

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# KAESER 5899240 (S/N 1010)

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

#### Recommendation

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

The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA013729	KCP54133	
Sample Date		Client Info		30 Apr 2024	28 Mar 2023	
Machine Age	hrs	Client Info		29929	18441	
Oil Age	hrs	Client Info		5488	18441	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	
Chromium	ppm	ASTM D5185m	>10	<1	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	<1	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	2	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m		9	9	
Tin	ppm	ASTM D5185m		ء <1	0	
Vanadium	ppm	ASTM D5185m	~10	<1	0	
Cadmium	ppm	ASTM D5185m		<1	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	0	
Magnesium		ASTM D5185m	100	۰ <1	<1	
Calcium	ppm	ASTM D5185m	0	<1	0	
	ppm				8	
Phosphorus	ppm	ASTM D5185m	0	1		
Zinc	ppm	ASTM D5185m	0	0	0	
Sulfur	ppm	ASTM D5185m	23500	16387	12843	
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	
Sodium	ppm	ASTM D5185m		2	0	
Potassium	ppm	ASTM D5185m	>20	<1	<1	
Water	%	ASTM D6304		0.002	0.007	
ppm Water	ppm	ASTM D6304	>500	23	74.5	
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		980		
Particles >6µm		ASTM D7647	>1300	305		
Particles >14µm		ASTM D7647	>80	36		
Particles >21µm		ASTM D7647	>20	12		
Particles >38µm		ASTM D7647	>4	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	17/15/12		
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.34	0.51	

Contact/Location: Service Manager - PRETHO Page 1 of 2



# **OIL ANALYSIS REPORT**

12000	Water (KF)			VISUAL		method	limit/base
12000	Severe			White Metal	scalar	*Visual	NONE
	I			Yellow Metal	scalar	*Visual	NONE
Water (ppm) 0009 0008				Precipitate	scalar	*Visual	NONE
₹ 4000				Silt	scalar	*Visual	NONE
2000				Debris	scalar	*Visual	NONE
0	Abnormal			Sand/Dirt	scalar	*Visual	NONE
	Mar28/23		Apr30/24	Appearance	scalar	*Visual	NORML
	Mar		Apró	Odor	scalar	*Visual	NORML
	Particle Trend			Emulsified Water	scalar	*Visual	>0.05
1k	4µm			Free Water	scalar	*Visual	
(je 1k	6μm 14μm			FLUID PROPERT	IES	method	limit/base
number of particles (1 ml) N N 11 N				Visc @ 40°C	cSt	ASTM D445	45
to Jaquini Ok				SAMPLE IMAGES	5	method	limit/base
Ok							
	Mar28/23		Apr30/24	Color			
	Water (KF)						
12000 10000	Severe			Bottom			
(mdg) after (ppm) 4000				GRAPHS			
1000	•			Ferrous Alloys			491,520
2000	Abnormal			8- iron			
0			NCUC	E 6 - nickel			122,880
	Mar28/23		JC~V	d 4			30,720
	Viscosity @ 40°	C		2-			7,680
60				23			
55	Severe			Mar28/23			Apr30/24 \$ (per 1 ml
<del>ت</del> 50	Abnormal			Non-ferrous Metal	s		Apr30/24
(0-0 <del>1</del> ) 150 45	Base			10 copper			d Jo per 120
	Abnormal			8 - exercise lead			
40	Severe						30
35			× C	2-			
	Mar28/23		1000-1	0			*
				Mar28/23			Apr30/24
1k	Particle Trend			≥ Viscosity @ 40°C			₹ (
				<sup>60</sup> T			~1.20
1 S	14μm			55 - Severe			B/H0 0.96
-piped 1k				(2) 50 - Abnormal (2) 50 - Base 8 45 - Abnormal			Ē0.72
number of particles (1 ml) N N N 11 11				Aprivilla			
UR OK				40 Severe			(B)HQ) 0.9( HQ) 0.9( B) 0.77 4 mm 0.4( Pigg 0.24 9.00 4 0.0(
0k	L <u>.</u>			354			+ 0.00
	Mar28/23		YCUC~Y	Mar28/23			Apr30/24
			Laboratory	: WearCheck USA - 50	1 Madisc	on Ave., Carv	, NC 27513
		ANAR	Sample No.	: KCPA013729	Rece	ived :10	) May 2024
劉			Lab Number	: 06175491	Teste		May 2024
5		Certificate L2367	Unique Number Test Package	: 11021544 : IND 2 ( Additional Tes			May 2024 - Ang

NONE NONE NONE /isual /isual NONE NONE NONE NONE NONE /isual NONE /isual NONE NONE NONE NONE NONE /isual MODER NONE NONE NONE /isual NORML NORML /isual NORML /isual NORML NORML NORML /isual >0.05 NEG NEG /isual NEG NEG STM D445 44.6 45.4 45 no image no image Particle Count 491,520 122,880 30,720 7,680 0SI (per 1 ml) Apr30/24 4406 1,920 1999 Cle 480 16 14 120 30 Apr30/24 214 38 Acid Number (B/H0) MOX 0.96 Ê 0.72 - <sup>20</sup> 0.48 N 0.24 Apr30/24

Mar28



3177 E THOUSAND OAKS BLVD d : 10 May 2024 : 14 May 2024 THOUSAND OAKS, CA sed : 14 May 2024 - Angela Borella : IND 2 (Additional Tests: KF, PrtCount) Contact: Service Manager te | 236' Test Package 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)

Contact/Location: Service Manager - PRETHO Page 2 of 2

PRESTIGE AUTO BODY

US 91362

T:

F: