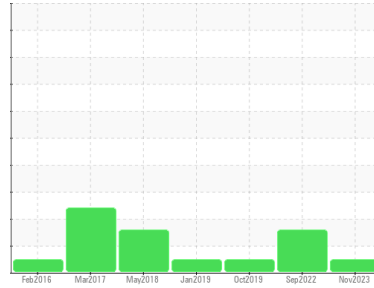




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER SM 10 4976544 (S/N 1682)

Component
Compressor

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

DIAGNOSIS

Recommendation

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 component. The amount and size of particulates present in the system is 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			KCPA007147	KCP49787	KCP21262
Sample Date	Client Info			07 Nov 2023	30 Sep 2022	23 Oct 2019
Machine Age	hrs	Client Info		33957	30628	17446
Oil Age	hrs	Client Info		0	3510	1255
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	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	5	2	1
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

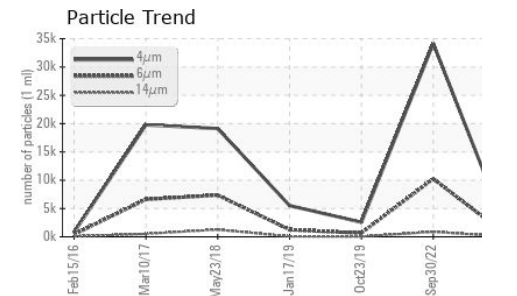
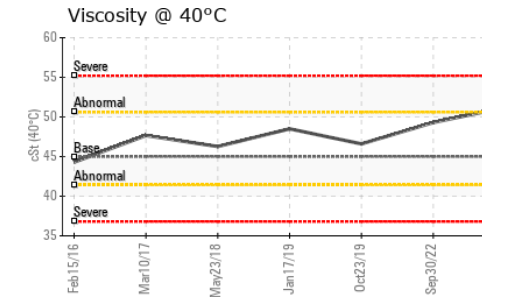
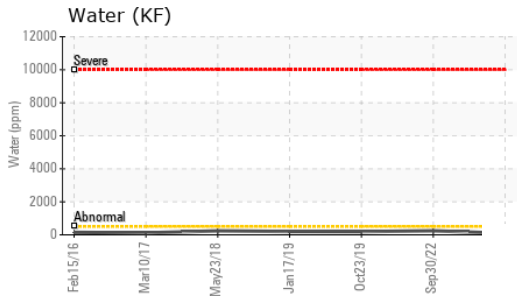
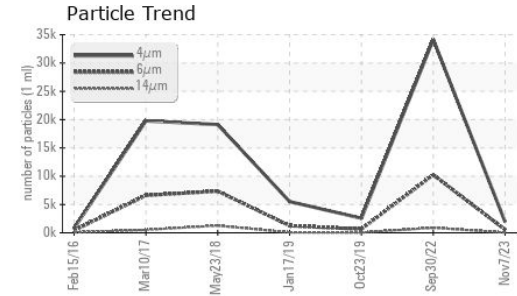
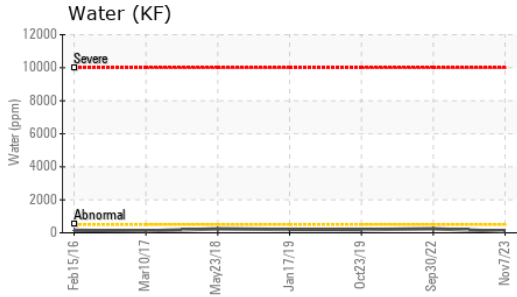
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	<1
Barium	ppm	ASTM D5185m	90	8	56	76
Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	100	34	67	71
Calcium	ppm	ASTM D5185m	0	0	4	3
Phosphorus	ppm	ASTM D5185m	0	<1	3	1
Zinc	ppm	ASTM D5185m	0	8	6	6
Sulfur	ppm	ASTM D5185m	23500	21581	23442	9499

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Sodium	ppm	ASTM D5185m		7	16	30
Potassium	ppm	ASTM D5185m	>20	1	<1	3
Water	%	ASTM D6304	>0.05	0.009	0.024	0.019
ppm Water	ppm	ASTM D6304	>500	93.3	244.7	192.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1939	34139	2569
Particles >6µm		ASTM D7647	>1300	561	▲ 10242	645
Particles >14µm		ASTM D7647	>80	47	▲ 886	46
Particles >21µm		ASTM D7647	>20	14	▲ 152	16
Particles >38µm		ASTM D7647	>4	1	3	5
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>17/13	16/13	▲ 21/17	17/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.37	0.43	0.447

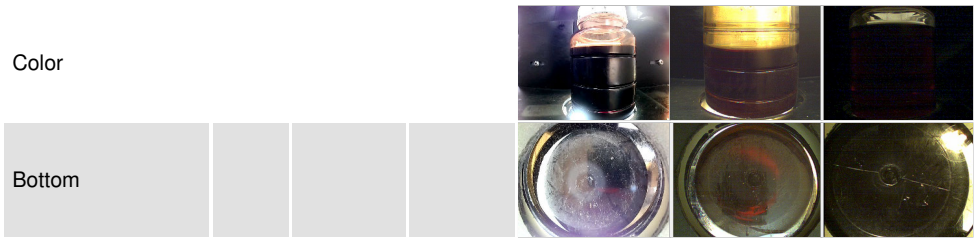
OIL ANALYSIS REPORT



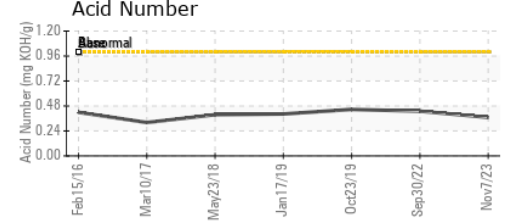
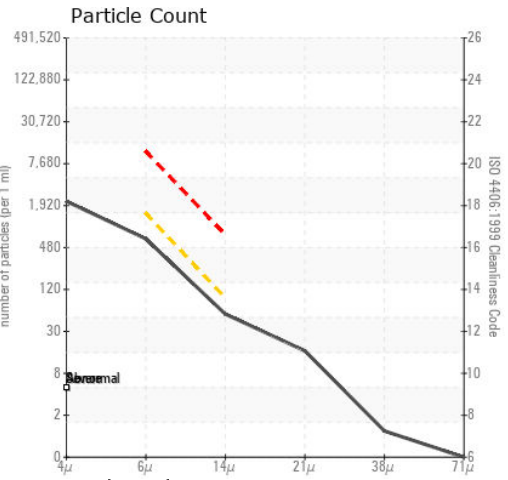
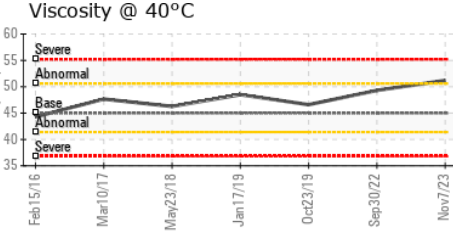
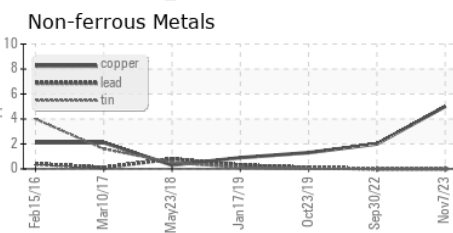
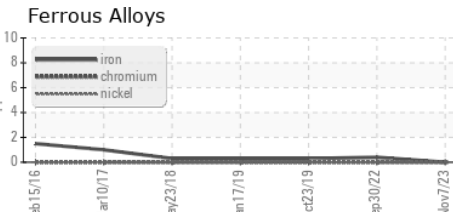
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	51.2	49.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA007147 **Received** : 15 Nov 2023
Lab Number : 06008319 **Diagnosed** : 17 Nov 2023
Unique Number : 10742081 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

FEDEX FREIGHT
 9351 WILLOW CT
 HENDERSON, CO
 US 80640
 Contact: ROGELIO VACA
 rogelio.vaca@fedex.com
 T:
 F:

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)