



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**Plant US1 Greenville**  
 Machine Id  
**BD-7 - Extruder**  
 Component  
**Gearbox**  
 Fluid  
**SHELL OMALA 320 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

Gear wear is indicated. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>TLC0001549</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>ABNORMAL</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>131</b>	---	---
Iron	ppm	ASTM D5185m >200	<b>▲ 213</b>	---	---
Chromium	ppm	ASTM D5185m >15	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >15	<b>2</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m >100	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >200	<b>2</b>	---	---
Tin	ppm	ASTM D5185m >25	<b>&lt;1</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>6</b>	---	---
Barium	ppm	ASTM D5185m 0.4	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 0.5	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m 23	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m 13	<b>6</b>	---	---
Phosphorus	ppm	ASTM D5185m 450	<b>306</b>	---	---
Zinc	ppm	ASTM D5185m 9.9	<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m 8181	<b>14798</b>	---	---

## CONTAMINANTS

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

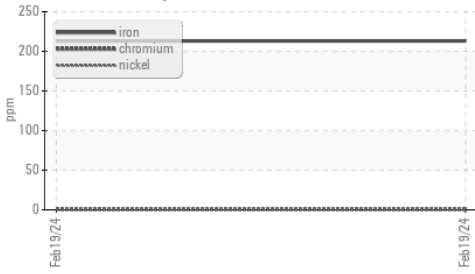
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.54</b>	---	---

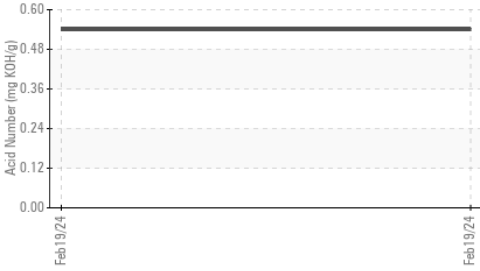


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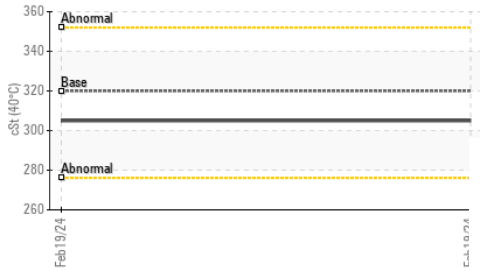
### ▲ Ferrous Alloys



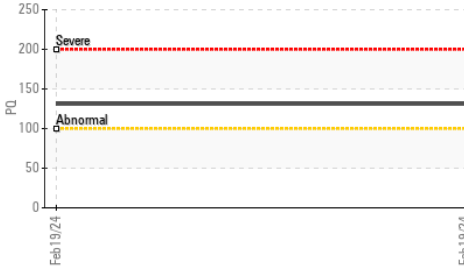
### Acid Number



### 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	---

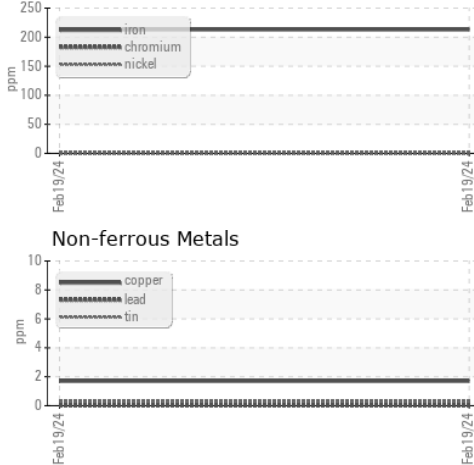
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	305	---

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



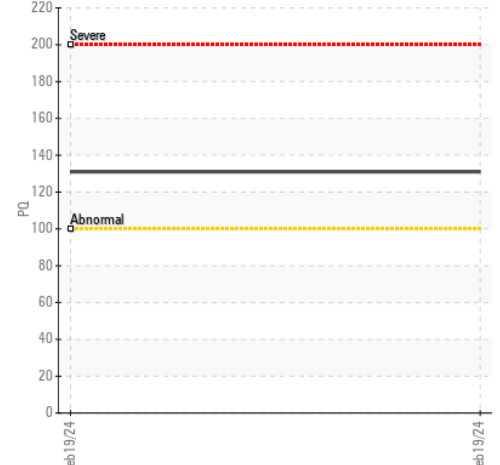
#### Non-ferrous Metals



#### Viscosity @ 40°C



#### PQ



#### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLC0001549      **Received** : 23 Feb 2024  
**Lab Number** : 06098572      **Tested** : 26 Feb 2024  
**Unique Number** : 10896802      **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: