



PERFORMANCE
UNDER
PRESSURE

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

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)

RECOMMENDATION

We advise that you check for the source of water entry. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RP0039284	RP0039050	RP0029675
Sample Date		Client Info		27 Jun 2024	24 Jun 2024	01 Sep 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	SEVERE

WEAR

Gear wear is indicated.

PQ		ASTM D8184		31	28	26
Iron	ppm	ASTM D5185m	>200	▲ 718	▲ 704	157
Chromium	ppm	ASTM D5185m	>15	4	3	1
Nickel	ppm	ASTM D5185m	>15	2	2	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	2	<1
Lead	ppm	ASTM D5185m	>100	<1	0	<1
Copper	ppm	ASTM D5185m	>200	1	<1	<1
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

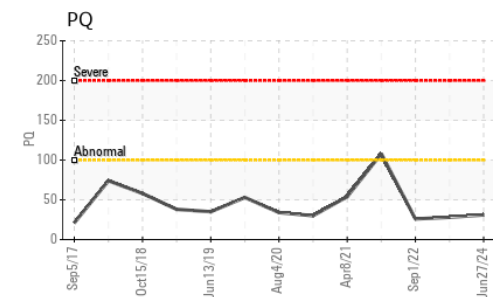
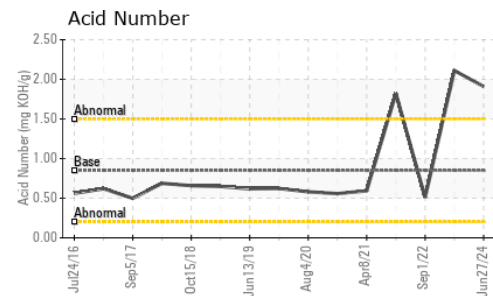
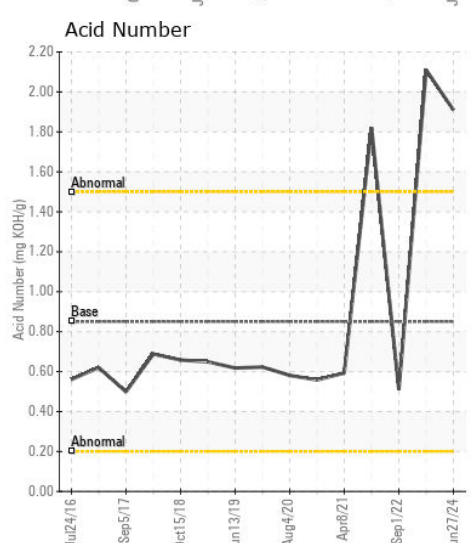
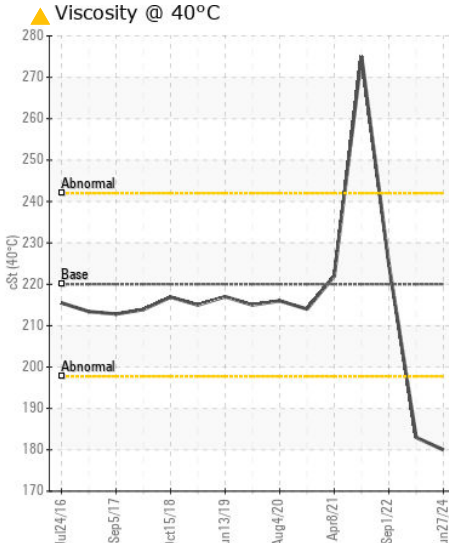
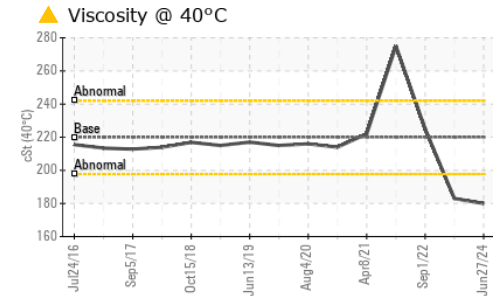
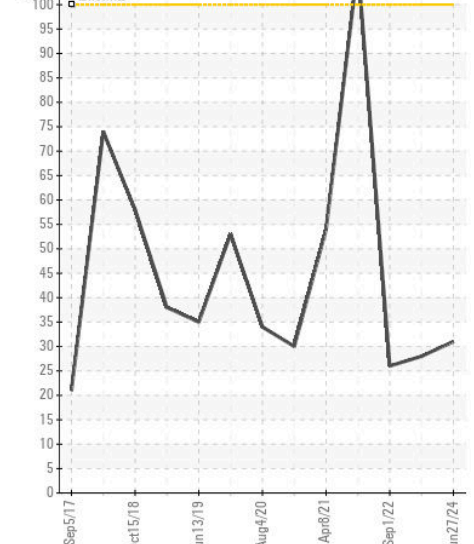
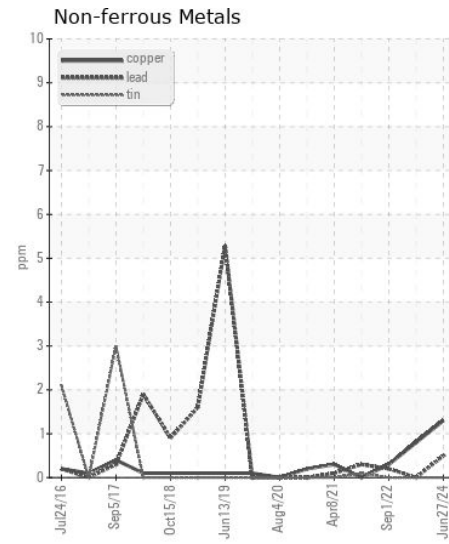
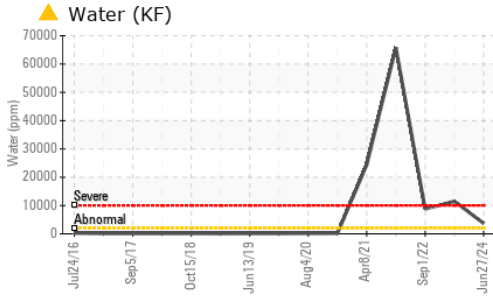
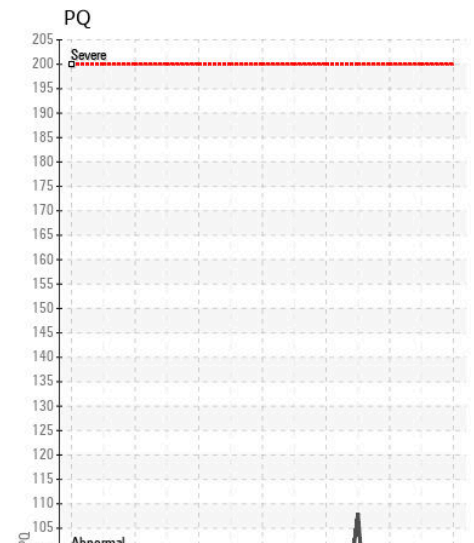
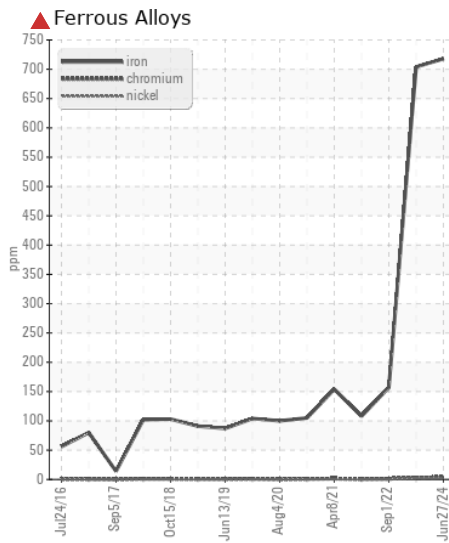
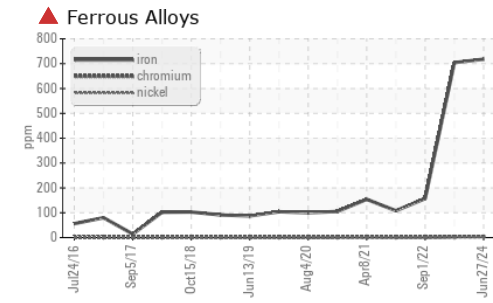
There is a moderate concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>50	4	3	1
Potassium	ppm	ASTM D5185m	>20	1	1	1
Water	%	ASTM D6304	>0.2	▲ 0.369	▲ 1.15	▲ 0.874
ppm Water	ppm	ASTM D6304	>2000	▲ 3688	▲ 11500	▲ 8740
Silt	scalar	*Visual	NONE	NONE	MODER	MODER
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	▲ 0.2%	▲ 0.2%

FLUID CONDITION

The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<1	1	0
Boron	ppm	ASTM D5185m	50	<1	6	<1
Barium	ppm	ASTM D5185m	15	1	0	2
Molybdenum	ppm	ASTM D5185m	15	139	138	<1
Manganese	ppm	ASTM D5185m		3	3	2
Magnesium	ppm	ASTM D5185m	50	<1	1	<1
Calcium	ppm	ASTM D5185m	50	30	34	18
Phosphorus	ppm	ASTM D5185m	350	460	600	180
Zinc	ppm	ASTM D5185m	100	35	34	8
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	1.91	▲ 2.11	0.51
Visc @ 40°C	cSt	ASTM D445	220	▲ 180	▲ 183	225



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039284 **Received** : 28 Jun 2024
Lab Number : 06223566 **Tested** : 03 Jul 2024
Unique Number : 11101763 **Diagnosed** : 03 Jul 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: PQ)

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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