unique Number** : 10111333 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**NPIC - NATIONAL POLYMER INTL CORP**  
 3601 E PLANO PKWY  
 PLANO, TX  
 USA 75074  
 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)

T:  
F: