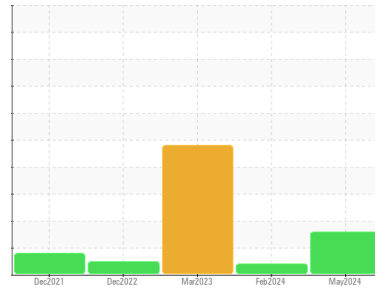




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
7618823 (S/N 1004)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-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			KCPA013338	KCP47439D	KCP54059
Sample Date	Client Info			01 May 2024	01 Feb 2024	30 Mar 2023
Machine Age	hrs	Client Info		23032	3180	17018
Oil Age	hrs	Client Info		2753	3180	2653
Oil Changed	Client Info			Not Changed	Changed	Not Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	21
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	3	7	9
Lead	ppm	ASTM D5185m	>10	0	1	0
Copper	ppm	ASTM D5185m	>50	5	5	8
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

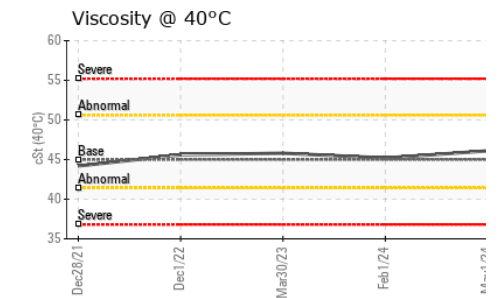
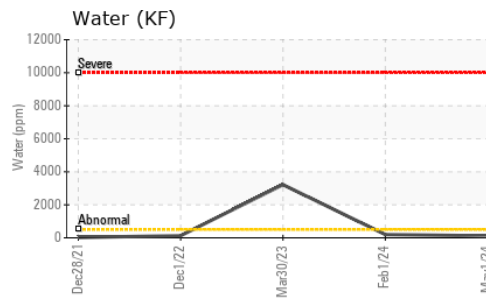
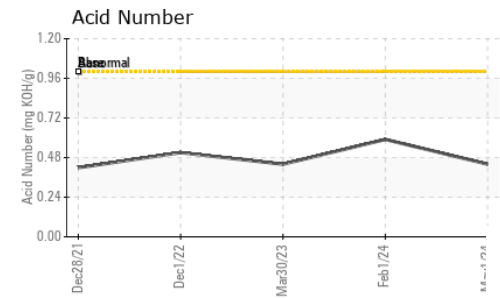
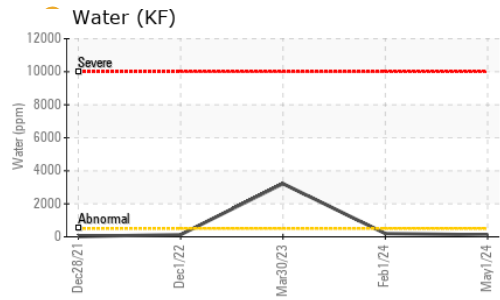
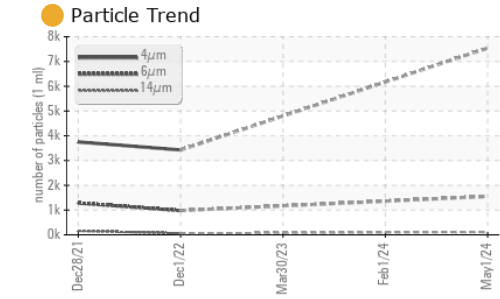
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	0	39	0
Molybdenum	ppm	ASTM D5185m	0	0	<1	0
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	100	14	68	2
Calcium	ppm	ASTM D5185m	0	2	5	<1
Phosphorus	ppm	ASTM D5185m	0	4	39	46
Zinc	ppm	ASTM D5185m	0	135	40	121
Sulfur	ppm	ASTM D5185m	23500	21533	20920	19923

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	<1
Sodium	ppm	ASTM D5185m		10	4	<1
Potassium	ppm	ASTM D5185m	>20	7	20	<1
Water	%	ASTM D6304	>0.05	0.011	0.020	▲ 0.322
ppm Water	ppm	ASTM D6304	>500	117	200	▲ 3220

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		7541	---	---
Particles >6µm		ASTM D7647	>1300	● 1550	---	---
Particles >14µm		ASTM D7647	>80	● 111	---	---
Particles >21µm		ASTM D7647	>20	● 32	---	---
Particles >38µm		ASTM D7647	>4	3	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● 20/18/14	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.44	0.59	0.44

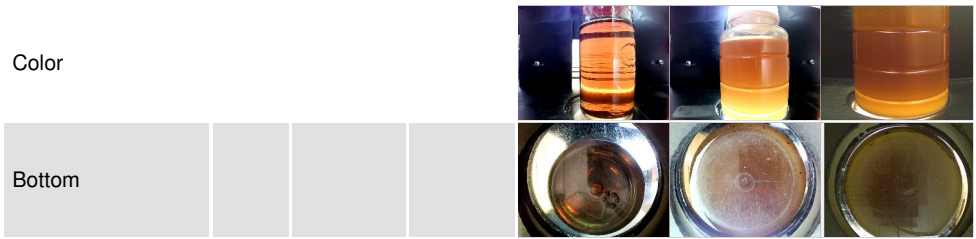
OIL ANALYSIS REPORT



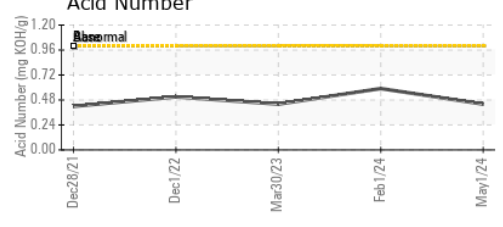
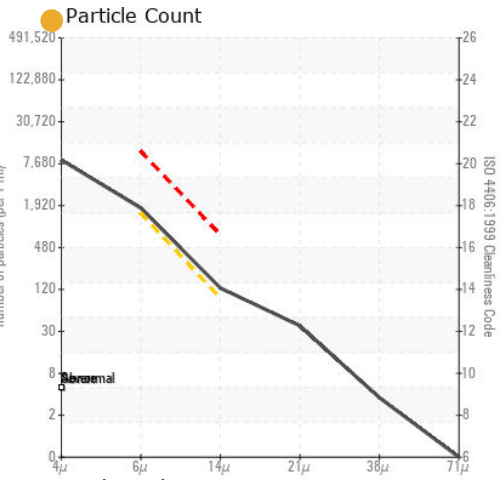
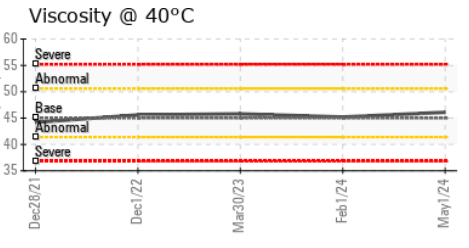
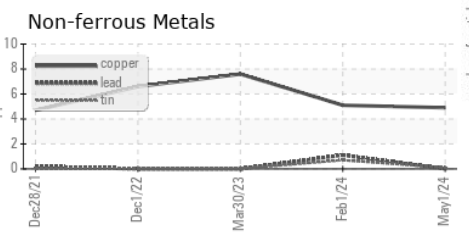
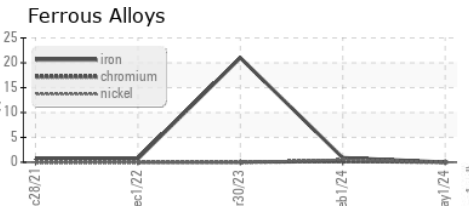
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	0.2%
Free Water	scalar	*Visual		NEG	▲ 2.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.1	45.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013338 **Received** : 09 May 2024
Lab Number : 06174618 **Tested** : 10 May 2024
Unique Number : 11020671 **Diagnosed** : 13 May 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PARMATECH CORP
 2221 PINE VIEW WAY
 PETALUMA, CA
 US 94954
 Contact: M. SHEEHAN
 msheehan@parmatech.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)