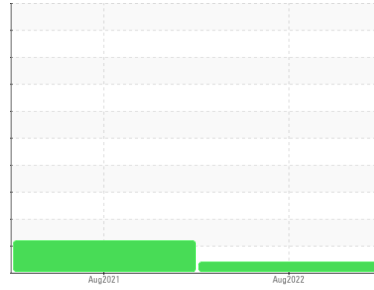


# PROBLEM SUMMARY

Sample Rating Trend



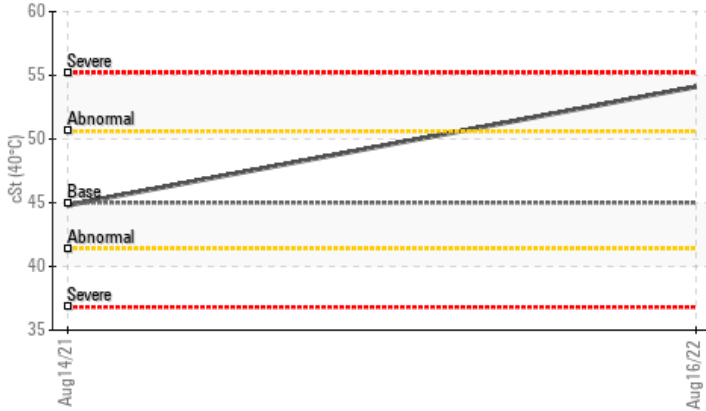
**VISCOSITY**



Machine Id  
**7438357 (S/N 1074)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



## 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				<b>ATTENTION</b>	ABNORMAL	---
Visc @ 40°C	cSt	ASTM D445	45	▲ 54.1	44.8	---

Customer Id: NORHOR  
Sample No.: KCP48155  
Lab Number: 05623889  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

### 14 Aug 2021 Diag: Don Baldrige

ISO



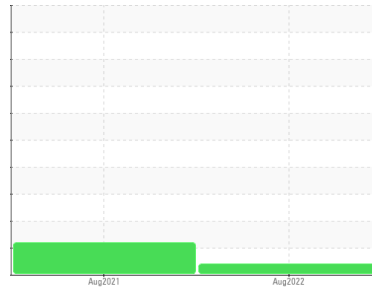
No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.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

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**VISCOSITY**



Machine Id  
**7438357 (S/N 1074)**  
Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

**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**

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

▲ **Fluid Condition**

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

**SAMPLE INFORMATION**

	method	limit/base	current	history 1	history 2
Sample Number			<b>KCP48155</b>	KCP11916	---
Sample Date			<b>16 Aug 2022</b>	14 Aug 2021	---
Machine Age	hrs		<b>12999</b>	5474	---
Oil Age	hrs		<b>7526</b>	5474	---
Oil Changed			<b>Changed</b>	Changed	---
Sample Status			<b>ATTENTION</b>	ABNORMAL	---

**WEAR METALS**

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	<b>2</b>	0	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >50	<b>4</b>	5	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	---
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

**ADDITIVES**

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m 100	<b>&lt;1</b>	1	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m 0	<b>3</b>	<1	---
Zinc	ppm	ASTM D5185m 0	<b>15</b>	18	---
Sulfur	ppm	ASTM D5185m 23500	<b>19230</b>	15603	---

**CONTAMINANTS**

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	---
Sodium	ppm	ASTM D5185m	<b>1</b>	<1	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	---
Water	%	ASTM D6304 >0.05	<b>0.009</b>	0.010	---
ppm Water	ppm	ASTM D6304 >500	<b>91.4</b>	100.9	---

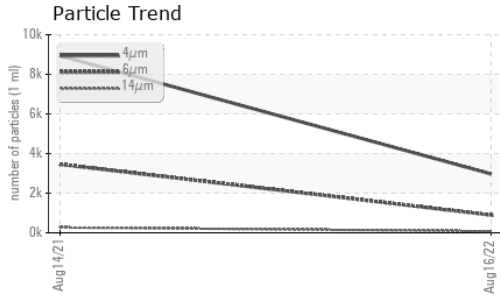
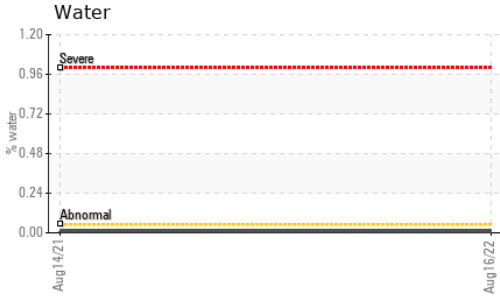
**FLUID CLEANLINESS**

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>2970</b>	8939	---
Particles >6µm	ASTM D7647	>1300	<b>894</b>	▲ 3459	---
Particles >14µm	ASTM D7647	>80	<b>75</b>	▲ 269	---
Particles >21µm	ASTM D7647	>20	<b>17</b>	▲ 70	---
Particles >38µm	ASTM D7647	>4	<b>2</b>	4	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	▲ 19/15	---

**FLUID DEGRADATION**

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.50</b>	0.385	---

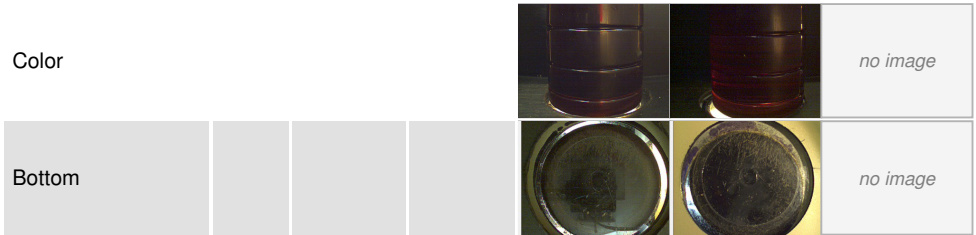
# OIL ANALYSIS REPORT



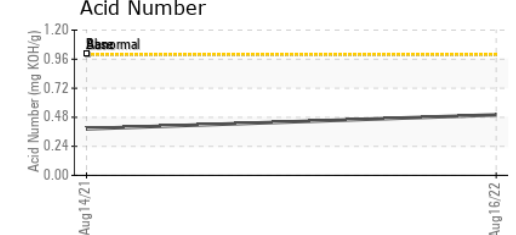
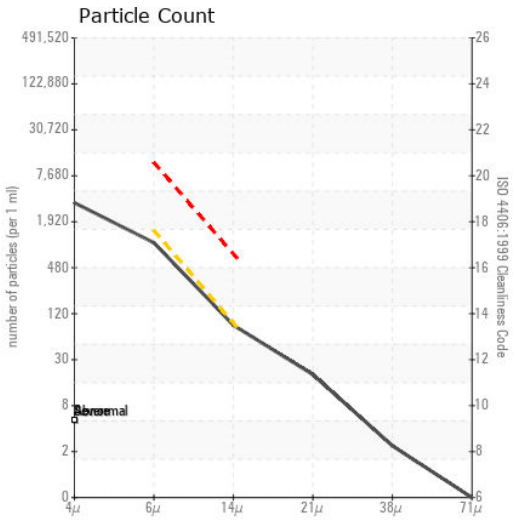
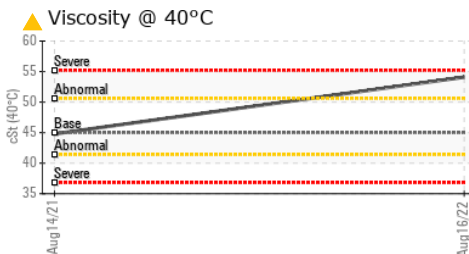
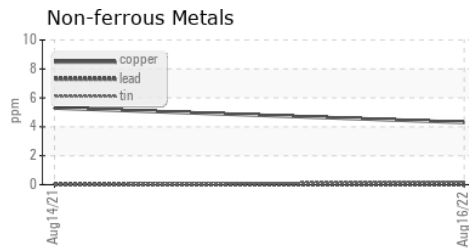
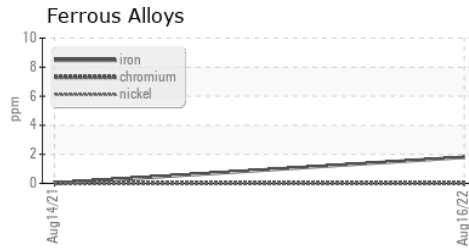
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45	▲ 54.1	44.8

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. : KCP48155 Received : 22 Aug 2022  
 Lab Number : 05623889 Diagnosed : 24 Aug 2022  
 Unique Number : 10103396 Diagnostician : Don Baldrige  
 Test Package : IND 2 ( Additional Tests: KF, PrtCount )

**NORWOOD SALES**  
 11202 38TH ST S  
 HORACE, ND  
 USA 58047  
 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: