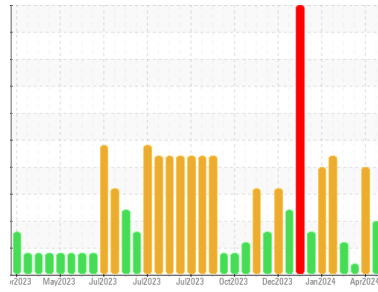




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
RIG 879
 Machine Id
R879-MP-03
 Component
Gearbox

Fluid
BRENNTAG COASTAL CHEMICAL HBC GEAR OIL 320 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. 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.

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		KL0014318	KL0014300	KL0013731
Sample Date	Client Info		07 May 2024	03 Apr 2024	05 Mar 2024
Machine Age	days	Client Info	0	0	0
Oil Age	days	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	SEVERE	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	23	7	5
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	0	0
Lead	ppm	ASTM D5185m	>50	0	0	0
Copper	ppm	ASTM D5185m	>200	4	<1	4
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		1	4	2
Barium	ppm	ASTM D5185m		14	<1	0
Molybdenum	ppm	ASTM D5185m		71	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		1	<1	0
Calcium	ppm	ASTM D5185m		18	14	0
Phosphorus	ppm	ASTM D5185m		215	157	95
Zinc	ppm	ASTM D5185m		107	17	25
Sulfur	ppm	ASTM D5185m		11662	9818	8713

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	15	8	7
Sodium	ppm	ASTM D5185m		6	4	14
Potassium	ppm	ASTM D5185m	>20	1	0	0

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 155761	▲ 131826	---
Particles >6µm	ASTM D7647	>5000	▲ 71442	▲ 46897	---
Particles >14µm	ASTM D7647	>640	▲ 1649	▲ 1606	---
Particles >21µm	ASTM D7647	>160	▲ 208	● 240	---
Particles >38µm	ASTM D7647	>40	1	5	---
Particles >71µm	ASTM D7647	>10	0	1	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 24/23/18	▲ 24/23/18	---

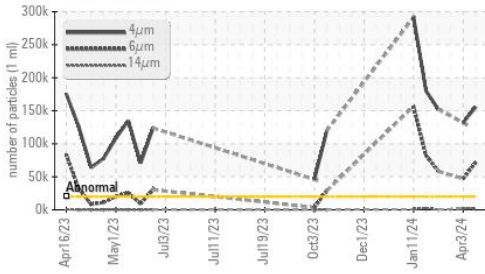
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.54	0.49	0.41

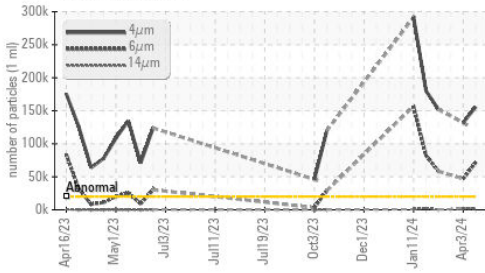


OIL ANALYSIS REPORT

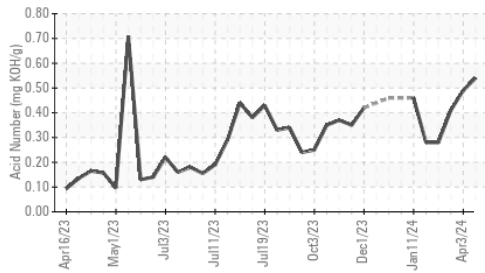
▲ Particle Trend



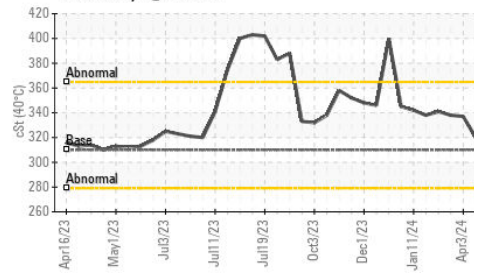
▲ Particle Trend



Acid Number



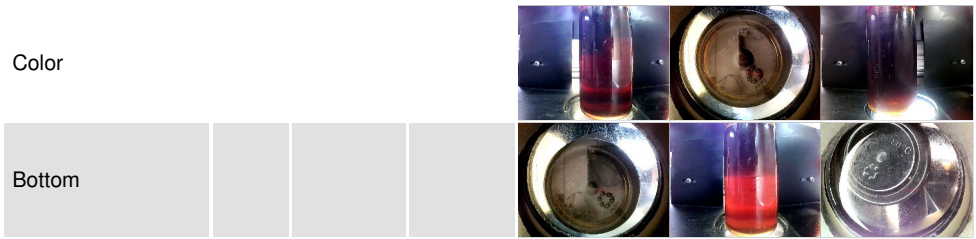
Viscosity @ 40°C



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	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

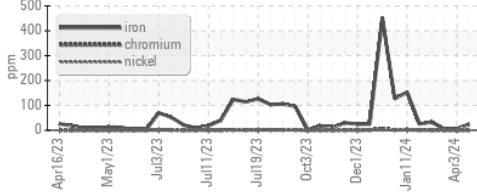
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	310	320	337

SAMPLE IMAGES	method	limit/base	current	history1	history2
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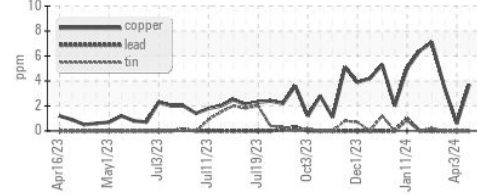


GRAPHS

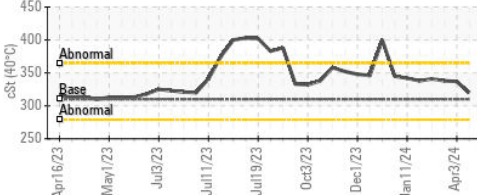
Ferrous Alloys



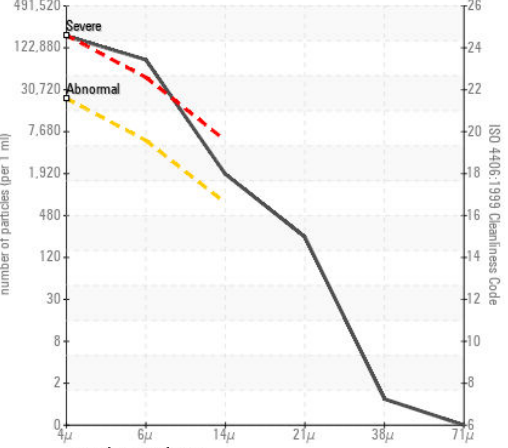
Non-ferrous Metals



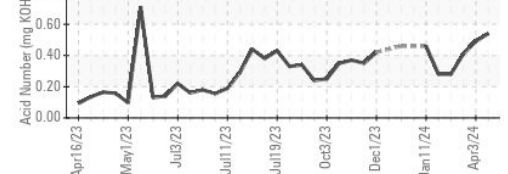
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014318 **Received** : 16 May 2024
Lab Number : 06181307 **Tested** : 17 May 2024
Unique Number : 11032633 **Diagnosed** : 20 May 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: PrtCount)

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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)