



# PROBLEM SUMMARY

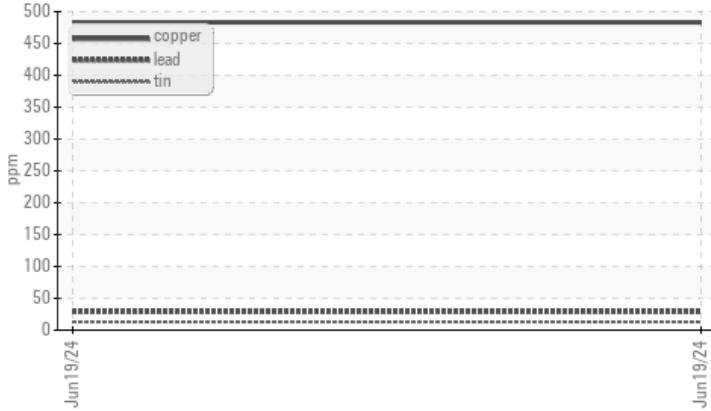
Area  
**MINING**  
 Machine Id  
**ME-103 JOHN DEERE 844L 1DW844LXHNL715325**  
 Component  
**Rear Differential**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (25 GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. 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				SEVERE	---	---
Lead	ppm	ASTM D5185m	>25	▲ 29	---	---
Copper	ppm	ASTM D5185m	>100	▲ 483	---	---
Tin	ppm	ASTM D5185m	>10	▲ 13	---	---

Customer Id: COVMAR  
 Sample No.: WC0942224  
 Lab Number: 06218646  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
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.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

**MINING**

Machine Id

**ME-103 JOHN DEERE 844L 1DW844LXHNL715325**

Component

**Rear Differential**

Fluid

**JOHN DEERE HY-GARD HYD/TRANS (25 GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

### ▲ Wear

Bearing and/or bushing wear is indicated.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0942224</b>	---	---
Sample Date	Client Info		<b>19 Jun 2024</b>	---	---
Machine Age	hrs	Client Info	<b>4981</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	<b>209</b>	---
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	---
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Silver	ppm	ASTM D5185m		<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	---
Lead	ppm	ASTM D5185m	>25	<b>▲ 29</b>	---
Copper	ppm	ASTM D5185m	>100	<b>▲ 483</b>	---
Tin	ppm	ASTM D5185m	>10	<b>▲ 13</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6	<b>31</b>	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	---
Manganese	ppm	ASTM D5185m		<b>36</b>	---
Magnesium	ppm	ASTM D5185m	145	<b>76</b>	---
Calcium	ppm	ASTM D5185m	3570	<b>3386</b>	---
Phosphorus	ppm	ASTM D5185m	1290	<b>999</b>	---
Zinc	ppm	ASTM D5185m	1640	<b>631</b>	---
Sulfur	ppm	ASTM D5185m		<b>4110</b>	---

## CONTAMINANTS

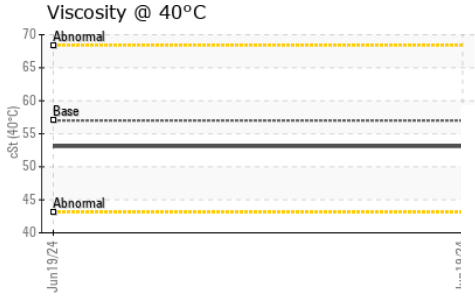
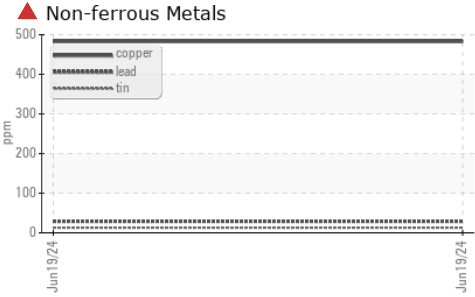
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	<b>12</b>	---
Sodium	ppm	ASTM D5185m		<b>7</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	---

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	---
Free Water	scalar	*Visual		<b>NEG</b>	---



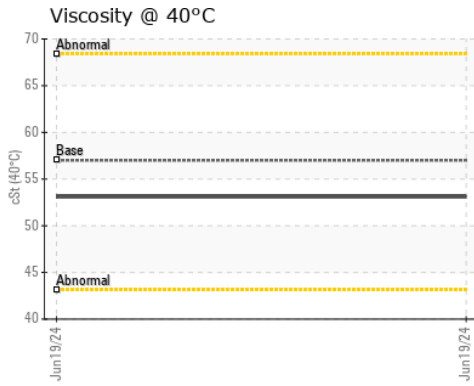
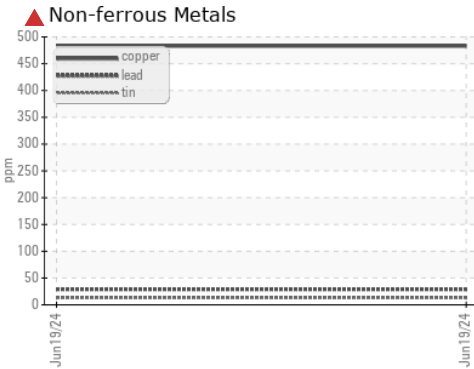
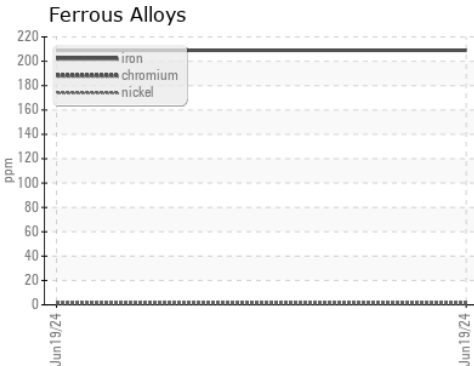
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	57.0	<b>53.1</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0942224      **Received** : 24 Jun 2024  
**Lab Number** : **06218646**      **Tested** : 25 Jun 2024  
**Unique Number** : 11096843      **Diagnosed** : 26 Jun 2024 - Sean Felton  
**Test Package** : CONST

**COVIA - MARSTON - 012**  
 541 COGNAC ROAD  
 MARSTON, NC  
 US 28363  
 Contact: Matt Wilkins  
 matt.wilkins@coviacorp.com  
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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)