



# PROBLEM SUMMARY

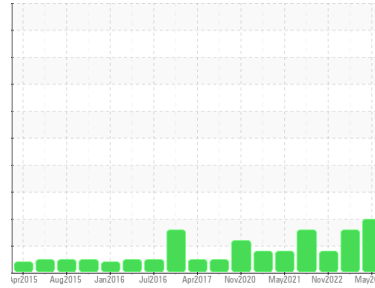
## Sample Rating Trend

**WEAR**



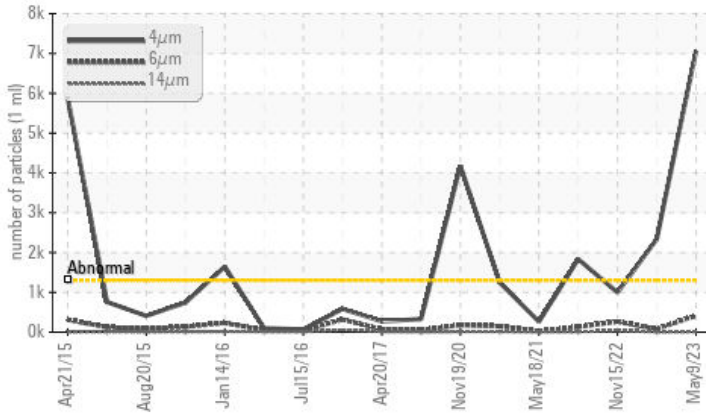
Area  
**WOOD SUPPLY**  
Machine Id  
**RADER 0135HP01**

Component  
**Hydraulic System**  
Fluid  
**KLUBER SUMMIT HYSYN FG 46 (450 GAL)**

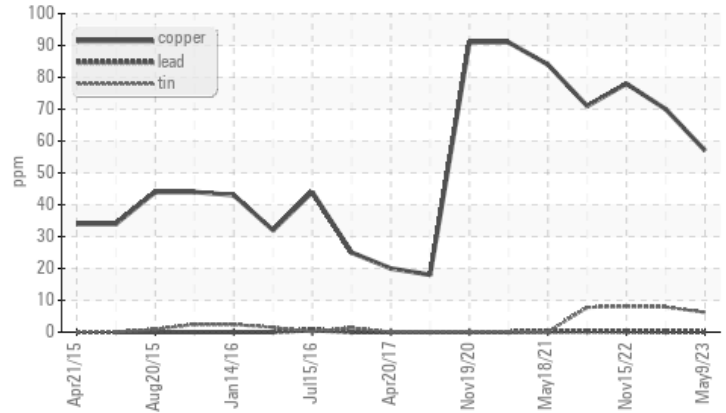


## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



### ▲ Non-ferrous Metals



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ATTENTION	MARGINAL
Copper	ppm	ASTM D5185m >20	▲ <b>57</b>	▲ 70	▲ 78
Particles >4µm		ASTM D7647 >1300	▲ <b>7062</b>	▲ 2337	997
Particles >6µm		ASTM D7647 >320	▲ <b>412</b>	77	266
Oil Cleanliness		ISO 4406 (c) >17/15/12	▲ <b>20/16/10</b>	▲ 18/13/10	17/15/12

Customer Id: FLAMONNC  
Sample No.: WC0730507  
Lab Number: 05844395  
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
Change Filter	MISSED	Sep 22 2023	?	We recommend you service the filters on this component.

## HISTORICAL DIAGNOSIS

### 13 Feb 2023 Diag: Don Baldrige

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is a moderate 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



### 15 Nov 2022 Diag: Angela Borella

#### WEAR



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

view report



### 17 Aug 2022 Diag: Don Baldrige

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is a moderate 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.

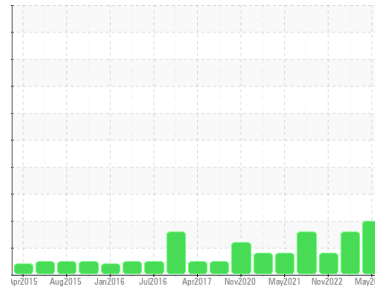
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**WOOD SUPPLY**  
 Machine Id  
**RADER 0135HP01**

Component  
**Hydraulic System**  
 Fluid  
**KLUBER SUMMIT HYSYN FG 46 (450 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

The copper level is abnormal. All other component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 14 microns in size) 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>WC0730507</b>	WC0730486	WC0668090
Sample Date	Client Info		<b>09 May 2023</b>	13 Feb 2023	15 Nov 2022
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	Not Chngd
Sample Status			<b>ABNORMAL</b>	ATTENTION	MARGINAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>7</b>	9	9
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>20	<b>▲ 57</b>	▲ 70	▲ 78
Tin	ppm	ASTM D5185m	>20	<b>6</b>	8	8
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		<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>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	2	2
Calcium	ppm	ASTM D5185m		<b>18</b>	23	23
Phosphorus	ppm	ASTM D5185m		<b>488</b>	477	484
Zinc	ppm	ASTM D5185m		<b>119</b>	151	153
Sulfur	ppm	ASTM D5185m		<b>2215</b>	2531	2634

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>1300	<b>▲ 7062</b>	▲ 2337	997
Particles >6µm	ASTM D7647	>320	<b>▲ 412</b>	77	266
Particles >14µm	ASTM D7647	>40	<b>10</b>	5	38
Particles >21µm	ASTM D7647	>10	<b>3</b>	1	8
Particles >38µm	ASTM D7647	>3	<b>0</b>	0	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>17/15/12	<b>▲ 20/16/10</b>	▲ 18/13/10	17/15/12

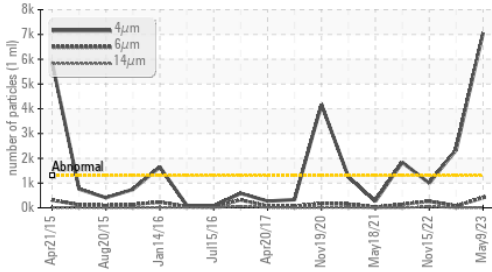
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.25</b>	0.29	0.29

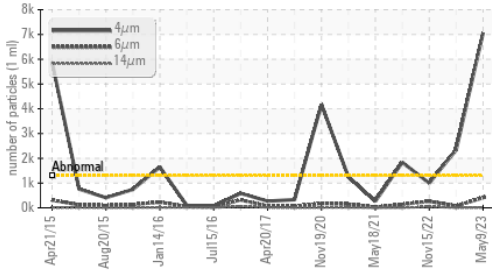


# OIL ANALYSIS REPORT

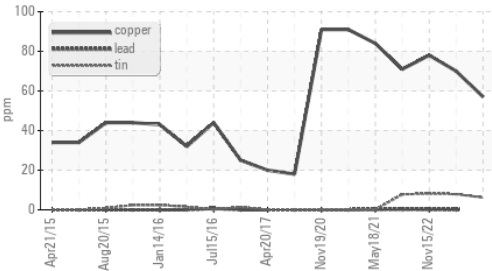
## Particle Trend



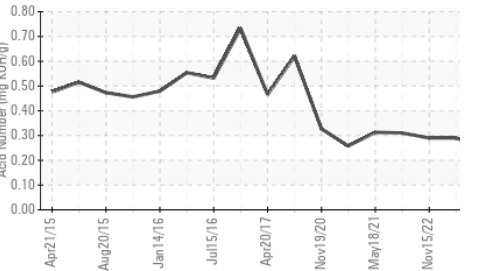
## Particle Trend



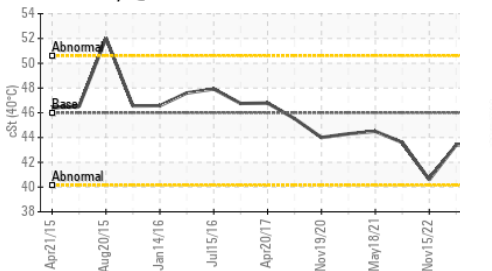
## Non-ferrous Metals



## Acid Number



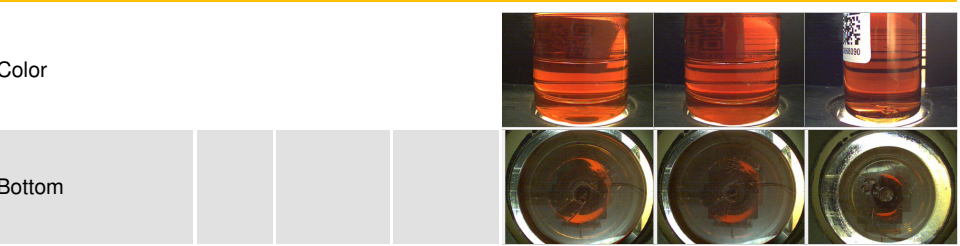
## Viscosity @ 40°C



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

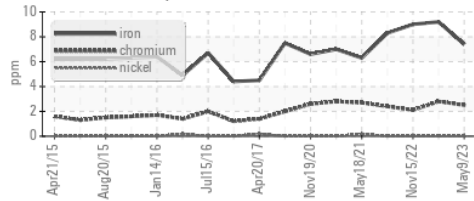
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	43.5	43.4	40.6

## SAMPLE IMAGES

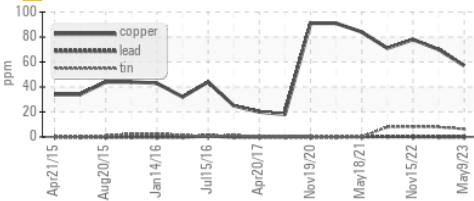


## GRAPHS

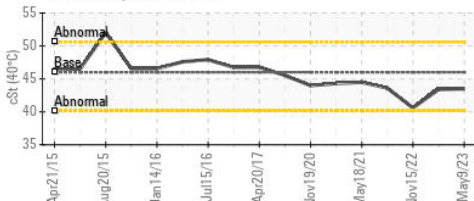
### Ferrous Alloys



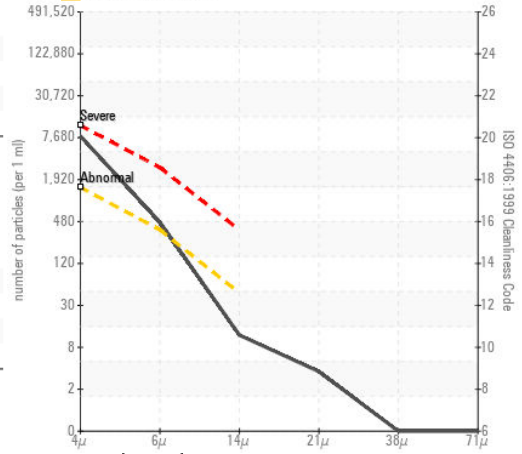
### Non-ferrous Metals



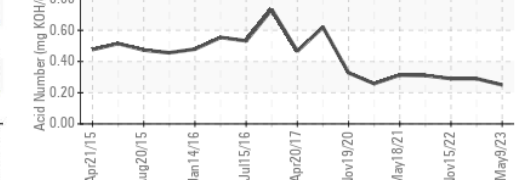
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0730507  
 Lab Number : 05844395  
 Unique Number : 10468502  
 Test Package : IND 2

**ARAUCO FLAKEBOARD - MDF**  
 985 CORINTH RD  
 MONCURE, NC  
 US  
 Contact: JAMES WALTON  
 james.walton@arauco.com  
 T: (919)642-6696  
 F:

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)