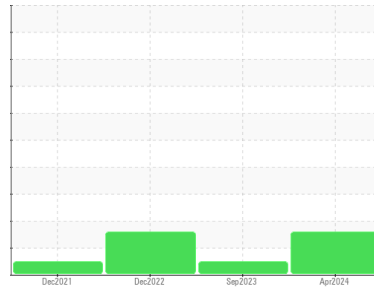




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

6934742 (S/N 1163)

Component

Compressor

Fluid

KAESER SIGMA (OEM) FG-460 (--- QTS)

DIAGNOSIS

Recommendation

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.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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			KCPA016156	KCPA003872	KCP52042
Sample Date	Client Info			08 Apr 2024	18 Sep 2023	12 Dec 2022
Machine Age	hrs	Client Info		18431	16709	14677
Oil Age	hrs	Client Info		1549	0	10000
Oil Changed	Client Info			Changed	N/A	Changed
Sample Status				ATTENTION	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	13	8
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	5	8
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	1	3	1
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

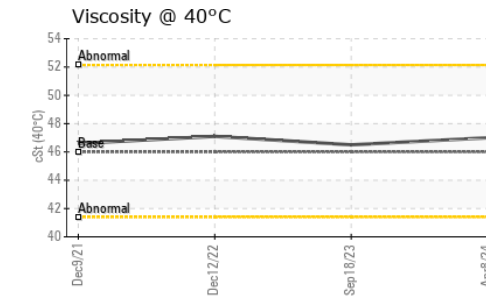
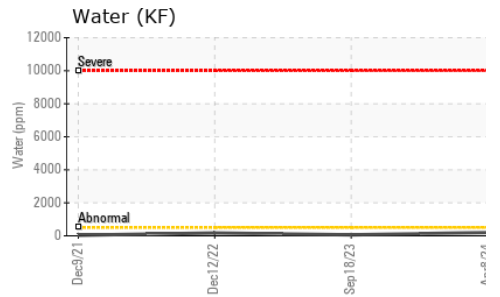
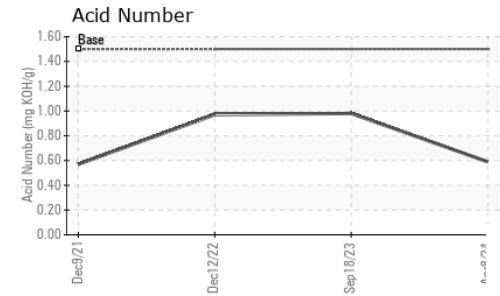
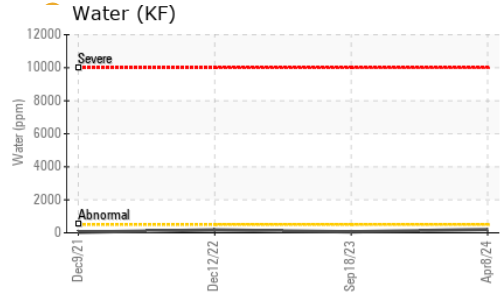
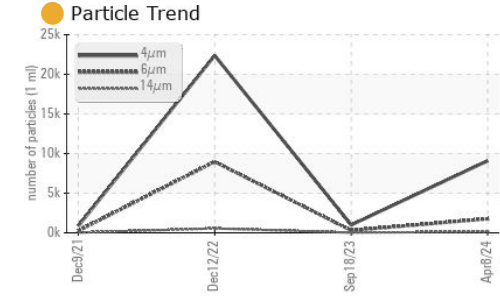
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		0	2	0
Calcium	ppm	ASTM D5185m		1	<1	0
Phosphorus	ppm	ASTM D5185m	500	275	460	516
Zinc	ppm	ASTM D5185m		339	516	613
Sulfur	ppm	ASTM D5185m		1764	2016	1932

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Sodium	ppm	ASTM D5185m		2	8	7
Potassium	ppm	ASTM D5185m	>20	2	1	<1
Water	%	ASTM D6304	>0.05	0.020	0.005	0.017
ppm Water	ppm	ASTM D6304	>500	205	58.4	174.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		9090	993	22370
Particles >6µm		ASTM D7647	>1300	1765	301	▲ 8970
Particles >14µm		ASTM D7647	>80	135	20	▲ 551
Particles >21µm		ASTM D7647	>20	30	7	▲ 66
Particles >38µm		ASTM D7647	>4	1	1	3
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	20/18/14	17/15/11	▲ 20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	0.59	0.98	0.97

OIL ANALYSIS REPORT

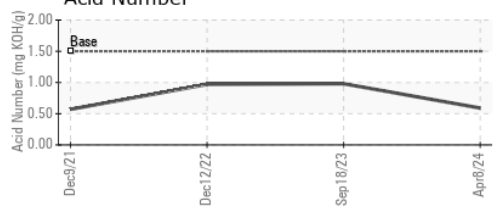
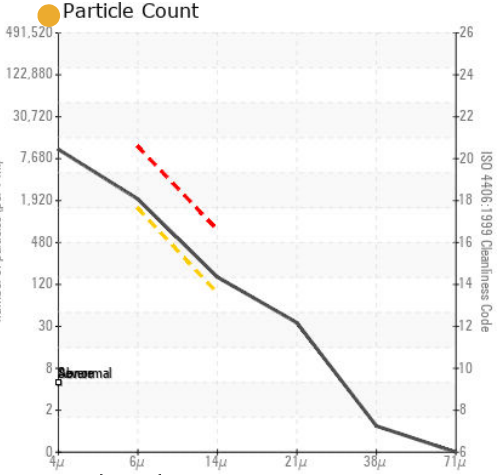
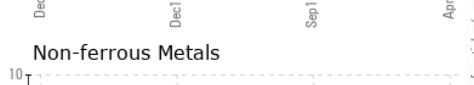


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.0	46.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016156 **Received** : 17 Apr 2024
Lab Number : 06152601 **Tested** : 22 Apr 2024
Unique Number : 10982679 **Diagnosed** : 22 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SEMI FREDDIS BAKERS
 1980 N LOOP RD
 ALAMEDA, CA
 US 94502
 Contact: Z GONZALES
 ZGONZALES@SEMIFREDDIS.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)