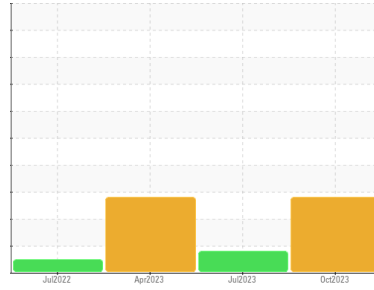




PROBLEM SUMMARY

Sample Rating Trend



WEAR



Area

Preparation-Prep NAR 650

Machine Id

[Preparation-Prep NAR 650] 360008008 - NAR 650 BULL GEAR LEFT

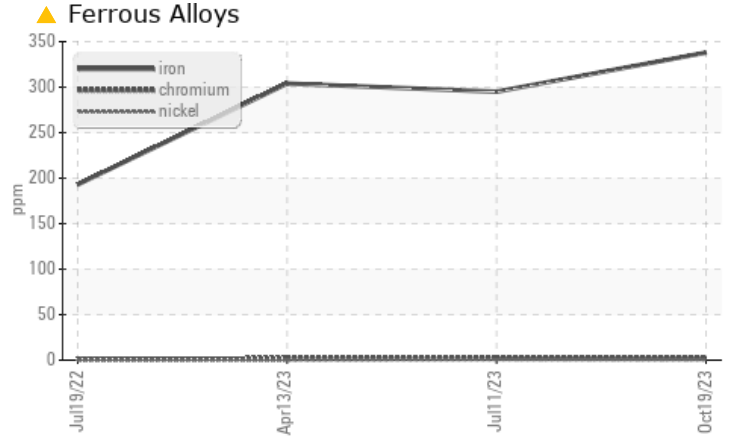
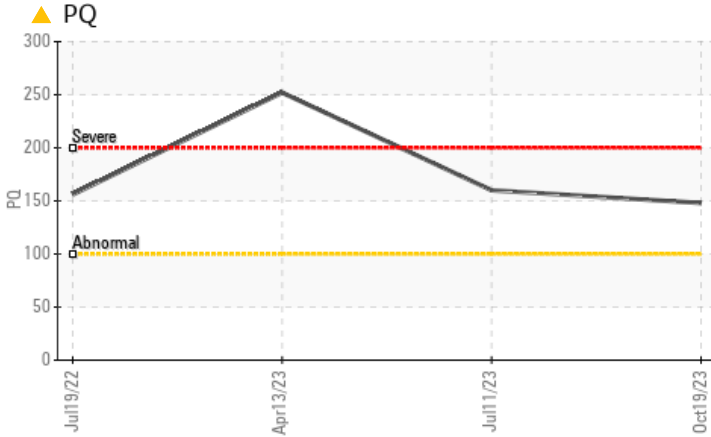
Component

Left Gearbox

Fluid

SHELL OMALA S2 G 680 (18 LTR)

COMPONENT CONDITION SUMMARY



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	ASTM D8184	ASTM D5185m	ABNORMAL	ABNORMAL	ABNORMAL
PQ	148	160	▲ 148	160	▲ 252
Iron	ppm	>200	▲ 338	▲ 295	▲ 304

Customer Id: MICAND
 Sample No.: TLC0001324
 Lab Number: 05998166
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@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.

HISTORICAL DIAGNOSIS

11 Jul 2023 Diag: Doug Bogart

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



13 Apr 2023 Diag: Jonathan Hester

WEAR



We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. The high ferrous density (PQ) index indicates that abnormal wear is occurring. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



19 Jul 2022 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

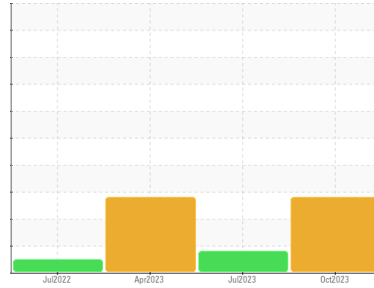
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
Preparation-Prep NAR 650
 Machine Id
[Preparation-Prep NAR 650] 360008008 - NAR 650 BULL GEAR LEFT
 Component
Left Gearbox
 Fluid
SHELL OMALA S2 G 680 (18 LTR)

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. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

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		TLC0001324	TLC0001313	TLC0001247
Sample Date	Client Info		19 Oct 2023	11 Jul 2023	13 Apr 2023
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			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		▲ 148	160	▲ 252
Iron	ppm	ASTM D5185m >200	▲ 338	▲ 295	▲ 304
Chromium	ppm	ASTM D5185m >15	2	2	2
Nickel	ppm	ASTM D5185m >15	<1	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	2	0
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	<1	2	<1
Tin	ppm	ASTM D5185m >25	0	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	19	0	0
Molybdenum	ppm	ASTM D5185m	<1	1	<1
Manganese	ppm	ASTM D5185m	1	2	2
Magnesium	ppm	ASTM D5185m	2	<1	1
Calcium	ppm	ASTM D5185m	9	8	7
Phosphorus	ppm	ASTM D5185m	308	271	275
Zinc	ppm	ASTM D5185m	18	8	13
Sulfur	ppm	ASTM D5185m	10827	12131	10629

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	6	5	8
Sodium	ppm	ASTM D5185m	3	2	1
Potassium	ppm	ASTM D5185m >20	1	2	<1

FLUID DEGRADATION

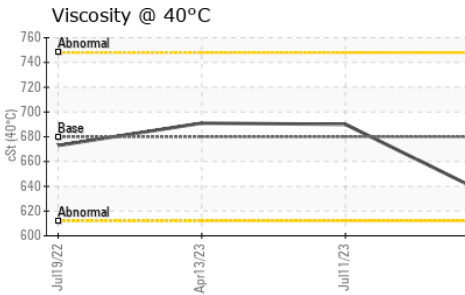
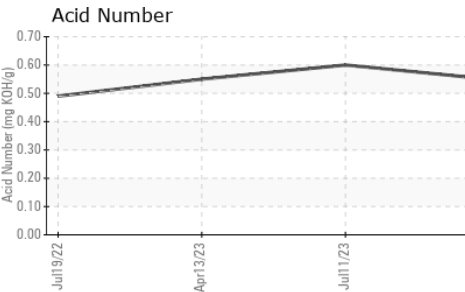
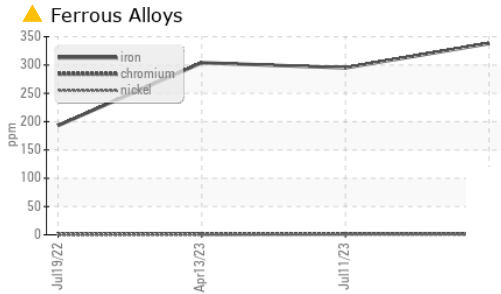
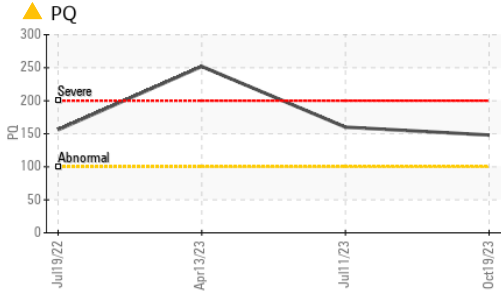
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.55	0.60	0.55

VISUAL

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

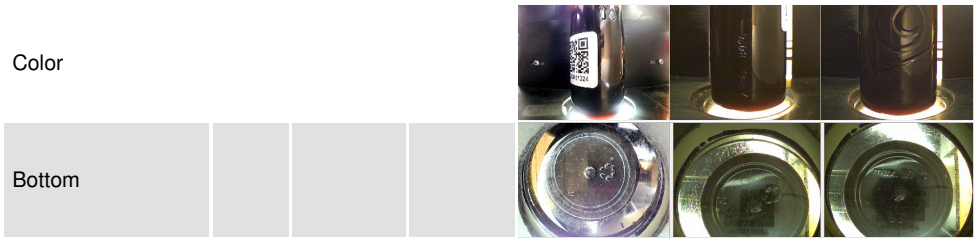


OIL ANALYSIS REPORT

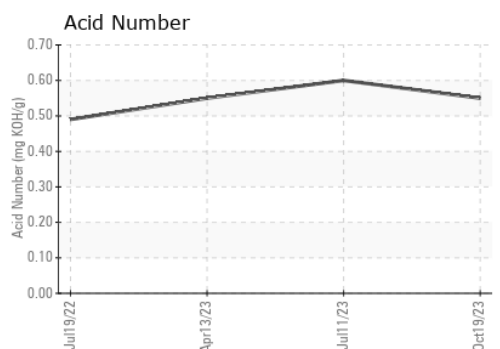
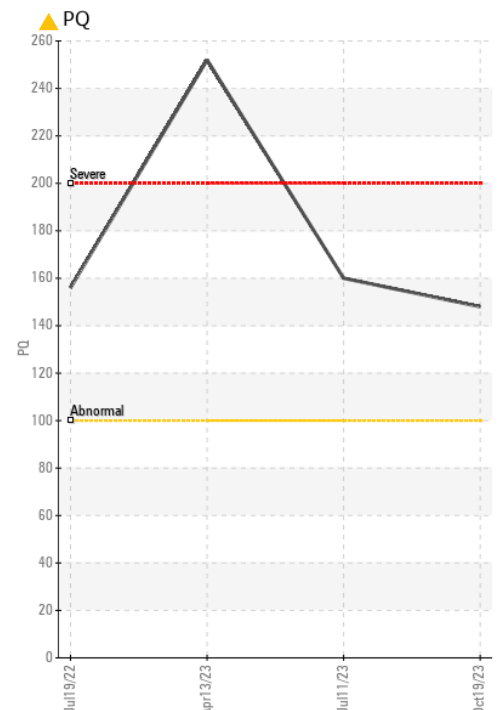
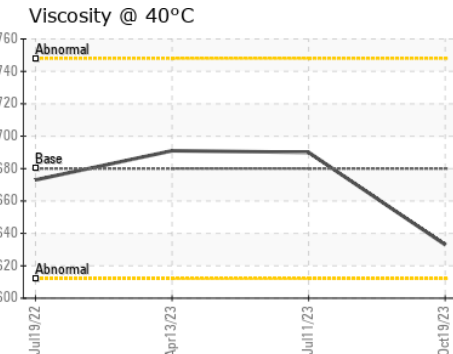
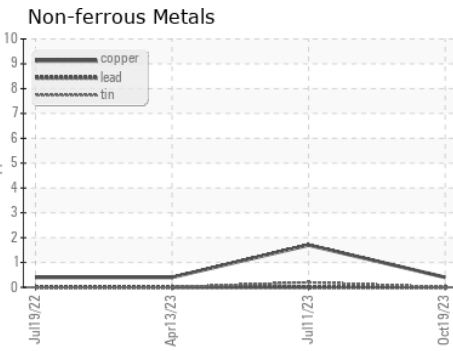
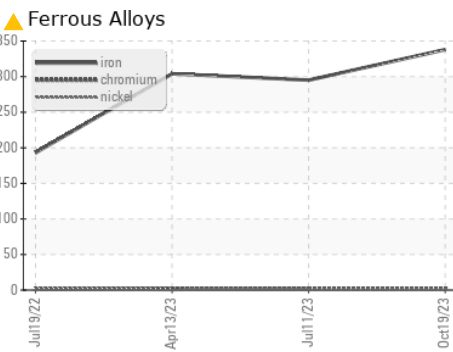


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 680	633	690	691

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLC0001324 **Received** : 03 Nov 2023
Lab Number : 05998166 **Diagnosed** : 06 Nov 2023
Unique Number : 10726526 **Diagnostician** : Angela Borella
Test Package : PLANT

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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 ANDERSON, SC
 US 29626

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 terrick.presley@michelin.com

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