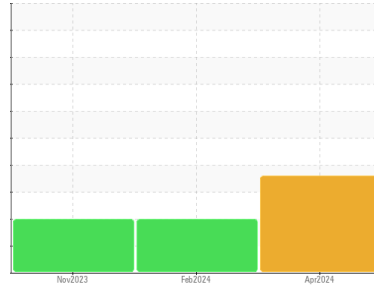




# OIL ANALYSIS REPORT

## Sample Rating Trend



WATER



Machine Id

## 821HP01-B

Component

### Reservoir Hydraulic System

Fluid

### KLUBER SUMMIT HYSYN FR 46 (--- 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. There is a trace of moisture 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>WC0806877</b>	WC0773252	WC0806880
Sample Date	Client Info	<b>17 Apr 2024</b>	07 Feb 2024	08 Nov 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>Not Changed</b>	Not Changd	Not Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

#### WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	<b>21</b>	21	22	
Iron	ppm	ASTM D5185m >20	<b>2</b>	3	2
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	1	2
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >20	<b>244</b>	221	228
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	5
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	<1	0
Calcium	ppm	ASTM D5185m	<b>&lt;1</b>	12	0
Phosphorus	ppm	ASTM D5185m	<b>172</b>	159	185
Zinc	ppm	ASTM D5185m	<b>23</b>	22	8
Sulfur	ppm	ASTM D5185m	<b>868</b>	684	757

#### CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>5</b>	5	4
Sodium	ppm	ASTM D5185m	<b>2</b>	1	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	2
Water	%	ASTM D6304 >0.05	<b>▲ 0.058</b>	0.028	0.019
ppm Water	ppm	ASTM D6304 >500	<b>▲ 583</b>	288	196

#### FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >640	<b>▲ 6394</b>	▲ 6606	▲ 4244
Particles >6µm	ASTM D7647 >160	<b>▲ 1946</b>	▲ 2182	▲ 1366
Particles >14µm	ASTM D7647 >20	<b>▲ 58</b>	▲ 145	▲ 82
Particles >21µm	ASTM D7647 >4	<b>▲ 7</b>	▲ 39	▲ 17
Particles >38µm	ASTM D7647 >3	<b>0</b>	2	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >16/14/11	<b>▲ 20/18/13</b>	▲ 20/18/14	▲ 19/18/14

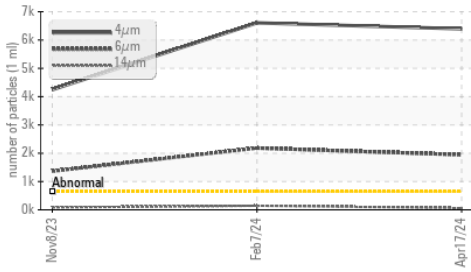
#### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 2.0	<b>3.02</b>	2.87	2.30

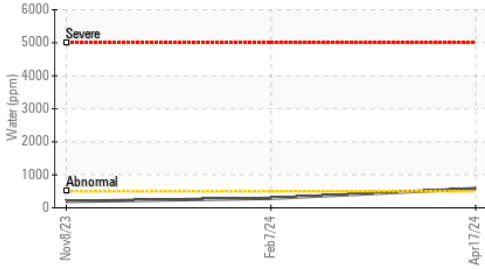


# OIL ANALYSIS REPORT

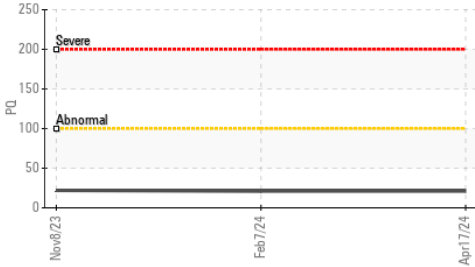
### ▲ Particle Trend



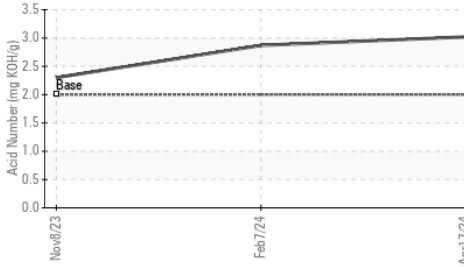
### ▲ Water (KF)



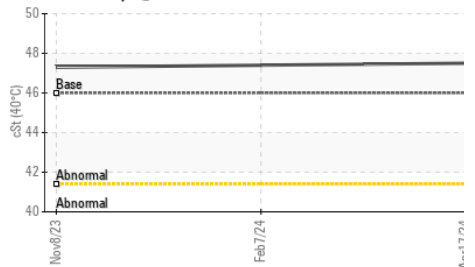
### ▲ PQ



### ▲ Acid Number



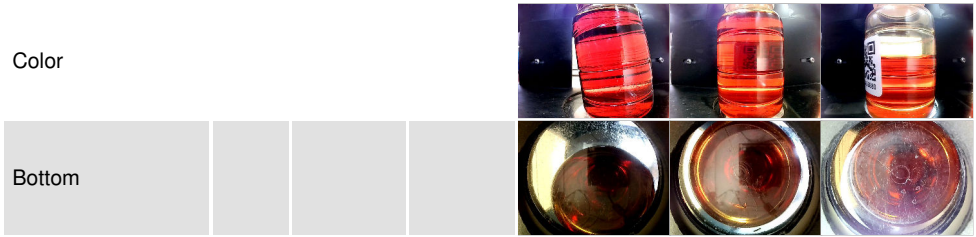
### ▲ Viscosity @ 40°C



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

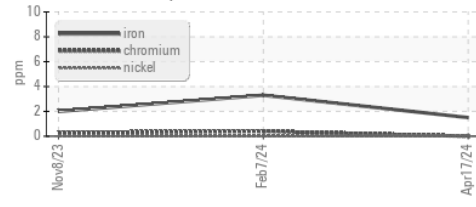
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	47.5	47.4	47.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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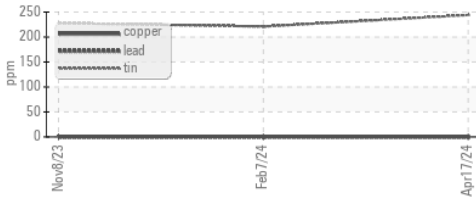


## GRAPHS

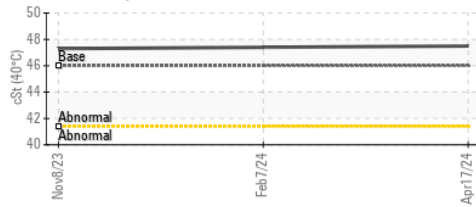
### ▲ Ferrous Alloys



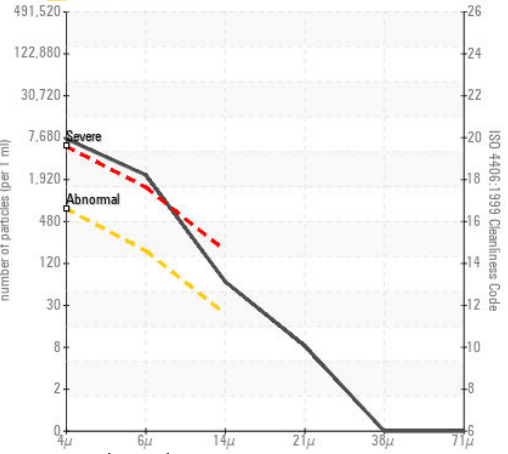
### ▲ Non-ferrous Metals



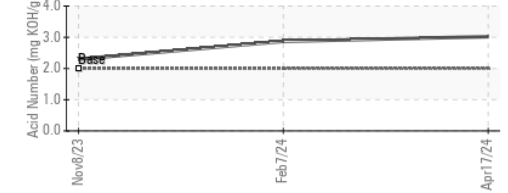
### ▲ Viscosity @ 40°C



### ▲ Particle Count



### ▲ Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0806877  
**Lab Number** : 06218231  
**Unique Number** : 11096428  
**Test Package** : IND 2 ( Additional Tests: KF, PQ )  
**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Don Baldrige

**ARAUCO FLAKEBOARD - 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)