

### **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# 8446061 (S/N 1248) Compressor

Fluid KAESER SIGMA (OEM) S-460 (--- GAL)

#### DIAGNOSIS

#### 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

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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA015788		
Sample Date		Client Info		26 Mar 2024		
Machine Age	hrs	Client Info		4084		
Oil Age	hrs	Client Info		3000		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>3	0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	0		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m		5		
Tin	ppm	ASTM D5185m	>10	ء <1		
Vanadium	ppm	ASTM D5185m	210	0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m	90	0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		0		
Magnesium	ppm	ASTM D5185m	90	0		
Calcium	ppm	ASTM D5185m	2	0		
Phosphorus	ppm	ASTM D5185m		0		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		18585		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1		
Sodium	ppm	ASTM D5185m		<1		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.05	0.015		
ppm Water	ppm	ASTM D6304	>500	153		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		66267		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>80	<b>A</b> 1111		
Particles >21µm		ASTM D7647	>20	<u> </u>		
Particles >38µm		ASTM D7647	>4	<b>6</b> 5		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>A</b> 23/22/17		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2



Built for a lifetime."

## **OIL ANALYSIS REPORT**

70k 60k 50k	4um			method	limit/base	current	history1	history2
💳 50k -	ματη ματη	White Metal	scalar	*Visual	NONE	NONE		
	••••••••••••••••••••••••••••••••••••••	Yellow Metal	scalar	*Visual	NONE	NONE		
- 40k -		Precipitate	scalar	*Visual	NONE	NONE		
- 30k -		Silt	scalar	*Visual	NONE	NONE		
E ZUK		Debris	scalar	*Visual	NONE	LIGHT		
" 10k		Sand/Dirt	scalar	*Visual	NONE	NONE		
	6/24 -	Appearance	scalar	*Visual	NORML	NORML		
0.00-14	Mar26/24	Odor	scalar	*Visual	NORML	NORML		
• ,	Water (KF)	Emulsified Water	scalar	*Visual	>0.05	NEG		
12000 T		Free Water	scalar	*Visual		NEG		
10000-	Severe	FLUID PROPER	TIES	method	limit/base	current	history1	history2
0008 Mater (ppm)		Visc @ 40°C	cSt	ASTM D445	46	44.8		
4000 Mate		SAMPLE IMAGE	S	method	limit/base	current	history1	history2
2000 -	Abnormal						-	
	Mar26/24	Color					no image	no image
0.50 ( <sup>()</sup> H0)	Acid Number	Bottom					no image	no image
- 0.30 B		GRAPHS						
Number d Number		Ferrous Alloys				Particle Count		
.10 Pig 0.10		10 iron			491,520	I		T <sup>26</sup>
0.00		o chromium			122,880			-24
10.0C-10		e 6			1			
2	ма. Т	2			30,720			-22
١	Water (KF)				7,680	•		-20 5
12000		Mar26/24			Mar26/24 . s (per 1 ml)			-20 180 406:1999 CleanIncess Code -16 CleanIncess Code -14 -14 -14 -12
10000-	Severe	Mar2			020, 1, 1, 1, 200 ss (ber			+10 06:199
ê 8000		Non-ferrous Meta	ls		100 HB 480			-16 Ce
0008 Water (ppm)		10 copper			d 10	· · · · · · · · · · · · · · · · · · ·		anline
≥ 4000-		8 - Read			4208264			117 SS Co
2000 -	Aboomal	E 6			30	+		-12 🖶
0		2			8			10
10.00-10	-7 (0.7 II) 1					<b>Bisreve</b> mal		
N	No.	Mar26/24			Mar26/24	t		
١	/iscosity @ 40°C	Mari			Q War	4 Gu	14µ 21µ	38µ 71µ
52	Abnormal	Viscosity @ 40°C				Acid Number	1ημ 21μ	50µ 71µ
50 - 48 -		Abnormal			(BHO) 0.40	Base		
	Base	50 + 9			ي 0.40 ق0.30	- 0		
- 46 SS (40°C)		Base 455 Abnormal			는 0.30 은 0.20			
42-		40 Abnormal			2.10			
40 -	Abnormal Account of the second	35						
38	+. V	Mar26/24			Mar26/24	Mar26/24		Mar26/24
10.00-10	1. 3C.~ ₽₹	Marĉ			Mar2	Mar2		Marz
	Laboratory Sample No. Lab Number Unique Number Test Package To discuss this sample report, * - Denotes test methods that Statements of conformity to sp	: 10969093 : IND 2 ( Additional Tes contact Customer Serv are outside of the ISO 1	Rece Teste Diagr sts: KF, F vice at 1-8	ived : 10 id : 11 nosed : 11 irtCount ) 200-237-1369 ope of accred	) Apr 2024   Apr 2024 Apr 2024 - Dou 9. litation.		2121 CLE M Contact: MIKE mike.bertapelle	

Report Id: SAMMARKC [WUSCAR] 06144285 (Generated: 04/12/2024 06:36:34) Rev: 1

Contact/Location: MIKE BERTAPELLE - SAMMARKC