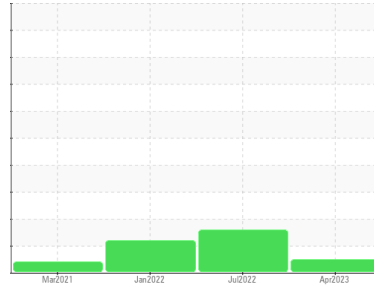




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4173852 (S/N 1011)**  
 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>KCPA000464</b>	KCP50743	KCP40906
Sample Date	Client Info			<b>05 Apr 2023</b>	07 Jul 2022	28 Jan 2022
Machine Age	hrs	Client Info		<b>90797</b>	84486	81405
Oil Age	hrs	Client Info		<b>0</b>	3000	7152
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	4	10
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

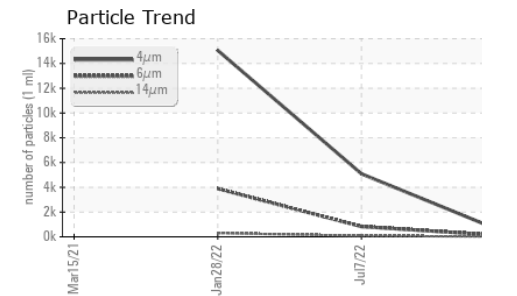
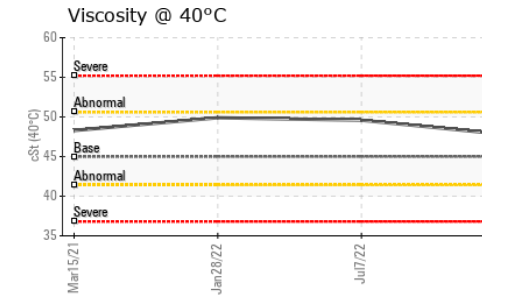
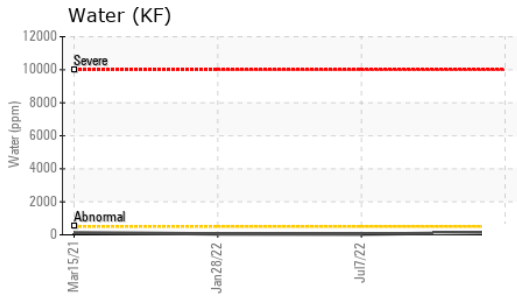
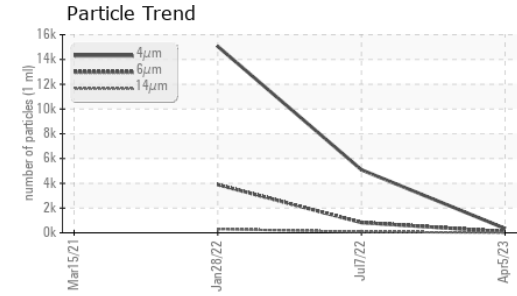
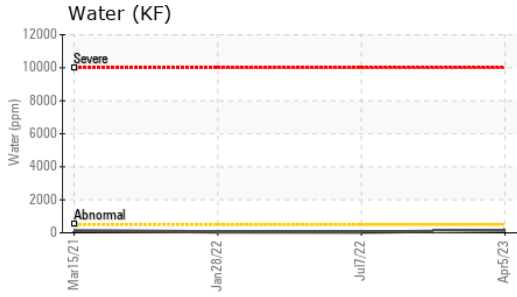
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	8	<1
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	100	<b>26</b>	12	1
Calcium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>21</b>	0	5
Zinc	ppm	ASTM D5185m	0	<b>21</b>	36	10
Sulfur	ppm	ASTM D5185m	23500	<b>21098</b>	22394	18143

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>11</b>	▲ 41	2
Sodium	ppm	ASTM D5185m		<b>5</b>	3	1
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Water	%	ASTM D6304	>0.05	<b>0.014</b>	0.003	0.005
ppm Water	ppm	ASTM D6304	>500	<b>141.5</b>	38.1	53.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>347</b>	5089	15058
Particles >6µm		ASTM D7647	>1300	<b>91</b>	829	▲ 3893
Particles >14µm		ASTM D7647	>80	<b>9</b>	77	▲ 305
Particles >21µm		ASTM D7647	>20	<b>5</b>	17	▲ 63
Particles >38µm		ASTM D7647	>4	<b>1</b>	1	4
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>16/14/10</b>	20/17/13	▲ 19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.41</b>	0.39	0.47

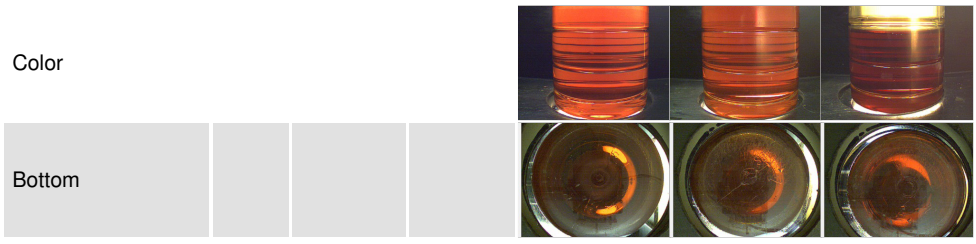
# OIL ANALYSIS REPORT



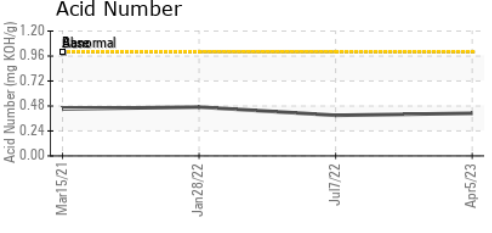
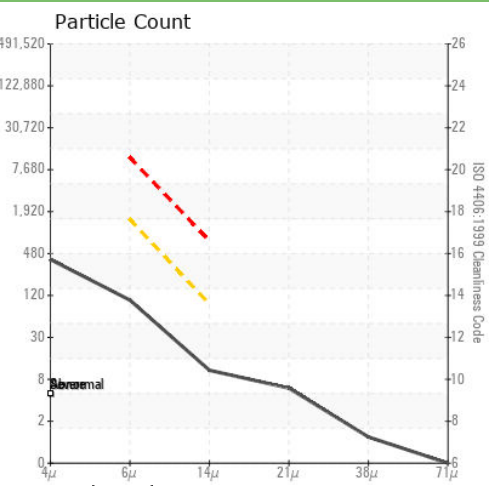
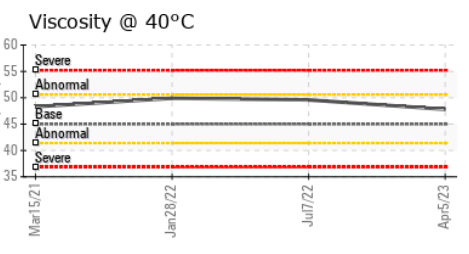
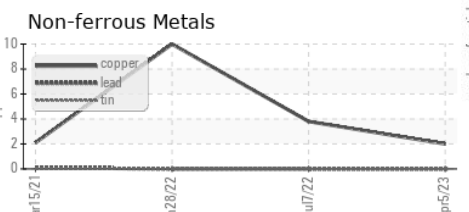
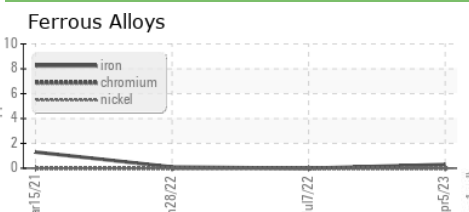
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	47.8	49.59	49.9

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA000464 **Received** : 14 Apr 2023  
**Lab Number** : 05820353 **Diagnosed** : 17 Apr 2023  
**Unique Number** : 10428436 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**GCX CORP**  
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 PETALUMA, CA  
 US 94954  
 Contact: Service Manager  
 OTUCAY@GCX.COM  
 T:  
 F:

Certificate L2367  
 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)