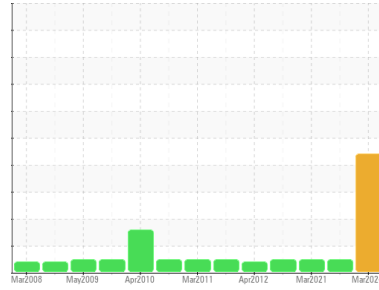




# PROBLEM SUMMARY

Sample Rating Trend



DEGRADATION



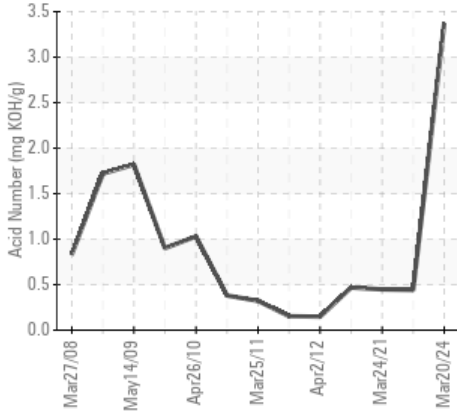
Machine Id  
**455-083-30**

Component  
**Gearbox**

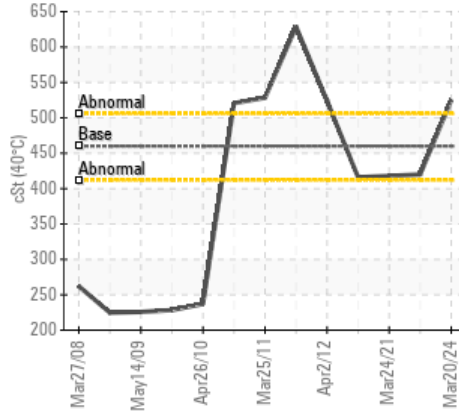
Fluid  
**ROYAL PURPLE SYNFILM GT 460 (--- QTS)**

## COMPONENT CONDITION SUMMARY

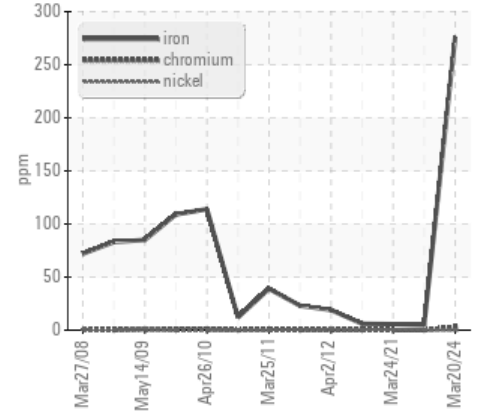
▲ Acid Number



▲ Viscosity @ 40°C



▲ Ferrous Alloys



## RECOMMENDATION

We advise that you check for a possible overheat condition. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	▲ 276	5	6
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ 3.37	0.442	0.448
Visc @ 40°C	cSt	ASTM D445	460	▲ 525	420	418

Customer Id: WEYNEW  
Sample No.: WC0432501  
Lab Number: 06130731  
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@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
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check For Overheating	---	---	?	We advise that you check for a possible overheat condition.

## HISTORICAL DIAGNOSIS

### 13 Sep 2021 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. 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



### 24 Mar 2021 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. The water content is negligible. 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 Jan 2021 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. The water content is negligible. 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.

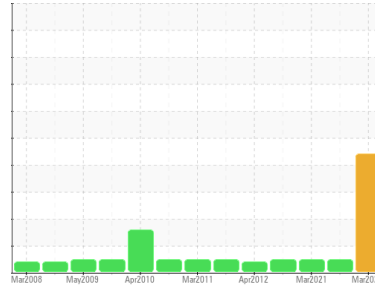
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id  
**455-083-30**

Component  
**Gearbox**

Fluid  
**ROYAL PURPLE SYNFILM GT 460 (--- QTS)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check for a possible overheat condition. We recommend that you drain the oil from the component if this has not already been done. 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 above the recommended limit. The oil viscosity is higher than normal.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0432501</b>	RP0008468	RP0003366
Sample Date	Client Info		<b>20 Mar 2024</b>	13 Sep 2021	24 Mar 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>	N/A	N/A
Sample Status			<b>SEVERE</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>▲ 276</b>	5	6
Chromium	ppm	ASTM D5185m >15	<b>3</b>	0	0
Nickel	ppm	ASTM D5185m >15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m >25	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	10
Barium	ppm	ASTM D5185m	<b>4</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>3</b>	<1	<1
Magnesium	ppm	ASTM D5185m 90	<b>4</b>	18	16
Calcium	ppm	ASTM D5185m	<b>32</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>275</b>	10	3
Zinc	ppm	ASTM D5185m	<b>4</b>	6	11
Sulfur	ppm	ASTM D5185m	<b>25821</b>	13947	16739

## CONTAMINANTS

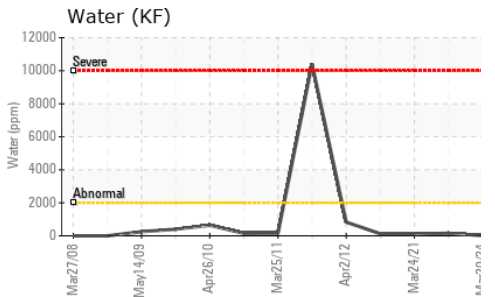
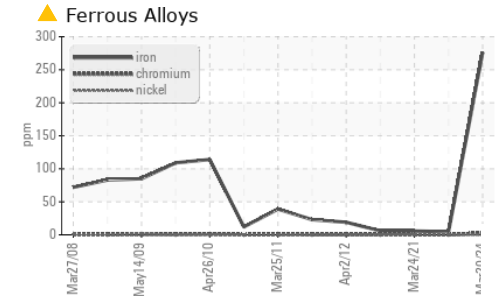
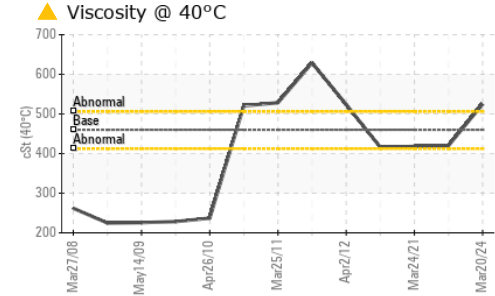
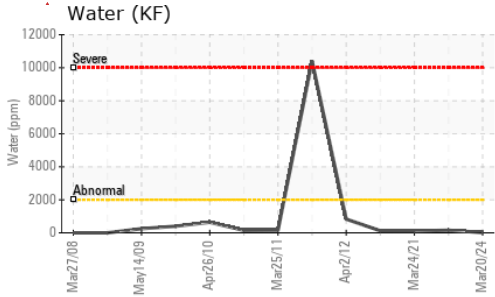
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>12</b>	<1	0
Sodium	ppm	ASTM D5185m	<b>3</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	0
Water	%	ASTM D6304 >0.2	<b>0.002</b>	0.015	0.011
ppm Water	ppm	ASTM D6304 >2000	<b>16</b>	154.6	116.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>▲ 3.37</b>	0.442	0.448



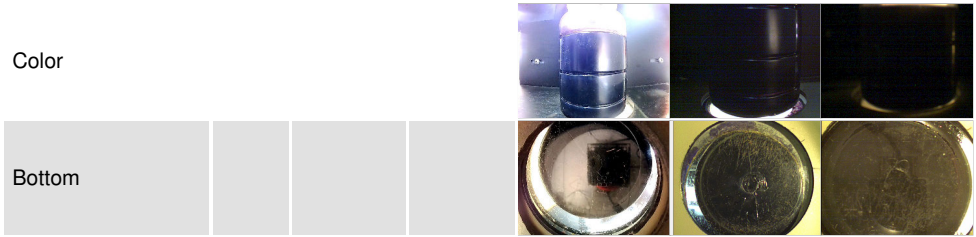
# OIL ANALYSIS REPORT



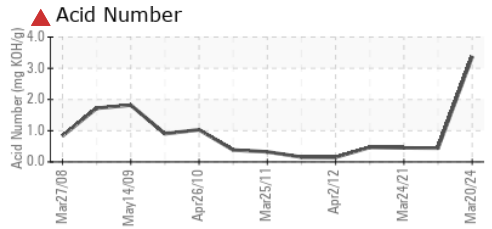
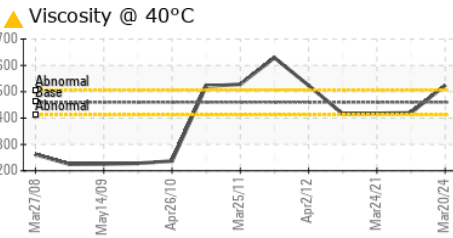
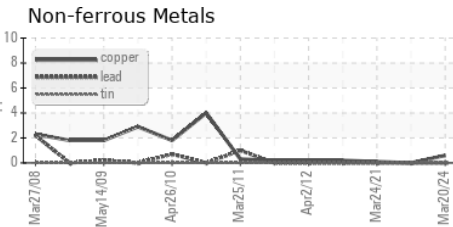
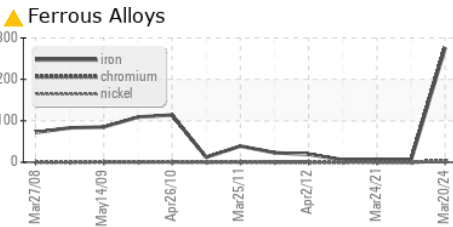
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	460	▲ 525	420	418

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.** : WC0432501 **Received** : 27 Mar 2024  
**Lab Number** : 06130731 **Tested** : 28 Mar 2024  
**Unique Number** : 10950196 **Diagnosed** : 01 Apr 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**INTERNATIONAL PAPER**  
 1785 Weyerhaeuser Road  
 VANCEBORO, NC  
 US 28586

Contact: DOUG WEIR  
 Doug.Weir@paper.com;jon.fazenbaker@wearcheck.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)

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