

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Machine Id

KAESER 1046990

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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

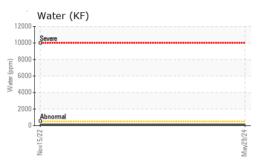
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

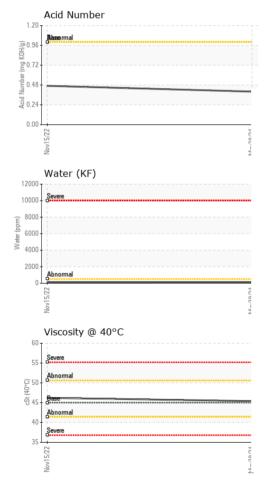
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA018932	KCP47528D	
Sample Date		Client Info		29 May 2024	15 Nov 2022	
Machine Age	hrs	Client Info		72707	68832	
Oil Age	hrs	Client Info		0	3000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	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	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>10	3	0	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm	ASTM D5185m	>50	3	21	
Tin	ppm	ASTM D5185m	>10	<1	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	0	0	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	100	13	0	
Calcium	ppm	ASTM D5185m	0	0	0	
Phosphorus	ppm	ASTM D5185m	0	0	6	
Zinc	ppm	ASTM D5185m	0	31	0	
Sulfur	ppm	ASTM D5185m	23500	21567	19841	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	2	0	
Water	%	ASTM D6304	>0.05	0.011	0.012	
ppm Water	ppm	ASTM D6304	>500	112	123.9	
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		18079	34846	
Particles >6µm		ASTM D7647	>1300	<u> </u>	6 210	
Particles >14µm		ASTM D7647	>80	A 315	4 746	
Particles >21µm		ASTM D7647	>20	<u> </u>	<u> </u>	
Particles >38µm		ASTM D7647	>4	6 5	A 31	
Particles >71µm		ASTM D7647	>3	1	1	
Oil Cleanliness		ISO 4406 (c)	>/17/13	A 21/19/15	A 22/20/17	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.40	0.47	

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SSORS





OIL ANALYSIS REPORT

VISUAL		method	limit/base	current	history1	history2
Vhite Metal	scalar	*Visual	NONE	NONE	NONE	
ellow Metal	scalar	*Visual	NONE	NONE	NONE	
recipitate	scalar	*Visual	NONE	NONE	NONE	
ilt	scalar	*Visual	NONE	NONE	NONE	
ebris	scalar	*Visual	NONE	LIGHT	VLITE	
and/Dirt	scalar	*Visual	NONE	NONE	NONE	
ppearance	scalar	*Visual	NORML	NORML	NORML	
Ddor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D445	45	45.4	46.2	
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
						,
) - I				T		
Color						no image
Bottom					Attox.	no image
GRAPHS						
Ferrous Alloys				Particle Count		
L			491,520			T ²⁶
iron chromium			122,880	-		-24
- nickel						
			30,720			-22
			7,680	1		-20
Nov15/22			May29/24. s (per 1 ml)	1.		-18
Nov			Way.	11		18
Non-ferrous Metal	s		May 29/24		~	-10 -18 -16 -14
copper			jo jo 120	-		-14
tin					. /	
tin			30			-12
			8	Bisrevennal		10
23						
Nov15/22			w29/			Y
≥ Viscosity @ 40°C			≥ 0	4μ 6μ	14µ 21µ	38µ 71µ
Г. –			- 1.20	Acid Number		
Severe			B/H 0.96	Basermal		
Abnormal Base Abnormal			Ē 0.72			
Abnormal	****		- a 0.48			
Severe			(b)HOX 0.96 HOX 0.96 D .72 tumn 0.48 V 0.24 V 0.00 V 0.04			
4				22		
Nov15/2			May29/24	Nov15/22		0
Z			Z	Z		:
/earCheck USA - 50	1 Madico		NC 27512		PENSKE TRU	
CPA018932	Recei		Jun 2024			NDOVAL WA
199124	Teste		5 Jun 2024			IAYWARD, C
061247		nosed : 06	Jun 2024 - Don			US 9454

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)

Report Id: PENHAY [WUSCAR] 06199124 (Generated: 06/06/2024 11:24:29) Rev: 1

Certificate L2367

Laboratory

Sample No. Lab Number Unique Number Test Package

Contact/Location: DANIEL CERVANTES - PENHAY

daniel.cervantes@penske.com

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F: