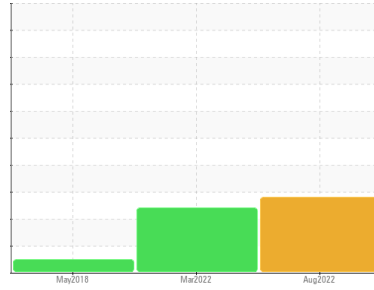


# PROBLEM SUMMARY

Sample Rating Trend



**WATER**

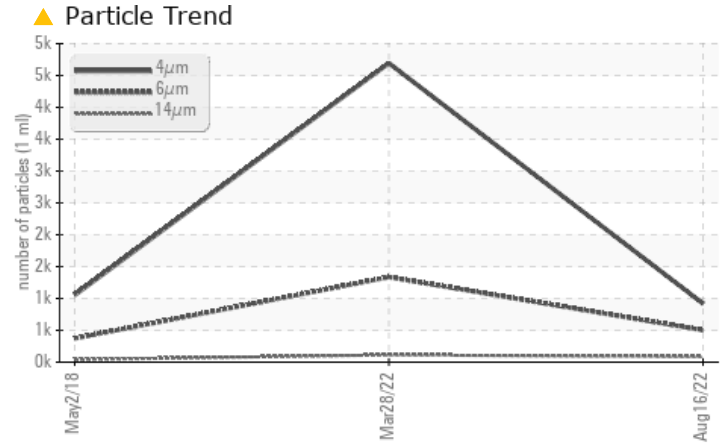
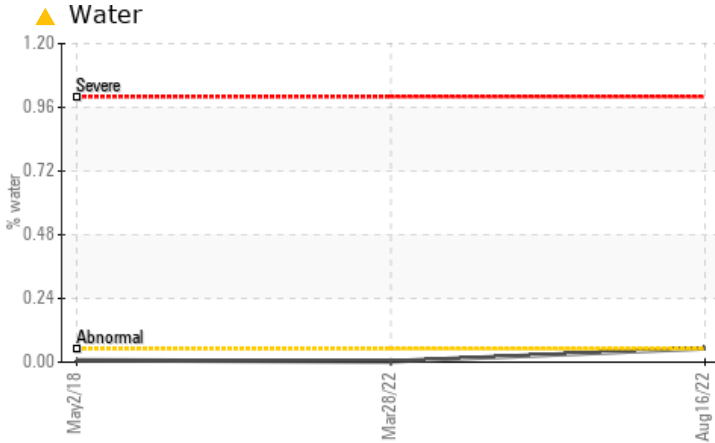


Machine Id  
**KAESER DSD 150 4993603 (S/N 1122)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-460 (--- QTS)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL
Water	%	ASTM D6304	>0.05	<b>▲ 0.052</b>	0.003	0.007
ppm Water	ppm	ASTM D6304	>500	<b>▲ 520</b>	37.7	70
Particles >14µm		ASTM D7647	>80	<b>▲ 85</b>	▲ 113	40
Particles >21µm		ASTM D7647	>20	<b>▲ 29</b>	▲ 22	11
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>▲ 17/16/14</b>	▲ 18/14	16/12

Customer Id: GREWILVT  
Sample No.: KCP48130  
Lab Number: 05627488  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS

### 28 Mar 2022 Diag: Jonathan Hester

#### DEGRADATION



Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is at the top-end of the recommended limit.

[view report](#)



### 02 May 2018 Diag: Doug Bogart

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

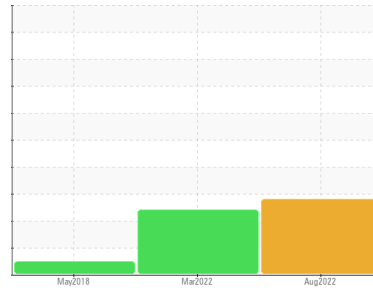
[view report](#)



Machine Id  
**KAESER DSD 150 4993603 (S/N 1122)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) FG-460 (--- QTS)**



## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a moderate amount of particulates present in the oil. There is a light concentration of water 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	history 1	history 2
Sample Number			<b>KCP48130</b>	KCP44315	KCP07997
Sample Date			<b>16 Aug 2022</b>	28 Mar 2022	02 May 2018
Machine Age	hrs		<b>36891</b>	34040	13574
Oil Age	hrs		<b>445</b>	2865	6322
Oil Changed			<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m	>50	<b>1</b>	<1	<1
Chromium	ppm ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m	>3	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m	>10	<b>8</b>	<1	4
Lead	ppm ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m	>50	<b>3</b>	4	<1
Tin	ppm ASTM D5185m	>10	<b>&lt;1</b>	0	0
Antimony	ppm ASTM D5185m		<b>---</b>	---	<1
Vanadium	ppm ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m		<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m		<b>0</b>	0	0
Barium	ppm ASTM D5185m		<b>0</b>	0	<1
Molybdenum	ppm ASTM D5185m		<b>0</b>	0	0
Manganese	ppm ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm ASTM D5185m		<b>&lt;1</b>	34	2
Calcium	ppm ASTM D5185m		<b>0</b>	0	51
Phosphorus	ppm ASTM D5185m	500	<b>64</b>	4	351
Zinc	ppm ASTM D5185m		<b>6</b>	8	18
Sulfur	ppm ASTM D5185m		<b>729</b>	15501	432

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	<b>&lt;1</b>	<1	1
Sodium	ppm ASTM D5185m		<b>0</b>	8	12
Potassium	ppm ASTM D5185m	>20	<b>&lt;1</b>	<1	4
Water	% ASTM D6304	>0.05	<b>▲ 0.052</b>	0.003	0.007
ppm Water	ppm ASTM D6304	>500	<b>▲ 520</b>	37.7	70

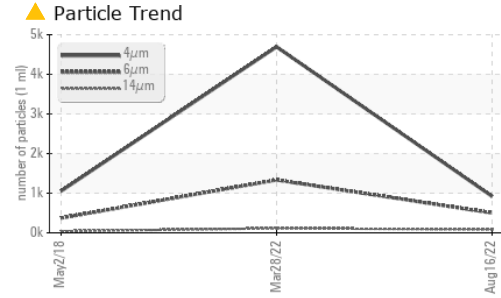
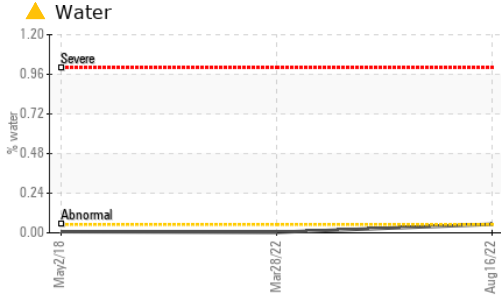
## FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		<b>920</b>	4694	1053
Particles >6µm	ASTM D7647	>1300	<b>501</b>	▲ 1334	372
Particles >14µm	ASTM D7647	>80	<b>▲ 85</b>	▲ 113	40
Particles >21µm	ASTM D7647	>20	<b>▲ 29</b>	▲ 22	11
Particles >38µm	ASTM D7647	>4	<b>4</b>	2	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	<b>▲ 17/16/14</b>	▲ 18/14	16/12

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.5	<b>0.60</b>	▲ 0.67	0.365

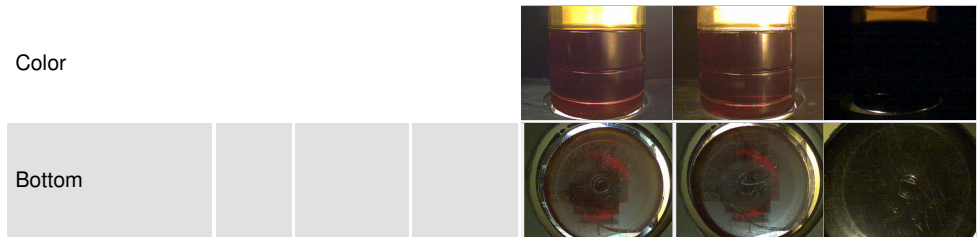
# OIL ANALYSIS REPORT



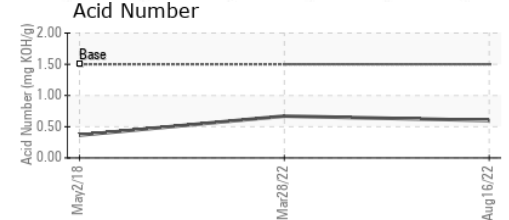
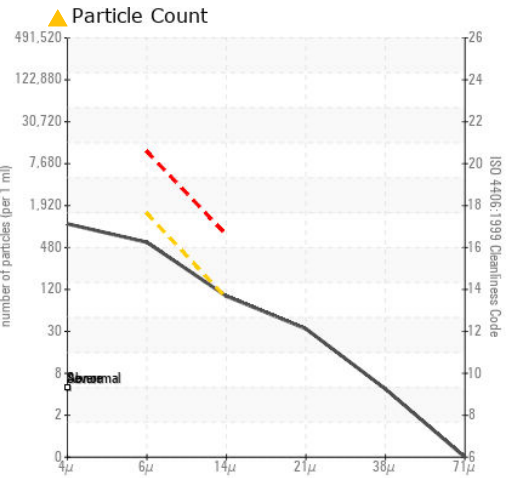
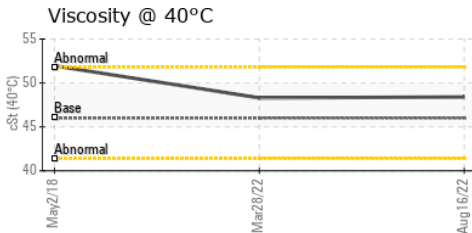
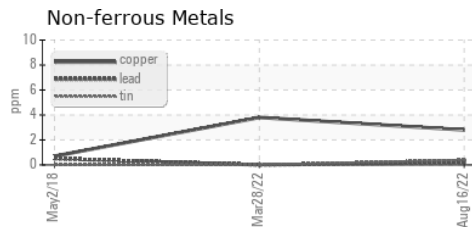
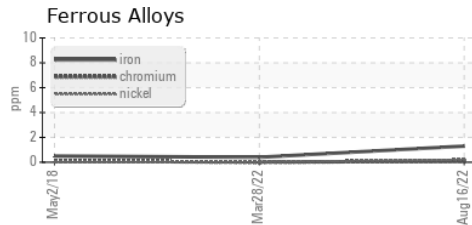
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	48.4	48.3	51.95

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KCP48130 Received : 25 Aug 2022  
 Lab Number : 05627488 Diagnosed : 30 Aug 2022  
 Unique Number : 10112009 Diagnostician : Jonathan Hester  
 Test Package : IND 2 ( Additional Tests: KF, PrtCount )

**GREEN MOUNTAIN COFFEE ROASTERS**  
 687 MARSHALL AVE  
 WILLISTON, VT  
 USA 05495  
 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: