



# OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**RIG 879**  
Machine Id  
**R879-MP-03**

Component  
**Gearbox**

Fluid  
**BRENTAG COASTAL CHEMICAL HBC GEAR OIL 320 (--- GAL)**

## RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

## WEAR

A sharp increase in the iron level is noted. Gear wear is indicated.

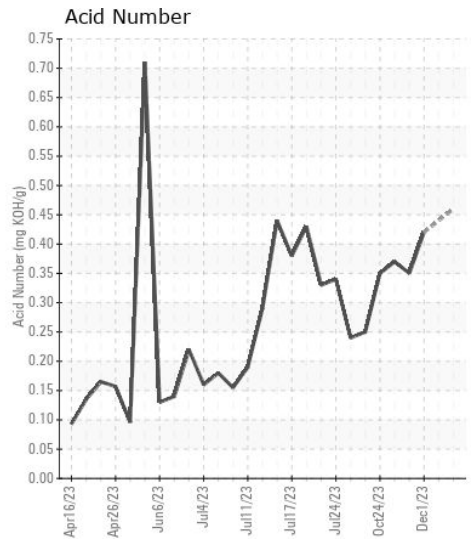
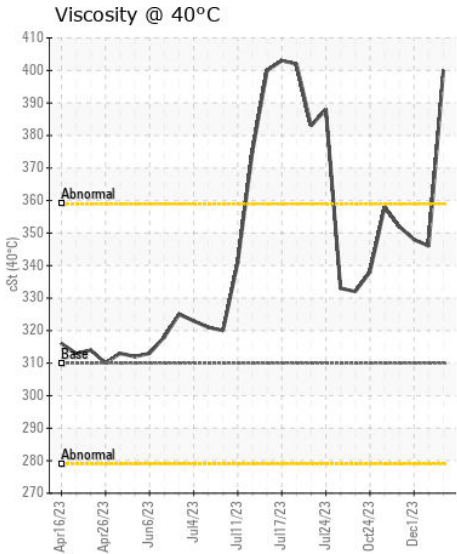
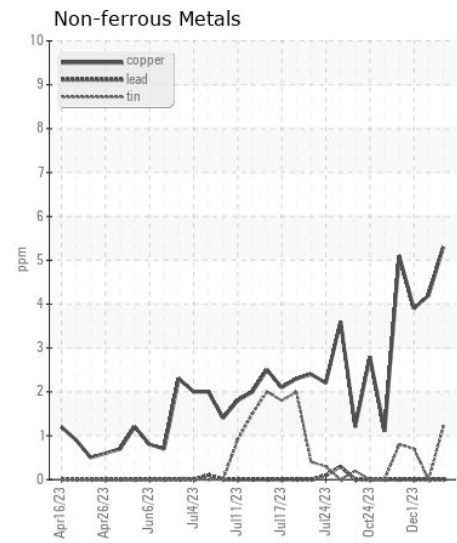
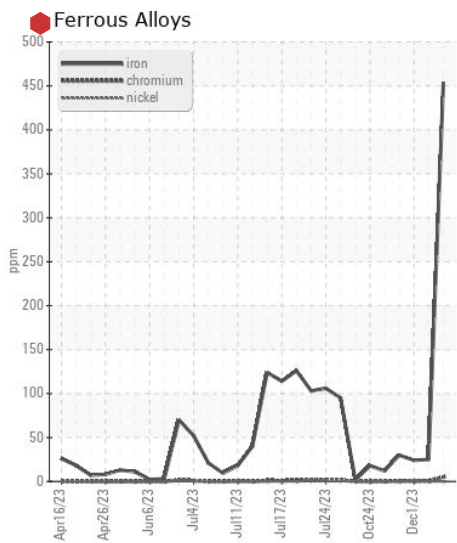
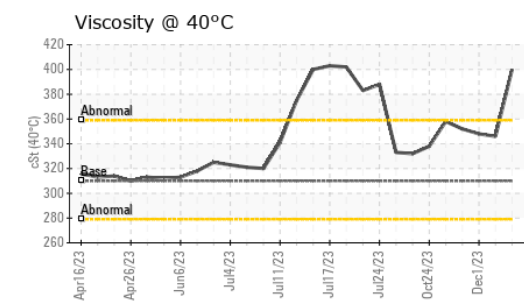
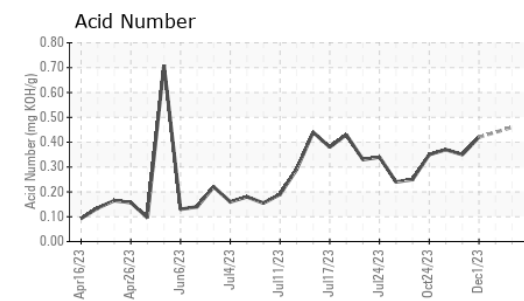
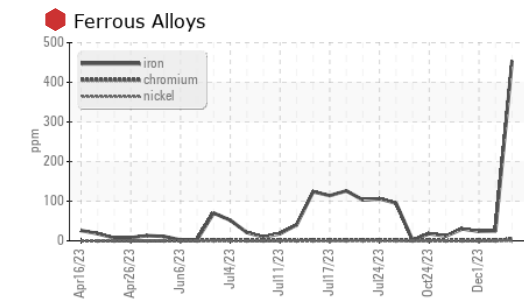
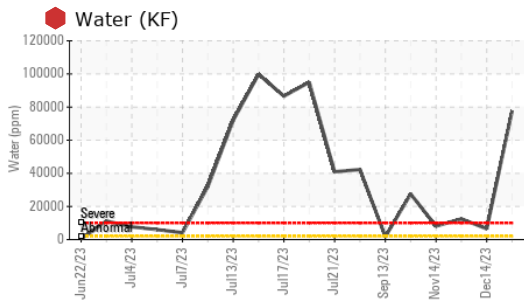
## CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil. There is a high concentration of water present in the oil.

## FLUID CONDITION

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0013146</b>	KL0011719	KL0013173
Sample Date		Client Info		<b>28 Dec 2023</b>	14 Dec 2023	01 Dec 2023
Machine Age	days	Client Info		<b>43803</b>	0	45132
Oil Age	days	Client Info		<b>0</b>	0	45132
Filter Age	days	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>200	<b>454</b>	25	24
Chromium	ppm	ASTM D5185m	>10	<b>5</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>7</b>	3	2
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>5</b>	4	4
Tin	ppm	ASTM D5185m	>10	<b>1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	<b>27</b>	15	11
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	4	4
Water	%	ASTM D6304	>0.2	<b>7.76</b>	0.649	1.25
ppm Water	ppm	ASTM D6304	>2000	<b>77600</b>	6490	12500
Silt	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Debris	scalar	*Visual	NONE	<b>MODER</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>MILKY</b>	MILKY	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>0.2%</b>	0.2%	0.2%
Sodium	ppm	ASTM D5185m		<b>88</b>	128	144
Boron	ppm	ASTM D5185m		<b>8</b>	13	10
Barium	ppm	ASTM D5185m		<b>11</b>	11	1
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>20</b>	22	23
Calcium	ppm	ASTM D5185m		<b>56</b>	51	40
Phosphorus	ppm	ASTM D5185m		<b>95</b>	204	137
Zinc	ppm	ASTM D5185m		<b>41</b>	63	47
Sulfur	ppm	ASTM D5185m		<b>9637</b>	12717	9262
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.46</b>	---	0.42
Visc @ 40°C	cSt	ASTM D445	310	<b>400</b>	346	348



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013146 **Received** : 08 Jan 2024  
**Lab Number** : 06054769 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10820718 **Diagnostician** : Don Baldridge  
**Test Package** : MOB 2 ( Additional Tests: KF, PrtCount )

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)

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