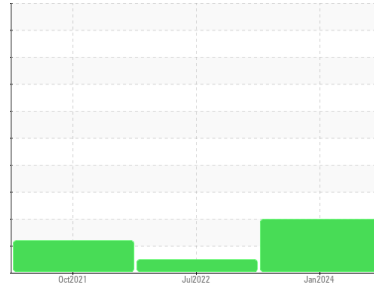




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**6064900 (S/N 1018)**

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 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>KCPA010382</b>	KCP51841	KCP38933
Sample Date	Client Info	<b>23 Jan 2024</b>	13 Jul 2022	27 Oct 2021
Machine Age	hrs	<b>17176</b>	10565	7736
Oil Age	hrs	<b>0</b>	3200	0
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	ATTENTION

## 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	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</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>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>15</b>	2	2
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	<1
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>	48	43
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m 100	<b>0</b>	62	62
Calcium	ppm	ASTM D5185m 0	<b>0</b>	2	1
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	0	10
Zinc	ppm	ASTM D5185m 0	<b>0</b>	4	5
Sulfur	ppm	ASTM D5185m 23500	<b>18657</b>	23128	16839

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>9</b>	6	8
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	16	19
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	0
Water	%	ASTM D6304 >0.05	<b>0.006</b>	0.021	0.021
ppm Water	ppm	ASTM D6304 >500	<b>70</b>	212.7	210.7

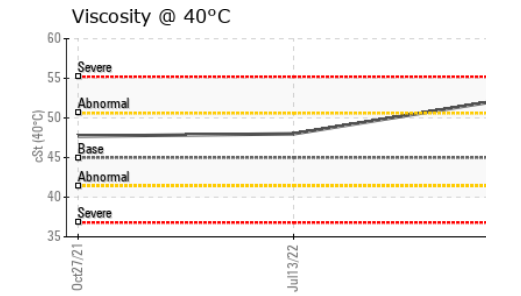
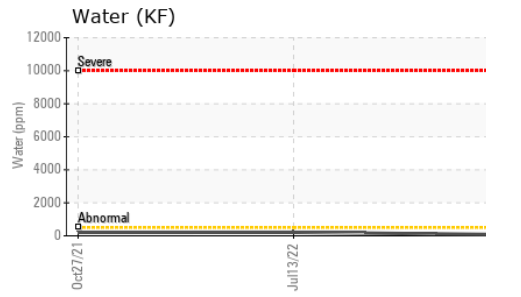
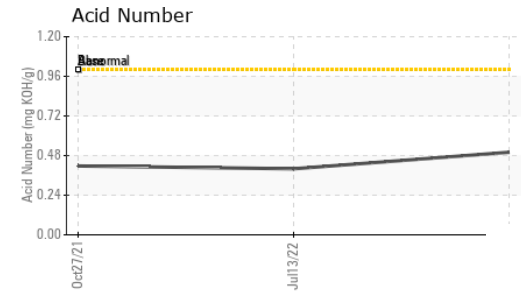
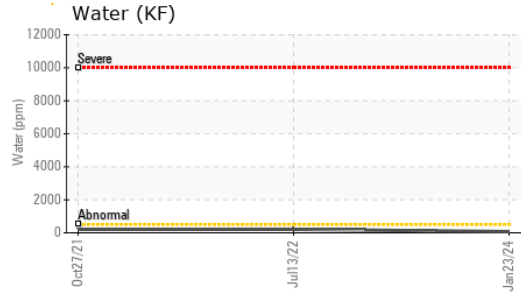
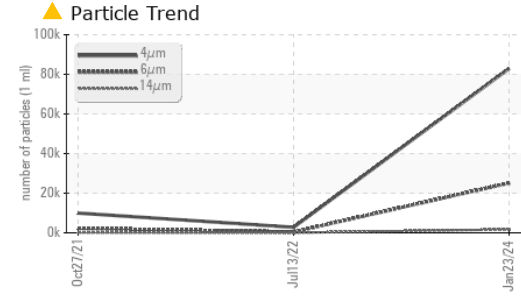
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>82954</b>	2781	9978
Particles >6µm	ASTM D7647 >1300	<b>▲ 25120</b>	391	▲ 2233
Particles >14µm	ASTM D7647 >80	<b>▲ 1681</b>	33	▲ 132
Particles >21µm	ASTM D7647 >20	<b>▲ 385</b>	10	▲ 31
Particles >38µm	ASTM D7647 >4	<b>▲ 9</b>	0	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 24/22/18</b>	19/16/12	▲ 18/14

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.50</b>	0.40	0.417

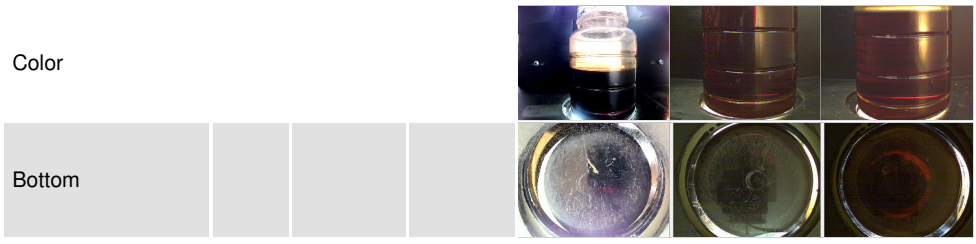
# OIL ANALYSIS REPORT



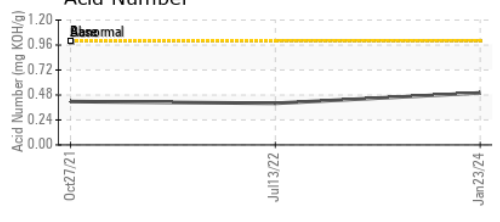
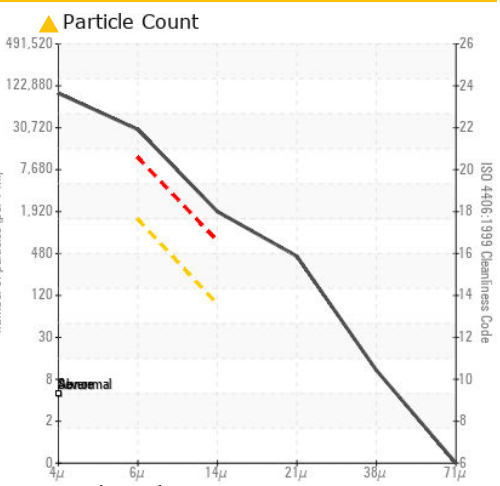
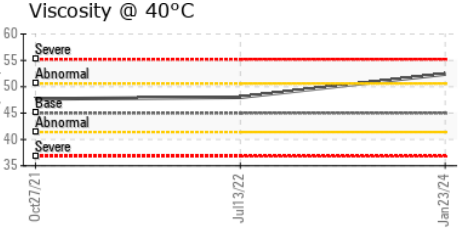
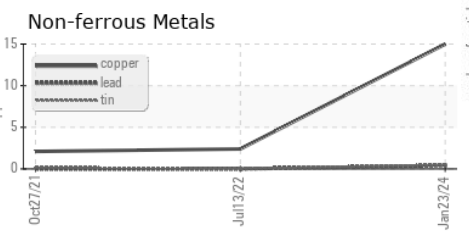
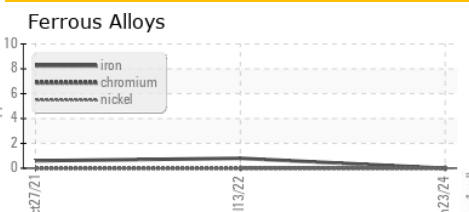
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	52.4	48.0	47.7

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA010382 **Received** : 01 Feb 2024  
**Lab Number** : 06076856 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10858947 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**POWERTRAIN INDUSTRIES**  
 4910 LANGLEY LN, SUITE 103  
 RENO, NV  
 US 89502  
 Contact: Service Manager

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)