



# OIL ANALYSIS REPORT

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

Area  
**RIG 879**  
Machine Id  
**R879-MP-01**  
Component  
**Gearbox**  
Fluid

## BRENTAG COASTAL CHEMICAL HBC GEAR OIL 320 (--- GAL)

### RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0014470</b>	KL0014479	KL0014320
Sample Date		Client Info		<b>03 Jul 2024</b>	11 Jun 2024	07 May 2024
Machine Age	days	Client Info		<b>0</b>	0	0
Oil Age	days	Client Info		<b>0</b>	0	0
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>ABNORMAL</b>	SEVERE	SEVERE

### WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>200	<b>▲ 502</b>	▲ 1340	38
Chromium	ppm	ASTM D5185m	>10	<b>▲ 6</b>	▲ 16	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	2	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	8	4
Lead	ppm	ASTM D5185m	>50	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>13</b>	14	5
Tin	ppm	ASTM D5185m	>10	<b>0</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

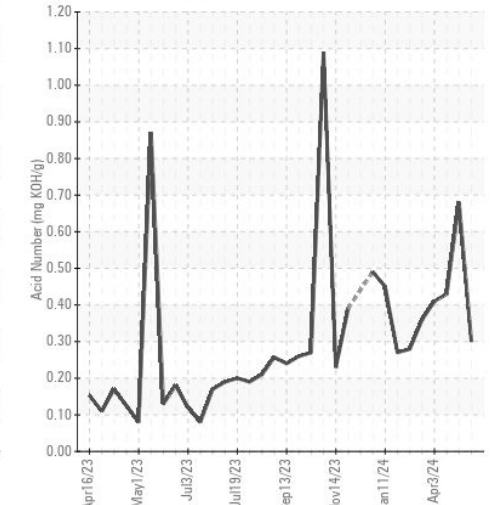
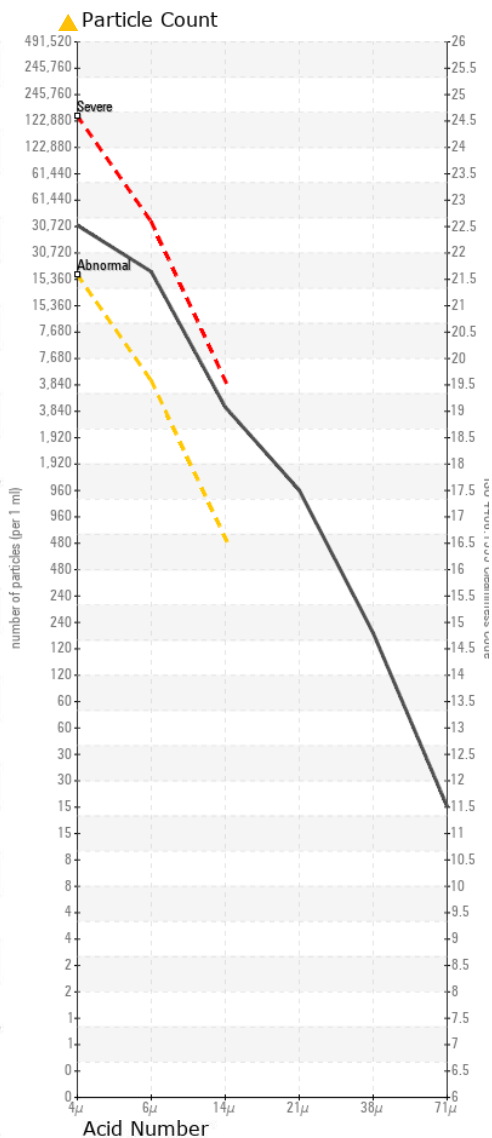
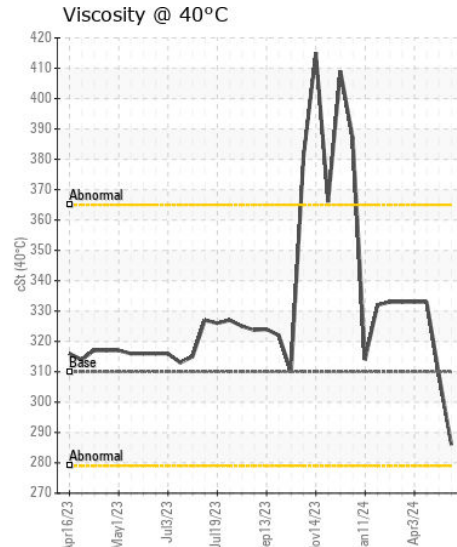
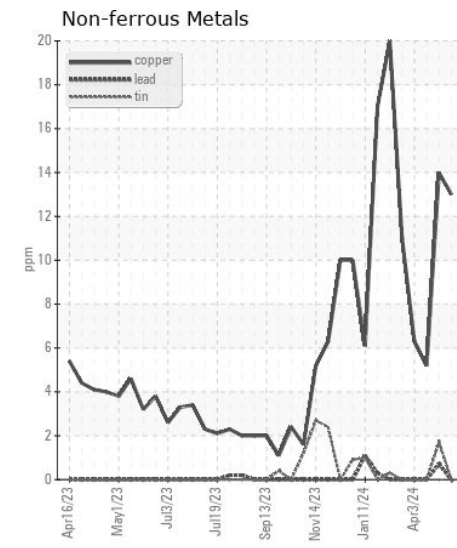
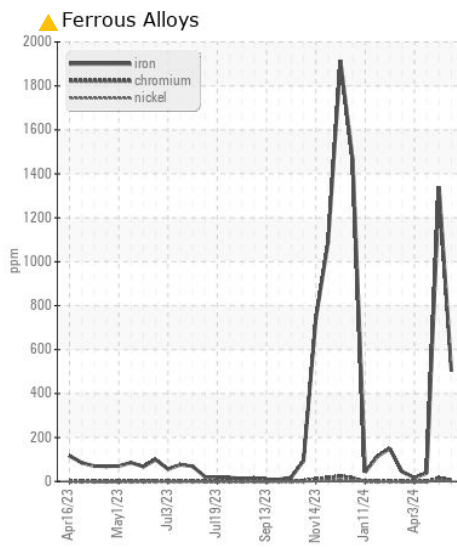
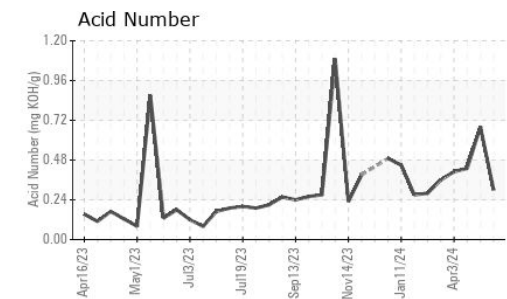
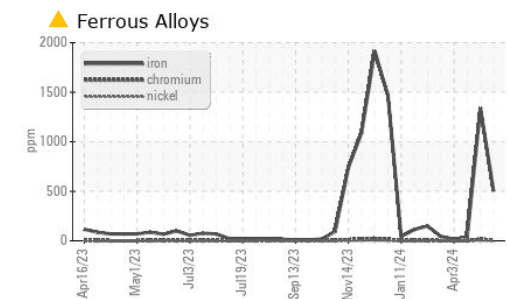
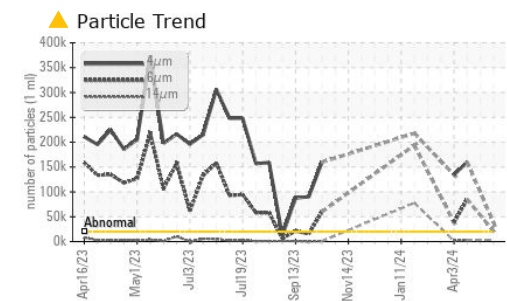
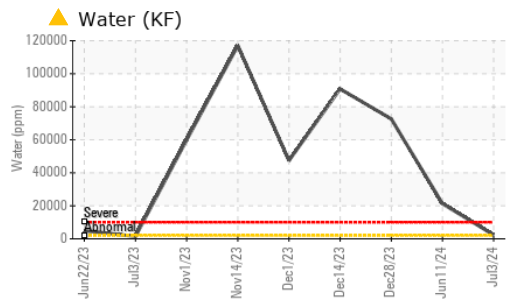
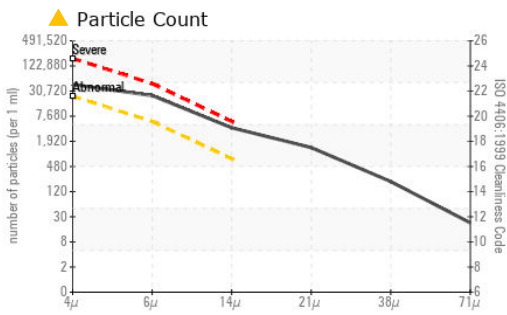
Appearance is hazy. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>24</b>	40	22
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	13	2
Water	%	ASTM D6304	>0.2	<b>▲ 0.232</b>	▲ 2.13	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 2320</b>	▲ 21300	---
Particles >4µm		ASTM D7647	>20000	<b>▲ 38209</b>	---	▲ 160120
Particles >6µm		ASTM D7647	>5000	<b>▲ 20815</b>	---	▲ 85076
Particles >14µm		ASTM D7647	>640	<b>▲ 3542</b>	---	▲ 2681
Particles >21µm		ASTM D7647	>160	<b>▲ 1193</b>	---	● 245
Particles >38µm		ASTM D7647	>40	<b>▲ 184</b>	---	1
Particles >71µm		ASTM D7647	>10	<b>▲ 19</b>	---	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>▲ 22/22/19</b>	---	▲ 25/24/19
Silt	scalar	*Visual	NONE	<b>NONE</b>	MODER	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>● HAZY</b>	● HAZY	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>0.2%</b>	▲ 0.2%	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>295</b>	471	14
Boron	ppm	ASTM D5185m		<b>1</b>	● 19	0
Barium	ppm	ASTM D5185m		<b>13</b>	26	39
Molybdenum	ppm	ASTM D5185m		<b>3</b>	4	1
Manganese	ppm	ASTM D5185m		<b>3</b>	8	<1
Magnesium	ppm	ASTM D5185m		<b>19</b>	● 79	3
Calcium	ppm	ASTM D5185m		<b>94</b>	● 187	27
Phosphorus	ppm	ASTM D5185m		<b>135</b>	197	119
Zinc	ppm	ASTM D5185m		<b>50</b>	● 93	42
Sulfur	ppm	ASTM D5185m		<b>9681</b>	11478	9719
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.30</b>	0.68	0.43
Visc @ 40°C	cSt	ASTM D445	310	<b>286</b>	309	333



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0014470  
**Lab Number** : 06234864  
**Unique Number** : 11123698  
**Test Package** : MOB 2 ( Additional Tests: KF, PrtCount )

**Received** : 12 Jul 2024  
**Tested** : 18 Jul 2024  
**Diagnosed** : 18 Jul 2024 - Jonathan Hester

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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