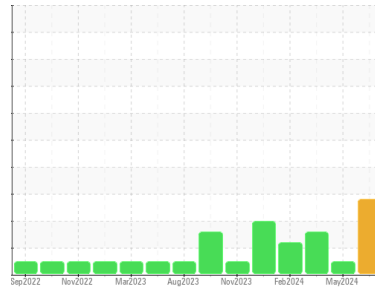




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
6840714 (S/N 1278)

Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

The aluminum level is abnormal. All other 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KCPA019181	KCPA018184	KCPA016052
Sample Date	Client Info			12 Jun 2024	17 May 2024	19 Apr 2024
Machine Age	hrs	Client Info		8511	8301	8040
Oil Age	hrs	Client Info		5966	5756	5495
Oil Changed	Client Info			Not Chngd	Not Chngd	Not Chngd
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	<1	0
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	▲ 36	22	9
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	1	1	<1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	1	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	0	<1	0
Calcium	ppm	ASTM D5185m	2	0	7	0
Phosphorus	ppm	ASTM D5185m		142	166	143
Zinc	ppm	ASTM D5185m		21	33	0
Sulfur	ppm	ASTM D5185m		1108	1401	1074

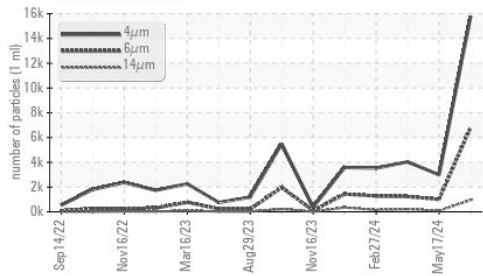
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	0
Sodium	ppm	ASTM D5185m		5	4	2
Potassium	ppm	ASTM D5185m	>20	1	1	0
Water	%	ASTM D6304	>0.05	0.015	0.006	0.005
ppm Water	ppm	ASTM D6304	>500	154	62	54

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		15779	2988	4034
Particles >6µm		ASTM D7647	>1300	▲ 6807	1004	1229
Particles >14µm		ASTM D7647	>80	▲ 941	76	▲ 213
Particles >21µm		ASTM D7647	>20	▲ 264	16	▲ 85
Particles >38µm		ASTM D7647	>4	▲ 14	0	▲ 10
Particles >71µm		ASTM D7647	>3	1	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 21/20/17	19/17/13	▲ 19/17/15

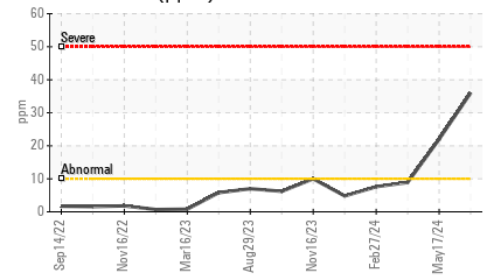
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.84	0.73	0.78

OIL ANALYSIS REPORT

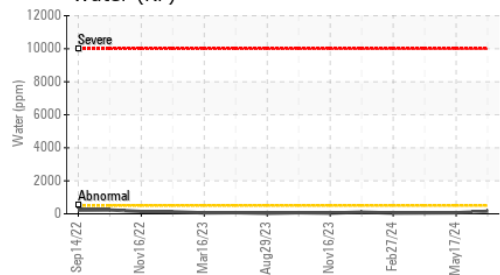
▲ Particle Trend



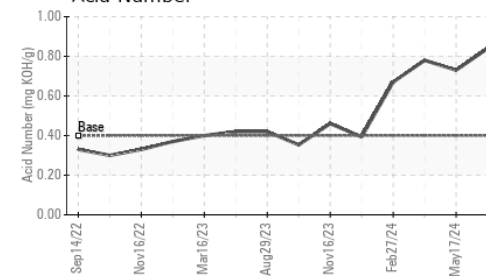
▲ Aluminum (ppm)



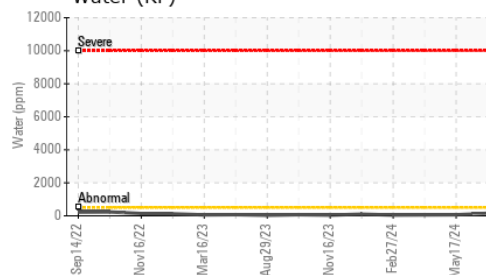
Water (KF)



Acid Number



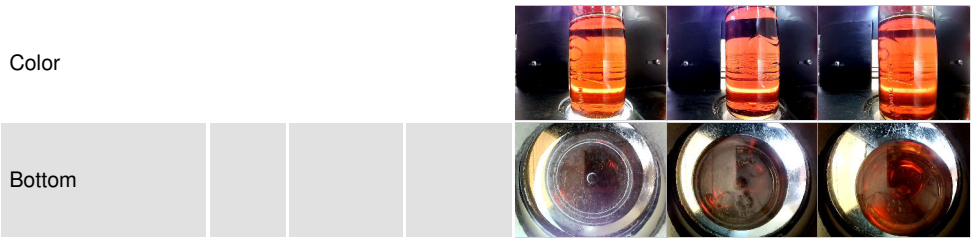
Water (KF)



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
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
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

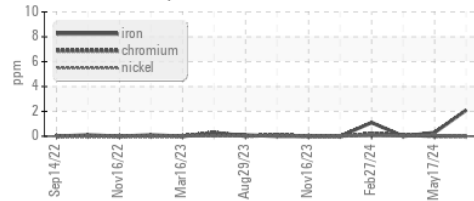
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	47.5	46.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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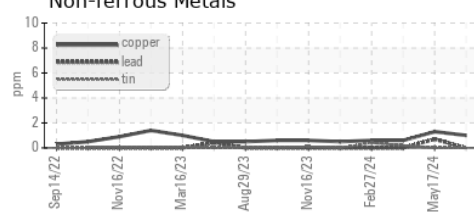


GRAPHS

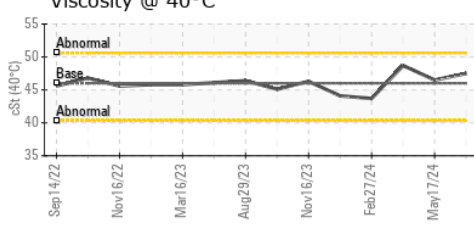
Ferrous Alloys



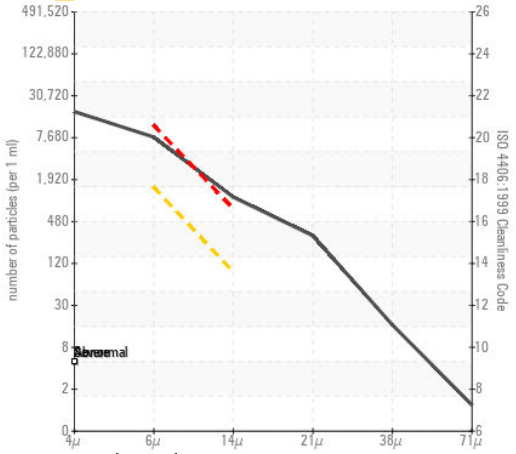
Non-ferrous Metals



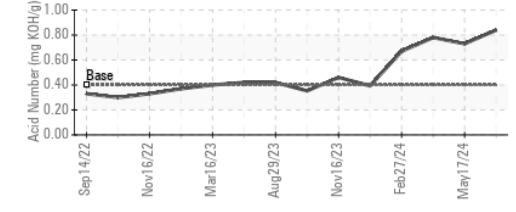
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA019181 **Received** : 13 Jun 2024
Lab Number : 06208713 **Tested** : 14 Jun 2024
Unique Number : 11076174 **Diagnosed** : 15 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

STAMPTECH (AOC)
 13140 PARKERS BATTERY RD
 CHESTER, VA
 US 23836
 Contact: Service Manager

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)