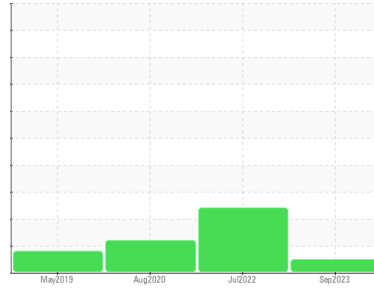




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER AIR CENTER SM 15 6271305 (S/N 1072)

Component
Compressor

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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			KCPA006039	KCP49652	KCP10368
Sample Date	Client Info			08 Sep 2023	07 Jul 2022	06 Aug 2020
Machine Age	hrs	Client Info		5182	4881	1723
Oil Age	hrs	Client Info		0	3158	1723
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	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	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>50	<1	2	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

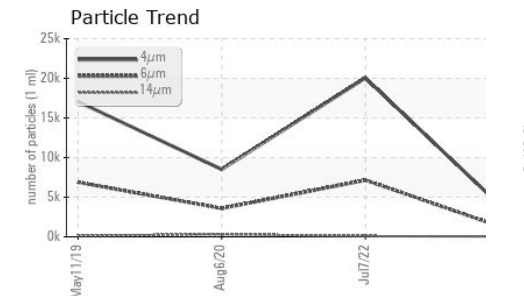
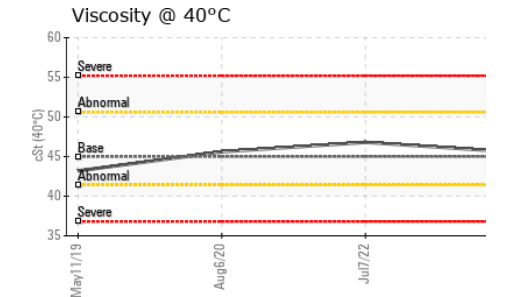
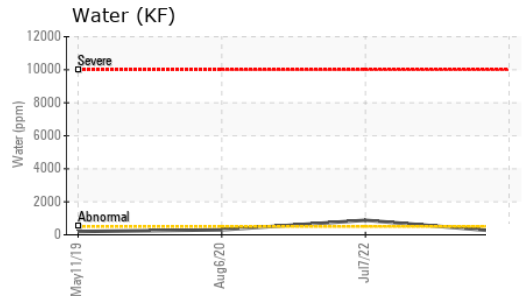
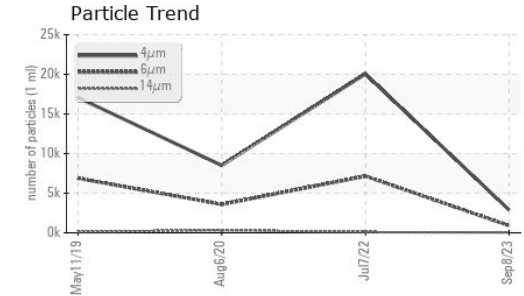
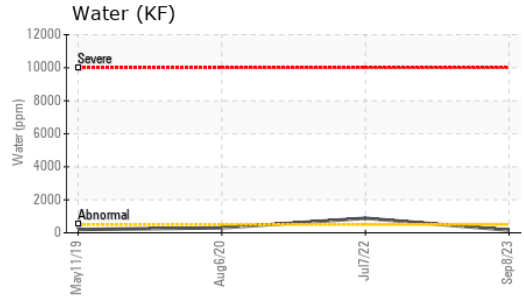
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	11
Barium	ppm	ASTM D5185m	90	12	0	2
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	100	30	49	68
Calcium	ppm	ASTM D5185m	0	<1	0	<1
Phosphorus	ppm	ASTM D5185m	0	1	2	0
Zinc	ppm	ASTM D5185m	0	35	<1	3
Sulfur	ppm	ASTM D5185m	23500	20652	21690	16299

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	<1
Sodium	ppm	ASTM D5185m		15	17	16
Potassium	ppm	ASTM D5185m	>20	3	4	<1
Water	%	ASTM D6304	>0.05	0.016	▲ 0.088	0.030
ppm Water	ppm	ASTM D6304	>500	160.3	▲ 884.6	302.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2892	20042	8513
Particles >6µm		ASTM D7647	>1300	898	▲ 7156	▲ 3581
Particles >14µm		ASTM D7647	>80	41	77	▲ 314
Particles >21µm		ASTM D7647	>20	10	9	▲ 75
Particles >38µm		ASTM D7647	>4	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	19/17/13	▲ 22/20/13	▲ 19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.23	0.33	0.323

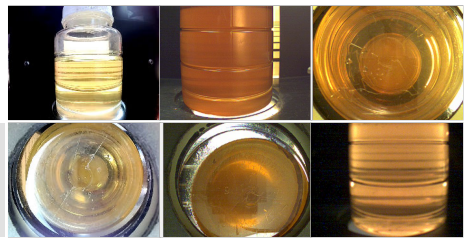
OIL ANALYSIS REPORT



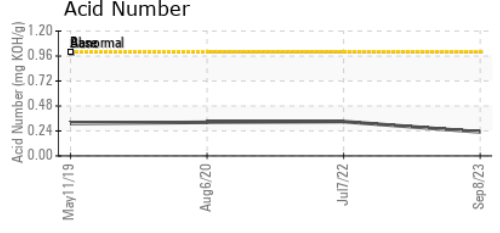
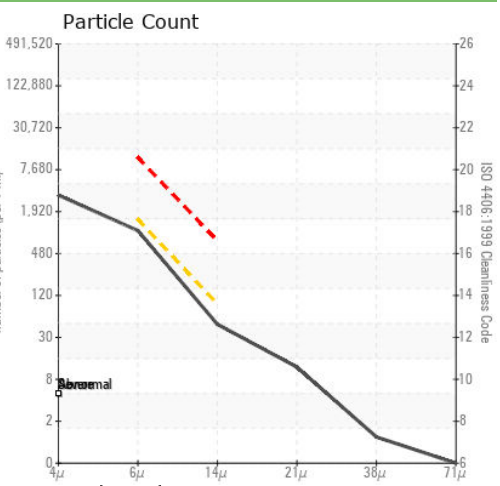
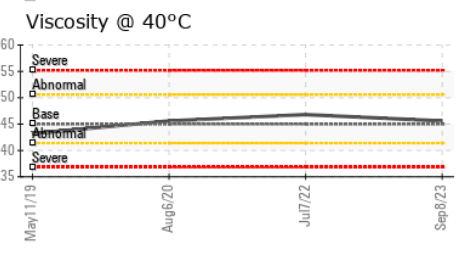
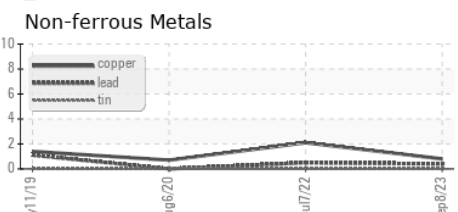
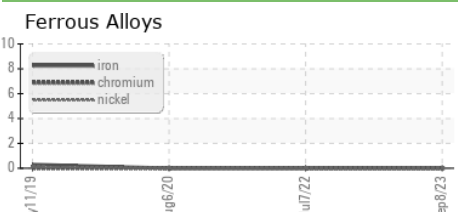
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.6	46.8	45.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA006039 **Received** : 22 Sep 2023
Lab Number : 05959086 **Diagnosed** : 25 Sep 2023
Unique Number : 10660299 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PRANAROM
 2301 NEVADA AVE N
 GOLDEN VALLEY, MN
 US 55427
 Contact: Service Manager

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)

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