



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SM 15T 8301181 (S/N 1168)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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.

### 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>KCPA018067</b>	KCPA003335	---
Sample Date	Client Info			<b>23 May 2024</b>	08 Jun 2023	---
Machine Age	hrs	Client Info		<b>3412</b>	1383	---
Oil Age	hrs	Client Info		<b>2020</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ATTENTION	---

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

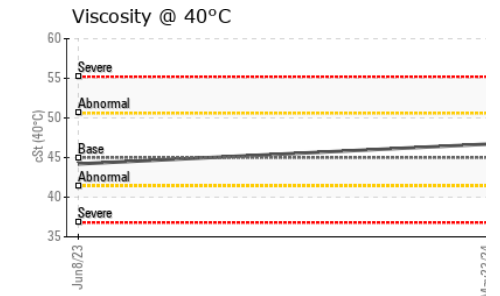
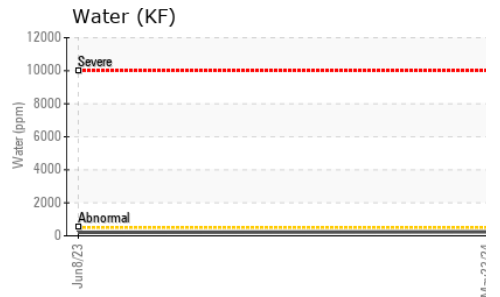
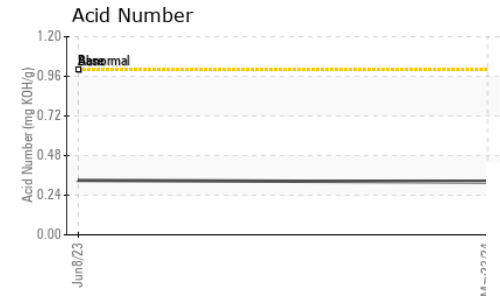
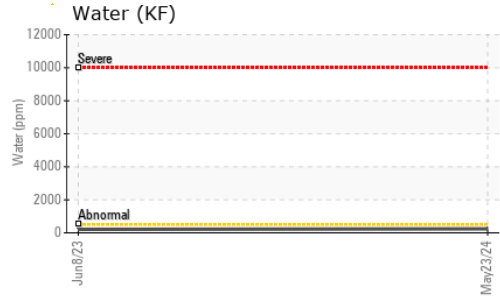
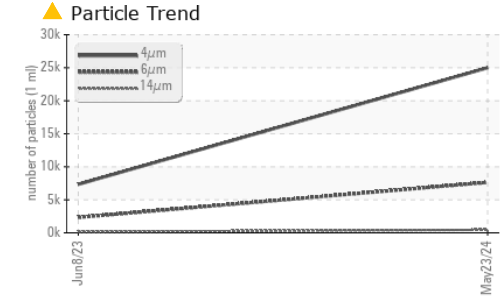
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>24</b>	47	---
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	100	<b>70</b>	83	---
Calcium	ppm	ASTM D5185m	0	<b>4</b>	5	---
Phosphorus	ppm	ASTM D5185m	0	<b>18</b>	3	---
Zinc	ppm	ASTM D5185m	0	<b>6</b>	7	---
Sulfur	ppm	ASTM D5185m	23500	<b>21885</b>	22155	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	---
Sodium	ppm	ASTM D5185m		<b>21</b>	20	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	---
Water	%	ASTM D6304	>0.05	<b>0.024</b>	0.021	---
ppm Water	ppm	ASTM D6304	>500	<b>244</b>	211.3	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>25001</b>	7348	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 7637</b>	● 2337	---
Particles >14µm		ASTM D7647	>80	<b>▲ 452</b>	● 154	---
Particles >21µm		ASTM D7647	>20	<b>▲ 85</b>	● 32	---
Particles >38µm		ASTM D7647	>4	<b>2</b>	1	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 22/20/16</b>	● 20/18/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.32</b>	0.33	---

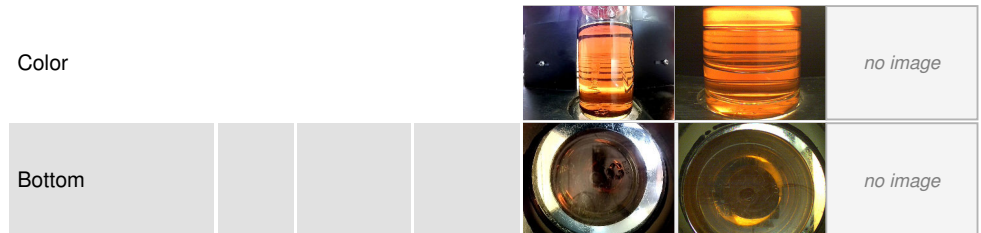
# OIL ANALYSIS REPORT



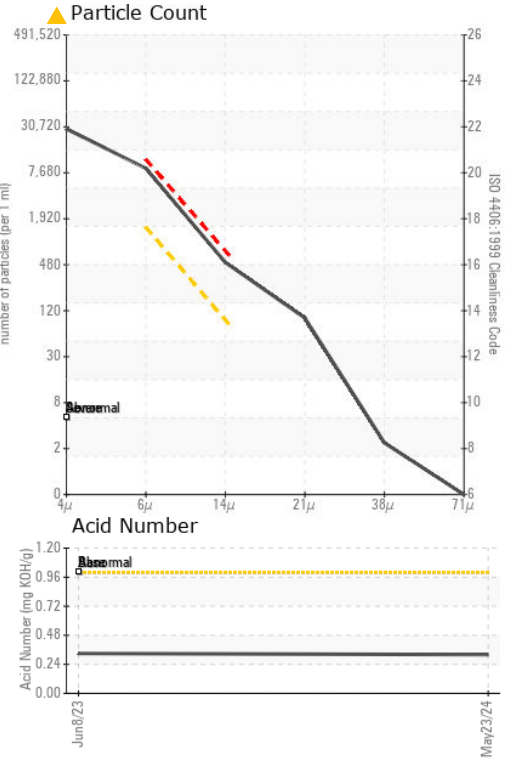
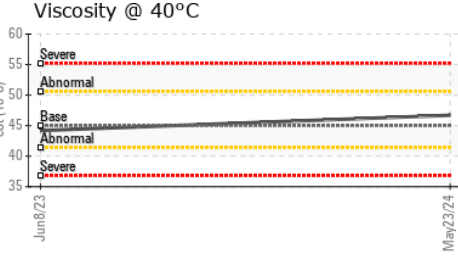
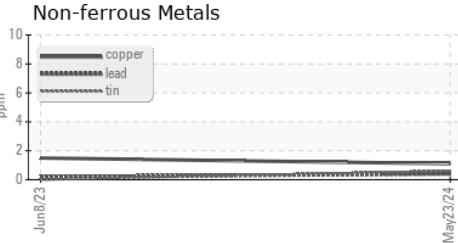
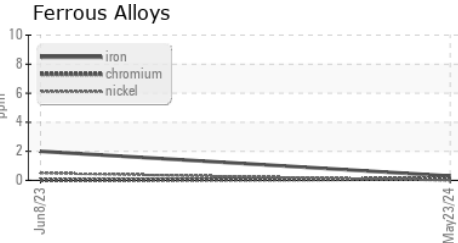
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	46.7	44.2

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018067  
**Lab Number** : 06195424  
**Unique Number** : 11057547  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 30 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 31 May 2024 - Angela Borella

**PRO TECH DESIGN & MANUFACTURING INC**  
 4041 EXPRESS ST  
 ARLINGTON, TX  
 US 76001  
 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)