

# **OIL ANALYSIS REPORT**

### Sample Rating Trend



Machine Id 8566420 (S/N 1969) Component

Compressor Fluid KAESER SIGMA (OEM) FG-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 moderate 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.

			Mar2023	Feb2024		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP50356	KCP54145	
Sample Date		Client Info		19 Feb 2024	27 Mar 2023	
Machine Age	hrs	Client Info		6739	3126	
Oil Age	hrs	Client Info		0	3000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ATTENTION	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	2	
Chromium	ppm	ASTM D5185m	>10	<1	0	
Nickel	ppm	ASTM D5185m	>3	<1	<1	
Titanium	ppm	ASTM D5185m	>3	<1	0	
Silver	ppm	ASTM D5185m	>2	<1	0	
Aluminum	ppm	ASTM D5185m	>10	1	4	
Lead	ppm	ASTM D5185m	>10	<1	<1	
Copper	ppm	ASTM D5185m	>50	6	4	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	
Barium	ppm	ASTM D5185m		5	2	
Molybdenum	ppm	ASTM D5185m		<1	0	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m		<1	0	
Calcium	ppm	ASTM D5185m		0	0	
Phosphorus	ppm	ASTM D5185m	500	233	209	
Zinc	ppm	ASTM D5185m		235	157	
Sulfur	ppm	ASTM D5185m		1566	2615	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	4	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	<1	<1	
Water	%	ASTM D6304	>0.05	0.005	0.005	
ppm Water	ppm	ASTM D6304	>500	51	50.5	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		7172		
Particles >6µm		ASTM D7647	>1300	<b>1877</b>		
Particles >14µm		ASTM D7647	>80	<b>1</b> 31		
Particles >21µm		ASTM D7647	>20	<b>a</b> 30		
Particles >38µm		ASTM D7647	>4	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>20/18/14</b>		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	0.68	0.55	

Contact/Location: Service Manager - INAIRV



12000

10000. 8000 Water (ppm) 6000 4000 2000

1.40 1.40 1.20 1.00 1.00 0.80 0.60

Piov 0.40 0.20 0.00 Mar27/23

12000

Built for a lifetime."

# **OIL ANALYSIS REPORT**

Particle Trend	VISUAL		method	limit/base	current	history1	history2
4μm 6μm	White Metal	scalar	*Visual	NONE	NONE	LIGHT	
14µm	Yellow Metal	scalar	*Visual	NONE	NONE	MODER	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
Nater (KF)	Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
Severe	FLUID PROPER	RTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	46	46.7	46.4	
	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
Abnormal				1			
	Feb 19/24						no image
Acid Number Base	Bottom						no image
	GRAPHS						
	Ferrous Alloys				Particle Count		
	<sup>10</sup>			491,520	I		T <sup>26</sup>
5	8 - Iron chromium			122,880			-24
	E 6+ minimum nickel			1			
	4			30,720	Ť		-22
Vater (KF)				7,680	~ `		-20
	Mar27/23			Feb 19/24 . (per 1 ml)	1		-20 -18 -16 -14
Severe	Mar2			1,920		<b>V</b>	-18
	Non-ferrous Met	tals		Feb19/24 Darticles (per 1 ml) 086			-16
				5			14
	8 - Lead						-12
hharmad				30	+		-12
Abnormal	2				Bioresemal		+10
		Maaaaa		10000 mmmm	abreemai	1	
	27/23			Feb19/24	•		18
íiscosity @ 40°C	Marž			虚 0			
Abnormal	Viscosity @ 40°	С		4	Acid Number	14μ 21μ	38µ 71µ
	Abnormal			@ <sup>2.00</sup>	T		
				9 1.50	Base		
3256	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;			(B)2.00 (B)HOX 1.50 B(M) 1.50 (B) 1.00 (C).50 (C).50			
				4 N 0.50			
Abnormal	Abnormal						
				9/24			₽ C/ E
	Mar27/23			Feb 19/24	Mar27/		Fah 19/24
Laborato Sample I Lab Num Unique Num	-	Recei Teste Diagn	ved : 23 d : 26 osed : 26	r, NC 27513 3 Feb 2024 5 Feb 2024 Feb 2024 - Don		01 OAK CANYO	MEDICAL INC DN, SUITE 100 IRVINE, C/ US 92616 ervice Manage
	eport, contact Customer Se			9.			0

Contact/Location: Service Manager - INAIRV