



PERFORMANCE  
UNDER  
PRESSURE

OIL ANALYSIS REPORT

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

Area  
**MELT SHOP BAG HOUSE (EAF151)**

Machine Id  
**M/S BAG HOUSE (EAF151) - Chain Conveyor Crosstransport (EAF 151) (S/N 15-6400-2000-2030)**

Component  
**Gearbox**

Fluid  
**GEAR OIL ISO 220 (--- QTS)**

**RECOMMENDATION**

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		<b>RP0039056</b>	RP0044102	RP0034571
Sample Date		Client Info		<b>27 Jun 2024</b>	24 Jun 2024	11 May 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	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>SEVERE</b>	ABNORMAL	SEVERE

**WEAR**

Gear wear is indicated.

PQ		ASTM D8184		<b>87</b>	22	▲ 13895
Iron	ppm	ASTM D5185m	>200	▲ <b>584</b>	▲ 320	▲ 1522
Chromium	ppm	ASTM D5185m	>15	▲ <b>17</b>	2	▲ 16
Nickel	ppm	ASTM D5185m	>15	<b>3</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	2	4
Lead	ppm	ASTM D5185m	>100	<b>1</b>	0	2
Copper	ppm	ASTM D5185m	>200	<b>3</b>	<1	<1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	10
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

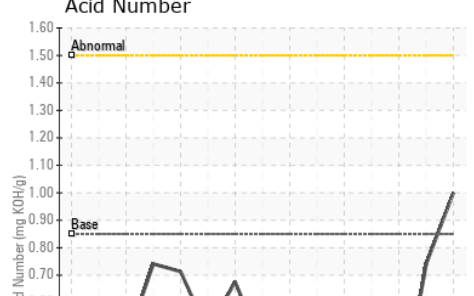
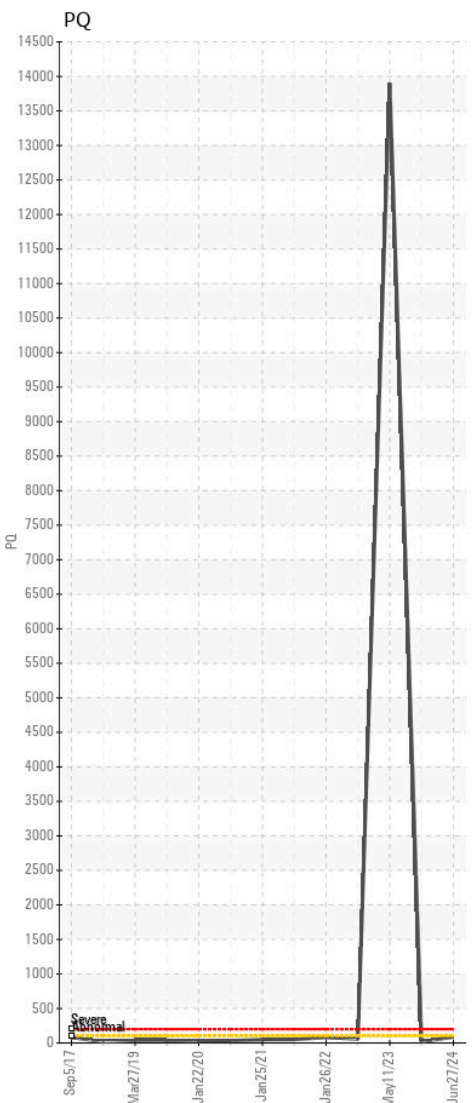
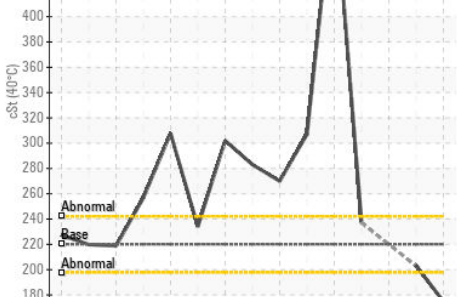
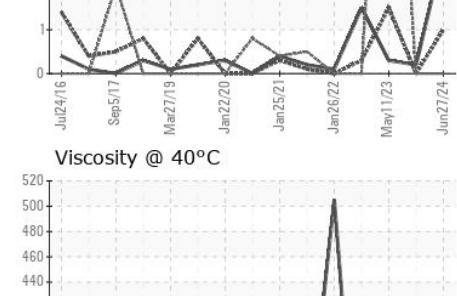
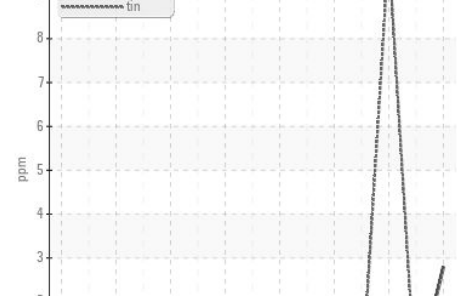
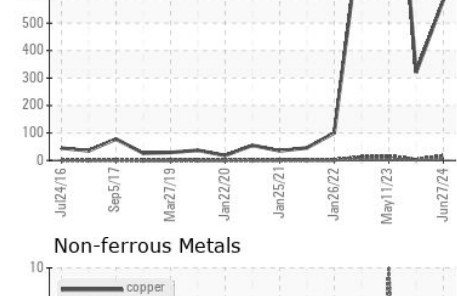
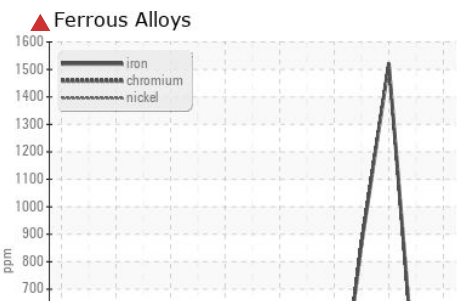
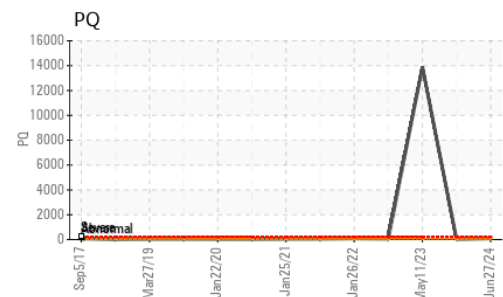
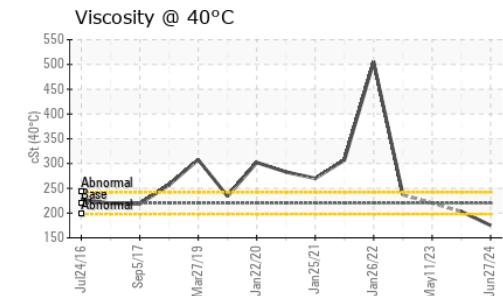
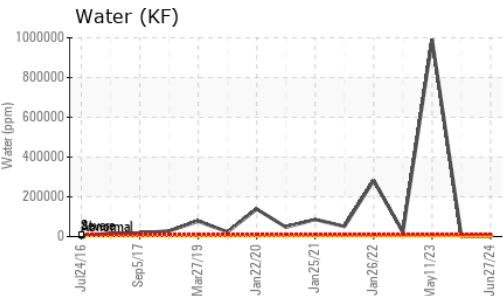
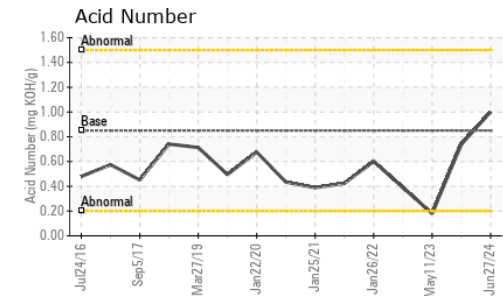
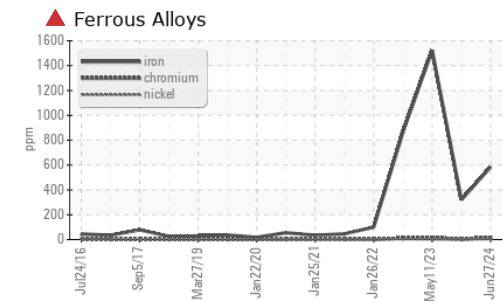
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>13</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	3
Water	%	ASTM D6304	>0.2	<b>0.020</b>	0.014	▲ 99.0
ppm Water	ppm	ASTM D6304	>2000	<b>206</b>	143	▲ 990000
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	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>NORML</b>	NORML	● MILKY
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	▲ 0.2%

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>1</b>	6	0
Boron	ppm	ASTM D5185m	50	<b>3</b>	6	13
Barium	ppm	ASTM D5185m	15	<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	15	<b>268</b>	210	<1
Manganese	ppm	ASTM D5185m		<b>9</b>	3	13
Magnesium	ppm	ASTM D5185m	50	<b>7</b>	<1	0
Calcium	ppm	ASTM D5185m	50	<b>60</b>	<1	13
Phosphorus	ppm	ASTM D5185m	350	<b>435</b>	493	70
Zinc	ppm	ASTM D5185m	100	<b>22</b>	19	0
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	<b>1.00</b>	0.74	0.18
Visc @ 40°C	cSt	ASTM D445	220	<b>175</b>	203	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0039056 **Received** : 28 Jun 2024  
**Lab Number** : 06223568 **Tested** : 01 Jul 2024  
**Unique Number** : 11101765 **Diagnosed** : 01 Jul 2024 - Don Baldridge  
**Test Package** : IND 2 ( Additional Tests: PQ )

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Certificate L2367  
 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)