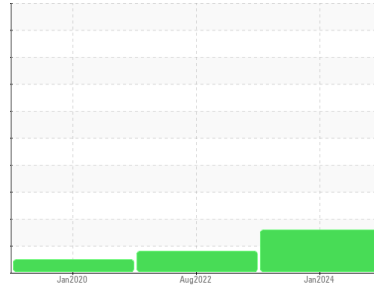




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 3837264 (S/N 1200)

Component
Compressor

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

DIAGNOSIS

▲ Recommendation

Oil and 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 moderate amount of silt (particulates < 14 microns in size) 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			KCP46321	KCP44119	KCP25907
Sample Date	Client Info			08 Jan 2024	15 Aug 2022	24 Jan 2020
Machine Age	hrs	Client Info		5045	4443	3323
Oil Age	hrs	Client Info		1000	1000	1000
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	0
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>50	4	7	14
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

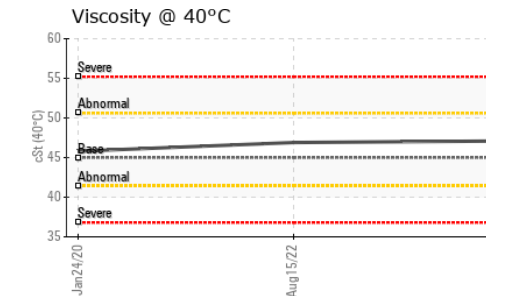
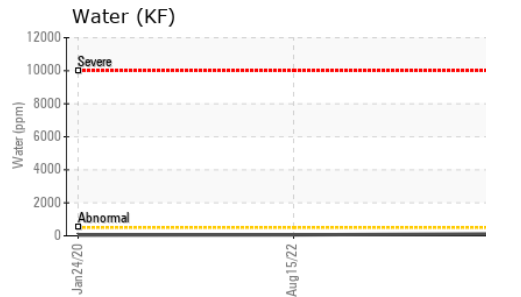
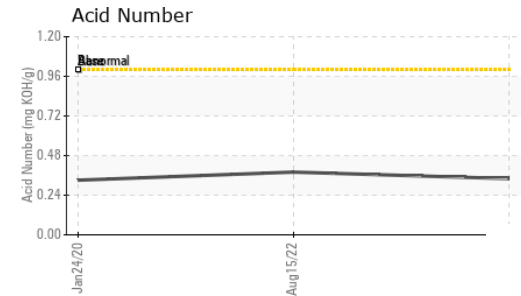
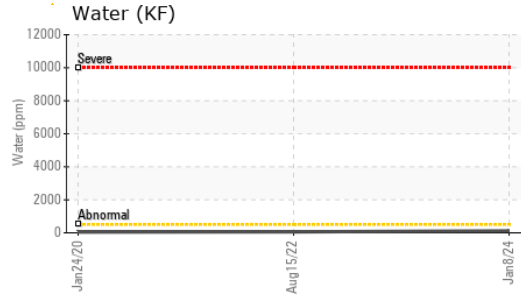
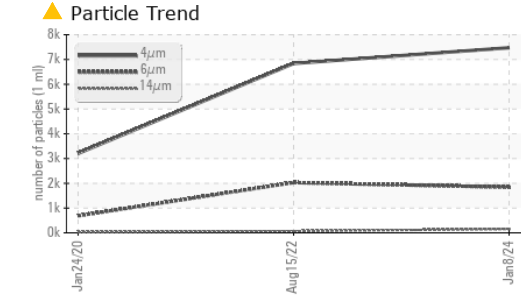
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	5	0	<1
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	56	2	14
Calcium	ppm	ASTM D5185m	0	<1	0	0
Phosphorus	ppm	ASTM D5185m	0	28	3	<1
Zinc	ppm	ASTM D5185m	0	0	3	20
Sulfur	ppm	ASTM D5185m	23500	24191	16980	16016

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Sodium	ppm	ASTM D5185m		9	<1	4
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water	%	ASTM D6304	>0.05	0.011	0.005	0.004
ppm Water	ppm	ASTM D6304	>500	116	58.5	46.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		7473	6840	3204
Particles >6µm		ASTM D7647	>1300	▲ 1841	▲ 2029	686
Particles >14µm		ASTM D7647	>80	▲ 151	67	26
Particles >21µm		ASTM D7647	>20	▲ 54	8	10
Particles >38µm		ASTM D7647	>4	3	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>17/13	▲ 18/14	▲ 18/13	17/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.34	0.38	0.331

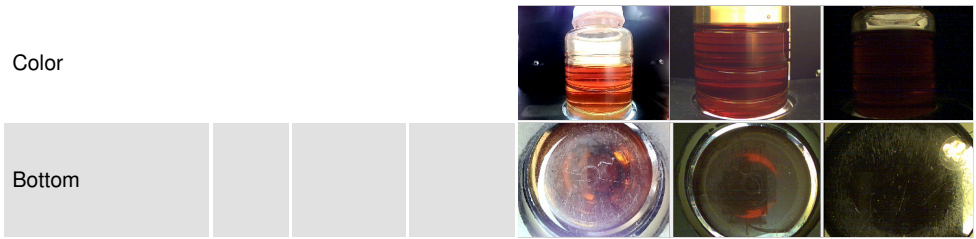
OIL ANALYSIS REPORT



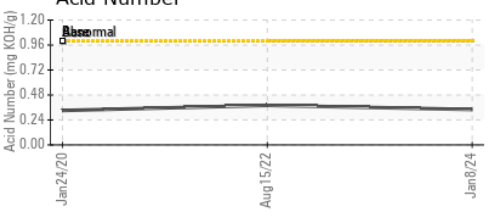
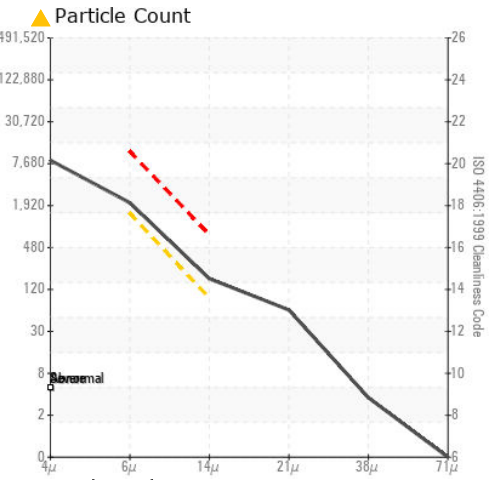
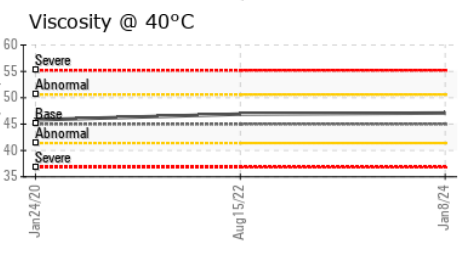
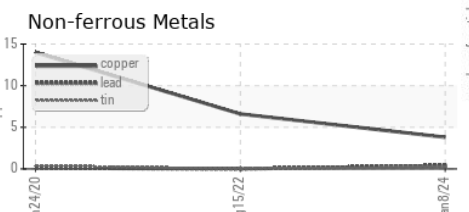
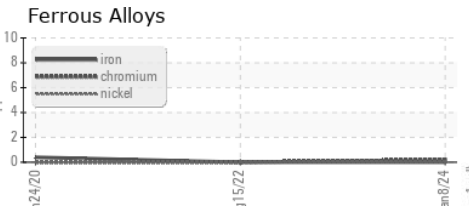
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.1	46.9	45.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP46321 **Received** : 18 Jan 2024
Lab Number : 06065043 **Diagnosed** : 24 Jan 2024
Unique Number : 10836425 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BRAKES PLUS 136
 519 LIGRANI LN
 GRAND JUNCTION, CO
 US 81505
 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)