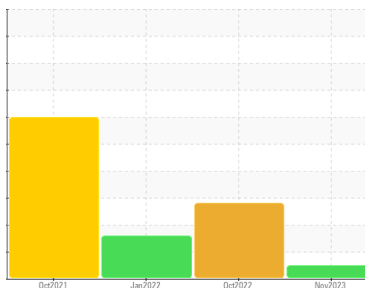


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**4313268 (S/N 1763)**

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>KCPA006930</b>	KCP46156	KCP27723
Sample Date	Client Info			<b>06 Nov 2023</b>	02 Oct 2022	25 Jan 2022
Machine Age	hrs	Client Info		<b>26813</b>	21369	15359
Oil Age	hrs	Client Info		<b>0</b>	3000	2084
Oil Changed	Client Info			<b>N/A</b>	Changed	Not Chngd
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>0</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	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	7	0
Copper	ppm	ASTM D5185m	>50	<b>38</b>	▲ 187	35
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

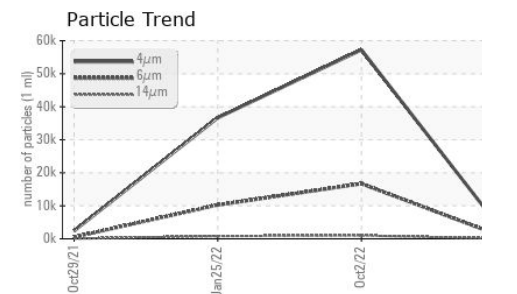
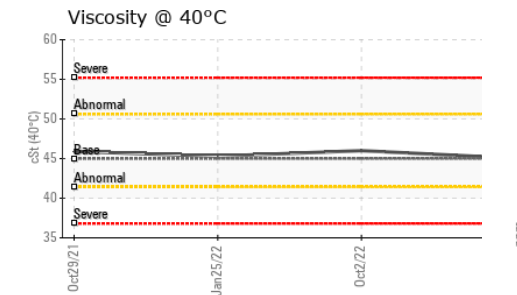
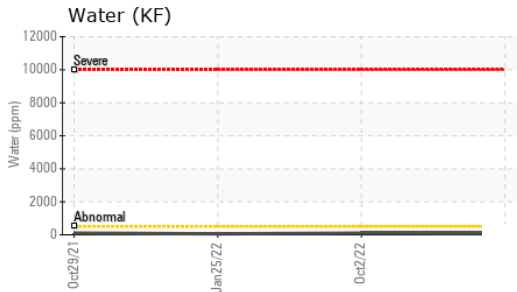
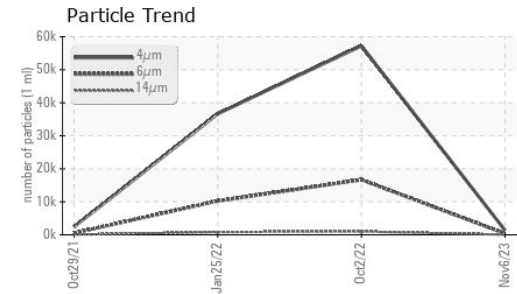
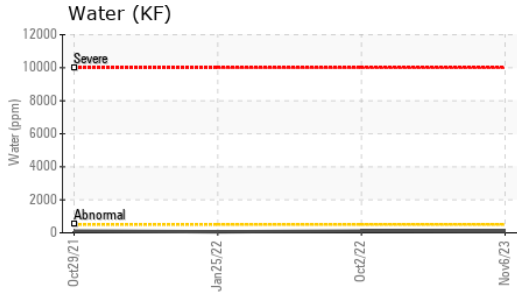
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	90	<b>6</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	100	<b>0</b>	9	1
Calcium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m	0	<b>17</b>	14	11
Zinc	ppm	ASTM D5185m	0	<b>0</b>	0	141
Sulfur	ppm	ASTM D5185m	23500	<b>17784</b>	15991	15977

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	11
Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304	>0.05	<b>0.008</b>	0.010	0.005
ppm Water	ppm	ASTM D6304	>500	<b>84.0</b>	109.3	59.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>1320</b>	57245	36655
Particles >6µm		ASTM D7647	>1300	<b>388</b>	▲ 16707	▲ 10242
Particles >14µm		ASTM D7647	>80	<b>30</b>	▲ 993	▲ 830
Particles >21µm		ASTM D7647	>20	<b>7</b>	▲ 161	▲ 231
Particles >38µm		ASTM D7647	>4	<b>0</b>	▲ 7	▲ 7
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>18/16/12</b>	▲ 23/21/17	▲ 21/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.41</b>	0.41	0.38

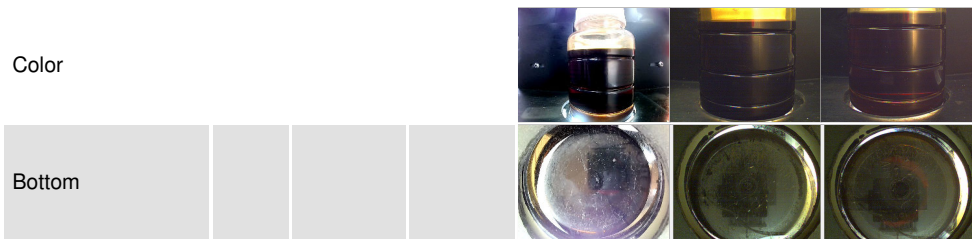
# OIL ANALYSIS REPORT



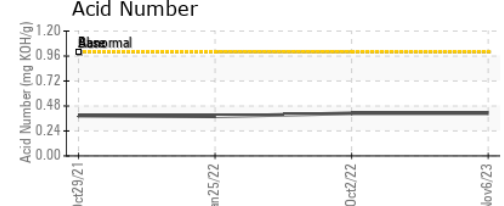
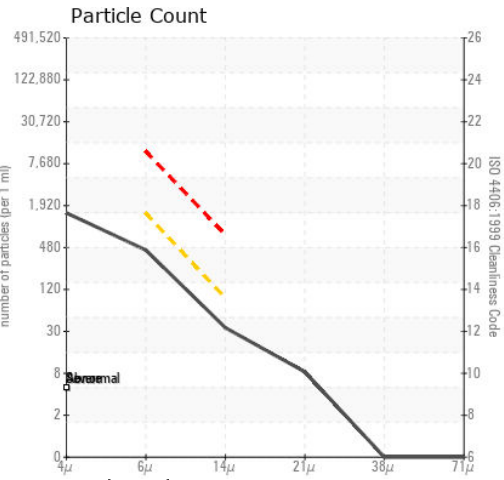
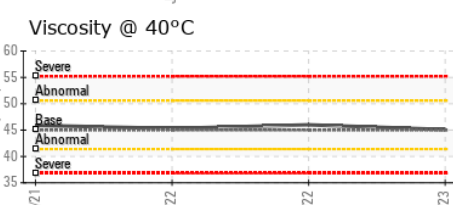
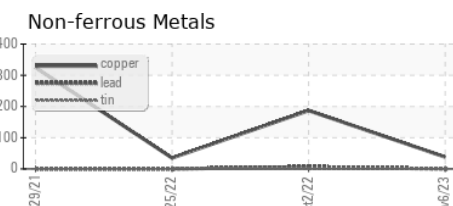
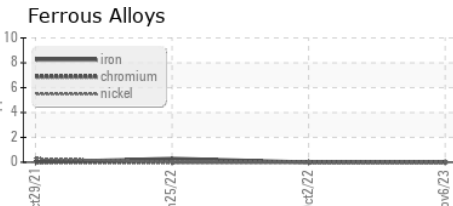
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.1	46.0	45.3

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA006930 **Received** : 16 Nov 2023  
**Lab Number** : 06009675 **Diagnosed** : 19 Nov 2023  
**Unique Number** : 10743437 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**DALLAS USA FOODS**  
 1880 LONESTAR DR  
 DALLAS, TX  
 US 75212  
 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)

T:  
F: