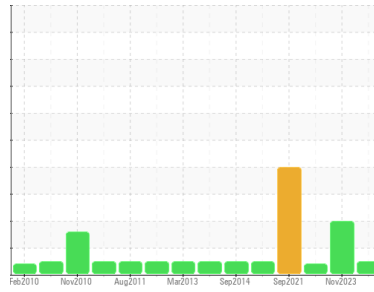




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER DSD 150 3411093 (S/N 1034)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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			KCPA018114	KCPA008763	KCP49201
Sample Date	Client Info			14 May 2024	22 Nov 2023	19 Jan 2023
Machine Age	hrs	Client Info		109108	107282	104409
Oil Age	hrs	Client Info		3000	0	3000
Oil Changed	Client Info			Changed	N/A	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	18	6
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	3	5
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	2	5	6
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

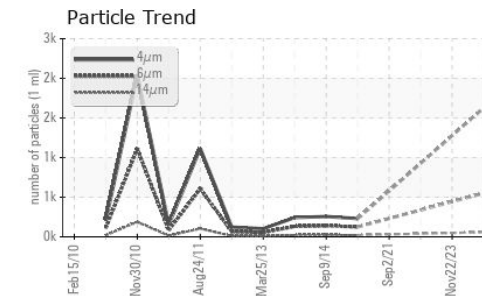
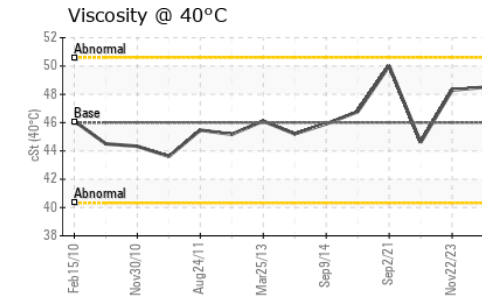
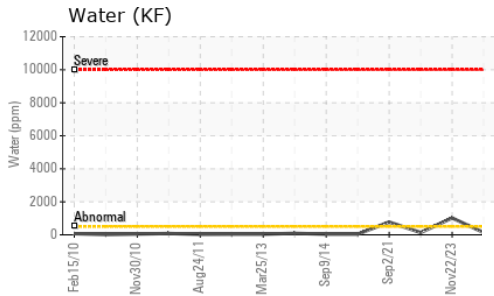
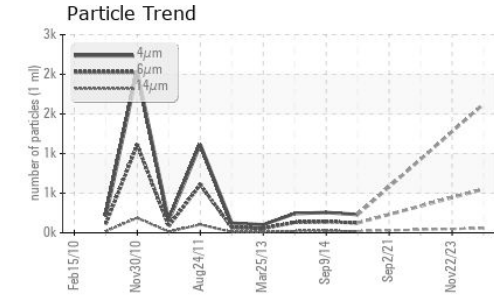
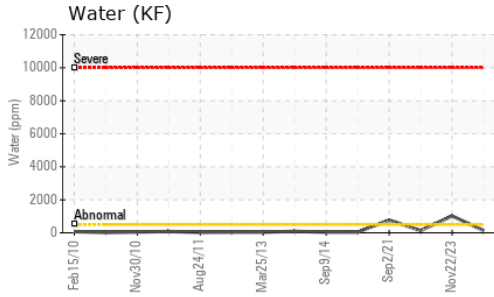
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	4	<1
Molybdenum	ppm	ASTM D5185m		0	<1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	27	40	5
Calcium	ppm	ASTM D5185m	2	0	7	2
Phosphorus	ppm	ASTM D5185m		5	0	65
Zinc	ppm	ASTM D5185m		39	15	25
Sulfur	ppm	ASTM D5185m		21647	20749	18724

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	1	<1
Sodium	ppm	ASTM D5185m		42	28	35
Potassium	ppm	ASTM D5185m	>20	10	10	9
Water	%	ASTM D6304	>0.05	0.013	▲ 0.102	0.013
ppm Water	ppm	ASTM D6304	>500	140	▲ 1020	138.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1628	---	---
Particles >6µm		ASTM D7647	>1300	551	---	---
Particles >14µm		ASTM D7647	>80	57	---	---
Particles >21µm		ASTM D7647	>20	15	---	---
Particles >38µm		ASTM D7647	>4	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	18/16/13	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.33	0.32	0.31

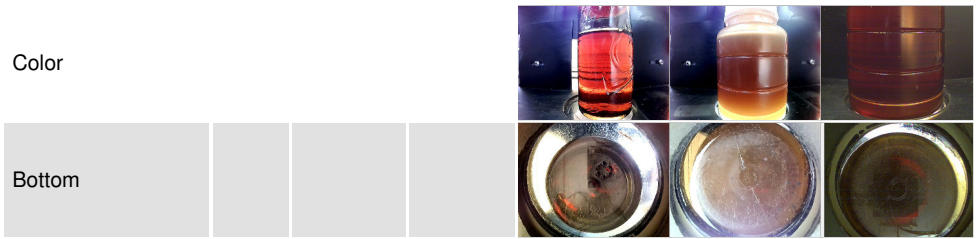
OIL ANALYSIS REPORT



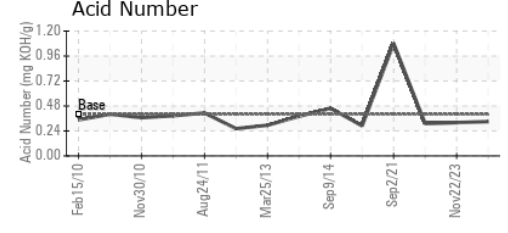
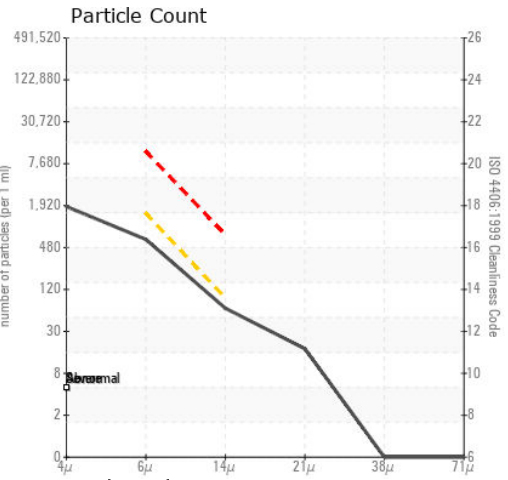
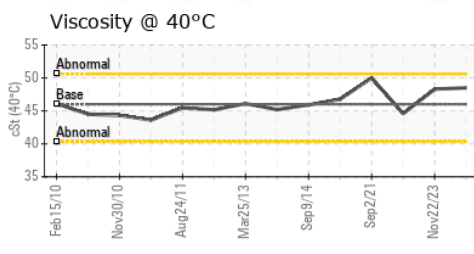
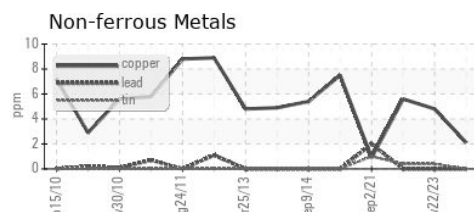
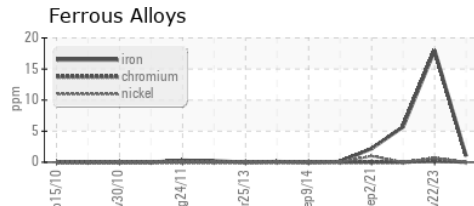
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	▲ MODER
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	48.5	48.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA018114
Lab Number : 06202070
Unique Number : 11069531
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 06 Jun 2024
Tested : 11 Jun 2024
Diagnosed : 11 Jun 2024 - Jonathan Hester

PACKAGING CORPORATION OF AMERICA
 1302 n. SALISBURY AVE.
 SALISBURY, NC
 US 28144
 Contact: JOHN EWALD
 johnewald@packagingcorp.com

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)