

OIL ANALYSIS REPORT

Sample Rating Trend



KAESER 7044341

Compressor Fluid KAESER SIGMA (OEM) S-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. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris 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		KC102003	KC82735	
Sample Date		Client Info		31 Jan 2023	03 Jan 2022	
Machine Age	hrs	Client Info		767	177	
Oil Age	hrs	Client Info		590	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	<1	0	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>10	<1	0	
Lead	ppm	ASTM D5185m	>10	0	0	
Copper	ppm	ASTM D5185m	>50	4	1	
Tin	ppm	ASTM D5185m	>10	0	<1	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	23	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m		0	0	
Manganese	ppm	ASTM D5185m		<1	<1	
Magnesium	ppm	ASTM D5185m	90	37	22	
Calcium	ppm	ASTM D5185m	2	2	0	
Phosphorus	ppm	ASTM D5185m		11	3	
Zinc	ppm	ASTM D5185m		7	8	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	
Sodium	ppm	ASTM D5185m		19	4	
Potassium	ppm	ASTM D5185m	>20	3	<1	
Water	%	ASTM D6304	>0.05	0.023	0.018	
ppm Water	ppm	ASTM D6304	>500	232.6	186.1	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.29	0.232	



OIL ANALYSIS REPORT

method limit/base

current

historv1

historv2

	Bu	ilt for a lifetime."		
1	2000-	Water (KF)	VISUAL	
1	0000.	Severe	White Metal Yellow Metal	SC
Water (ppm)	8000 • 6000 •		Precipitate	SC
Na N	4000.		Silt	SC
	2000 •		Debris	SC
	0	Abnormal	Sand/Dirt	SC
		Jan 3/22 Jan 31/23	Appearance	SC
		Lan La	Odor	SC
		Water (KF)	Emulsified Water	SC
1	2000-		Free Water	SC
	0000.	Severe O	FLUID PROPER	
Water (ppm)	8000 • 6000 •		Visc @ 40°C	cS
Wate	4000.		SAMPLE IMAGE	ES
	2000 •	Abnormal EZVIEuer	Color	
	52 - 50 - 48 -	Viscosity @ 40°C	Bottom	
	(0-046 · 44 ·	Base	GRAPHS	
	42.		Ferrous Alloys	
	40.	Abnormal	10 8iron	
	38]	Jan3/22 -	etromum 6 4 2 0 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
			Non-ferrous Met	ale

	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar '	*Visual	NONE	NONE	NONE	
	Yellow Metal		*Visual	NONE	NONE	NONE	
	Precipitate		*Visual	NONE	NONE	NONE	
	Silt		*Visual	NONE	NONE	NONE	
	Debris		*Visual	NONE		A MODER	
	Sand/Dirt		*Visual	NONE	NONE	NONE	
1/23 -	Appearance		*Visual	NORML	NORML	NORML	
Jan 31/23	Odor		*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.05	NEG	NEG	
	Free Water		*Visual		NEG	NEG	
	FLUID PROPERT	TIES	method	limit/base	current	history1	history2
	Visc @ 40°C		ASTM D445	46	43.6	43.6	
	SAMPLE IMAGES	S	method	limit/base	current	history1	history2
		5	method		ourient		motoryz
Jan 31/23	Color						no image
	Bottom						no image
	GRAPHS						
	Ferrous Alloys						
	Jan 3/22			Jan 31/23			
	Non-ferrous Metal	s					
	udd 2 0 2ZZ/E/ep			cZ/1Cuer			
	→ Viscosity @ 40°C			La.	0 - 1 - 1 - 1		
	⁵⁵			-0.5	Acid Number		
	50 - Abnormal			(^{0.5} (⁶ /H0)	Base		
	() () () () () () () () () ()			Ĕ 0.3	0 -		
	Abnormal			0.3 4 0.2 10.0 4 0.2 0.0 9 0.0	0		
	40 + 0			2 0.1	0		
	35						
	Jan 3/22			Jan31/23	Jan 3/22		
Laboratory Sample No.	: WearCheck USA - 50 : KC102003	1 Madison Receiv		, NC 27513 Mar 2023		SUNCOAST D	ISTRIBUTIO 33 123RD C

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

Contact/Location: Service Manager - SUNLAR