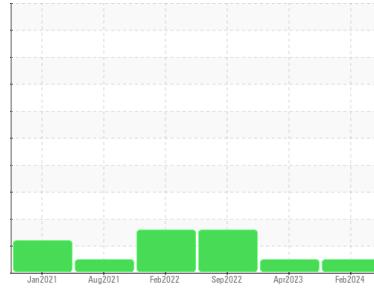




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**4144746 (S/N 1064)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
 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. There is no indication of any contamination 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			<b>KCP36779</b>	KCP52806	KCP28640
Sample Date	Client Info			<b>15 Feb 2024</b>	10 Apr 2023	19 Sep 2022
Machine Age	hrs Client Info			<b>90783</b>	83699	81631
Oil Age	hrs Client Info			<b>5084</b>	4000	5299
Oil Changed	Client Info			<b>Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

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

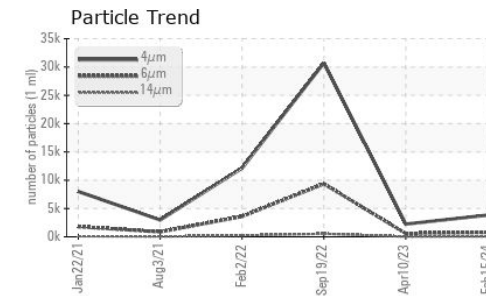
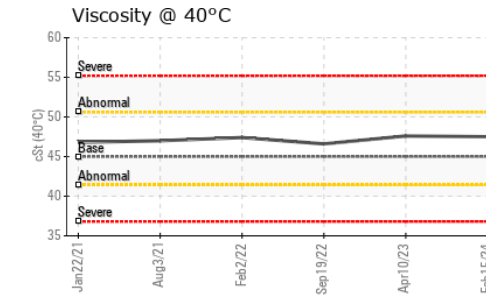
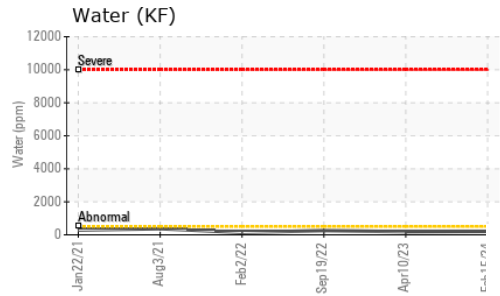
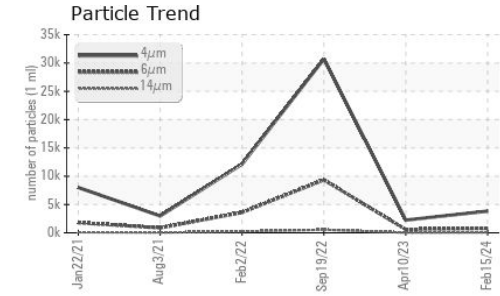
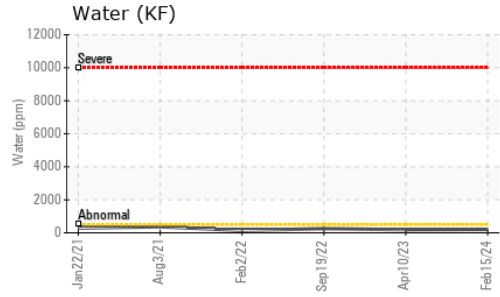
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	90	<b>25</b>	41	18
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	100	<b>70</b>	88	55
Calcium	ppm	ASTM D5185m	0	<b>2</b>	2	7
Phosphorus	ppm	ASTM D5185m	0	<b>5</b>	4	18
Zinc	ppm	ASTM D5185m	0	<b>0</b>	6	13
Sulfur	ppm	ASTM D5185m	23500	<b>22656</b>	24051	12606

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	2
Sodium	ppm	ASTM D5185m		<b>21</b>	17	14
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	10
Water	%	ASTM D6304	>0.05	<b>0.020</b>	0.018	0.025
ppm Water	ppm	ASTM D6304	>500	<b>207</b>	187.1	257.4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>3837</b>	2244	30711
Particles >6µm		ASTM D7647	>1300	<b>779</b>	587	▲ 9365
Particles >14µm		ASTM D7647	>80	<b>44</b>	29	▲ 546
Particles >21µm		ASTM D7647	>20	<b>12</b>	5	▲ 64
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>19/17/13</b>	18/16/12	▲ 22/20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.42</b>	0.36	0.40

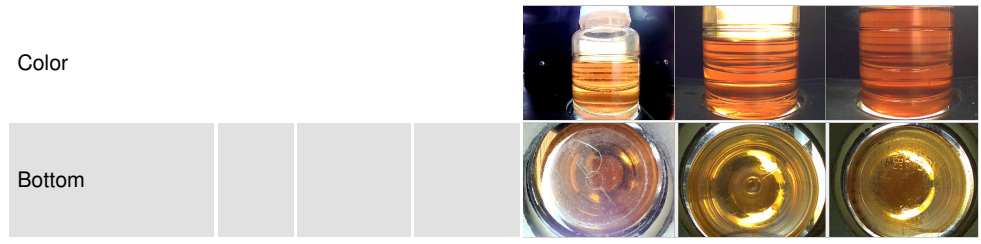
# OIL ANALYSIS REPORT



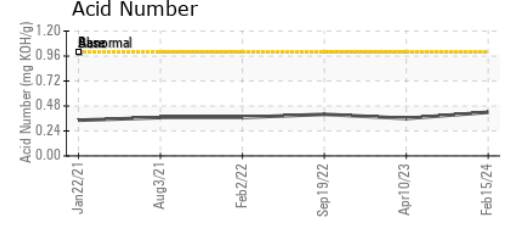
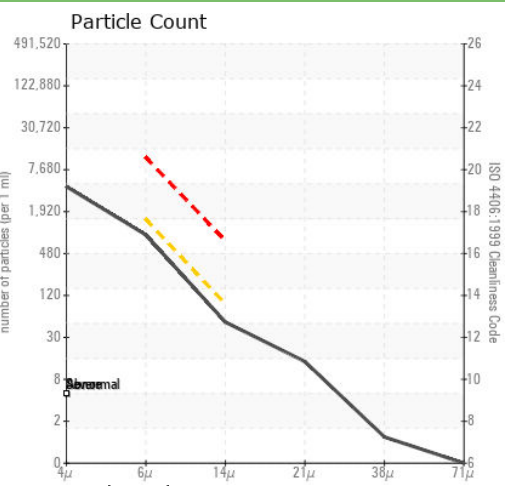
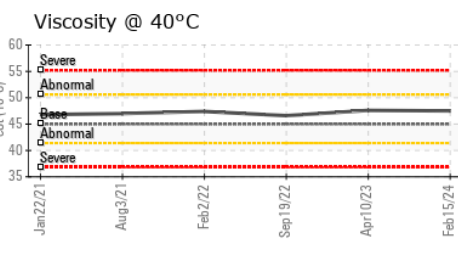
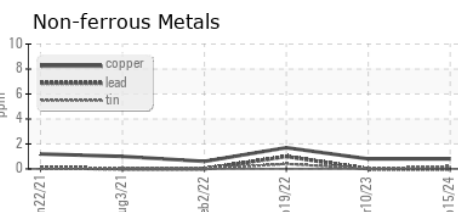
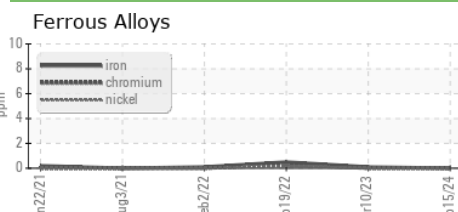
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45	47.5	47.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP36779 **Received** : 20 Mar 2024  
**Lab Number** : 06123672 **Tested** : 25 Mar 2024  
**Unique Number** : 10937823 **Diagnosed** : 25 Mar 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**PRINT PROMOTIONS GROUP LLC**  
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 VESTAVIA HILLS, AL  
 US 35216  
 Contact: MARK TUCKER  
 mark.tucker@encompasshealth.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)