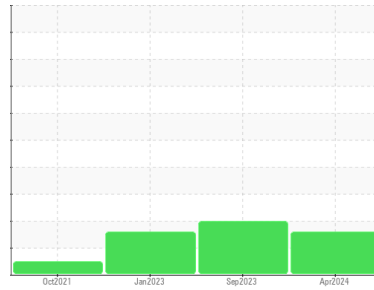




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**1426226 (S/N 087175)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high 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			<b>KCPA016375</b>	KCP40032D	KCP53130
Sample Date	Client Info			<b>08 Apr 2024</b>	20 Sep 2023	09 Jan 2023
Machine Age	hrs	Client Info		<b>42954</b>	39903	36134
Oil Age	hrs	Client Info		<b>0</b>	0	7000
Oil Changed	Client Info			<b>Changed</b>	Not Changd	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

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

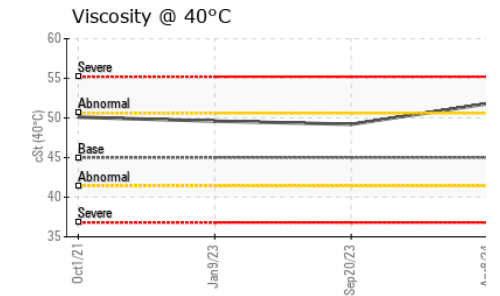
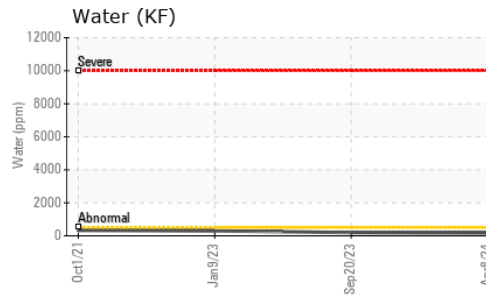
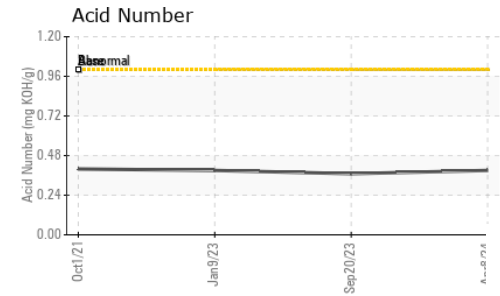
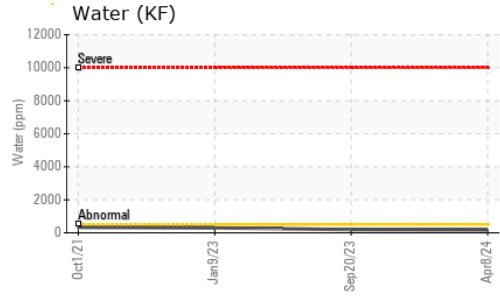
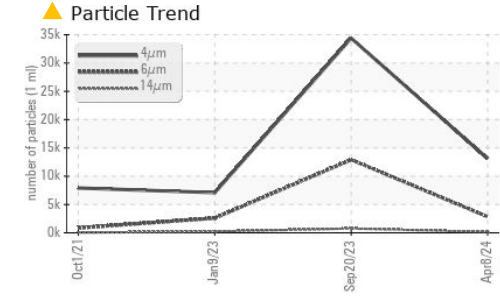
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>60</b>	74	66
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	100	<b>67</b>	84	84
Calcium	ppm	ASTM D5185m	0	<b>2</b>	4	1
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	3	2
Zinc	ppm	ASTM D5185m	0	<b>0</b>	0	5
Sulfur	ppm	ASTM D5185m	23500	<b>21994</b>	23771	23518

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>2</b>	5	20
Sodium	ppm	ASTM D5185m		<b>30</b>	30	17
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	5	<1
Water	%	ASTM D6304	>0.05	<b>0.017</b>	0.019	0.029
ppm Water	ppm	ASTM D6304	>500	<b>172</b>	194.6	299.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>13112</b>	34384	7091
Particles >6µm		ASTM D7647	>1300	<b>▲ 2841</b>	▲ 12912	▲ 2595
Particles >14µm		ASTM D7647	>80	<b>▲ 133</b>	▲ 755	▲ 224
Particles >21µm		ASTM D7647	>20	<b>▲ 27</b>	▲ 158	▲ 54
Particles >38µm		ASTM D7647	>4	<b>1</b>	● 7	4
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 21/19/14</b>	▲ 22/21/17	▲ 20/19/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.39</b>	0.37	0.39

# OIL ANALYSIS REPORT



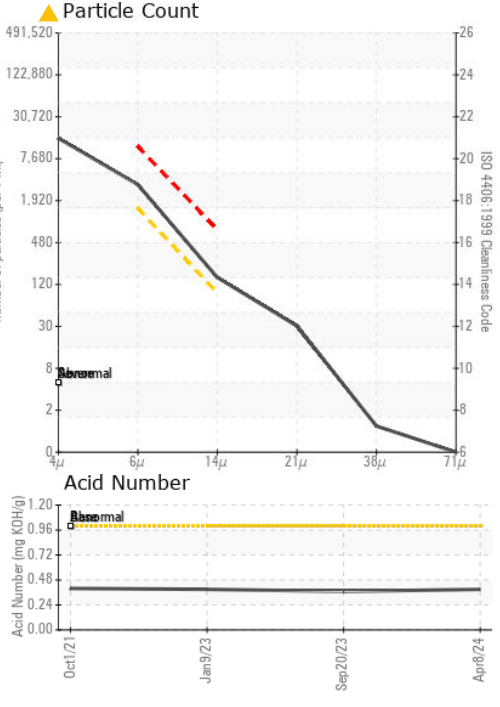
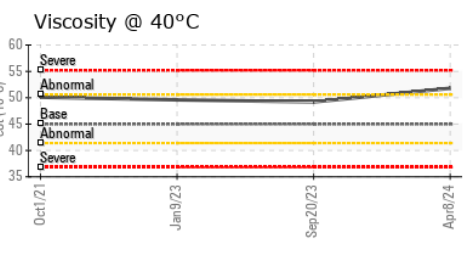
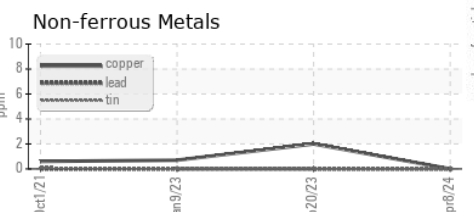
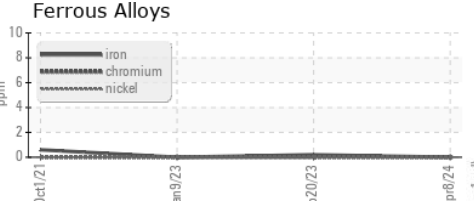
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	51.8	49.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA016375 **Received** : 10 Apr 2024  
**Lab Number** : 06144286 **Tested** : 11 Apr 2024  
**Unique Number** : 10969094 **Diagnosed** : 11 Apr 2024 - Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**PRECISION TOOL DISTRIBUTORS**  
 46613 FREMONT BLVD  
 FREMONT, CA  
 US 94538  
 Contact: MIKE B.  
 mikeb@pretool.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)