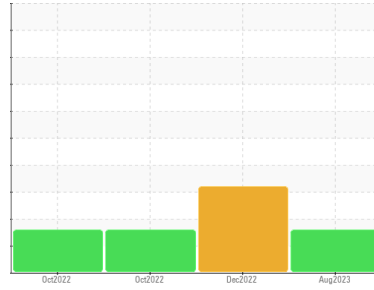




# PROBLEM SUMMARY

Sample Rating Trend



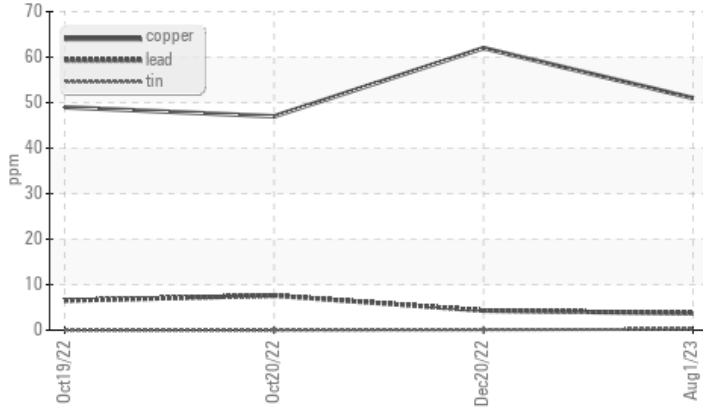
WEAR



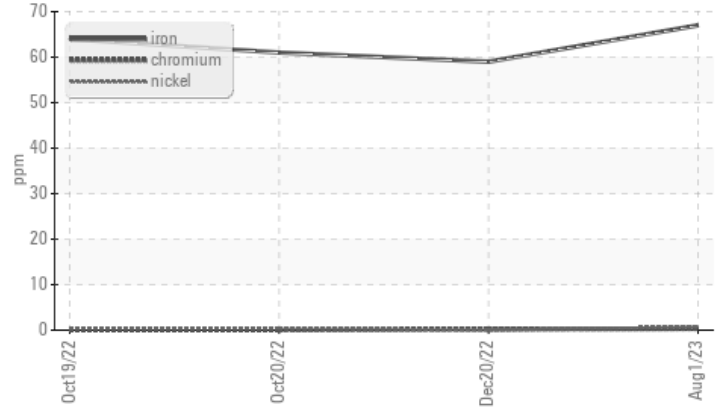
Machine Id  
**RU14 815**  
 Component  
**Hydraulic System**  
 Fluid  
 {not provided} (--- GAL)

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



### ▲ Ferrous Alloys



## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>20	▲ 67	▲ 59	▲ 61
Copper	ppm	ASTM D5185m	>20	▲ 51	▲ 62	▲ 47

Customer Id: KELFAY  
 Sample No.: WC0841619  
 Lab Number: 05930328  
 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
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

20 Dec 2022 Diag: Jonathan Hester

DIRT



No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. The copper level is abnormal. Elemental level of silicon (Si) above normal indicating ingress of seal material. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



20 Oct 2022 Diag: Doug Bogart

WEAR



This is a baseline read-out on the submitted sample. The iron level is abnormal. The copper level is abnormal. The amount and size of particulates present in the system are acceptable. 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 Oct 2022 Diag: Doug Bogart

WEAR



This is a baseline read-out on the submitted sample. The iron level is abnormal. The copper level is abnormal. The amount and size of particulates present in the system are acceptable. 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.

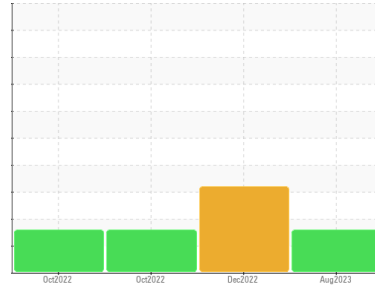
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**RU14 815**  
 Component  
**Hydraulic System**  
 Fluid  
 {not provided} (--- GAL)

## DIAGNOSIS

### ▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### ▲ Wear

The iron level is abnormal. The copper level is abnormal.

### Contamination

The amount and size of particulates present in the system are acceptable. 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>WC0841619</b>	WC0710130	WC0710125
Sample Date	Client Info		<b>01 Aug 2023</b>	20 Dec 2022	20 Oct 2022
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>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>▲ 67</b>	▲ 59	▲ 61
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m >20	<b>4</b>	4	8
Copper	ppm	ASTM D5185m >20	<b>▲ 51</b>	▲ 62	▲ 47
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	<b>0</b>	1	0
Calcium	ppm	ASTM D5185m	<b>9</b>	11	3
Phosphorus	ppm	ASTM D5185m	<b>291</b>	268	322
Zinc	ppm	ASTM D5185m	<b>149</b>	145	208
Sulfur	ppm	ASTM D5185m	<b>969</b>	1124	1057

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>10</b>	▲ 15	8
Sodium	ppm	ASTM D5185m	<b>2</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1415</b>	906	1733
Particles >6µm	ASTM D7647	>1300	<b>287</b>	172	205
Particles >14µm	ASTM D7647	>160	<b>24</b>	8	6
Particles >21µm	ASTM D7647	>40	<b>7</b>	2	2
Particles >38µm	ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>18/15/12</b>	17/15/10	18/15/10

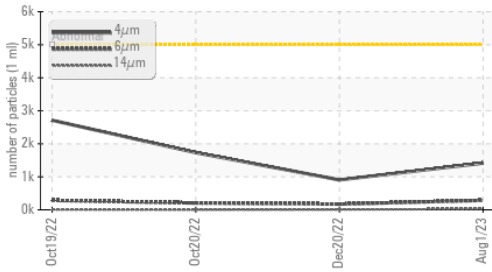
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.38</b>	0.34	0.51

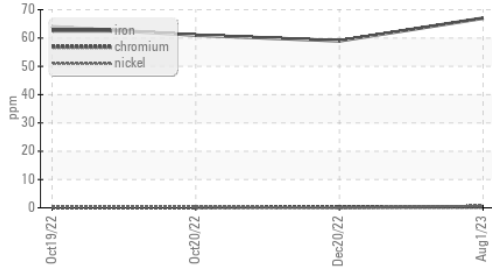


# OIL ANALYSIS REPORT

## Particle Trend



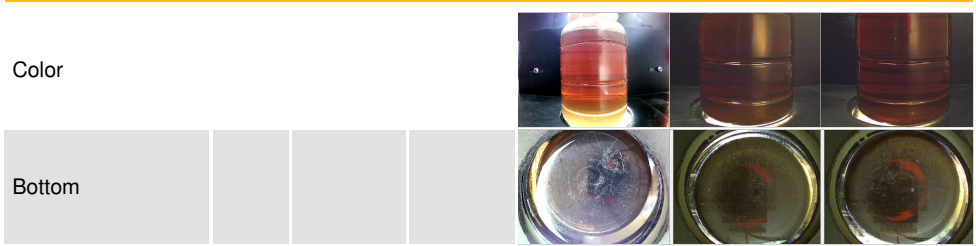
## Ferrous Alloys



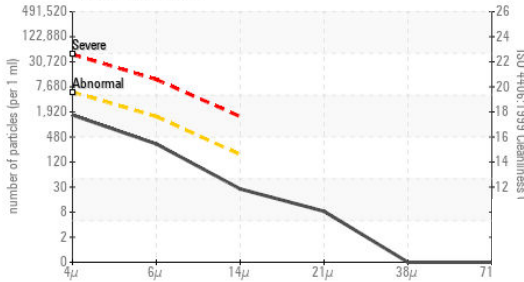
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.9	65.0	76.7

## SAMPLE IMAGES

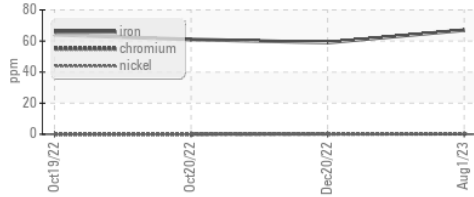


## Particle Count

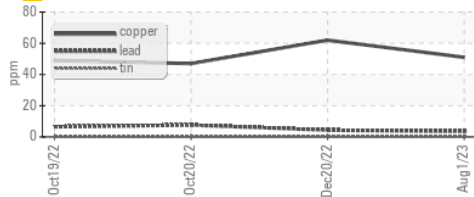


## GRAPHS

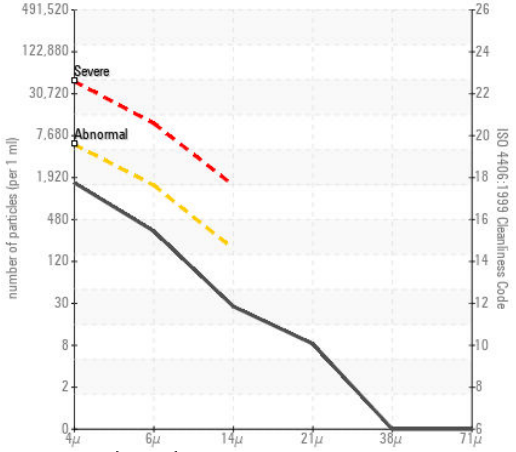
### Ferrous Alloys



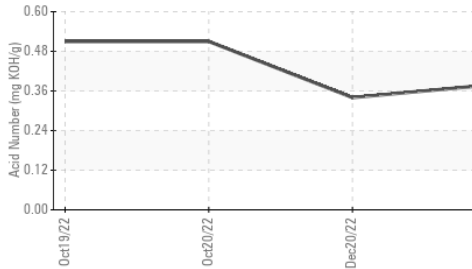
### Non-ferrous Metals



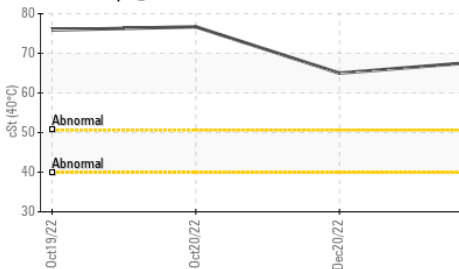
### Particle Count



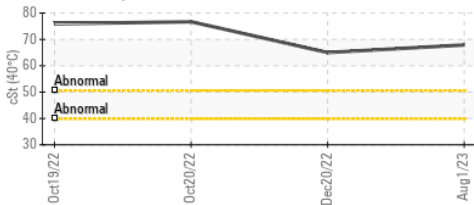
## Acid Number



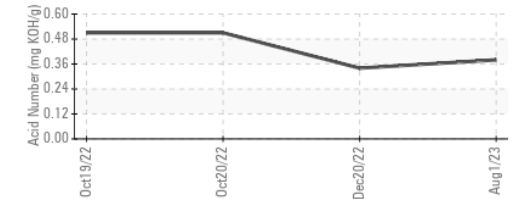
## Viscosity @ 40°C



## Viscosity @ 40°C



## Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0841619  
 Lab Number : 05930328  
 Unique Number : 10615599  
 Test Package : IND 2

KELLY SPRINGFIELD TIRE CO. / GOODYEAR TIRE  
 6650 RAMSEY ST.  
 FAYETTEVILLE, NC  
 US 28311  
 Contact: RAYMOND MEADE  
 raymond\_j\_meade@goodyear.com  
 T:  
 F: (910)630-5229

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)