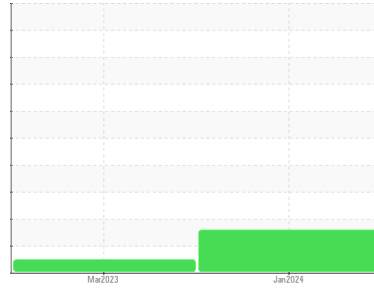


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER 5615744 (S/N 1024)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) M-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>KCPA008656</b>	KCPA001312	---
Sample Date	Client Info			<b>05 Jan 2024</b>	31 Mar 2023	---
Machine Age	hrs	Client Info		<b>43839</b>	37412	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	NORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</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>	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>12</b>	6	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

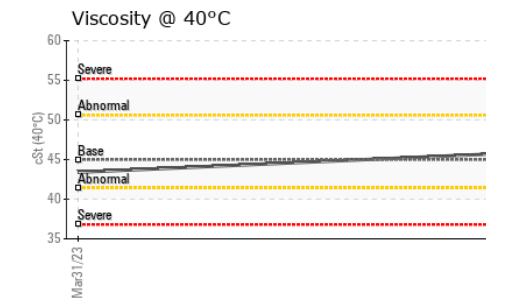
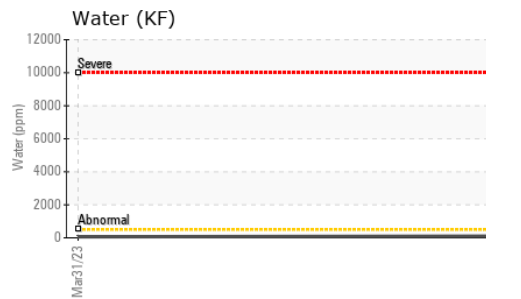
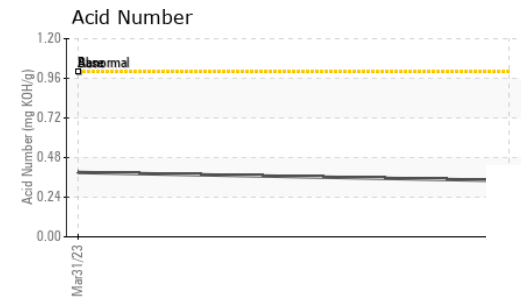
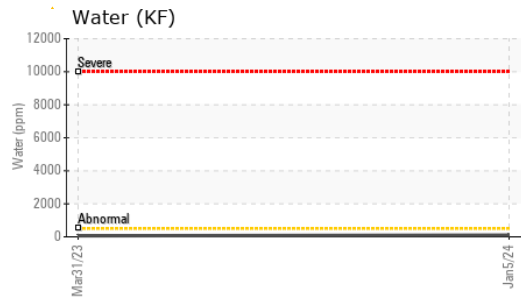
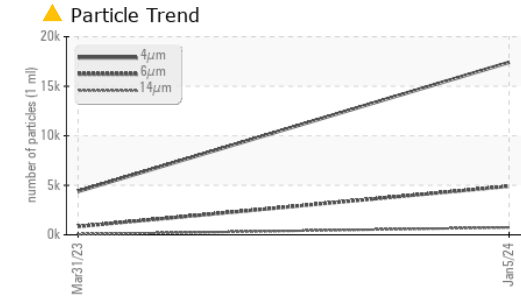
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	100	<b>9</b>	4	---
Calcium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	<1	---
Zinc	ppm	ASTM D5185m	0	<b>68</b>	68	---
Sulfur	ppm	ASTM D5185m	23500	<b>16068</b>	19683	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	0	---
Sodium	ppm	ASTM D5185m		<b>2</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water	%	ASTM D6304	>0.05	<b>0.010</b>	0.006	---
ppm Water	ppm	ASTM D6304	>500	<b>102</b>	63.2	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>17411</b>	4381	---
Particles >6µm		ASTM D7647	>1300	▲ <b>4899</b>	839	---
Particles >14µm		ASTM D7647	>80	▲ <b>744</b>	52	---
Particles >21µm		ASTM D7647	>20	▲ <b>259</b>	16	---
Particles >38µm		ASTM D7647	>4	<b>11</b>	1	---
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>21/19/17</b>	19/17/13	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.34</b>	0.39	---

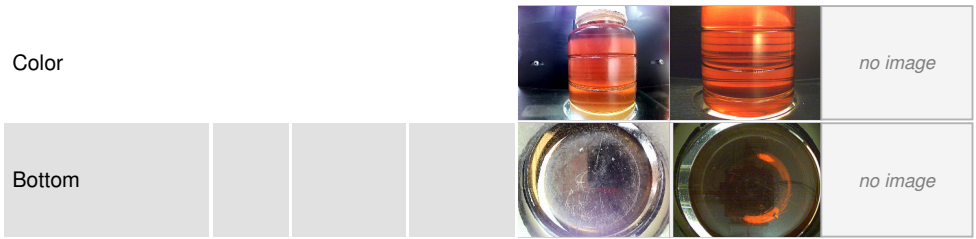
# OIL ANALYSIS REPORT



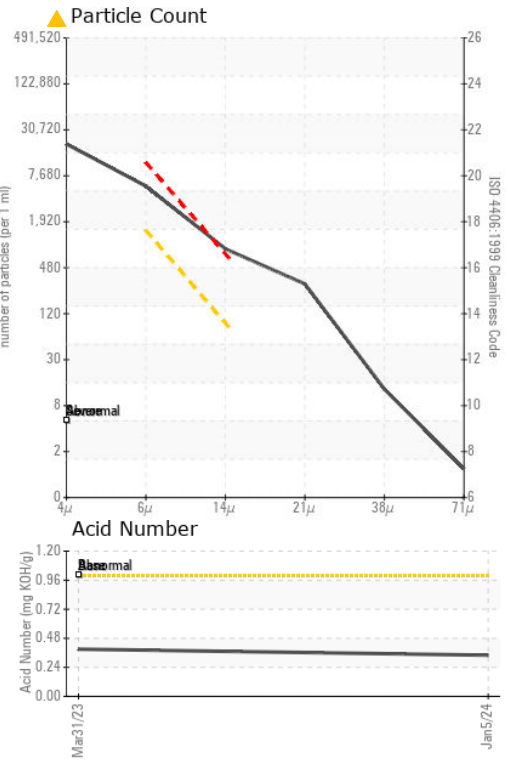
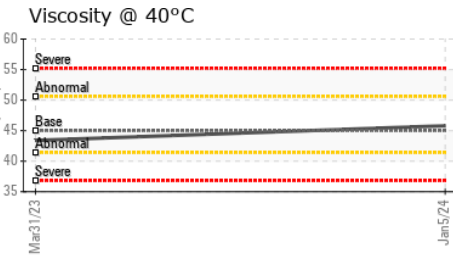
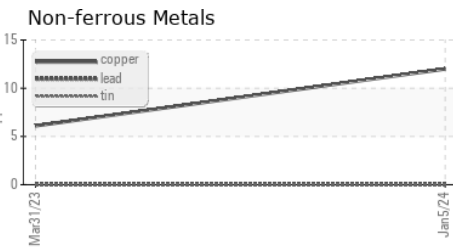
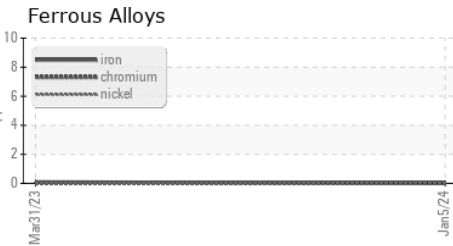
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	45.8	43.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA008656 **Received** : 19 Jan 2024  
**Lab Number** : 06065644 **Diagnosed** : 22 Jan 2024  
**Unique Number** : 10837026 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**FORTRESS RESOURCES LLC**  
 24200 MAIN ST  
 CARSON, CA  
 US 90745  
 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)