WEAR CONTAMINATION FLUID CONDITION

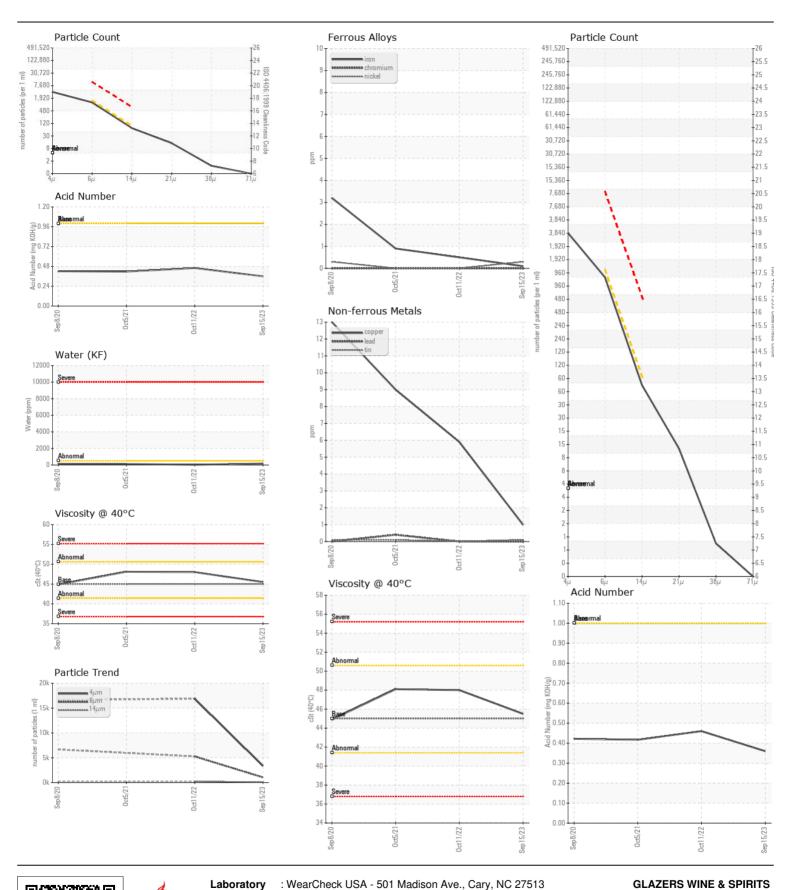
NORMAL NORMAL NORMAL

Machine Id

KAESER 6723197

Component

Compressor							
KAESER SIGMA (OEM) M-460 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
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.	Sample Number		Client Info		KCP40037D	KCP50493	KCP11847
	Sample Date		Client Info		15 Sep 2023	11 Oct 2022	05 Oct 2021
	Machine Age	hrs	Client Info		4348	4217	3129
	Oil Age	hrs	Client Info		131	1088	1106
	Filter Age	hrs	Client Info		131	1088	1106
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>50	<1	<1	<1
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	0	0
	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	<1
	Aluminum	ppm	ASTM D5185m		0	<1	2
	Lead	ppm	ASTM D5185m		0	0	<1
	Copper	ppm	ASTM D5185m		1	6	9
	Tin	ppm	ASTM D5185m		<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.	Silicon	nnm	ASTM D5185m	> 25	_1	_1	2
		ppm			<1 2	<1 0	2 <1
	Potassium	ppm o/	ASTM D5185m				
	Water	%	ASTM D6304		0.017	0.003	0.011
	ppm Water Particles >4µm	ppm	ASTM D6304 ASTM D7647	>5000	173.6 3374	36.5 16886	119.6
	Particles >6µm		ASTM D7647	~1300	1056	▲ 5271	
	Particles >14μm				63	△ 273	
	Particles >21µm		ASTM D7647		12	<u>△</u> 56	
	Particles >38µm		ASTM D7647		1	2	
	Particles >71µm		ASTM D7647		0	0	
	Oil Cleanliness			>/17/13	19/17/13	<u>^</u> 21/20/15	
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor		*Visual	NORML	NORML	NORML	NORML
	Emulsified Water		*Visual	>0.05	NEG	NEG	NEG
ELUID CONDITION	0 "				_	4	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	0	7	15	7
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		0	0	<1
	Barium	ppm	ASTM D5185m		74	21	8
	Molybdenum	ppm	ASTM D5185m	U	0	0	0
	Manganese	ppm	ASTM D5185m	100	0	0	<1
	Magnesium	ppm	ASTM D5185m		85	51	38
	Calcium	ppm	ASTM D5185m		3	1	0
	Phosphorus	ppm	ASTM D5185m		2	2	5
	Zinc	ppm	ASTM D5185m		2	12	2
	Sulfur	ppm	ASTM D5185m		20421	22516	18515
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.36	0.46	0.417
	Visc @ 40°C	cSt	ASTM D445	45	45.5	48.0	48.1





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 05957675

: KCP40037D

Received **Tested** Unique Number: 10658888

Diagnosed

: 22 Sep 2023 : 22 Sep 2023 - Doug Bogart

: 21 Sep 2023

Contact: Service Manager

22800 E 19TH AVE

AURORA, CO

US 80019

T: F:

Test Package : IND 2 (Additional Tests: KF, PrtCount) 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)