

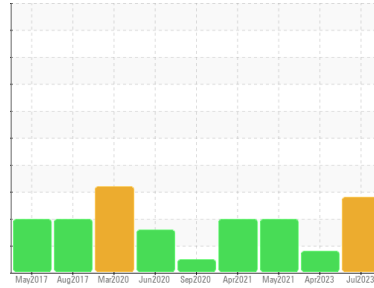


# PROBLEM SUMMARY

Area  
**PRESS**  
Machine Id  
**0809SB01**

Component  
**Front Gearbox**  
Fluid  
**KLUBER Klübersynth GH 6 ISO 320 (--- LTR)**

Sample Rating Trend

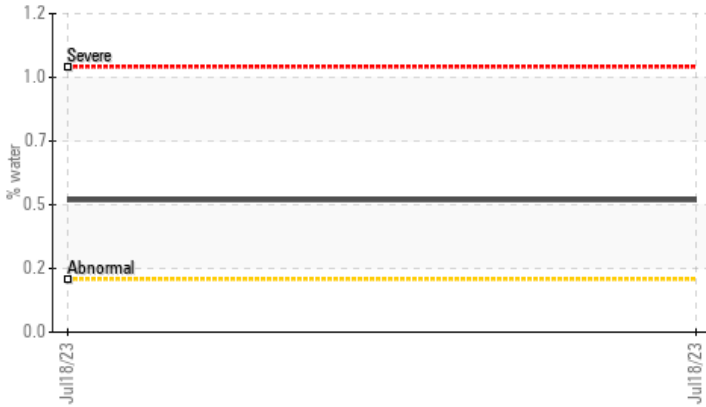


**WATER**

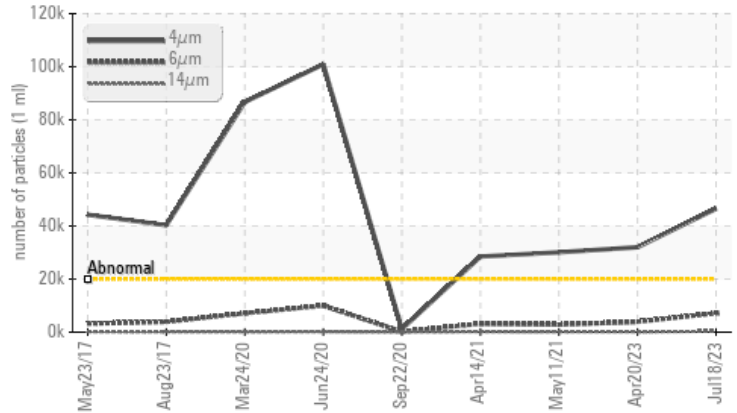


## COMPONENT CONDITION SUMMARY

### ▲ Water



### ▲ Particle Trend



## RECOMMENDATION

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ATTENTION	SEVERE
Water	%	ASTM D6304	>0.2	▲ <b>0.498</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ <b>4986.5</b>	---	---
Particles >4µm		ASTM D7647	>20000	▲ <b>46519</b>	▲ 31992	■ 30080
Particles >6µm		ASTM D7647	>5000	▲ <b>7117</b>	3886	▲ 2849
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ <b>23/20/16</b>	▲ 22/19/14	■ 22/19/14

Customer Id: FLAMONNC  
Sample No.: WC0668039  
Lab Number: 05930872  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

## HISTORICAL DIAGNOSIS

### 20 Apr 2023 Diag: Wes Davis

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 11 May 2021 Diag: Wes Davis

ISO



Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Particles >4µm are severely high. Particles >6µm are abnormally high. Particles >14µm are notably high. Particles >21µm are notably high. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 14 Apr 2021 Diag: Wes Davis

ISO



We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. Particles >4µm are severely high. Particles >6µm are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

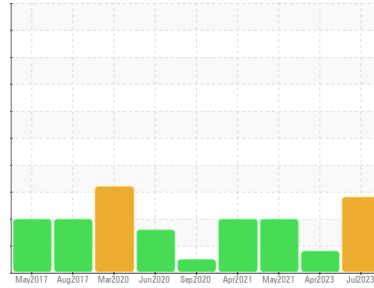
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**PRESS**  
 Machine Id  
**0809SB01**

Component  
**Front Gearbox**  
 Fluid  
**KLUBER Klübersynth GH 6 ISO 320 (--- LTR)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a moderate concentration of water present in the oil.

### Fluid Condition

The AN level is at the top-end of the recommended limit.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0668039</b>	WC0730482	WC0541838
Sample Date	Client Info		<b>18 Jul 2023</b>	20 Apr 2023	11 May 2021
Machine Age	hrs	Client Info	<b>0</b>	0	80000
Oil Age	hrs	Client Info	<b>0</b>	0	4000
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	N/A
Sample Status			<b>ABNORMAL</b>	ATTENTION	SEVERE

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>34</b>	---	---
Iron	ppm	ASTM D5185m >200	<b>5</b>	7	0
Chromium	ppm	ASTM D5185m >15	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m >5	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>2</b>	0	8
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	<b>3</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>2</b>	<1	0
Phosphorus	ppm	ASTM D5185m 2450	<b>2547</b>	2404	1580
Zinc	ppm	ASTM D5185m	<b>15</b>	19	1
Sulfur	ppm	ASTM D5185m	<b>38</b>	0	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>33</b>	46	31
Sodium	ppm	ASTM D5185m	<b>0</b>	5	2
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	0
Water	%	ASTM D6304 >0.2	<b>▲ 0.498</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>▲ 4986.5</b>	---	---

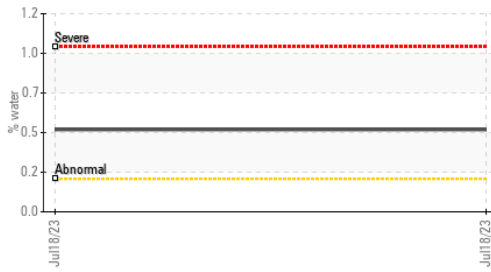
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 46519</b>	▲ 31992	● 30080
Particles >6µm	ASTM D7647	>5000	<b>▲ 7117</b>	3886	▲ 2849
Particles >14µm	ASTM D7647	>640	<b>340</b>	107	▲ 117
Particles >21µm	ASTM D7647	>160	<b>101</b>	24	▲ 38
Particles >38µm	ASTM D7647	>40	<b>2</b>	1	2
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/20/16</b>	▲ 22/19/14	● 22/19/14

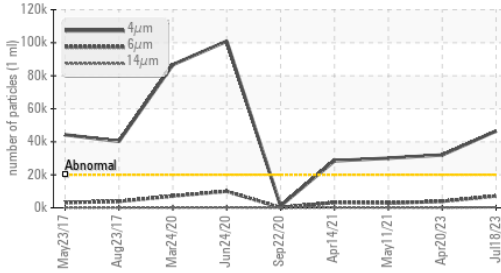


# OIL ANALYSIS REPORT

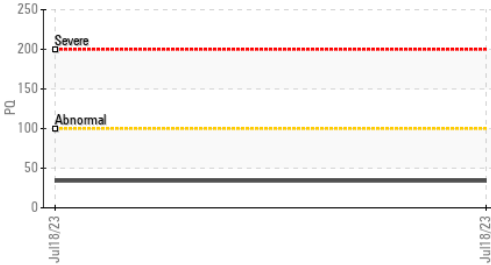
## Water



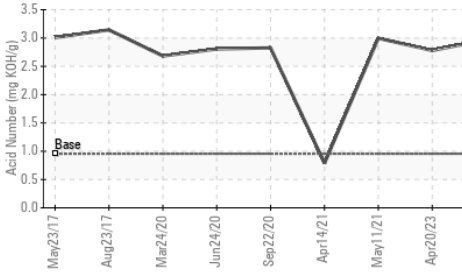
## Particle Trend



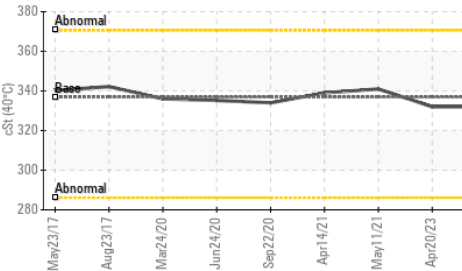
## PQ



## Acid Number



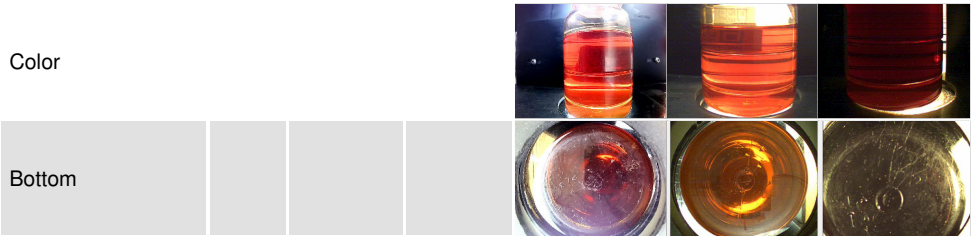
## Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.955	<b>2.97</b>	2.78	2.996
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

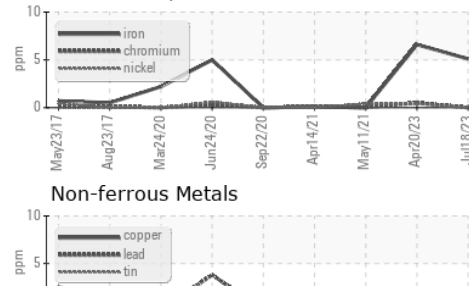
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	336.9	<b>332</b>	332	341

## SAMPLE IMAGES

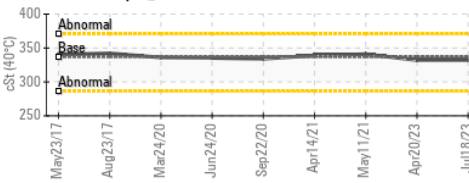


## GRAPHS

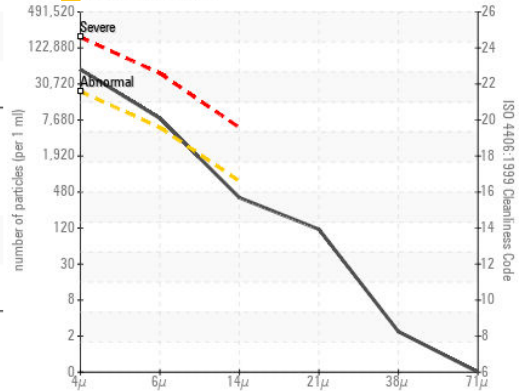
### Ferrous Alloys



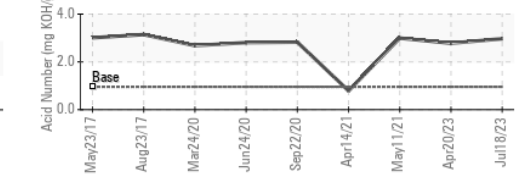
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0668039 **Received** : 22 Aug 2023  
**Lab Number** : 05930872 **Diagnosed** : 23 Aug 2023  
**Unique Number** : 10616143 **Diagnostician** : Don Baldrige

**FLAKEBOARD ARAUCO - MDF**  
 985 CORINTH RD  
 MONCURE, NC  
 US

Contact: CHRISTOPHER JACKSON  
 christopher.jackson@arauco.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)

T:  
F: