

# **OIL ANALYSIS REPORT**

#### Sample Rating Trend

WATER

Machine Id 6969637 (S/N 1128) Component

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

### DIAGNOSIS

#### A Recommendation

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend an early resample in 500 hours to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

## Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA015516	KCPA005393	
Sample Date		Client Info		05 Mar 2024	27 Jun 2023	
Machine Age	hrs	Client Info		64264	31014	
Oil Age	hrs	Client Info		3249	0	
Oil Changed		Client Info		Changed	N/A	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum		ASTM D5185m	>10	<1	0	
Lead	ppm	ASTM D5185m	>10	0	0	
	ppm		>50	2	13	
Copper	ppm					
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	100	46	2	
Calcium	ppm	ASTM D5185m	0	0	0	
Phosphorus	ppm	ASTM D5185m	0	0	0	
Zinc	ppm	ASTM D5185m	0	2	16	
Sulfur	ppm	ASTM D5185m	23500	22777	20950	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	2	
Sodium	ppm	ASTM D5185m		8	1	
Potassium	ppm	ASTM D5185m	>20	0	<1	
Water	%	ASTM D6304	>0.05	<b>0.194</b>	0.010	
ppm Water	ppm	ASTM D6304		<b>1940</b>	100.6	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647			17501	
Particles >6µm		ASTM D7647	>1300		▲ 9534	
Particles >14µm		ASTM D7647	>80		▲ 1444	
Particles >21µm		ASTM D7647			▲ 466	
Particles >38µm		ASTM D7647 ASTM D7647	>20		▲ 23	
					1	
Particles >71µm		ASTM D7647				
Oil Cleanliness		ISO 4406 (c)	>/17/13		▲ 21/20/18	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.38	0.36	

Contact/Location: Service Manager - GAVSAN



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method

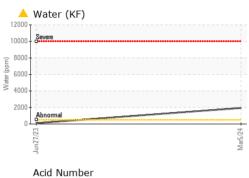
limit/base

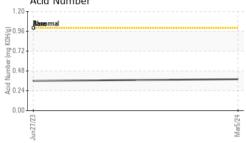
current

historv1

historv2

VISUAL







	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		LIGHT	
 	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
5/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
Mar5/24	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
 				11			
	FLUID PROPER	TIES	method	limit/base		history1	history2
	Visc @ 40°C	cSt	ASTM D445	45	46.6	51.4	
 	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Mat5/24	Color						no image
 	Bottom						no image
 	GRAPHS						
 	Ferrous Alloys						
	10						
	o - chromium						
Ē,	E 6						
A.A.	4						
	2						
	123	Januari (1999)		;/24			
	Jun 27/23			Mar5/24			
		alc					
	Non-ferrous Meta	ula					
	15 <sub>1</sub>						
	15 10						
	15 10						
	15 10						
	10 5						
	15 10 5 0			5/24			
	10 5			Mar5/24			
	15 10 5 0				Acid Number		
	Viscosity @ 40°C				Acid Number		
	Viscosity @ 40°C				Acid Number		
	Viscosity @ 40°C				Acid Number		
	Viscosity @ 40°C				Acid Number		
	Viscosity @ 40°C			(b)H0.9 0.1 0.1 0.1 0.1	Acid Number		
	Viscosity @ 40°C			1.1 0.0 400 (00 KOH/0) 1.0 Varue 1.0 Varue 1.0 Varue	20 4 5 18 18 18 18 18 18 18 19 19 19 19 19 19 19 19 19 19		
	Viscosity @ 40°C			1.1 (0,100 (0,100 (0,100 (0,100) (0,00) (0,0) (0,00)	20 4 5 18 18 18 18 18 18 18 19 19 19 19 19 19 19 19 19 19		
Laboratory Sample No. Lab Number Unique Number Test Package	<pre> ind for the second secon</pre>	01 Madiso Recei Teste Diagr	ived : 19 ed : 21 nosed : 21	Ma5/24	20 <b>Basemal</b> 72 8 9 9 9 9 9 9 9 9 9 9 9 9 9	SANTAI	GAVIAL IT 369 WARD D BARBARA, C US 9311 ervice Manage

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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