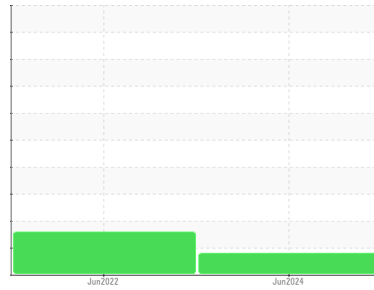




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
6063387 (S/N 1656)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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			KCPA018286	KCP40769	---
Sample Date	Client Info			06 Jun 2024	22 Jun 2022	---
Machine Age	hrs	Client Info		3740	1532	---
Oil Age	hrs	Client Info		0	3000	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				ATTENTION	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	1	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>3	0	0	---
Titanium	ppm	ASTM D5185m	>3	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	0	<1	---
Lead	ppm	ASTM D5185m	>10	0	<1	---
Copper	ppm	ASTM D5185m	>50	12	1	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

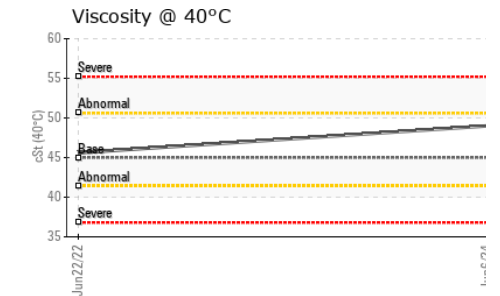
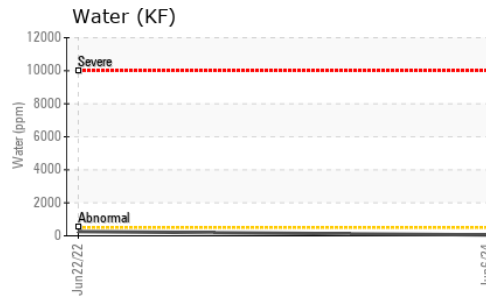
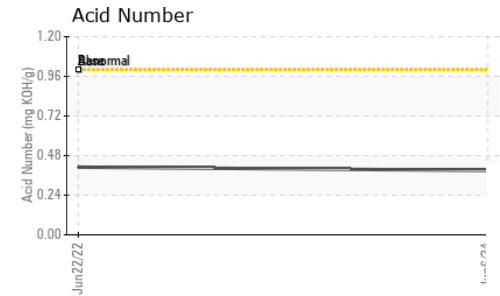
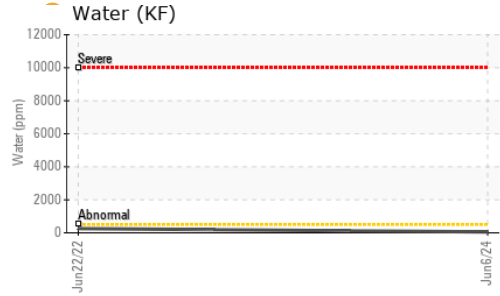
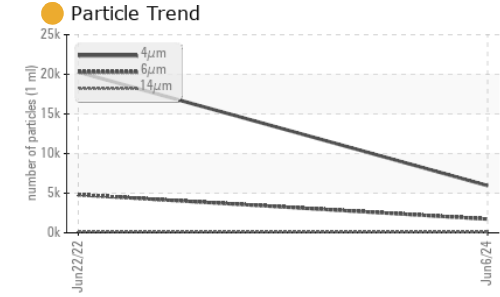
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	90	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	100	<1	62	---
Calcium	ppm	ASTM D5185m	0	0	<1	---
Phosphorus	ppm	ASTM D5185m	0	<1	11	---
Zinc	ppm	ASTM D5185m	0	0	3	---
Sulfur	ppm	ASTM D5185m	23500	17823	21493	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	---
Sodium	ppm	ASTM D5185m		1	13	---
Potassium	ppm	ASTM D5185m	>20	0	3	---
Water	%	ASTM D6304	>0.05	0.005	0.025	---
ppm Water	ppm	ASTM D6304	>500	54	258.9	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		5953	20285	---
Particles >6µm		ASTM D7647	>1300	1734	▲ 4798	---
Particles >14µm		ASTM D7647	>80	74	▲ 156	---
Particles >21µm		ASTM D7647	>20	20	▲ 28	---
Particles >38µm		ASTM D7647	>4	3	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	20/18/13	▲ 22/19/14	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.39	0.41	---

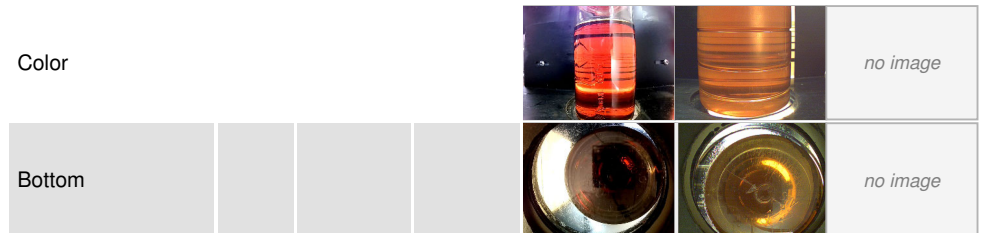
OIL ANALYSIS REPORT



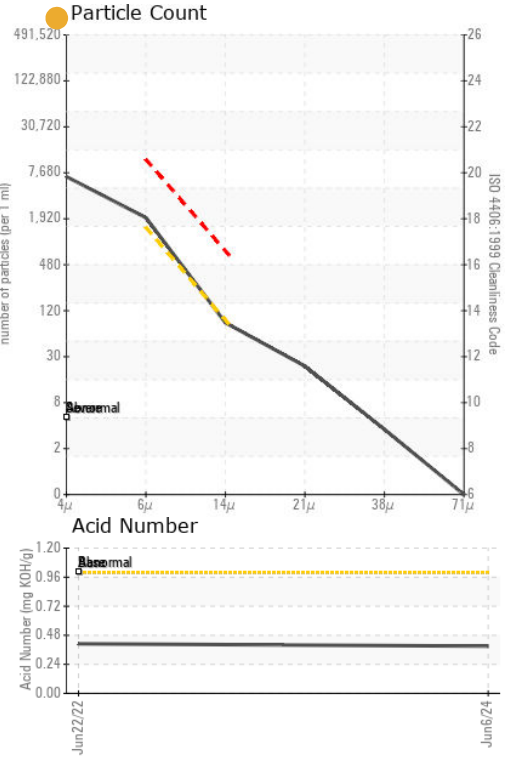
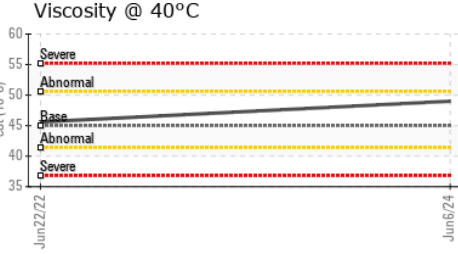
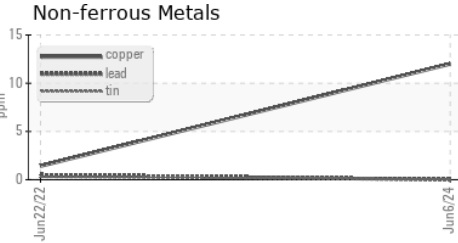
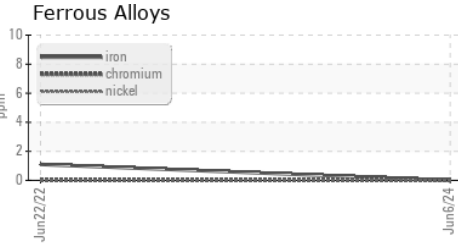
PARAMETER	VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual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

PARAMETER	method	limit/base	current	history1	history2
FLUID PROPERTIES					
Visc @ 40°C	cSt	ASTM D445 45	49.0	45.6	---

PARAMETER	method	limit/base	current	history1	history2
SAMPLE IMAGES					



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA018286 **Received** : 11 Jun 2024
Lab Number : 06206543 **Tested** : 13 Jun 2024
Unique Number : 11074004 **Diagnosed** : 13 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

BREAKWATER RESEARCH
 3758 SPINNAKER CT
 FREMONT, CA
 US 94538
 Contact: WILLIAM
 william@breakwaterresearch.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)