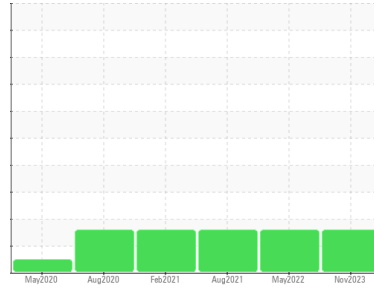


# PROBLEM SUMMARY

Sample Rating Trend



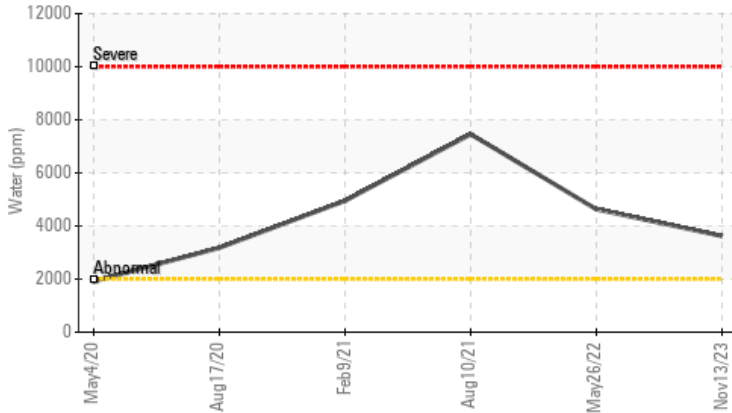
**WATER**



Machine Id  
**RAL-112C**  
Component  
**Gearbox**  
Fluid  
**SYNGEAR PG460 (--- GAL)**

## COMPONENT CONDITION SUMMARY

▲ Water (KF)



## RECOMMENDATION

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>0.2	▲ <b>0.362</b>	▲ 0.463	▲ 0.746
ppm Water	ppm	ASTM D6304	>2000	▲ <b>3622.2</b>	▲ 4630	▲ 7460

Customer Id: HOLCOR  
Sample No.: RP0027938  
Lab Number: 06007037  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

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
Check Water Access	---	---	?	We advise that you check for the source of water entry.

## HISTORICAL DIAGNOSIS

### 26 May 2022 Diag: Don Baldrige

WATER



We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



### 10 Aug 2021 Diag: Jonathan Hester

WATER



We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 09 Feb 2021 Diag: Don Baldrige

WATER



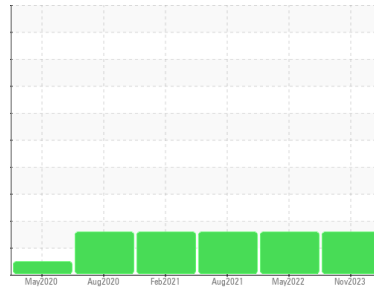
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Machine Id  
**RAL-112C**  
 Component  
**Gearbox**  
 Fluid  
**SYNGEAR PG460 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

We advise that you check for the source of water entry. Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is a light concentration of water present in the oil.

**Fluid Condition**

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>RP0027938</b>	RP0012055	RP0011900
Sample Date	Client Info			<b>13 Nov 2023</b>	26 May 2022	10 Aug 2021
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

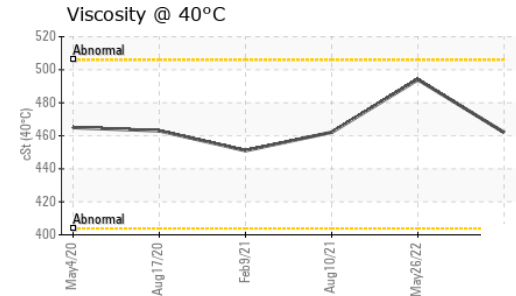
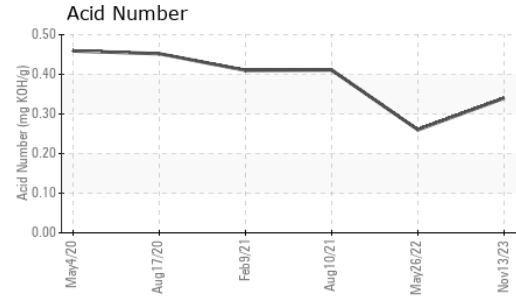
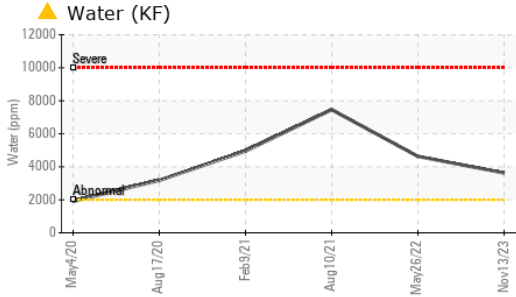
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>58</b>	2	0
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	<1	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	3	0
Copper	ppm	ASTM D5185m	>200	<b>2</b>	2	1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	2	<1
Antimony	ppm	ASTM D5185m	>5	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	10	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>2</b>	0	0
Calcium	ppm	ASTM D5185m		<b>5</b>	<1	0
Phosphorus	ppm	ASTM D5185m		<b>690</b>	629	707
Zinc	ppm	ASTM D5185m		<b>0</b>	0	0

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>2</b>	1	<1
Sodium	ppm	ASTM D5185m		<b>10</b>	5	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Water	%	ASTM D6304	>0.2	<b>▲ 0.362</b>	▲ 0.463	▲ 0.746
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 3622.2</b>	▲ 4630	▲ 7460

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.34</b>	0.26	0.411

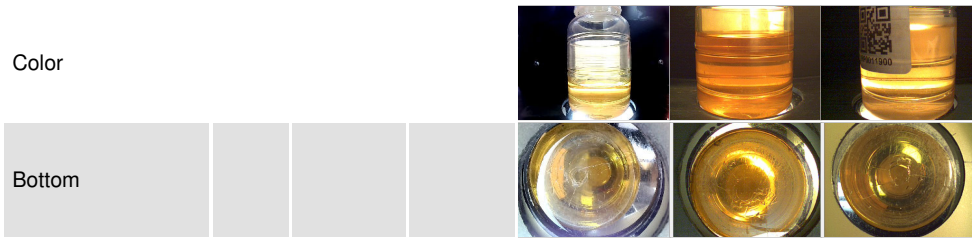
# OIL ANALYSIS REPORT



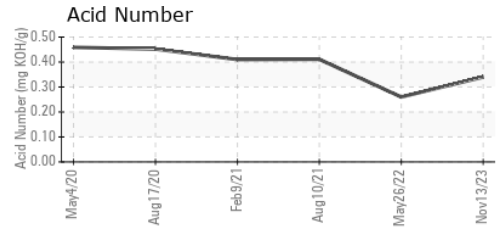
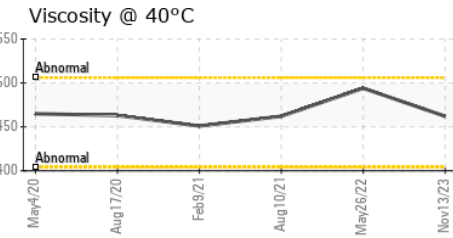
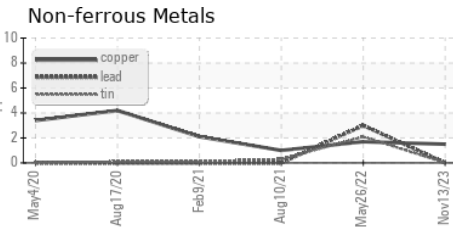
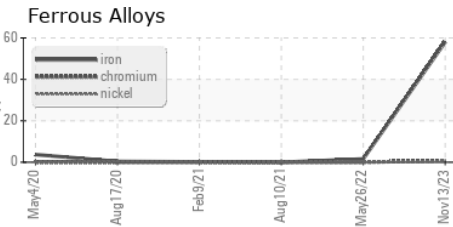
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	462	494	462.1

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.** : RP0027938 **Received** : 14 Nov 2023  
**Lab Number** : 06007037 **Diagnosed** : 15 Nov 2023  
**Unique Number** : 10740799 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**HOLLINGSWORTH & VOSE CO**  
 1115 SE CRYSTAL LAKE DR  
 CORVALLIS, OR  
 US 97333  
 Contact: Jon Ayers  
 jonathan.ayers@hovo.com  
 T: (541)738-5399  
 F: x:

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)