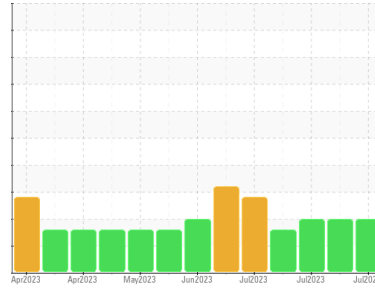




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
RIG 879
Machine Id
R879-P-01

Component
Pump Drive
Fluid
BRENTAG COASTAL CHEMICAL HBC GEAR OIL 320 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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		KL0011970	KL0011969	KL0011973
Sample Date	Client Info		19 Jul 2023	17 Jul 2023	13 Jul 2023
Machine Age	days	Client Info	45126	45129	45120
Oil Age	days	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	19	21	69
Chromium	ppm	ASTM D5185m >15	0	0	<1
Nickel	ppm	ASTM D5185m >10	0	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	2	2	7
Lead	ppm	ASTM D5185m	0	0	0
Copper	ppm	ASTM D5185m >35	2	2	3
Tin	ppm	ASTM D5185m >4	0	0	0
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	4	4	0
Barium	ppm	ASTM D5185m	0	0	5
Molybdenum	ppm	ASTM D5185m	4	4	11
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	6	6	11
Calcium	ppm	ASTM D5185m	100	103	230
Phosphorus	ppm	ASTM D5185m	111	113	48
Zinc	ppm	ASTM D5185m	38	33	32
Sulfur	ppm	ASTM D5185m	10676	10570	10299

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	16	17	38
Sodium	ppm	ASTM D5185m	96	97	245
Potassium	ppm	ASTM D5185m >20	0	0	1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 248195	▲ 247903	▲ 306528
Particles >6µm	ASTM D7647	>5000	▲ 94413	▲ 92874	▲ 158543
Particles >14µm	ASTM D7647	>640	▲ 2367	▲ 2357	▲ 4638
Particles >21µm	ASTM D7647	>160	▲ 364	▲ 429	▲ 819
Particles >38µm	ASTM D7647	>40	9	14	25
Particles >71µm	ASTM D7647	>10	1	1	3
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 25/24/18	▲ 25/24/18	▲ 25/24/19

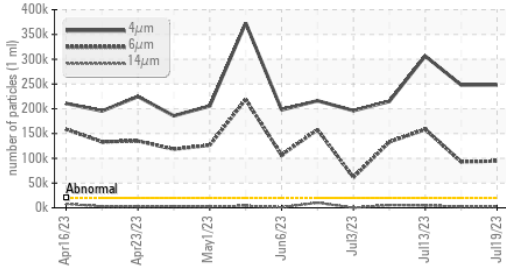
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.20	0.19	0.17

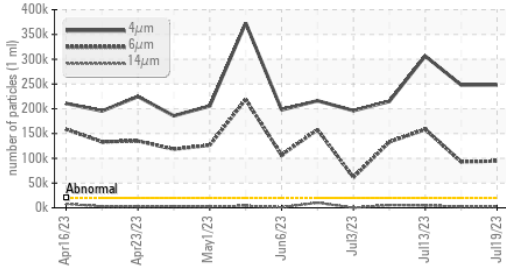


OIL ANALYSIS REPORT

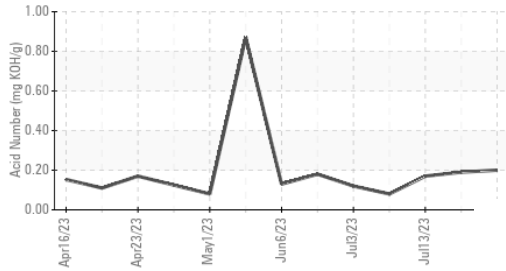
▲ Particle Trend



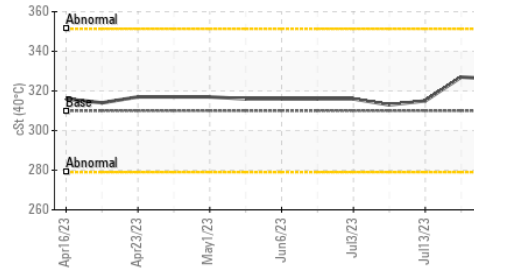
▲ Particle Trend



Acid Number



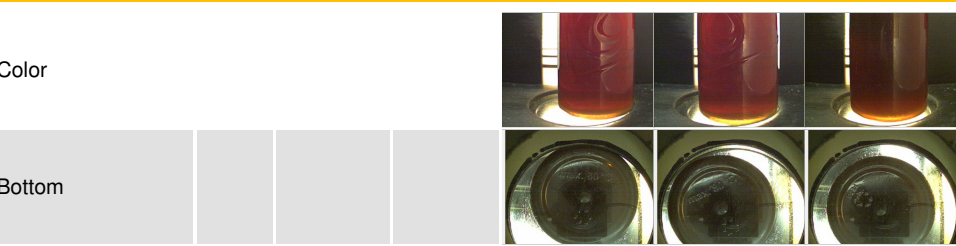
Viscosity @ 40°C



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	NONE	LIGHT
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

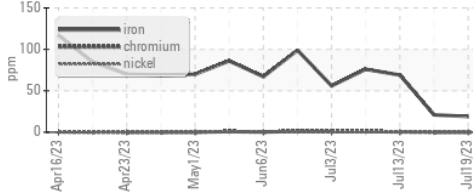
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	310	326	327

SAMPLE IMAGES

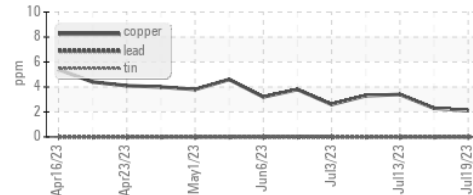


GRAPHS

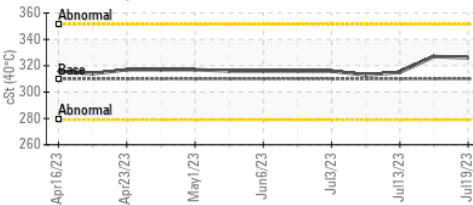
Ferrous Alloys



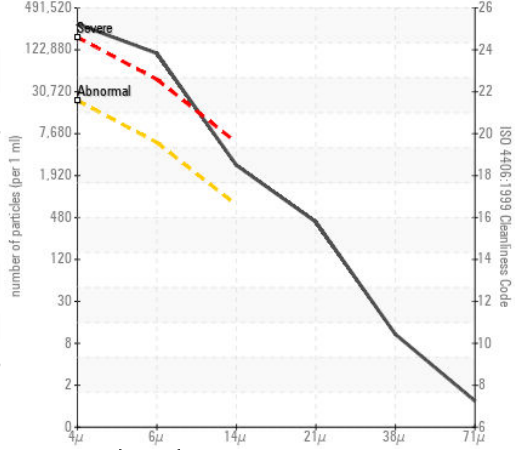
Non-ferrous Metals



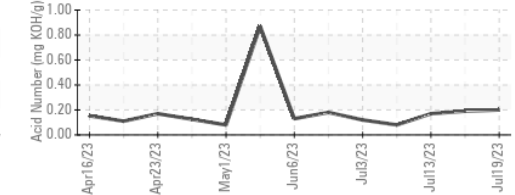
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KL0011970 Received : 21 Jul 2023
 Lab Number : 05904312 Diagnosed : 24 Jul 2023
 Unique Number : 10565668 Diagnostician : Doug Bogart
 Test Package : MOB 2 (Additional Tests: 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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