

### **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# KAESER CSD 75 8440732 (S/N 1335)

Component Compressor Fluid

KAESER SIGMA (OEM) FG-460 (--- GAL)

#### DIAGNOSIS

#### Recommendation

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

#### A Wear

The aluminum level is abnormal.

#### Contamination

Insufficient sample was received to conduct all the routine laboratory tests. There is a high concentration of water present in the oil.

#### Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA014225	KCPA006484	
Sample Date		Client Info		19 Mar 2024	26 Oct 2023	
Machine Age	hrs	Client Info		10219	8676	
Oil Age	hrs	Client Info		4000	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	3	0	
Chromium	ppm	ASTM D5185m	>10	0	<1	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	<b>A</b> 36	<1	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	1	1	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m		0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m		5	0	
Calcium	ppm	ASTM D5185m		31	0	
Phosphorus	ppm	ASTM D5185m	500	366	0	
Zinc	ppm	ASTM D5185m		260	0	
Sulfur	ppm	ASTM D5185m		2156	2556	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	0	2	
Water	%	ASTM D6304	>0.05	<b>A</b> 0.828	0.006	
ppm Water	ppm	ASTM D6304	>500	<b>A</b> 8280	66.1	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647			27590	
Particles >6µm		ASTM D7647	>1300		<u> </u>	
Particles >14µm		ASTM D7647	>80		41	
Particles >21µm		ASTM D7647	>20		7	
Particles >38µm		ASTM D7647	>4		0	
Particles >71µm		ASTM D7647	>3		0	
Oil Cleanliness		ISO 4406 (c)	>/17/13		<b>2</b> 2/19/13	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5		0.35	

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Built for a lifetime."

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	Watan (KE)							
12000-	Water (KF)			VISUAL		method	limit/base	current
10000-	Severe			White Metal	scalar	*Visual	NONE	NONE
Ê 8000	1000-			Yellow Metal	scalar	*Visual	NONE	NONE
(ppm)	3000 -			Precipitate	scalar	*Visual	NONE	NONE
<sup>₩</sup> 4000.	4000			Silt	scalar	*Visual	NONE	NONE
2000-				Debris	scalar	*Visual	NONE	NONE
0-	Abnormat			Sand/Dirt	scalar	*Visual	NONE	NONE
	0ct26/23			Appearance	scalar	*Visual	NORML	NORML
Mari			Odor	scalar	*Visual	NORML	NORML	
<b></b>	Aluminum (ppr	n)		Emulsified Water	scalar	*Visual	>0.05	0.2%
60-				Free Water	scalar	*Visual		NEG
50-	Severe			FLUID PROPER	RTIES	method	limit/base	current
40-				Visc @ 40°C	cSt	ASTM D445	46	
퉙.30-						A511VI D445	40	
20-	Abnormal			SAMPLE IMAG	ES	method	limit/base	current
10.	Abnormal							
0.	/23		- 124	Color				
	0ct26/23		Mar1 9/24					and the second second
	Acid Number							
1.60-								
1.40			1	Bottom				
H 1.20								
الله الله 0.80-				GRAPHS				
(B/HOX) B/HOX B/HO				Ferrous Alloys				
-P2 0.40 0.20				<sup>10</sup> T				
0.00-				8 - Iron chromium				
	0ct26/23		, cr a cr	E 6 - nickel				
	0		Č	2				
	Viscosity @ 40°	°C						
52-	Abnormal			0ct26/23			Mar19/24	
50.							Mai	
48 (0-0+) tso	Base			Non-ferrous Met	als			
5 44.	- 0			8 - copper				
				E 6 - tin				
42 -	Abnormal			4				
40-	6/23		64.2	2				
	0ct26/23		CT-C	33	***********	***********************	/24	
				0ct26/23			Mar19/	
				Viscosity @ 40°0	2		_	Acid Number
				52 Abnormal			<u>_</u> 2.00	
				50 - 48			2.00 1.50 1.50 Vmmp et 0.50 Vmm	Base
				() 48 () 00 () 46 5 3 44			 ສ 1.00	
				42 Abnormal			0.00 Veri	
				5 0ct26/23			0ct26/23	0ct26/23 -
				0ct2			0ct2	Octé
<u>المجر</u>		4	Laboratory	: WearCheck USA - 5				
52		ANAB	Sample No.	: KCPA014225	Recei		Apr 2024	
22		A C C R E D I T E D	Lab Number Unique Number		Teste Diagr		3 Apr 2024 Apr 2024 - Jonati	han Hester
644		Certificate L2367		: IND 2 (Additional Te			יקי בטביד טטוומנו	
			is sample report,	contact Customer Sel	rvice at 1-8	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)

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**GRIFFITH LABORATORIES** 

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acope@griffithfoods.com

0ct26/23 -

T:

F:



history1

NONE NONE

NONE

NORML NEG NEG

history1

history1

46.6

NONE NONE NONE NORML history2

\_\_\_\_

history2

history2