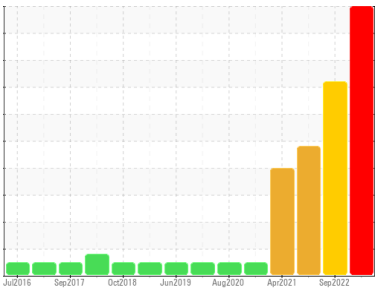
PROBLEM SUMMARY

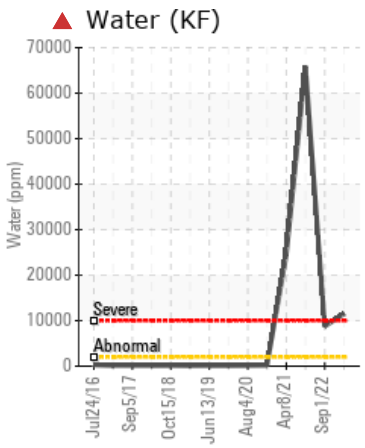
Sample Rating Trend

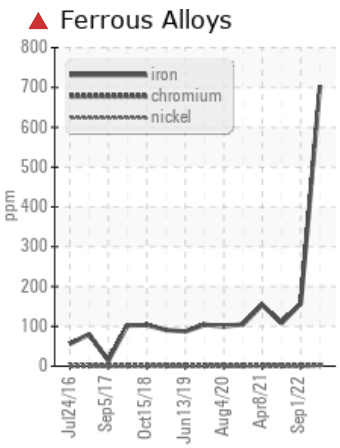


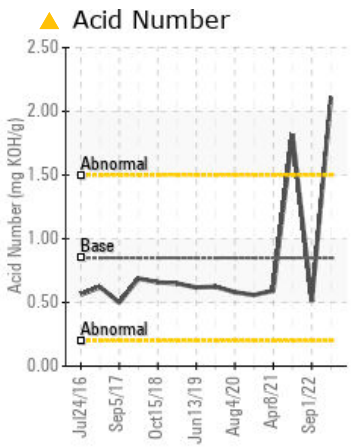
WEAR

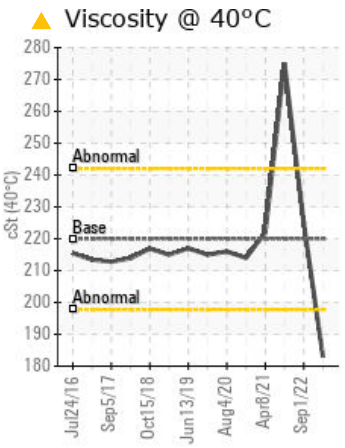
Area
MELT SHOP BAG HOUSE (EAF151)
Machine Id
ET151605-2316B-A001 M/S BAG HOUSE - Chain Conveyor Chamber 7-12 (S/N 16-6400-1000-2020)
Component
Gearbox
Fluid
GEAR OIL ISO 220 (--- QTS)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>200	▲ **704**	157	108
Water	%	ASTM D6304	>0.2	▲ **1.15**	▲ 0.874	▲ 6.58
ppm Water	ppm	ASTM D6304	>2000	▲ **11500**	▲ 8740	▲ 65800
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	▲ **2.11**	0.51	1.82
Emulsified Water	scalar	*Visual	>0.2	▲ **0.2%**	▲ 0.2%	▲ 0.2%
Visc @ 40°C	cSt	ASTM D445	220	▲ **183**	225	▲ 275

Customer Id: OUTCALAL
Sample No.: RP0039050
Lab Number: 06219780
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

WATER

01 Sep 2022 Diag: Angela Borella

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 recommend an early resample to monitor this condition.All component wear rates are normal. There is a light concentration of water present in the oil. Free water present. The oil is no longer serviceable due to the presence of contaminants.

view report

WATER

26 Jan 2022 Diag: Doug Bogart

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 recommend an early resample to monitor this condition.All component wear rates are normal. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. An increase in the AN level is noted. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

view report

WATER

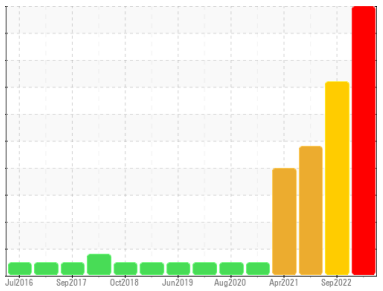
08 Apr 2021 Diag: Doug Bogart

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Else we recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.All component wear rates are normal. Appearance is milky. There is a high concentration of water present in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
MELT SHOP BAG HOUSE (EAF151)
Machine Id
ET151605-2316B-A001 M/S BAG HOUSE - Chain Conveyor Chamber 7-12 (S/N 16-6400-1000-2020)
Component
Gearbox
Fluid
GEAR OIL ISO 220 (--- QTS)

DIAGNOSIS

Recommendation
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.

Wear
The iron level is abnormal. Gear wear is indicated.

Contamination
There is a high concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition
The AN level is above the recommended limit. The oil viscosity is lower than normal. The oil is no longer serviceable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0039050**	RP0029675	RP0023468
Sample Date		Client Info		**24 Jun 2024**	01 Sep 2022	26 Jan 2022
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**SEVERE**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**28**	26	108
Iron	ppm	ASTM D5185m	>200	▲ **704**	157	108
Chromium	ppm	ASTM D5185m	>15	**3**	1	<1
Nickel	ppm	ASTM D5185m	>15	**2**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	<1	<1
Aluminum	ppm	ASTM D5185m	>25	**2**	<1	<1
Lead	ppm	ASTM D5185m	>100	**0**	<1	<1
Copper	ppm	ASTM D5185m	>200	**<1**	<1	0
Tin	ppm	ASTM D5185m	>25	**0**	0	<1
Antimony	ppm	ASTM D5185m	>5	**---**	---	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

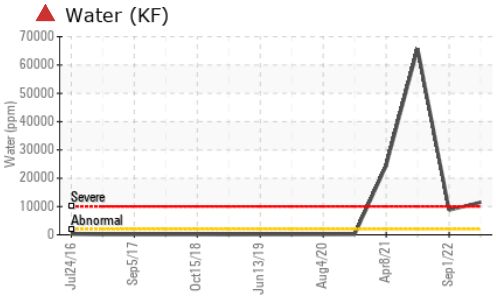
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**6**	<1	25
Barium	ppm	ASTM D5185m	15	**0**	2	0
Molybdenum	ppm	ASTM D5185m	15	**138**	<1	<1
Manganese	ppm	ASTM D5185m		**3**	2	2
Magnesium	ppm	ASTM D5185m	50	**1**	<1	2
Calcium	ppm	ASTM D5185m	50	**34**	18	557
Phosphorus	ppm	ASTM D5185m	350	**600**	180	232
Zinc	ppm	ASTM D5185m	100	**34**	8	19

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**3**	1	3
Sodium	ppm	ASTM D5185m		**1**	0	1
Potassium	ppm	ASTM D5185m	>20	**1**	1	0
Water	%	ASTM D6304	>0.2	▲ **1.15**	▲ 0.874	▲ 6.58
ppm Water	ppm	ASTM D6304	>2000	▲ **11500**	▲ 8740	▲ 65800

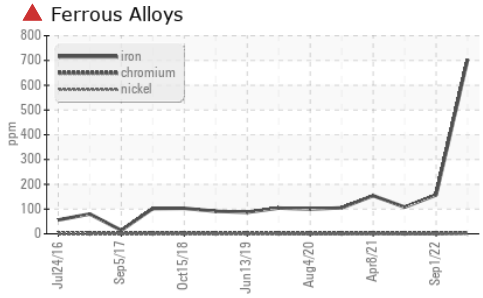
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	▲ **2.11**	0.51	1.82

OIL ANALYSIS REPORT

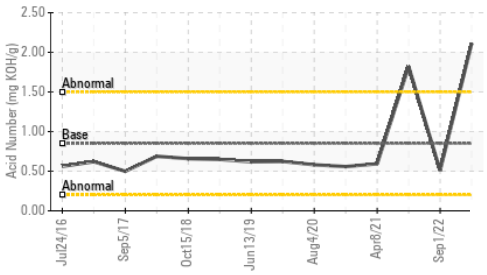
Water (KF)



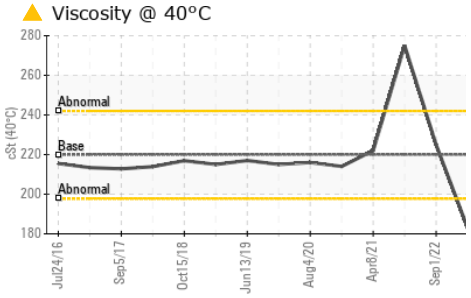
Ferrous Alloys



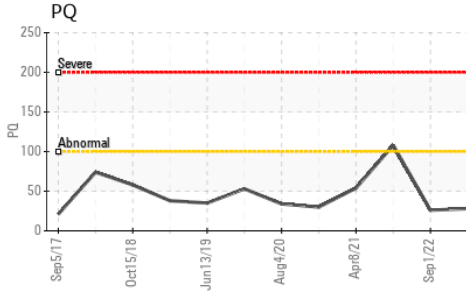
Acid Number



Viscosity @ 40°C

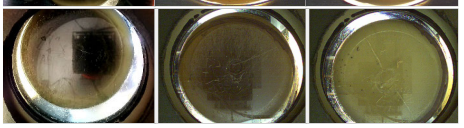


PQ



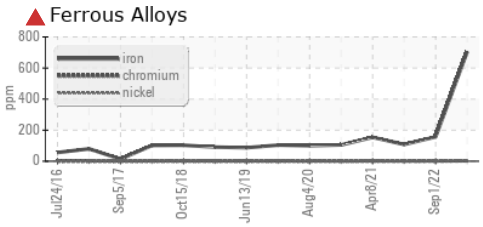
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**MODER**	MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	● **HAZY**	● MILKY	● MILKY
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	▲ **0.2%**	▲ 0.2%	▲ 0.2%
Free Water	scalar	*Visual		**NEG**	▲ 1.0	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	▲ **183**	225	▲ 275

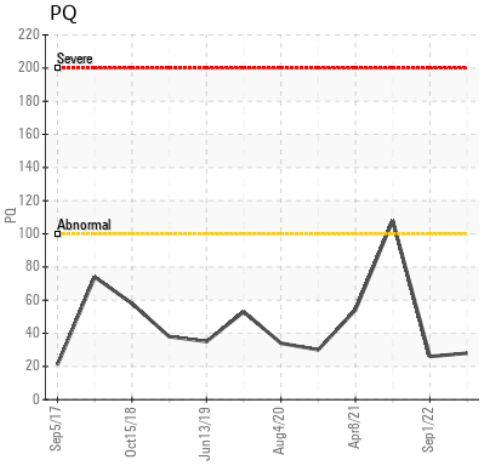
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

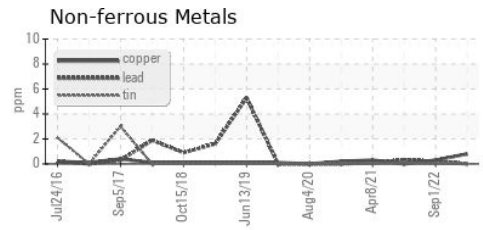
Ferrous Alloys



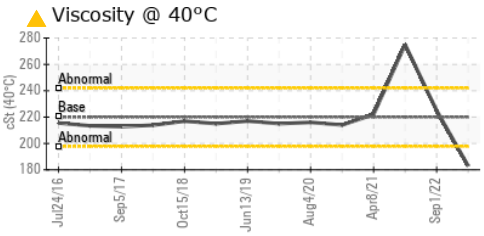
PQ



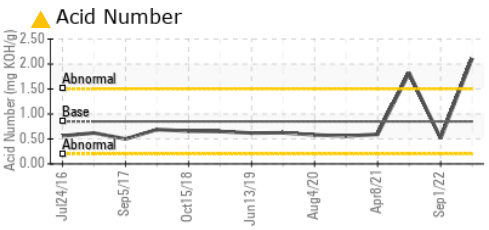
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039050
Lab Number : 06219780
Unique Number : 11097977
Test Package : IND 2 (Additional Tests: PQ)

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 27 Jun 2024 - Angela Borella

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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