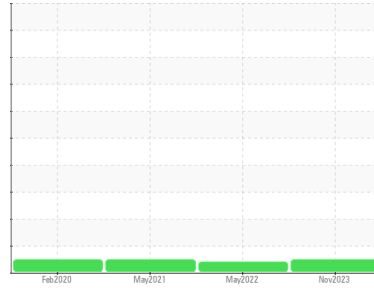




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
KAESER SFC 110 6757248 (S/N 2381)

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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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			KCPA001875	KCP48057	KCP32422
Sample Date	Client Info			12 Nov 2023	07 May 2022	07 May 2021
Machine Age	hrs	Client Info		19644	12999	8922
Oil Age	hrs	Client Info		0	3467	2851
Oil Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	<1
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	<1	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	25	16	12
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Antimony	ppm	ASTM D5185m		---	---	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

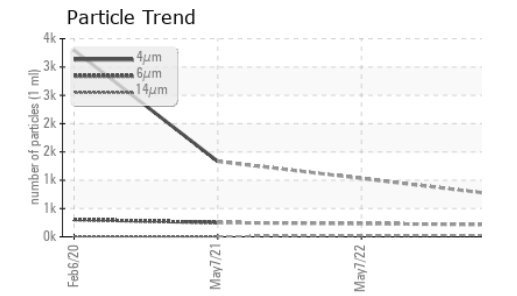
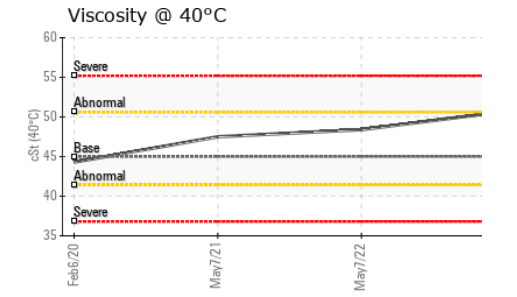
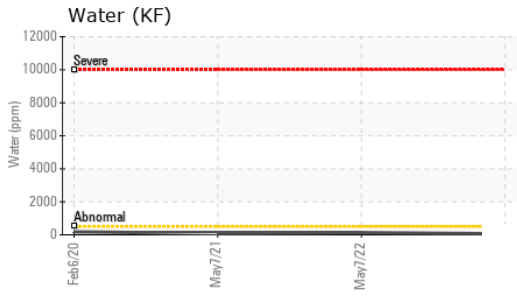
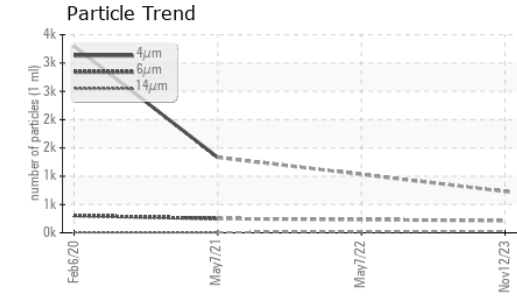
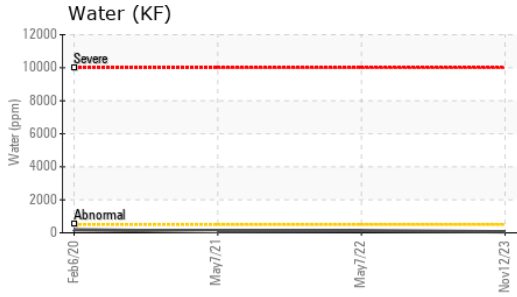
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	<1
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	0	10	19
Calcium	ppm	ASTM D5185m	0	<1	0	0
Phosphorus	ppm	ASTM D5185m	0	1	4	0
Zinc	ppm	ASTM D5185m	0	6	45	36
Sulfur	ppm	ASTM D5185m	23500	17563	16605	17244

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	0
Sodium	ppm	ASTM D5185m		0	6	7
Potassium	ppm	ASTM D5185m	>20	0	<1	3
Water	%	ASTM D6304	>0.05	0.006	0.013	0.008
ppm Water	ppm	ASTM D6304	>500	62.4	133.1	81.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		731	---	1333
Particles >6µm		ASTM D7647	>1300	214	---	250
Particles >14µm		ASTM D7647	>80	29	---	8
Particles >21µm		ASTM D7647	>20	7	---	1
Particles >38µm		ASTM D7647	>4	0	---	0
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	17/15/12	---	15/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.37	0.47	0.406

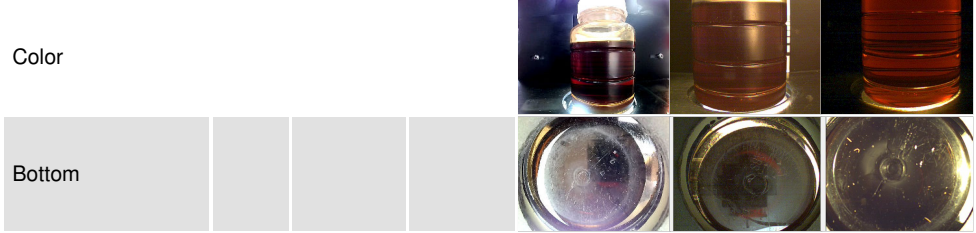
OIL ANALYSIS REPORT



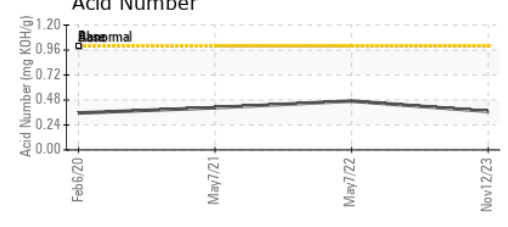
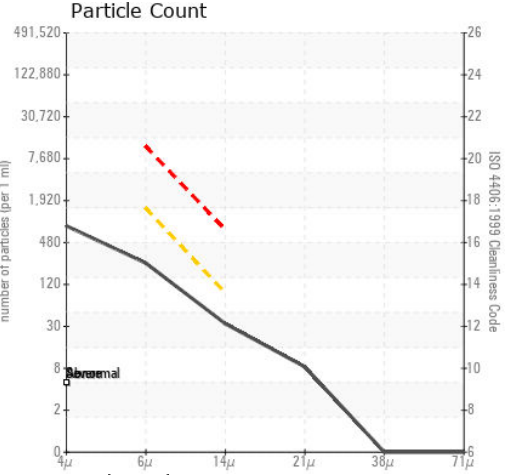
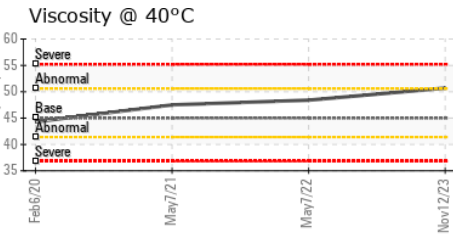
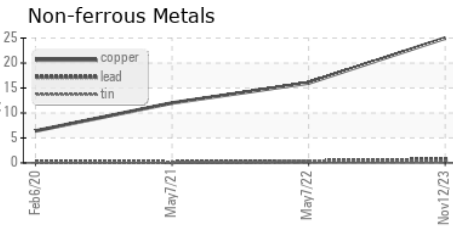
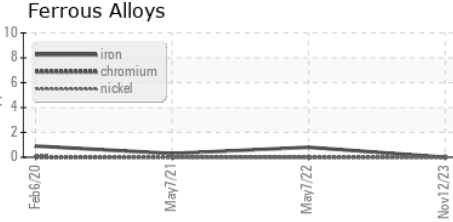
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	50.7	48.4	47.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA001875 **Received** : 13 Nov 2023
Lab Number : 06006326 **Diagnosed** : 14 Nov 2023
Unique Number : 10740088 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

CATANIA-SPAGNA
 1 NEMCO WAY
 AYER, MA
 US 01432
 Contact: M. MADIGAN
 mmadigan@cataniaoils.com
 T:
 F:

Certificate L2367
 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)