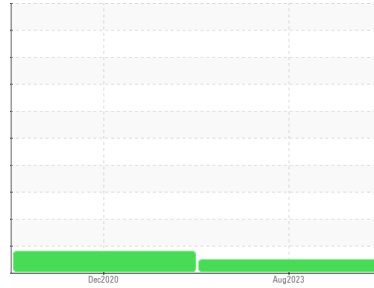




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**7187498 (S/N 1467)**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

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 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>KCPA002113</b>	KCP27437	---
Sample Date	Client Info			<b>02 Aug 2023</b>	28 Dec 2020	---
Machine Age	hrs	Client Info		<b>10104</b>	3216	---
Oil Age	hrs	Client Info		<b>0</b>	3216	---
Oil Changed	Client Info			<b>N/A</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	---
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>	<1	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>50	<b>5</b>	3	---
Tin	ppm	ASTM D5185m	>10	<b>0</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	---

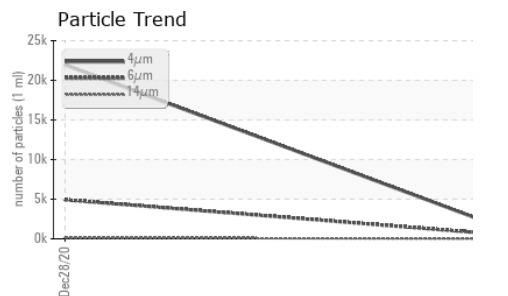
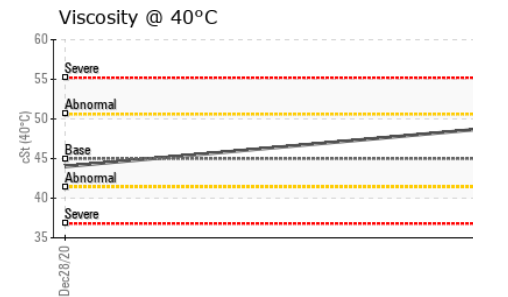
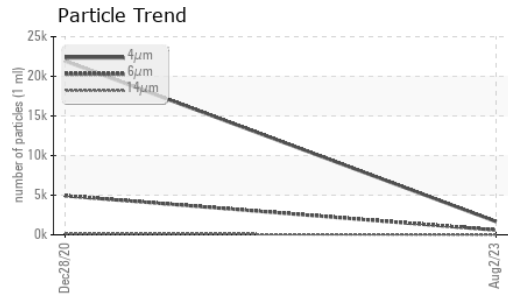
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	10	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	20	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	100	<b>37</b>	46	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>4</b>	2	---
Zinc	ppm	ASTM D5185m	0	<b>7</b>	2	---
Sulfur	ppm	ASTM D5185m	23500	<b>22482</b>	15855	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>3</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	---
Water	%	ASTM D6304	>0.05	<b>0.014</b>	0.009	---
ppm Water	ppm	ASTM D6304	>500	<b>146.4</b>	98.8	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>1672</b>	21936	---
Particles >6µm		ASTM D7647	>1300	<b>592</b>	▲ 4920	---
Particles >14µm		ASTM D7647	>80	<b>19</b>	▲ 117	---
Particles >21µm		ASTM D7647	>20	<b>4</b>	11	---
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>18/16/11</b>	▲ 19/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.37</b>	0.339	---

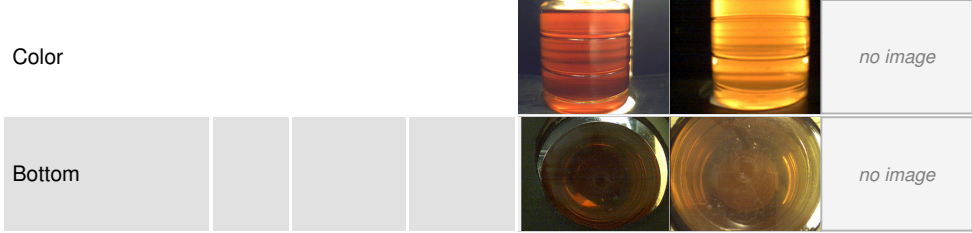
# OIL ANALYSIS REPORT



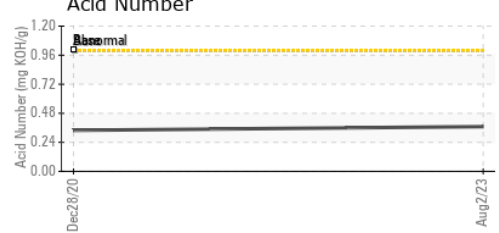
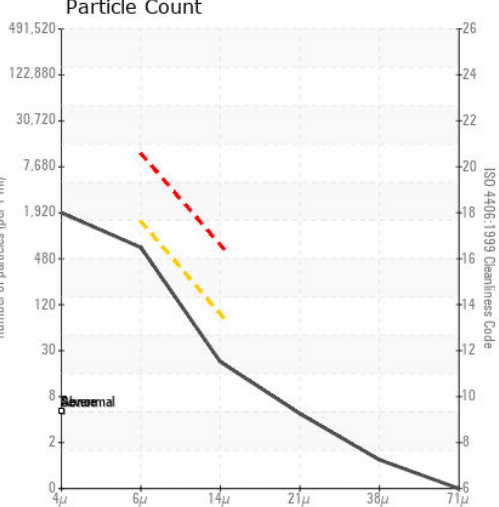
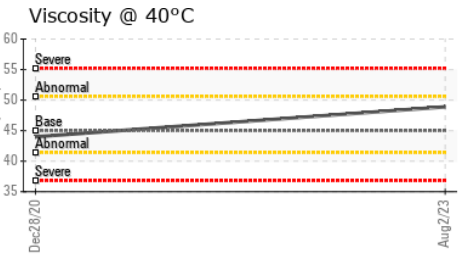
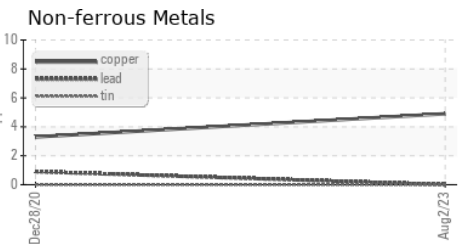
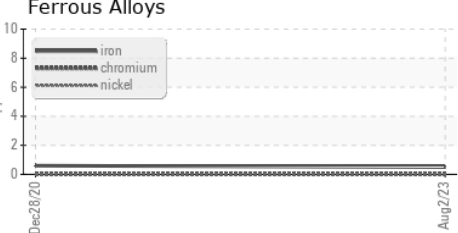
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.9	44.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA002113 **Received** : 14 Aug 2023  
**Lab Number** : 05924300 **Diagnosed** : 16 Aug 2023  
**Unique Number** : 10604247 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**DAL MACHINE INC**  
 14162 NORTHDAL BLVD  
 ROGERS, MN  
 US 55374  
 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: