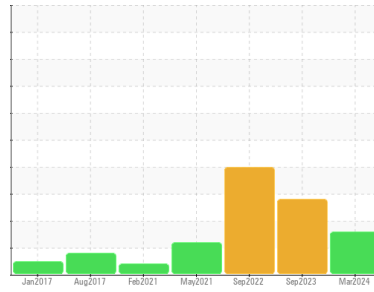




OIL ANALYSIS REPORT

Area
ENERGY
 Machine Id
2030 RV01
 Component
Gearbox
 Fluid
SUMMIT Syngear SH-1022 220 (--- LTR)

Sample Rating Trend



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

Gear wear is indicated.

Contamination

There is a moderate amount of visible silt present in the sample.

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		WC0842383	WC0806885	WC0635758
Sample Date	Client Info		08 Mar 2024	09 Sep 2023	01 Sep 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			ABNORMAL	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		135	94	---
Iron	ppm	ASTM D5185m >200	▲ 275	▲ 244	123
Chromium	ppm	ASTM D5185m >15	13	11	9
Nickel	ppm	ASTM D5185m >15	6	5	4
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	3	2
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	7	6	3
Tin	ppm	ASTM D5185m >25	<1	0	0
Antimony	ppm	ASTM D5185m >5	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	72	49	84
Barium	ppm	ASTM D5185m	<1	<1	2
Molybdenum	ppm	ASTM D5185m	0	<1	<1
Manganese	ppm	ASTM D5185m	4	3	2
Magnesium	ppm	ASTM D5185m	7	7	4
Calcium	ppm	ASTM D5185m	4	4	3
Phosphorus	ppm	ASTM D5185m	556	494	487
Zinc	ppm	ASTM D5185m	33	26	13
Sulfur	ppm	ASTM D5185m	11160	9584	10938

CONTAMINANTS

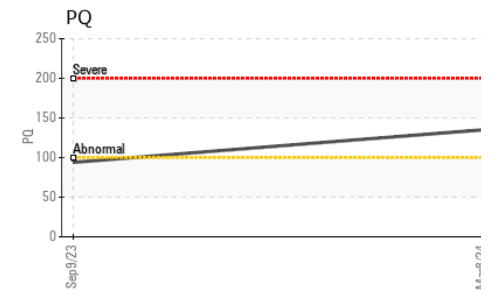
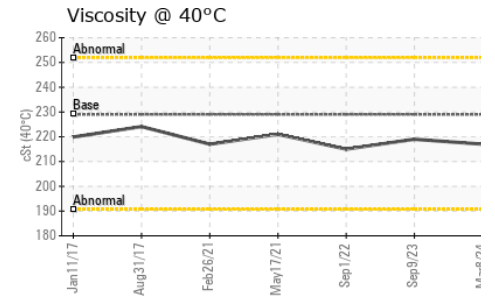
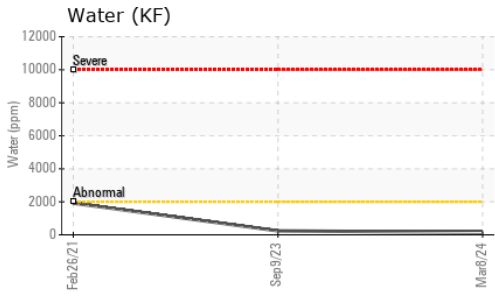
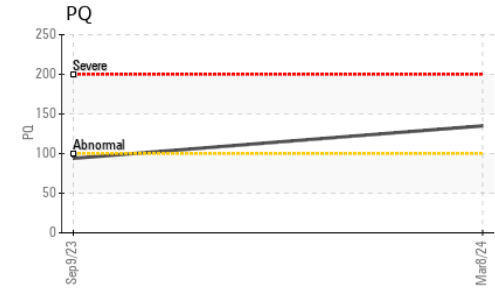
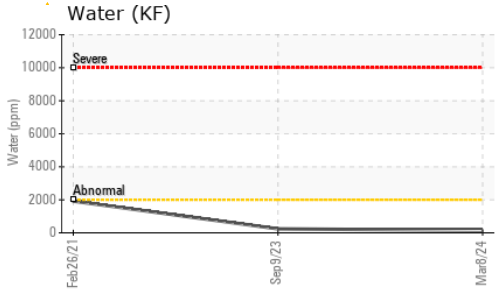
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	25	23	11
Sodium	ppm	ASTM D5185m	5	3	3
Potassium	ppm	ASTM D5185m >20	3	1	0
Water	%	ASTM D6304 >0.2	0.015	0.024	---
ppm Water	ppm	ASTM D6304 >2000	150	240.4	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	---	▲ 214252	▲ 228061
Particles >6µm	ASTM D7647	>5000	---	▲ 141567	▲ 148476
Particles >14µm	ASTM D7647	>640	---	▲ 3399	▲ 4206
Particles >21µm	ASTM D7647	>160	---	▲ 165	114
Particles >38µm	ASTM D7647	>40	---	0	3
Particles >71µm	ASTM D7647	>10	---	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	---	▲ 25/24/19	▲ 25/24/19



OIL ANALYSIS REPORT

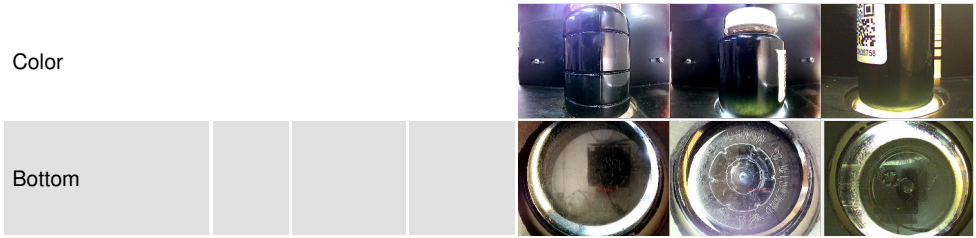


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.62	0.75	0.71

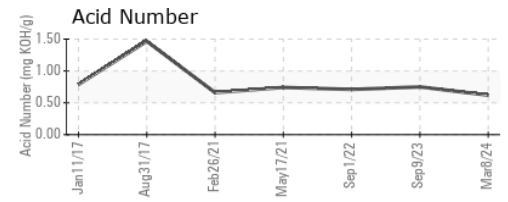
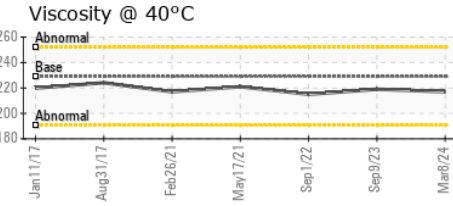
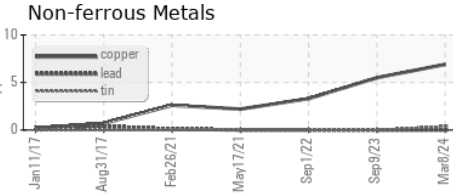
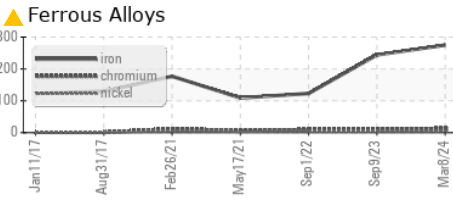
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	229	217	219	215

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0842383
Lab Number : 06218240
Unique Number : 11096437
Test Package : IND 2 (Additional Tests: KF, PQ, PrcCount)
Received : 24 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Jonathan Hester

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)