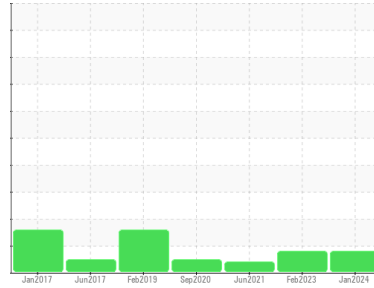




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SM8 2585669 (S/N 1131)**

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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA008811</b>	KCP54118	KCP32856
Sample Date	Client Info			<b>10 Jan 2024</b>	07 Feb 2023	01 Jun 2021
Machine Age	hrs	Client Info		<b>7570</b>	7044	5995
Oil Age	hrs	Client Info		<b>0</b>	1000	300
Oil Changed	Client Info			<b>N/A</b>	Changed	Not Chngd
Sample Status				<b>ATTENTION</b>	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</b>	<1	1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>8</b>	21	6
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

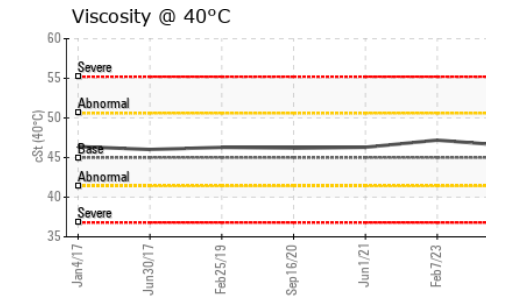
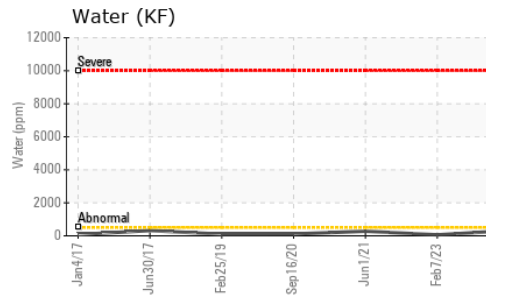
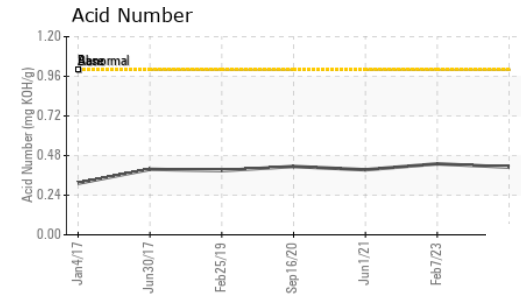
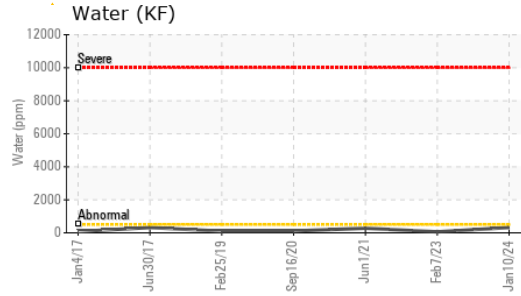
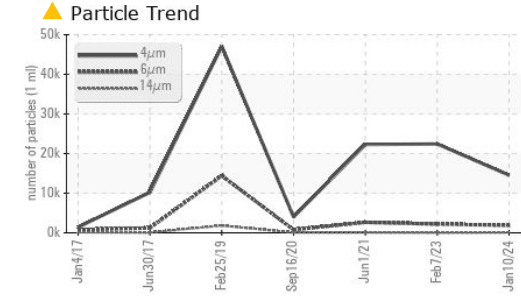
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	8
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	100	<b>&lt;1</b>	0	36
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	3
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	9	5
Zinc	ppm	ASTM D5185m	0	<b>9</b>	0	3
Sulfur	ppm	ASTM D5185m	23500	<b>18191</b>	22033	17180

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	1	0
Sodium	ppm	ASTM D5185m		<b>4</b>	<1	10
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Water	%	ASTM D6304	>0.05	<b>0.032</b>	0.005	0.027
ppm Water	ppm	ASTM D6304	>500	<b>320</b>	58.7	279.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>14542</b>	22425	22286
Particles >6µm		ASTM D7647	>1300	<b>▲ 1854</b>	▲ 2196	▲ 2655
Particles >14µm		ASTM D7647	>80	<b>75</b>	27	74
Particles >21µm		ASTM D7647	>20	<b>17</b>	5	11
Particles >38µm		ASTM D7647	>4	<b>1</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 21/18/13</b>	▲ 22/18/12	▲ 19/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.41</b>	0.43	0.394

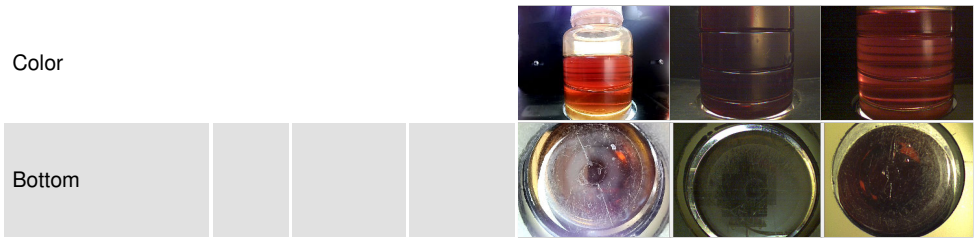
# OIL ANALYSIS REPORT



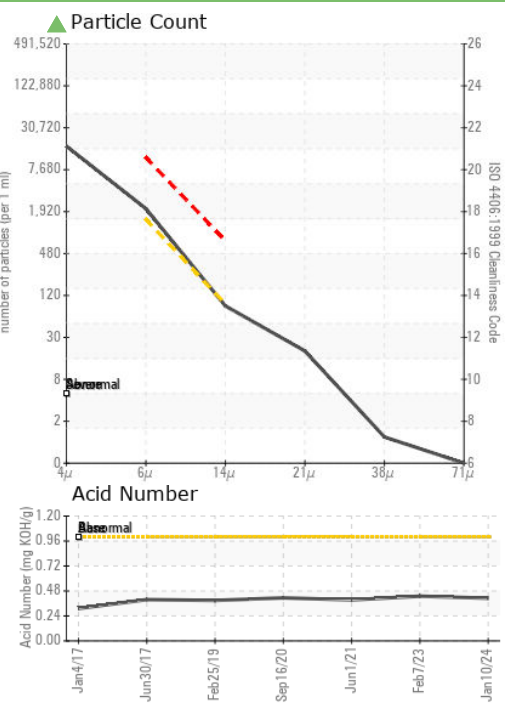
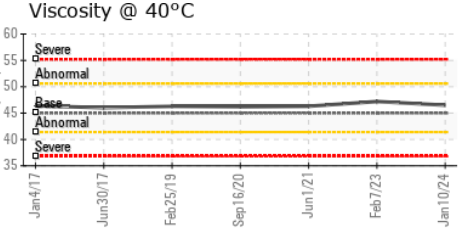
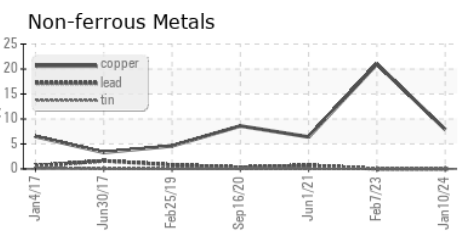
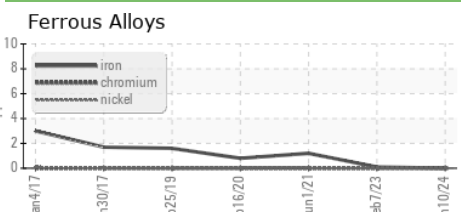
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	46.5	47.2	46.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA008811 **Received** : 30 Jan 2024  
**Lab Number** : 06073863 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10855954 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**OLD DOMINION FREIGHT LINE INC**  
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 TOMAH, WI  
 US 54660  
 Contact: DAVE ALLISON  
 DAVE.ALLISON@ODLF.COM  
 T:  
 F:

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)