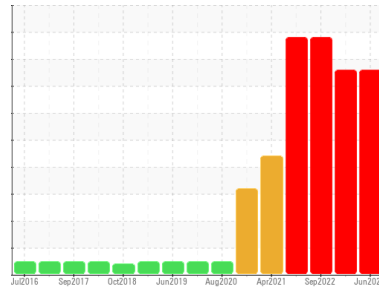


PROBLEM SUMMARY

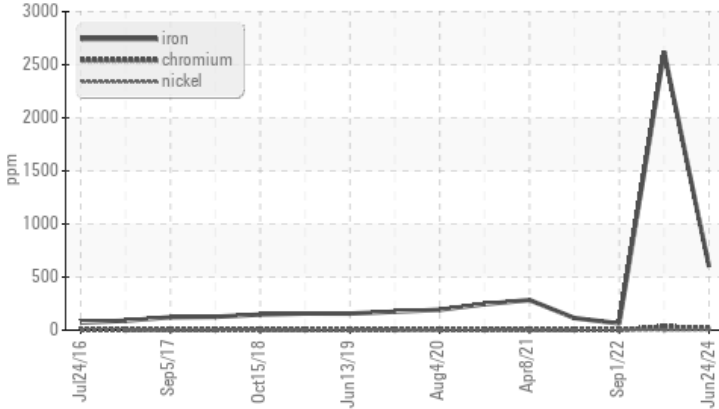
Area
MELT SHOP BAG HOUSE (EAF151)
 Machine Id
M/S BAG HOUSE (EAF151)- Chain Conveyor Chamber 1-6 (EAF 151) (S/N 15-6400-2000-2010)
 Component
Gearbox
 Fluid
{not provided} (--- QTS)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>200	▲ 600	▲ 2621	63
Chromium	ppm	ASTM D5185m	>15	▲ 17	▲ 33	<1

Customer Id: OUTCALAL
 Sample No.: RP0044103
 Lab Number: 06219782
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.

HISTORICAL DIAGNOSIS

WEAR



11 May 2023 Diag: Don Baldrige

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. The iron level is severe. Gear wear is indicated. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



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 high concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. 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. Free water present. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

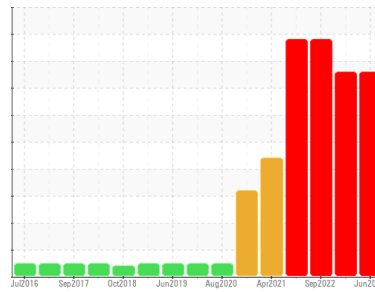
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Area
MELT SHOP BAG HOUSE (EAF151)
 Machine Id
M/S BAG HOUSE (EAF151)- Chain Conveyor Chamber 1-6 (EAF 151) (S/N 15-6400-2000-2010)
 Component
Gearbox
 Fluid
{not provided} (--- QTS)

DIAGNOSIS

- Recommendation**
We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.
- Wear**
Gear wear is indicated.
- Contamination**
Appearance is hazy. There is no indication of any contamination in the oil.
- Fluid Condition**
The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0044103	RP0034456	RP0029722
Sample Date	Client Info		24 Jun 2024	11 May 2023	01 Sep 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		85	214	25
Iron	ppm	ASTM D5185m >200	▲ 600	▲ 2621	63
Chromium	ppm	ASTM D5185m >15	▲ 17	▲ 33	<1
Nickel	ppm	ASTM D5185m >15	3	3	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	5	5	<1
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >200	2	4	<1
Tin	ppm	ASTM D5185m >25	0	<1	0
Antimony	ppm	ASTM D5185m >5	---	---	---
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	10	18	2
Barium	ppm	ASTM D5185m	0	0	2
Molybdenum	ppm	ASTM D5185m	273	<1	0
Manganese	ppm	ASTM D5185m	9	9	1
Magnesium	ppm	ASTM D5185m	10	0	1
Calcium	ppm	ASTM D5185m	64	57	177
Phosphorus	ppm	ASTM D5185m	581	370	258
Zinc	ppm	ASTM D5185m	21	0	22

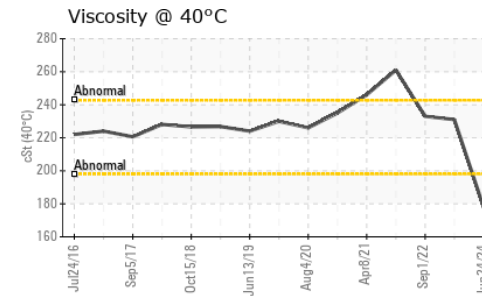
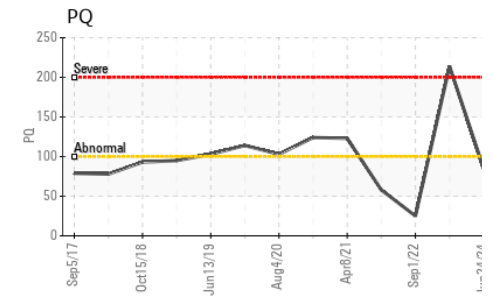
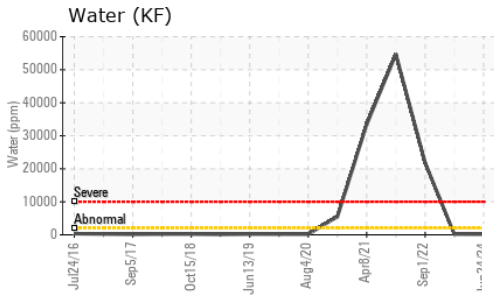
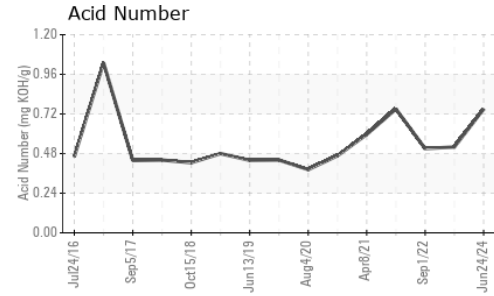
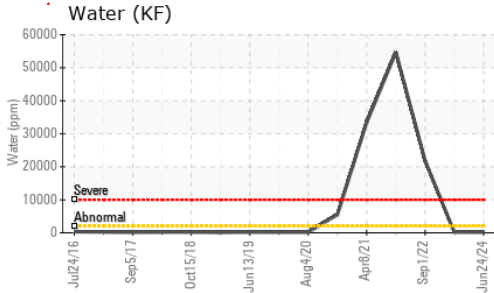
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	14	8	2
Sodium	ppm	ASTM D5185m	2	<1	0
Potassium	ppm	ASTM D5185m >20	2	<1	1
Water	%	ASTM D6304 >0.2	0.013	0.018	▲ 2.18
ppm Water	ppm	ASTM D6304 >2000	130	185.2	▲ 21800

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.75	0.52	0.51

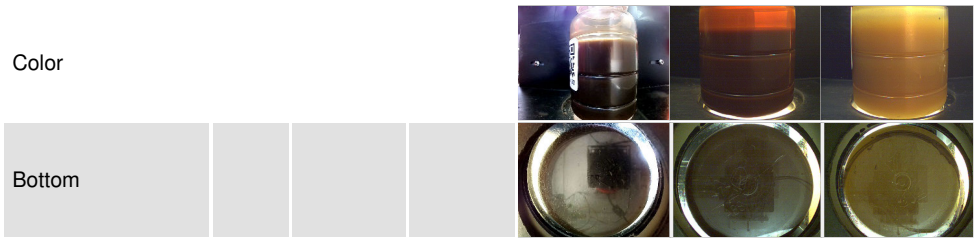
OIL ANALYSIS REPORT



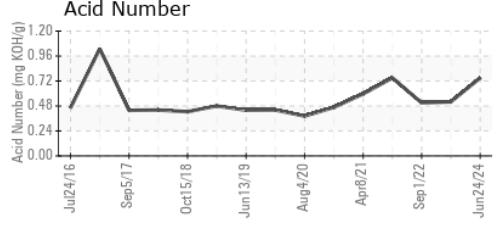
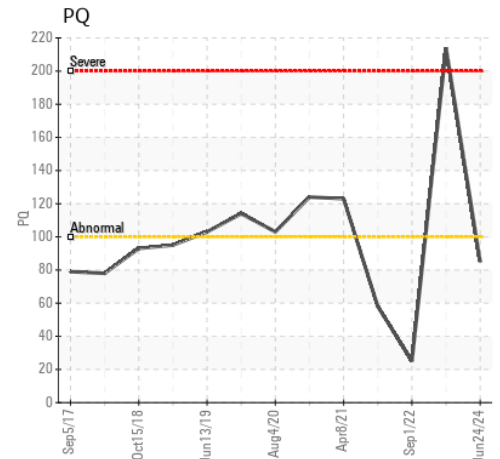
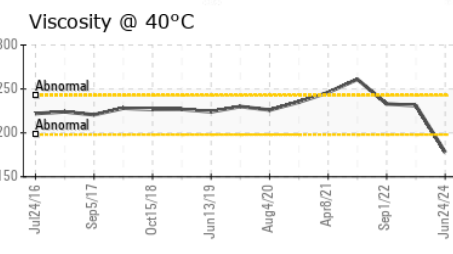
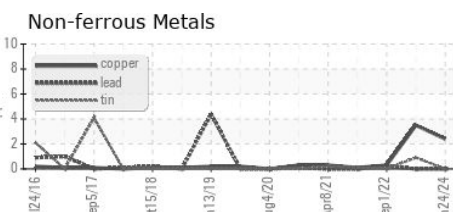
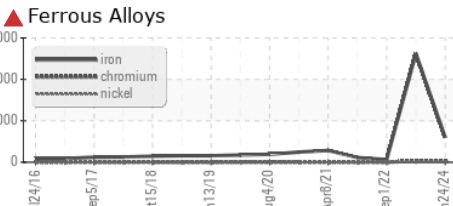
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	MILKY
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	178	231	233

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0044103 **Received** : 25 Jun 2024
Lab Number : 06219782 **Tested** : 28 Jun 2024
Unique Number : 11097979 **Diagnosed** : 28 Jun 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: PQ)

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 T: (251)321-4105
 F: x:

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)