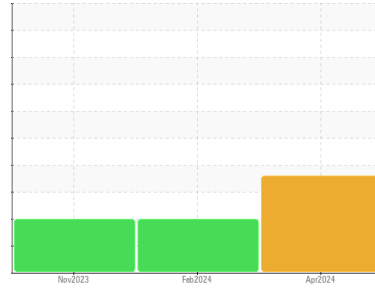




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id

821HP01-A

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	WC0842384	WC0773250	WC0842377
Sample Date	Client Info	17 Apr 2024	07 Feb 2024	08 Nov 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Changed	Not Changed	N/A
Sample Status		ABNORMAL	ATTENTION	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	24	17	20
Iron	ppm	ASTM D5185m >20	1	3
Chromium	ppm	ASTM D5185m >20	0	<1
Nickel	ppm	ASTM D5185m >20	<1	0
Titanium	ppm	ASTM D5185m	0	0
Silver	ppm	ASTM D5185m	0	0
Aluminum	ppm	ASTM D5185m >20	<1	1
Lead	ppm	ASTM D5185m >20	0	0
Copper	ppm	ASTM D5185m >20	<1	<1
Tin	ppm	ASTM D5185m >20	231	233
Vanadium	ppm	ASTM D5185m	0	0
Cadmium	ppm	ASTM D5185m	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0
Barium	ppm	ASTM D5185m	0	0
Molybdenum	ppm	ASTM D5185m	0	0
Manganese	ppm	ASTM D5185m	<1	0
Magnesium	ppm	ASTM D5185m	0	<1
Calcium	ppm	ASTM D5185m	0	4
Phosphorus	ppm	ASTM D5185m	166	151
Zinc	ppm	ASTM D5185m	21	23
Sulfur	ppm	ASTM D5185m	821	600

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	6	6
Sodium	ppm	ASTM D5185m	2	1
Potassium	ppm	ASTM D5185m >20	3	<1
Water	%	ASTM D6304 >0.05	0.055	0.032
ppm Water	ppm	ASTM D6304 >500	551	322

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >640	4909	1136	796
Particles >6µm	ASTM D7647 >160	1378	291	211
Particles >14µm	ASTM D7647 >20	68	19	27
Particles >21µm	ASTM D7647 >4	7	5	9
Particles >38µm	ASTM D7647 >3	0	0	1
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >16/14/11	19/18/13	17/15/11	17/15/12

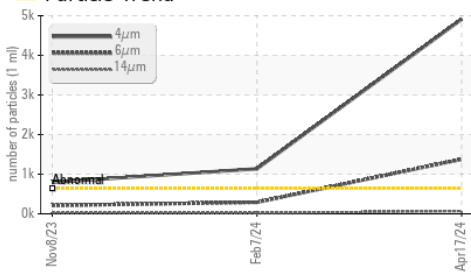
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.0	2.85	2.87
				2.32

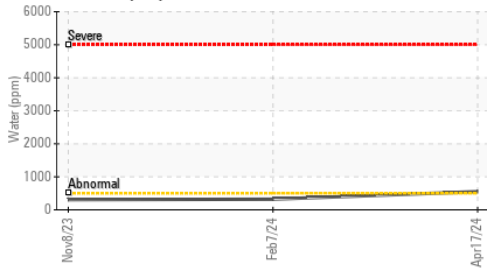


OIL ANALYSIS REPORT

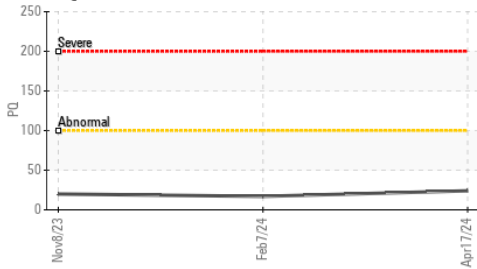
Particle Trend



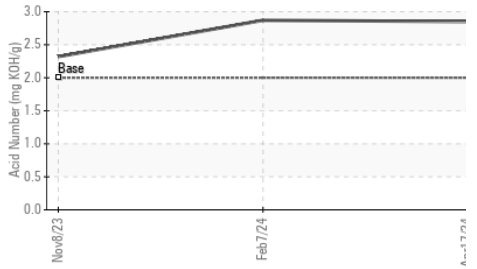
Water (KF)



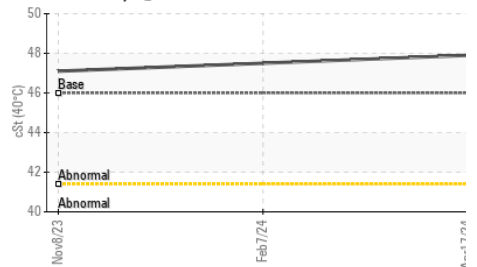
PQ



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	47.9	47.5	47.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

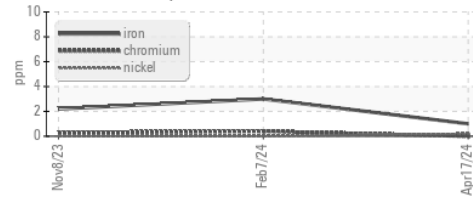


Bottom

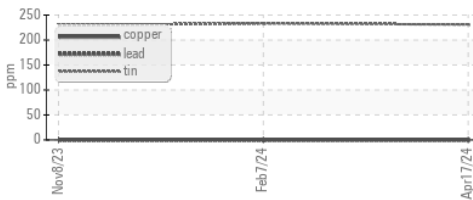


GRAPHS

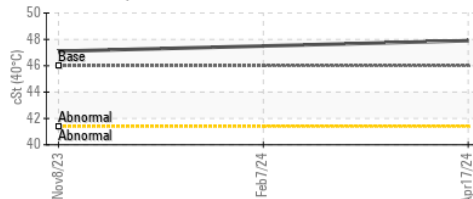
Ferrous Alloys



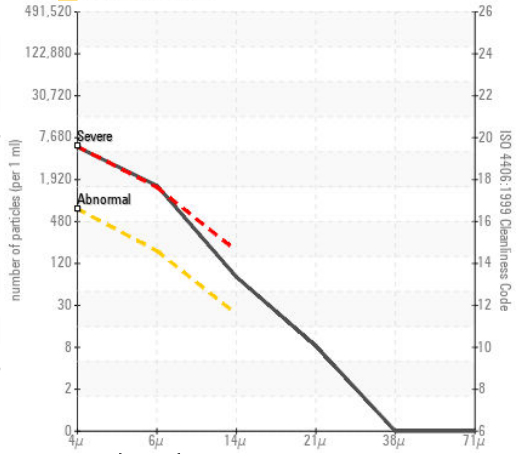
Non-ferrous Metals



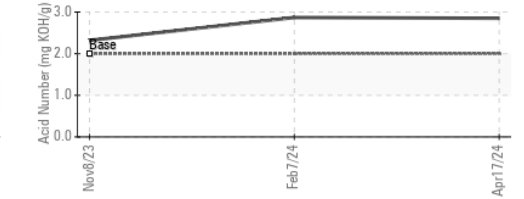
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0842384

Lab Number : 06218232

Unique Number : 11096429

Test Package : IND 2 (Additional Tests: KF, PQ)

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)

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

T:

F: