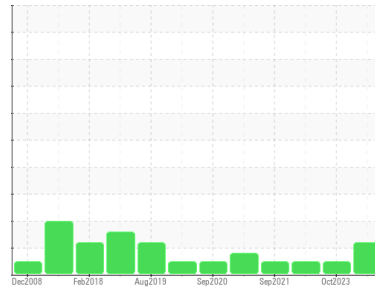




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER CSD 100 2478275 (S/N 1050)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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 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	KCPA016543	KCPA006357	KCP45622
Sample Date	Client Info	25 Apr 2024	24 Oct 2023	20 Apr 2022
Machine Age	hrs	73521	69176	62063
Oil Age	hrs	4345	0	352
Oil Changed	Client Info	Not Chngd	N/A	N/A
Sample Status		ATTENTION	NORMAL	NORMAL

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	1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >10	0	<1	<1
Lead	ppm	ASTM D5185m >10	0	<1	<1
Copper	ppm	ASTM D5185m >50	0	2	<1
Tin	ppm	ASTM D5185m >10	<1	<1	0
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	<1
Barium	ppm	ASTM D5185m 90	48	0	77
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 90	86	32	92
Calcium	ppm	ASTM D5185m 2	2	1	4
Phosphorus	ppm	ASTM D5185m	0	<1	11
Zinc	ppm	ASTM D5185m	4	0	0
Sulfur	ppm	ASTM D5185m	22212	17484	16343

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	0	0	<1
Sodium	ppm	ASTM D5185m	38	7	10
Potassium	ppm	ASTM D5185m >20	4	2	<1
Water	%	ASTM D6304 >0.05	0.024	0.011	0.016
ppm Water	ppm	ASTM D6304 >500	248	119	168.1

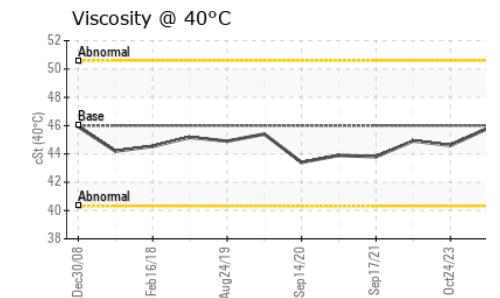
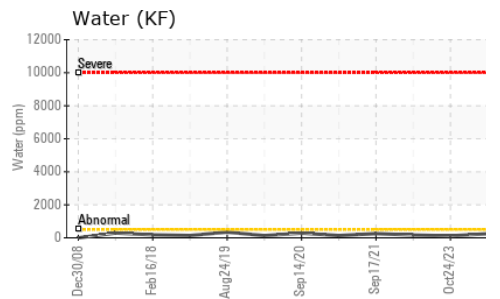
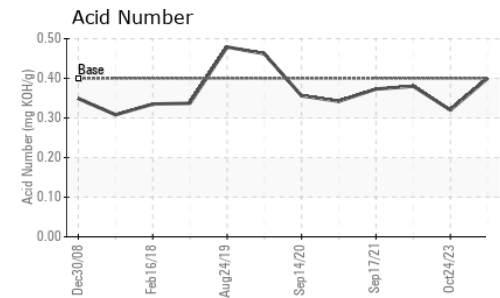
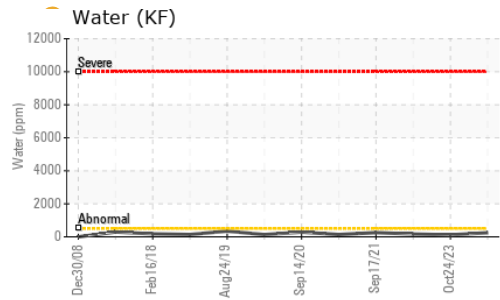
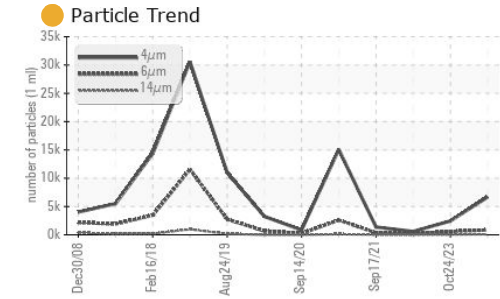
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	6683	2450	586
Particles >6µm	ASTM D7647 >1300	853	565	175
Particles >14µm	ASTM D7647 >80	89	32	15
Particles >21µm	ASTM D7647 >20	24	11	5
Particles >38µm	ASTM D7647 >4	0	1	0
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	20/17/14	18/16/12	15/11

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.40	0.32	0.38

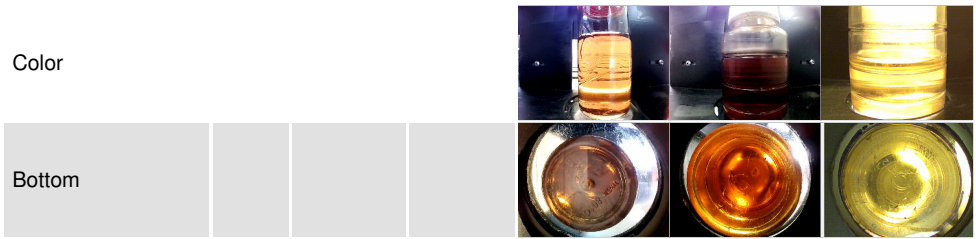
OIL ANALYSIS REPORT



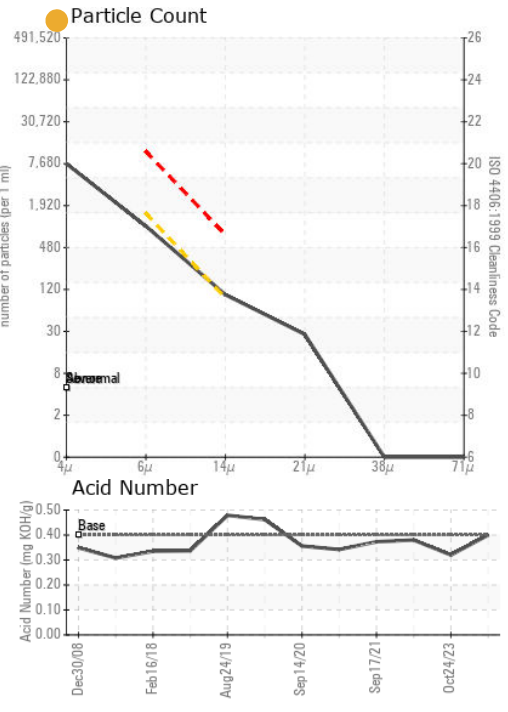
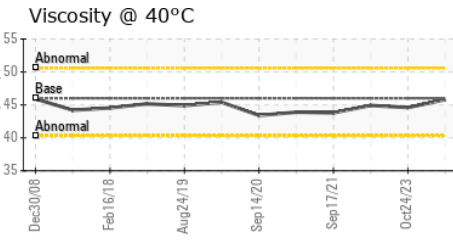
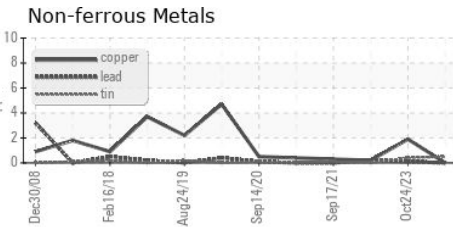
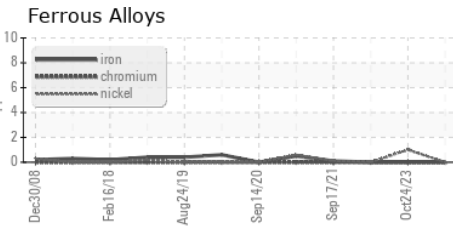
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	45.8	44.6	44.92

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016543
Lab Number : 06176105
Unique Number : 11022158
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PRESCRIPTION SOLUTIONS - OPTUM RX
 8660 W 115TH ST, SUITE 150
 OVERLAND PARK, KS
 US 66211

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)