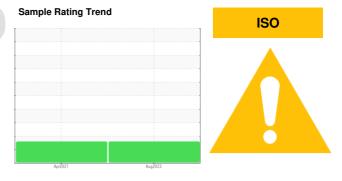


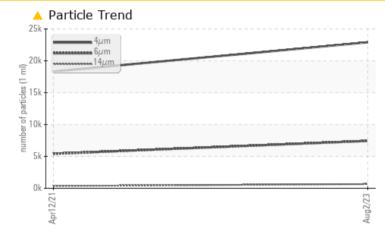
# **PROBLEM SUMMARY**



#### Machine Id 5865146 (S/N 1791) Component

Compressor Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

# COMPONENT CONDITION SUMMARY



## 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	ABNORMAL	
Particles >6µm	ASTM D7647 >130	0 🔺 7432	<b>4</b> 5415	
Particles >14µm	ASTM D7647 >80	<u> </u>	<b>4</b> 352	
Particles >21µm	ASTM D7647 >20	<u> </u>	<b>1</b> 07	
Oil Cleanliness	ISO 4406 (c) >/1	7/13 🔺 <b>22/20/17</b>	<b>2</b> 0/16	

Customer Id: GRORAN Sample No.: KCP55002 Lab Number: 05933592 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Don Baldridge +1 <u>don.b505@comcast.net</u>

*To change component or sample information:* Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

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



## 12 Apr 2021 Diag: Don Baldridge

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.





# **OIL ANALYSIS REPORT**

### Sample Rating Trend

ISO

Machine Id 5865146 (S/N 1791) 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 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.

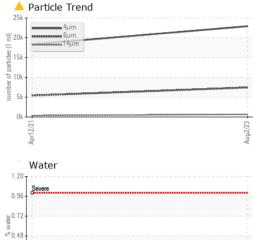
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP55002	KCP32610	
Sample Date		Client Info		02 Aug 2023	12 Apr 2021	
Machine Age	hrs	Client Info		17410	11219	
Oil Age	hrs	Client Info		3049	2740	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	0	<1	
Lead		ASTM D5185m	>10	0	0	
	ppm			-		
Copper	ppm	ASTM D5185m	>50	5	3	
Tin	ppm	ASTM D5185m	>10	0	0	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	
Barium	ppm	ASTM D5185m	90	32	17	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	100	64	48	
Calcium	ppm	ASTM D5185m	0	0	0	
Phosphorus	ppm	ASTM D5185m	0	0	<1	
Zinc	ppm	ASTM D5185m	0	10	9	
Sulfur	ppm	ASTM D5185m	23500	23871	19726	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	6	
Sodium	ppm	ASTM D5185m		2	12	
Potassium	ppm	ASTM D5185m	>20	2	0	
Water	%	ASTM D6304	>0.05	0.017	0.015	
opm Water	ppm	ASTM D6304	>500	178.1	159.2	
FLUID CLEANLINE	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		22900	18326	
		ASTM D7647	>1300	<b>A</b> 7432	<b>5</b> 415	
Particles >6µm		ASTM D7647 ASTM D7647	>1300 >80	▲ 7432 ▲ 659	<ul><li>▲ 5415</li><li>▲ 352</li></ul>	
Particles >6μm Particles >14μm		ASTM D7647		<mark>人</mark> 659	<b>4</b> 352	
Particles >6µm Particles >14µm Particles >21µm		ASTM D7647 ASTM D7647	>80		<ul><li>▲ 352</li><li>▲ 107</li></ul>	
Particles >6µm Particles >14µm Particles >21µm Particles >38µm		ASTM D7647 ASTM D7647 ASTM D7647	>80 >20 >4	<ul> <li>▲ 659</li> <li>▲ 156</li> <li>4</li> </ul>	<ul> <li>▲ 352</li> <li>▲ 107</li> <li>▲ 7</li> </ul>	
Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm		ASTM D7647 ASTM D7647	>80 >20 >4	▲ 659 ▲ 156	<ul><li>▲ 352</li><li>▲ 107</li></ul>	
Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	TION	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c)	>80 >20 >4 >3 >/17/13	<ul> <li>▲ 659</li> <li>▲ 156</li> <li>4</li> <li>0</li> <li>▲ 22/20/17</li> </ul>	<ul> <li>▲ 352</li> <li>▲ 107</li> <li>▲ 7</li> <li>0</li> <li>▲ 20/16</li> </ul>	
Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	TION mg KOH/g	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>80 >20 >4 >3	<ul> <li>▲ 659</li> <li>▲ 156</li> <li>4</li> <li>0</li> </ul>	<ul> <li>▲ 352</li> <li>▲ 107</li> <li>▲ 7</li> <li>0</li> </ul>	

Report Id: GRORAN [WUSCAR] 05933592 (Generated: 08/28/2023 17:26:59) Rev: 1

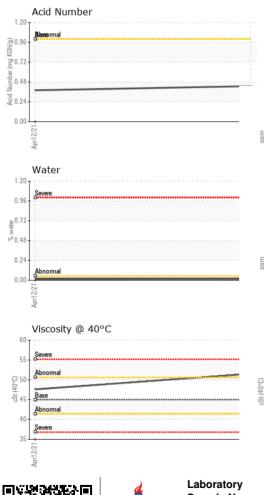
Page 3 of 4



# **OIL ANALYSIS REPORT**







VISUAL method limit/base history1 history2 current NONE White Metal \*Visual NONE NONE scalar Yellow Metal \*Visual NONE NONE NONE scalar Precipitate scalar \*Visua NONE NONE NONE Silt scalar \*Visual NONE NONE NONE NONE Debris \*Visual NONE LIGHT scalar NONE Sand/Dirt scalar \*Visual NONE NONE NORML Appearance \*Visual NORML NORML scalar \*Visual NORML Odor scalar NORML NORML \*Visual **Emulsified Water** scalar >0.05 NEG NEG Free Water scalar \*Visual NEG NEG FLUID PROPERTIES method limit/base curren history history2 Visc @ 40°C cSt ASTM D445 45 51.5 47.6 history2 SAMPLE IMAGES method limit/base history1 current Color no image Bottom no image GRAPHS Ferrous Alloys Particle Count 491,52 122,880 30.72 7.680 Aug2/23 4406 per 1 1,920 "pul :1999 Cle Non-ferrous Metals 480 120 31

Aug2/23

: 24 Aug 2023

: 25 Aug 2023

Diagnostician : Don Baldridge

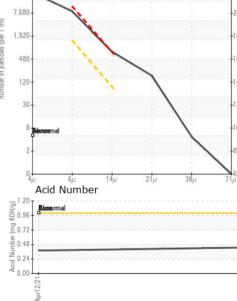
# ₹ Viscosity @ 40°C



: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Diagnosed





GROUP MANUFACTURING SERVICES 2483 MERCANTILE DR RANCHO CORDOVA, CA US 95742 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.

Test Package : IND 2 (Additional Tests: KF, PrtCount)

: KCP55002

: 05933592

: 10618863

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Sample No.

Lab Number

Unique Number