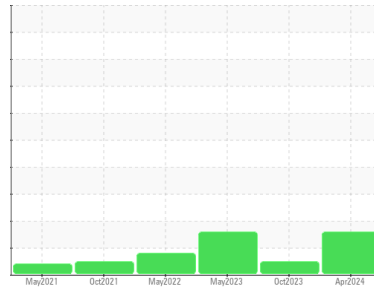




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER 7478838

Component

Compressor

Fluid

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The 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 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		KCPA016828	KCPA006942	KCP53294
Sample Date	Client Info		04 Apr 2024	26 Oct 2023	02 May 2023
Machine Age	hrs	Client Info	1884	1586	853
Oil Age	hrs	Client Info	297	0	853
Oil Changed	Client Info		Not Chngd	N/A	Not Chngd
Sample Status			ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 90	25	0	75
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	1	0	<1
Magnesium	ppm	ASTM D5185m 100	74	53	83
Calcium	ppm	ASTM D5185m 0	2	0	0
Phosphorus	ppm	ASTM D5185m 0	1	0	4
Zinc	ppm	ASTM D5185m 0	0	7	0
Sulfur	ppm	ASTM D5185m 23500	23664	17769	22429

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	0	0
Sodium	ppm	ASTM D5185m	14	14	5
Potassium	ppm	ASTM D5185m >20	3	3	<1
Water	%	ASTM D6304 >0.05	0.014	0.027	0.018
ppm Water	ppm	ASTM D6304 >500	142	272.1	182.2

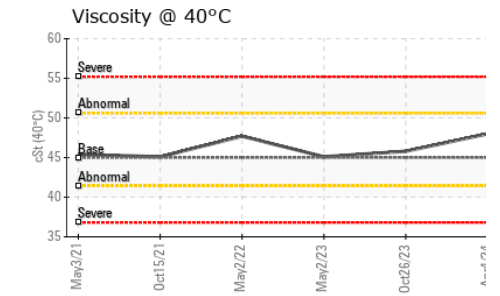
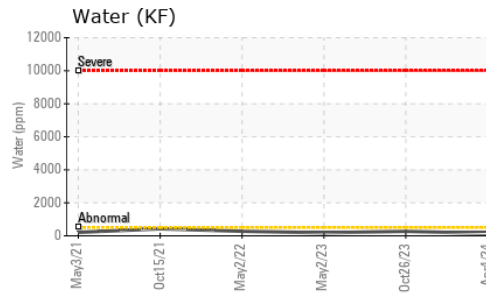
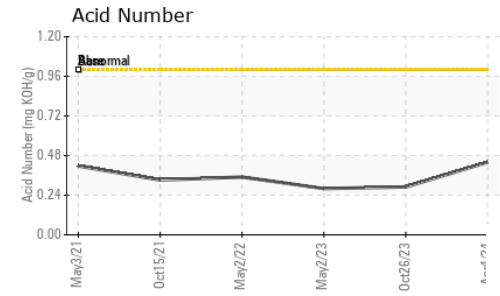
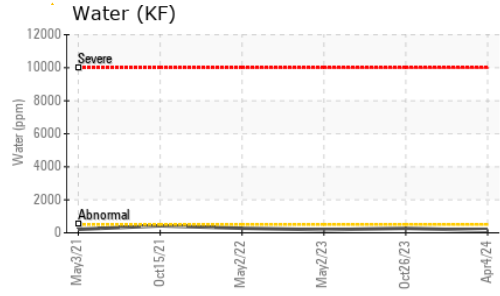
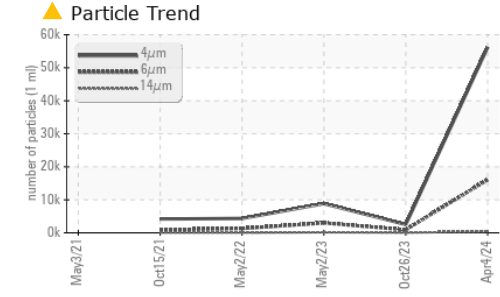
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		56190	2526	8843
Particles >6µm	ASTM D7647	>1300	▲ 16088	912	▲ 3000
Particles >14µm	ASTM D7647	>80	▲ 382	51	▲ 167
Particles >21µm	ASTM D7647	>20	▲ 53	7	▲ 23
Particles >38µm	ASTM D7647	>4	1	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/21/16	19/17/13	▲ 20/19/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.44	0.29	0.28

OIL ANALYSIS REPORT

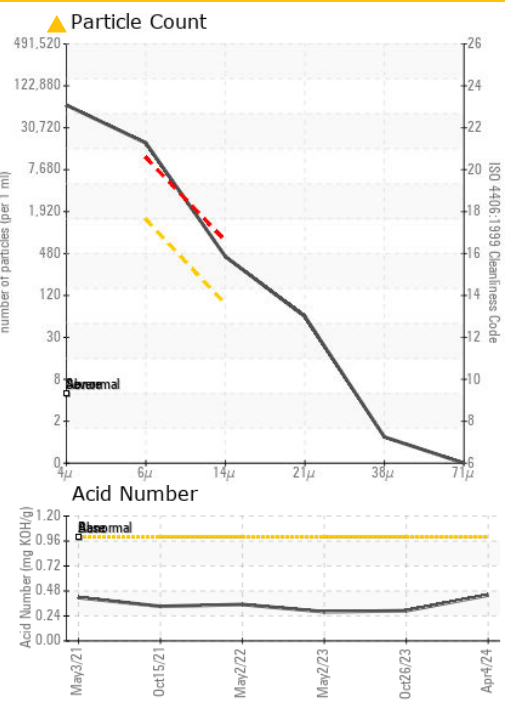
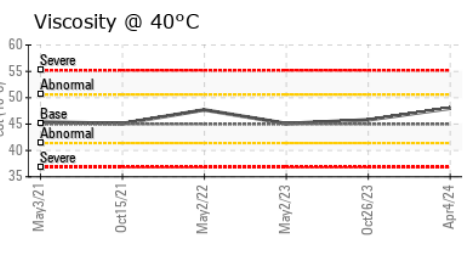
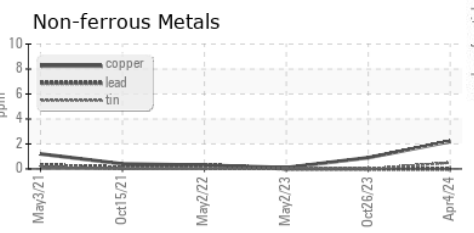
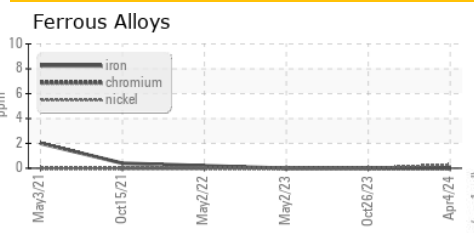


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 45	48.0	45.8	45.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016828 **Received** : 16 Apr 2024
Lab Number : 06151172 **Tested** : 19 Apr 2024
Unique Number : 10981250 **Diagnosed** : 19 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

FEDEX
 145 PINNACLE DR
 ROMEOVILLE, IL
 US 60446
 Contact: CYNTHIA GEORGE
 CYNTHIA.GEORGE@FEDEX.COM

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)