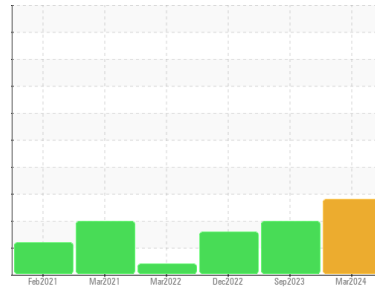




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id

6759785 (S/N 1326)

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA015346	KCPA006307	KCP52517
Sample Date	Client Info		11 Mar 2024	06 Sep 2023	08 Dec 2022
Machine Age	hrs	Client Info	26666	24548	2143
Oil Age	hrs	Client Info	2117	0	4300
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	<1	0
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	<1	0
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	4	2	6
Tin	ppm	ASTM D5185m >10	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 90	14	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	37	15	0
Calcium	ppm	ASTM D5185m 0	4	0	0
Phosphorus	ppm	ASTM D5185m 0	3	0	0
Zinc	ppm	ASTM D5185m 0	12	11	4
Sulfur	ppm	ASTM D5185m 23500	21145	19120	21074

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	2	1	<1
Potassium	ppm	ASTM D5185m >20	<1	<1	0
Water	%	ASTM D6304 >0.05	▲ 0.204	0.011	0.012
ppm Water	ppm	ASTM D6304 >500	▲ 2040	113.0	120.1

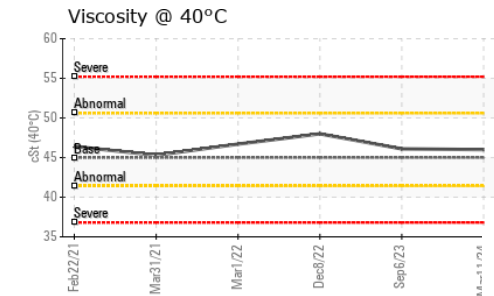
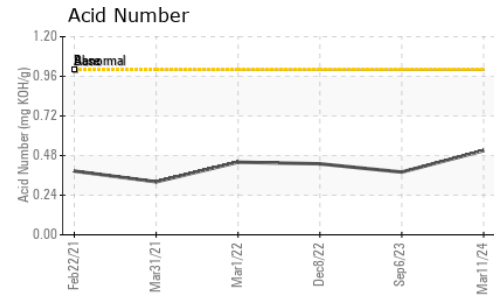
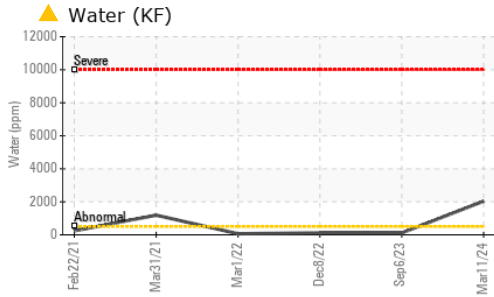
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	14368	16259
Particles >6µm	ASTM D7647	>1300	---	▲ 5135	▲ 5726
Particles >14µm	ASTM D7647	>80	---	▲ 602	▲ 304
Particles >21µm	ASTM D7647	>20	---	▲ 190	▲ 48
Particles >38µm	ASTM D7647	>4	---	▲ 10	4
Particles >71µm	ASTM D7647	>3	---	1	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	---	▲ 21/20/16	▲ 21/20/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.51	0.38	0.43

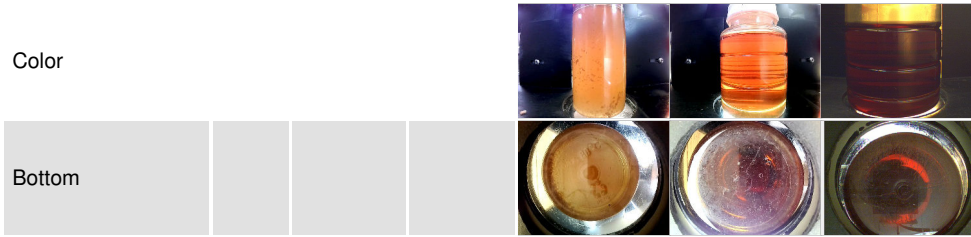
OIL ANALYSIS REPORT



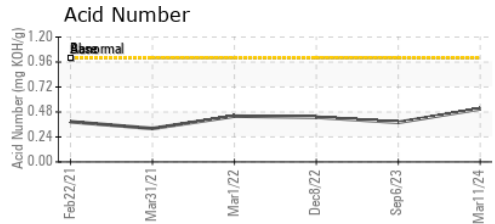
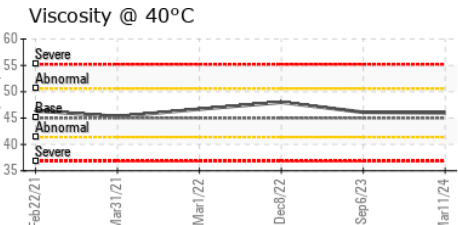
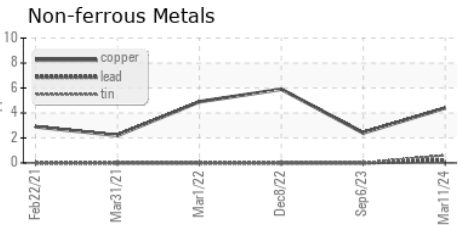
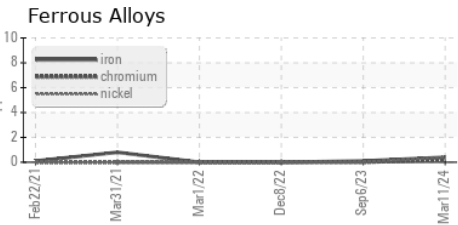
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	● HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ 0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.0	46.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015346 **Received** : 23 Apr 2024
Lab Number : 06158455 **Tested** : 25 Apr 2024
Unique Number : 10993878 **Diagnosed** : 25 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

TURNAMATIC MACHINE INC
 541 STERLING DR
 RICHARDSON, TX
 US 75081
 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)

T:
F: