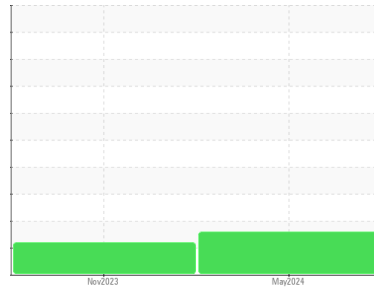




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id

**KAESER 2954201**

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>KCPA012691</b>	KCPA011837	---
Sample Date	Client Info			<b>01 May 2024</b>	30 Nov 2023	---
Machine Age	hrs	Client Info		<b>37330</b>	35459	---
Oil Age	hrs	Client Info		<b>3000</b>	0	---
Oil Changed	Client Info			<b>Not Chngd</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</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>0</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>50	<b>0</b>	4	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

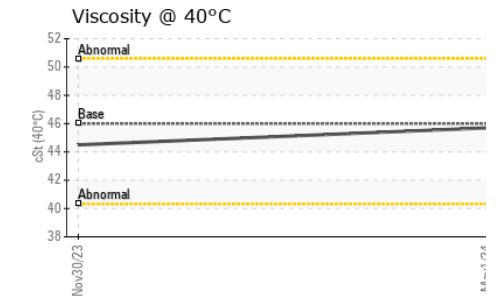
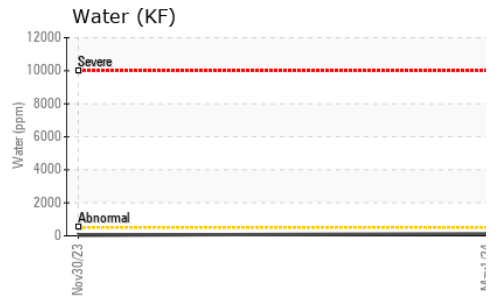
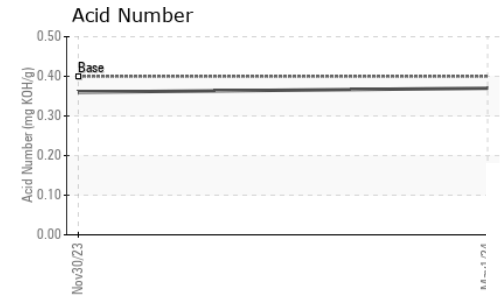
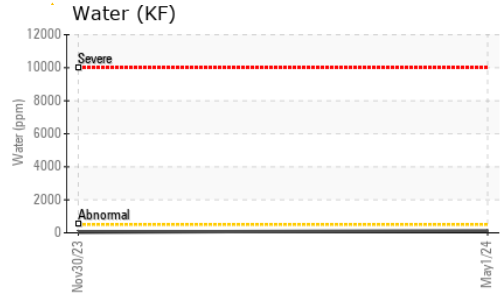
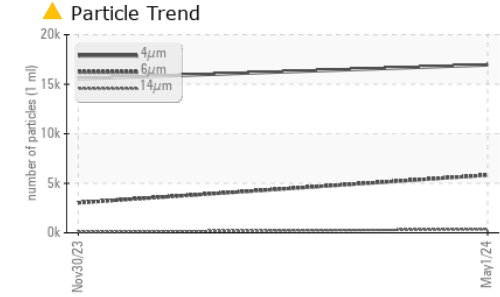
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>79</b>	17	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	1	---
Magnesium	ppm	ASTM D5185m	90	<b>84</b>	54	---
Calcium	ppm	ASTM D5185m	2	<b>2</b>	0	---
Phosphorus	ppm	ASTM D5185m		<b>0</b>	0	---
Zinc	ppm	ASTM D5185m		<b>6</b>	0	---
Sulfur	ppm	ASTM D5185m		<b>23611</b>	22088	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	---
Sodium	ppm	ASTM D5185m		<b>21</b>	14	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water	%	ASTM D6304	>0.05	<b>0.013</b>	0.003	---
ppm Water	ppm	ASTM D6304	>500	<b>134</b>	35	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>16952</b>	15555	---
Particles >6µm		ASTM D7647	>1300	▲ <b>5833</b>	▲ 3031	---
Particles >14µm		ASTM D7647	>80	▲ <b>351</b>	▲ 95	---
Particles >21µm		ASTM D7647	>20	▲ <b>58</b>	19	---
Particles >38µm		ASTM D7647	>4	<b>3</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>21/20/16</b>	▲ 21/19/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.37</b>	0.36	---

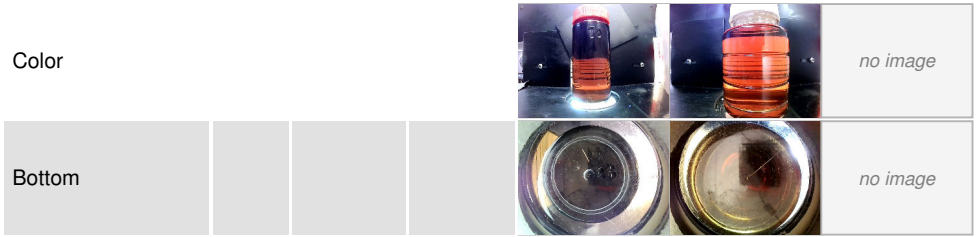
# OIL ANALYSIS REPORT



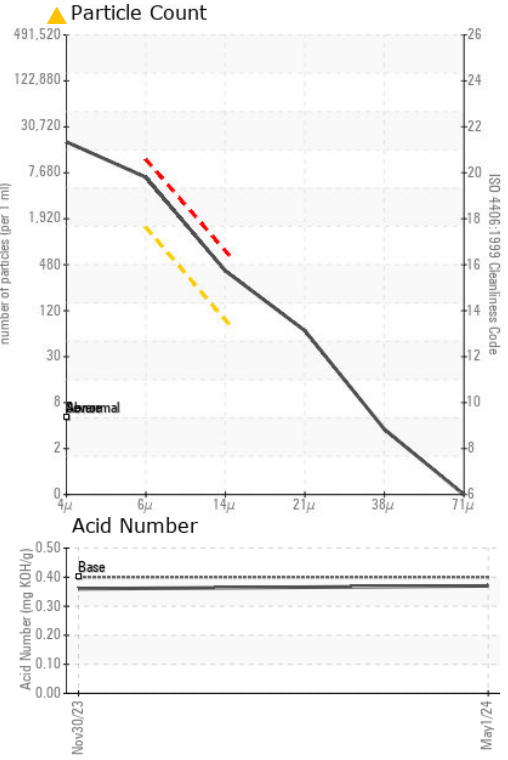
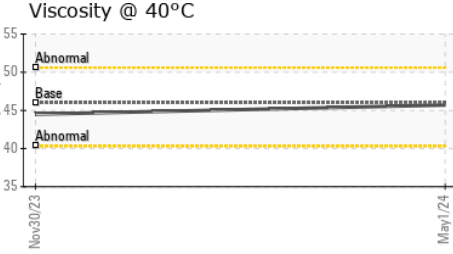
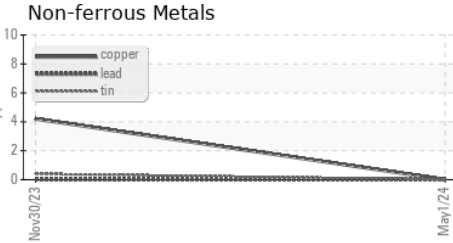
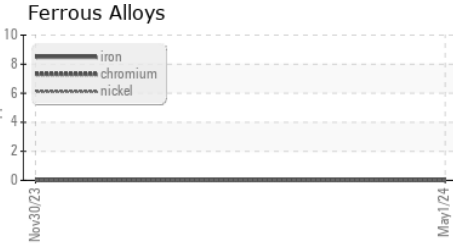
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	46	45.7	44.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA012691 **Received** : 11 Jul 2024  
**Lab Number** : 06233851 **Tested** : 12 Jul 2024  
**Unique Number** : 11122685 **Diagnosed** : 13 Jul 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**OLD DOMINION FREIGHT LINE**  
 2818 PARKWAY BLVD  
 WEST VALLEY CITY, UT  
 US 84119  
 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: