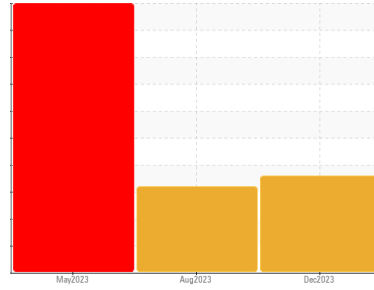




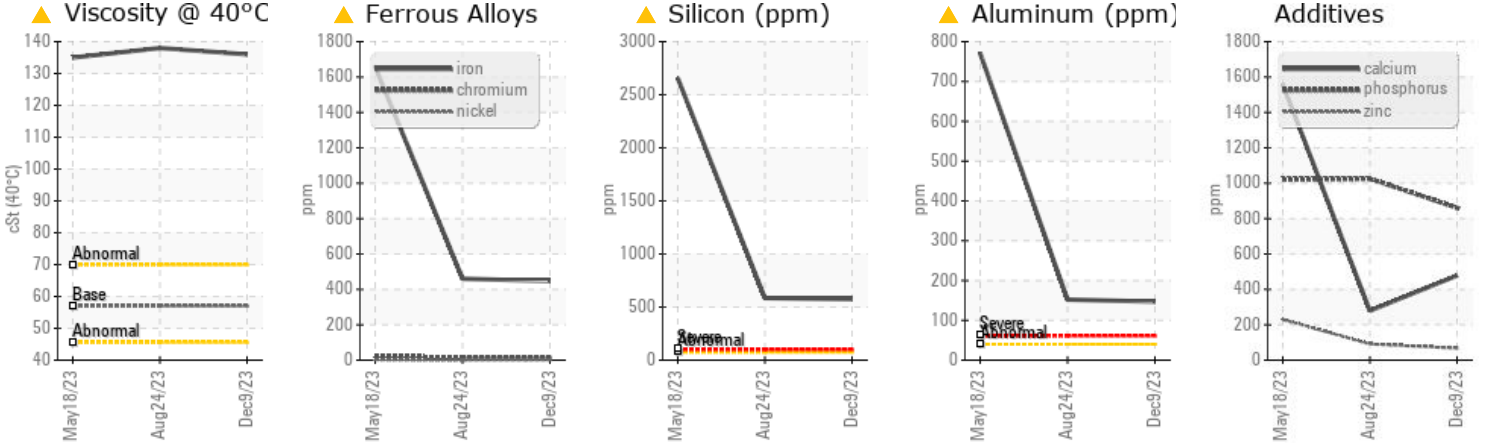
# PROBLEM SUMMARY

Sample Rating Trend



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**881**  
 Component  
**Left Final Drive**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	SEVERE
Chromium	ppm	ASTM D5185(m)	>9	▲ 11	▲ 11	● 25
Aluminum	ppm	ASTM D5185(m)	>40	▲ 147	▲ 152	▲ 771
Silicon	ppm	ASTM D5185(m)	>75	▲ 574	▲ 585	● 2656
Visc @ 40°C	cSt	ASTM D7279(m)	57.0	▲ 136	138	135

Customer Id: RONVAU  
 Sample No.: WC0872890  
 Lab Number: 02603321  
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

## HISTORICAL DIAGNOSIS

### 24 Aug 2023 Diag: Kevin Marson

#### DIRT



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Chromium ppm levels are abnormal. Aluminum ppm levels are noted. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

[view report](#)



### 18 May 2023 Diag: Kevin Marson

#### WEAR



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Chromium and iron ppm levels are severe. Titanium ppm levels are abnormal. Aluminum ppm levels are noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

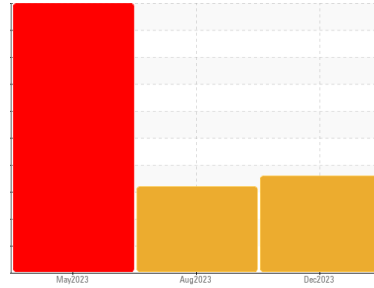
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



**DIRT**



Area  
**ORIN CONTRACTORS**  
 Machine Id  
**881**

Component  
**Left Final Drive**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### Wear

Chromium ppm levels are abnormal. Aluminum ppm levels are noted.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

### Fluid Condition

Viscosity of sample indicates oil is within SAE 90 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. 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>WC0872890</b>	LH0275299	LH0256630
Sample Date	Client Info		<b>09 Dec 2023</b>	24 Aug 2023	18 May 2023
Machine Age	hrs	Client Info	<b>0</b>	1382	1195
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.075	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >750	<b>447</b>	460	1658
Chromium	ppm	ASTM D5185(m) >9	<b>▲ 11</b>	▲ 11	25
Nickel	ppm	ASTM D5185(m) >10	<b>1</b>	<1	3
Titanium	ppm	ASTM D5185(m)	<b>8</b>	9	▲ 47
Silver	ppm	ASTM D5185(m)	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >40	<b>▲ 147</b>	▲ 152	▲ 771
Lead	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	7
Copper	ppm	ASTM D5185(m) >40	<b>1</b>	1	3
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	<1	2
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

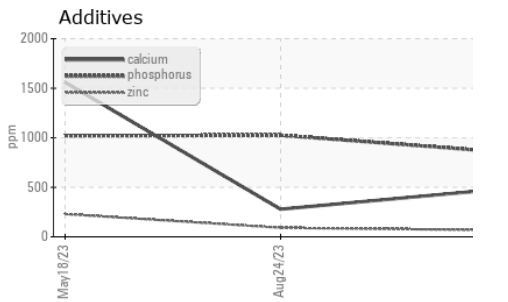
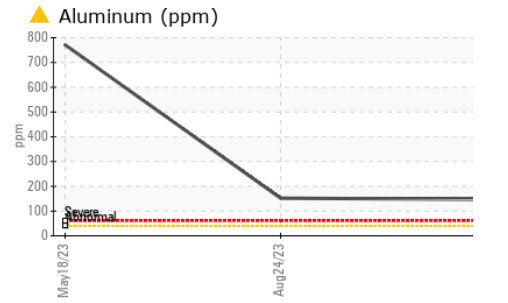
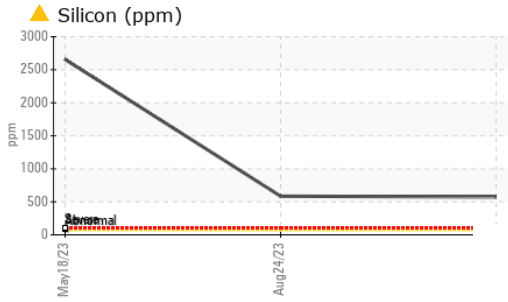
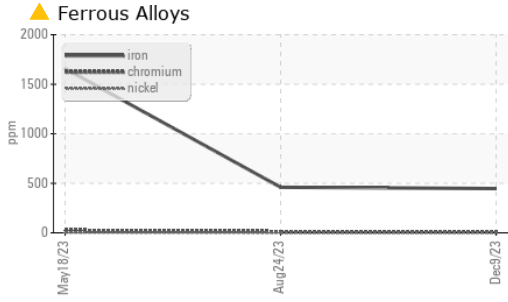
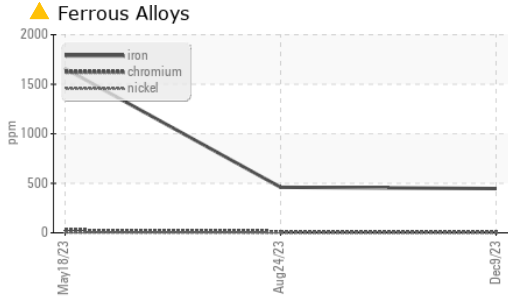
	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 6	<b>149</b>	143	142
Barium	ppm	ASTM D5185(m) 0	<b>2</b>	3	7
Molybdenum	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	1	2
Manganese	ppm	ASTM D5185(m)	<b>7</b>	10	27
Magnesium	ppm	ASTM D5185(m) 145	<b>75</b>	69	339
Calcium	ppm	ASTM D5185(m) 3570	<b>478</b>	279	1560
Phosphorus	ppm	ASTM D5185(m) 1290	<b>861</b>	1025	1021
Zinc	ppm	ASTM D5185(m) 1640	<b>67</b>	91	230
Sulfur	ppm	ASTM D5185(m)	<b>16222</b>	16552	15615
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	2

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	<b>▲ 574</b>	▲ 585	2656
Sodium	ppm	ASTM D5185(m) >51	<b>27</b>	27	131
Potassium	ppm	ASTM D5185(m) >20	<b>50</b>	56	300



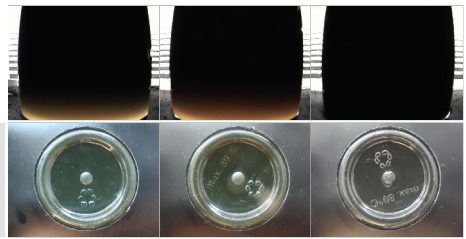
# OIL ANALYSIS REPORT



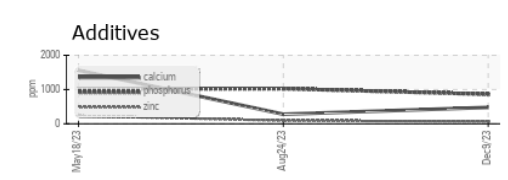
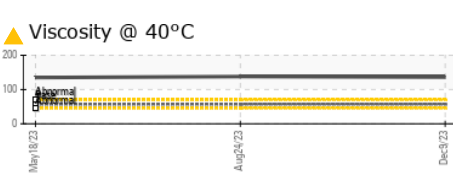
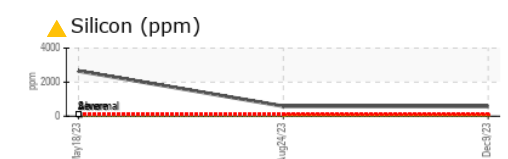
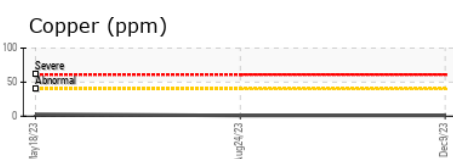
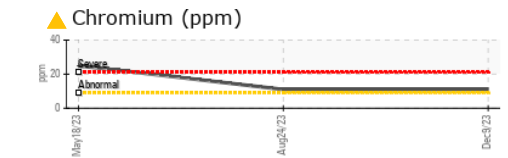
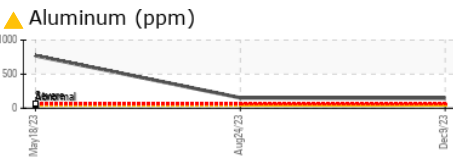
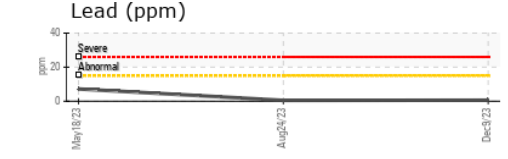
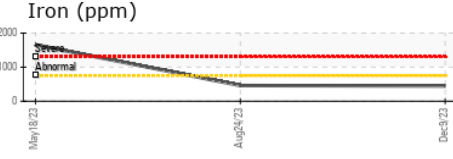
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.075	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	57.0 ▲ 136	138	135

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **RONI/IRON SHORE EXCAVATING LTD.**  
**Sample No.** : WC0872890 **Received** : 14 Dec 2023 **100 MACINTOSH BLVD**  
**Lab Number** : 02603321 **Diagnosed** : 18 Dec 2023 **VAUGHAN, ON**  
**Unique Number** : 5696406 **Diagnostician** : Kevin Marson **CA L4K 4P3**  
**Test Package** : MOBCE ( Additional Tests: Visual ) **Contact: Service Team**  
**service.team@roni.ca**

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.