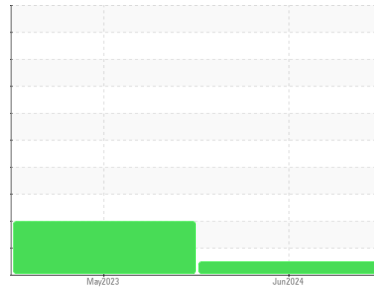




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**6853200 (S/N 1374)**  
 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

The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA018384</b>	KCP52364	---
Sample Date	Client Info			<b>06 Jun 2024</b>	11 May 2023	---
Machine Age	hrs	Client Info		<b>34652</b>	31129	---
Oil Age	hrs	Client Info		<b>4208</b>	3000	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

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

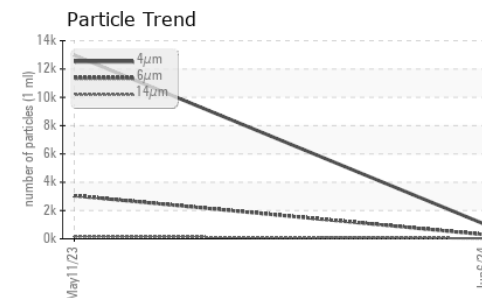
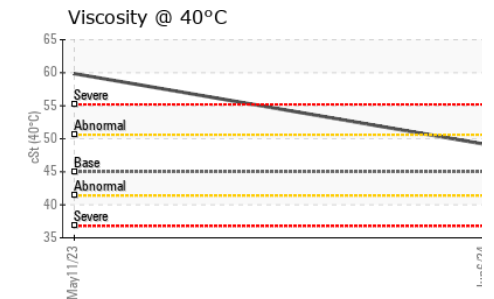
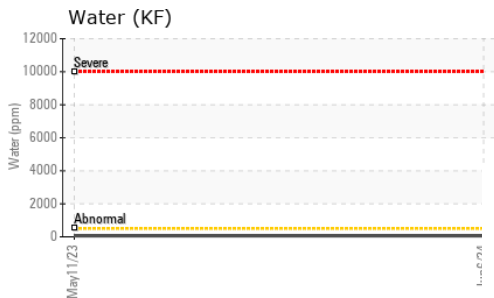
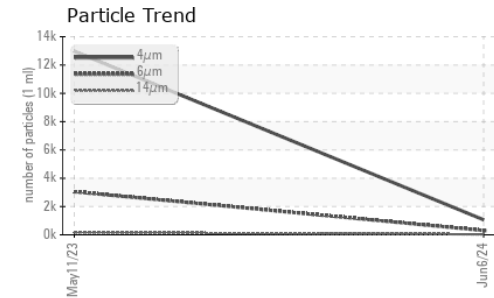
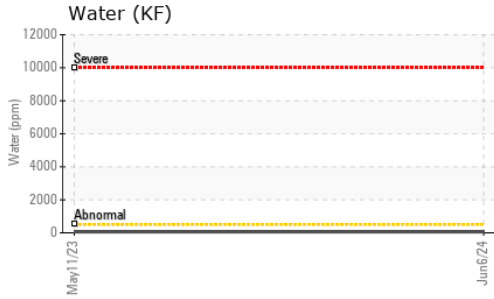
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	100	<b>3</b>	0	---
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	---
Zinc	ppm	ASTM D5185m	0	<b>1</b>	0	---
Sulfur	ppm	ASTM D5185m	23500	<b>19672</b>	8801	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>1</b>	12	---
Sodium	ppm	ASTM D5185m		<b>2</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	---
Water	%	ASTM D6304	>0.05	<b>0.006</b>	0.006	---
ppm Water	ppm	ASTM D6304	>500	<b>63</b>	63	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>1063</b>	12975	---
Particles >6µm		ASTM D7647	>1300	<b>303</b>	▲ 3043	---
Particles >14µm		ASTM D7647	>80	<b>30</b>	▲ 168	---
Particles >21µm		ASTM D7647	>20	<b>8</b>	▲ 38	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	1	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>17/15/12</b>	▲ 21/19/15	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.48</b>	0.91	---

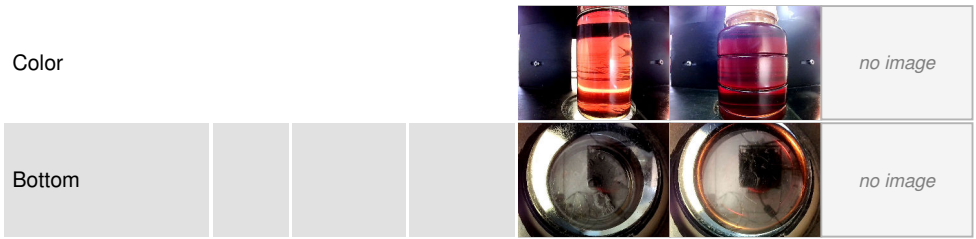
# OIL ANALYSIS REPORT



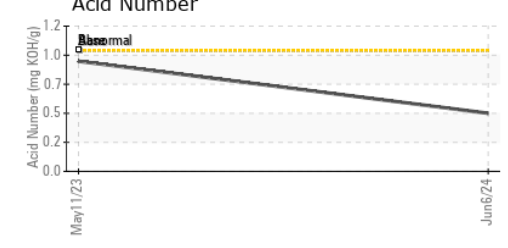
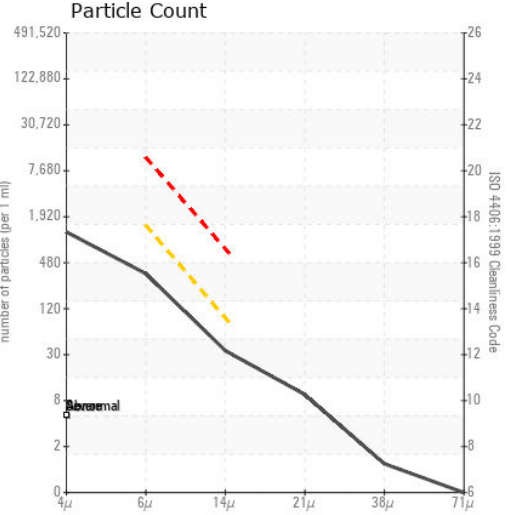
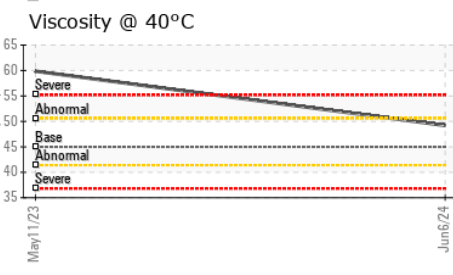
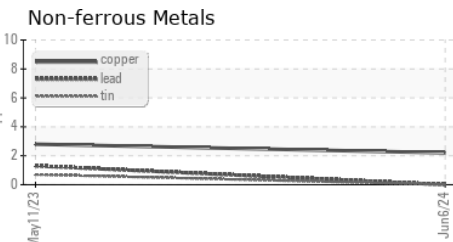
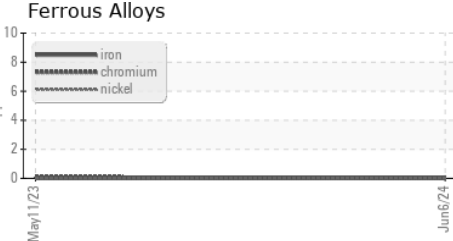
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	49.2	59.86

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018384  
**Lab Number** : 06207103  
**Unique Number** : 11074564  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 11 Jun 2024  
**Tested** : 13 Jun 2024  
**Diagnosed** : 13 Jun 2024 - Angela Borella

**FATHOM DIGITAL MANUFACTURING - KAMERA INC**  
 46750 LAKEVIEW BLVD  
 FREMONT, CA  
 US 94538  
 Contact: TANNER MASTRUD  
 tanner.mastrud@fathommfg.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)