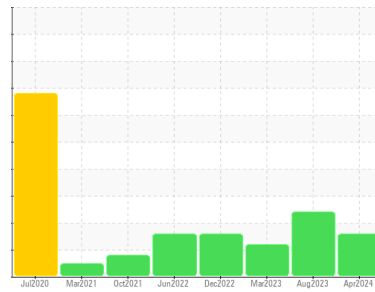


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SK 20 5919170 (S/N 1811)
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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		KCPA017104	KCPA005214	KCPA001515
Sample Date	Client Info		10 Apr 2024	21 Aug 2023	20 Mar 2023
Machine Age	hrs	Client Info	23299	23090	22859
Oil Age	hrs	Client Info	1593	0	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			ATTENTION	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	5	25	4
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	4	▲ 14	1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	2	2	<1
Tin	ppm	ASTM D5185m >10	<1	0	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	3	0	<1
Calcium	ppm	ASTM D5185m	<1	0	<1
Phosphorus	ppm	ASTM D5185m 500	533	423	588
Zinc	ppm	ASTM D5185m	95	113	63
Sulfur	ppm	ASTM D5185m	2615	2059	2308

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	0	2
Sodium	ppm	ASTM D5185m	3	3	2
Potassium	ppm	ASTM D5185m >20	1	<1	0
Water	%	ASTM D6304 >0.05	0.010	0.005	0.008
ppm Water	ppm	ASTM D6304 >500	104	51.2	81.9

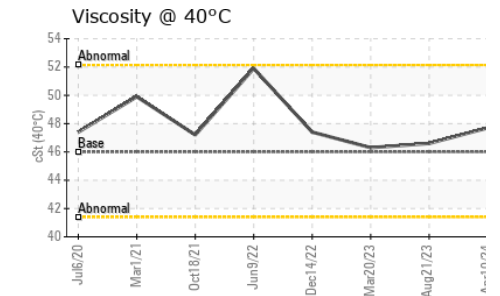
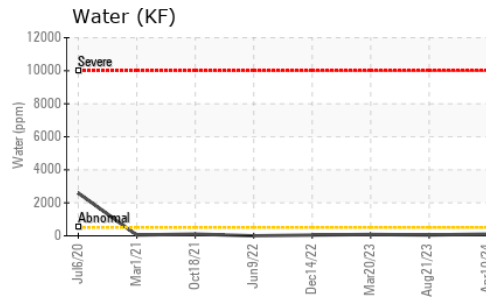
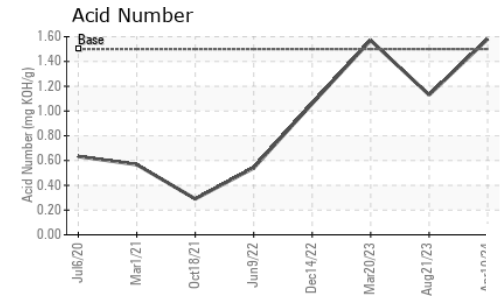
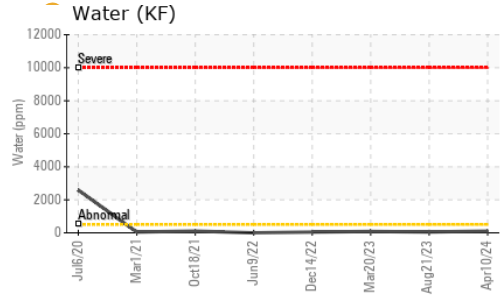
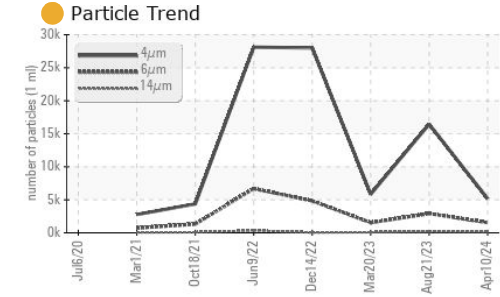
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		5175	16448	5848
Particles >6µm	ASTM D7647 >1300	● 1530	▲ 2922	● 1543	
Particles >14µm	ASTM D7647 >80	● 139	▲ 183	● 84	
Particles >21µm	ASTM D7647 >20	● 38	▲ 42	25	
Particles >38µm	ASTM D7647 >4	2	1	1	
Particles >71µm	ASTM D7647 >3	0	0	0	
Oil Cleanliness	ISO 4406 (c) >--/17/13	● 20/18/14	▲ 21/19/15	● 20/18/14	

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	1.58	1.13	1.57

OIL ANALYSIS REPORT

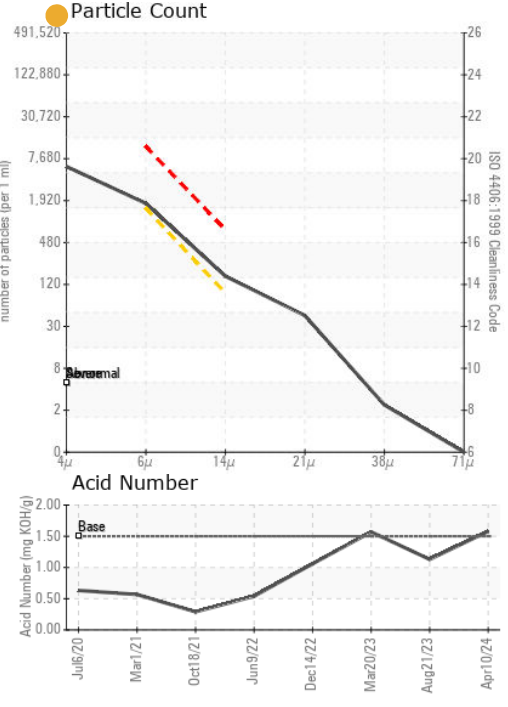
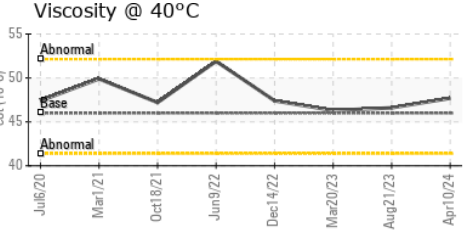
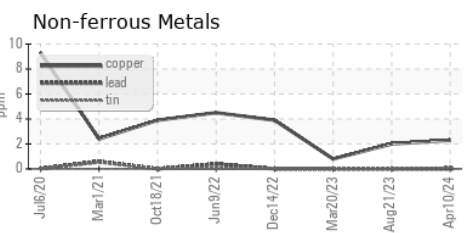
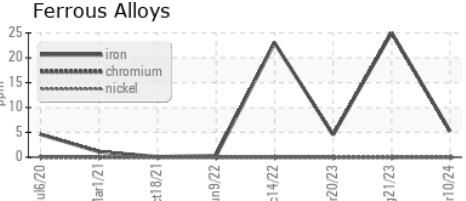


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.7	46.6	46.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017104 **Received** : 19 Apr 2024
Lab Number : 06154346 **Tested** : 22 Apr 2024
Unique Number : 10989769 **Diagnosed** : 23 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BALCONES DISTILLING
 225 S 11TH ST
 WACO, TX
 US 76701
 Contact:

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)