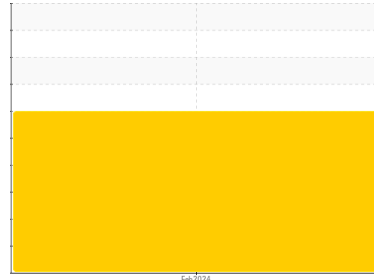




# PROBLEM SUMMARY

Sample Rating Trend



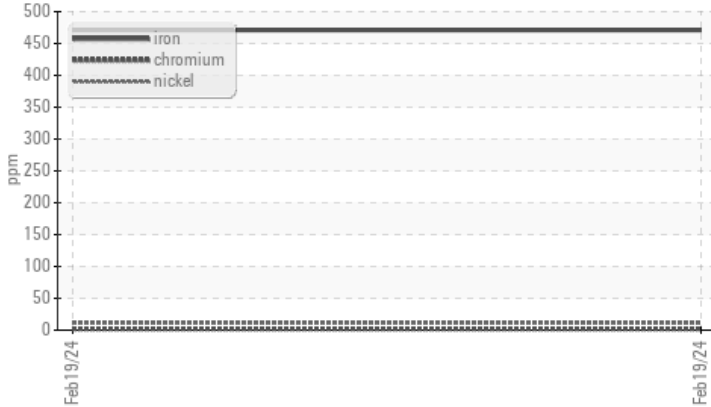
WEAR



Area  
**Plant US1 Greenville**  
Machine Id  
**MAF3 - Extruder**  
Component  
**Gearbox**  
Fluid  
**SHELL OMALA 320 (--- GAL)**

## 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.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>200	471	---	---

Customer Id: MICGRES  
Sample No.: TLC0001534  
Lab Number: 06098585  
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## HISTORICAL DIAGNOSIS



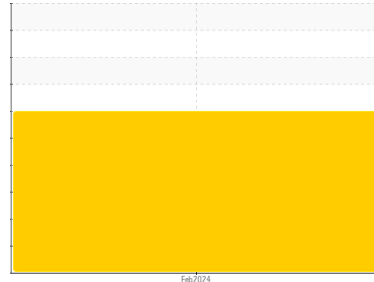
# OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area  
**Plant US1 Greenville**  
 Machine Id  
**MAF3 - Extruder**  
 Component  
**Gearbox**  
 Fluid  
**SHELL OMALA 320 (--- GAL)**



## DIAGNOSIS

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

**Wear**  
 Gear wear is indicated.

**Contamination**  
 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		<b>TLC0001534</b>	---	---
Sample Date	Client Info		<b>19 Feb 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>72</b>	---	---
Iron	ppm	ASTM D5185m >200	<b>471</b>	---	---
Chromium	ppm	ASTM D5185m >15	<b>2</b>	---	---
Nickel	ppm	ASTM D5185m >15	<b>11</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>9</b>	---	---
Lead	ppm	ASTM D5185m >100	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >200	<b>3</b>	---	---
Tin	ppm	ASTM D5185m >25	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5.5	<b>11</b>	---	---
Barium	ppm	ASTM D5185m 0.4	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 0.5	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>4</b>	---	---
Magnesium	ppm	ASTM D5185m 23	<b>2</b>	---	---
Calcium	ppm	ASTM D5185m 13	<b>33</b>	---	---
Phosphorus	ppm	ASTM D5185m 450	<b>279</b>	---	---
Zinc	ppm	ASTM D5185m 9.9	<b>3</b>	---	---
Sulfur	ppm	ASTM D5185m 8181	<b>14181</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>5</b>	---	---
Sodium	ppm	ASTM D5185m	<b>4</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	---	---

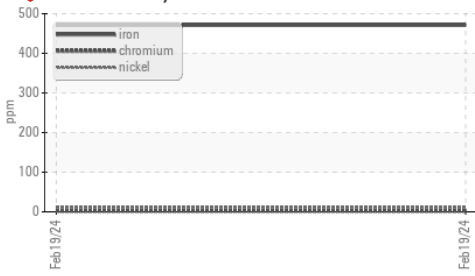
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.52</b>	---	---



# OIL ANALYSIS REPORT

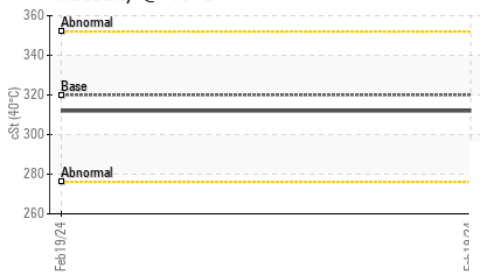
### Ferrous Alloys



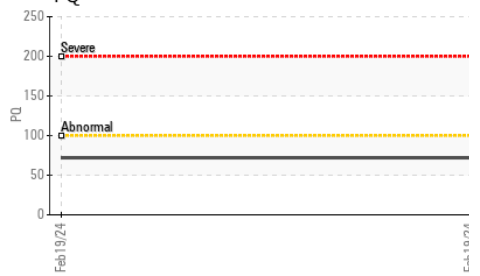
### Acid Number



### Viscosity @ 40°C



### PQ



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

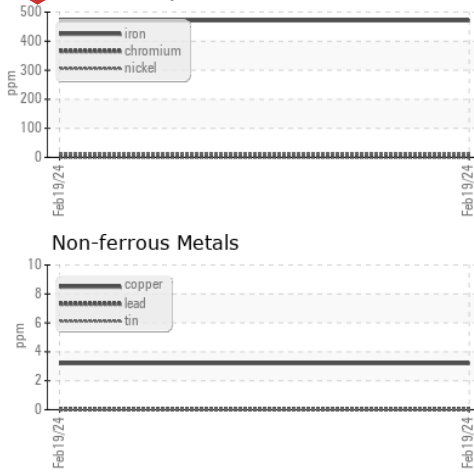
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	312	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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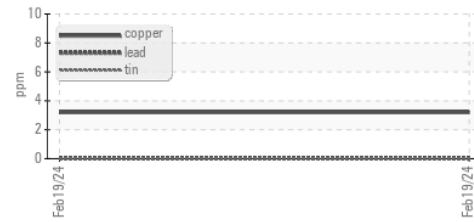
Color				no image	no image
Bottom				no image	no image

### GRAPHS

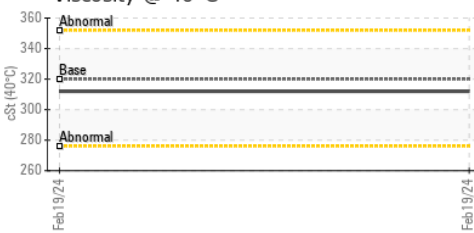
#### Ferrous Alloys



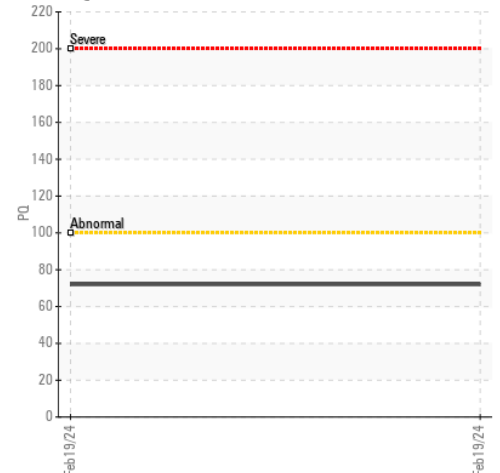
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### PQ



#### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLC0001534      **Received** : 23 Feb 2024  
**Lab Number** : 06098585      **Tested** : 26 Feb 2024  
**Unique Number** : 10896815      **Diagnosed** : 26 Feb 2024 - Don Baldrige  
**Test Package** : PLANT

**MICHELIN TIRE-GRENVILLE US 1 JN DOCK**  
 1401 ANTIOCH CHURCH ROAD  
 Greenville, SC  
 US 29605  
 Contact: Nicolas Jackson  
 nicolas.jackson@michelin.com

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)

T:  
F: