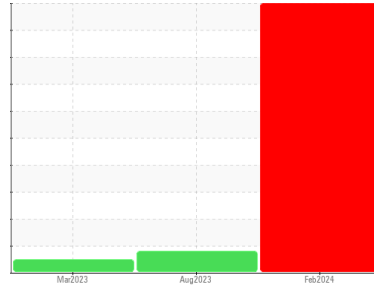


PROBLEM SUMMARY

Area
[W47882]
 Machine Id
HITACHI 85USB-5 HCMDEF60K00021559
 Component
Left Final Drive
 Fluid
JOHN DEERE GL-5 80W90 (1 QTS)

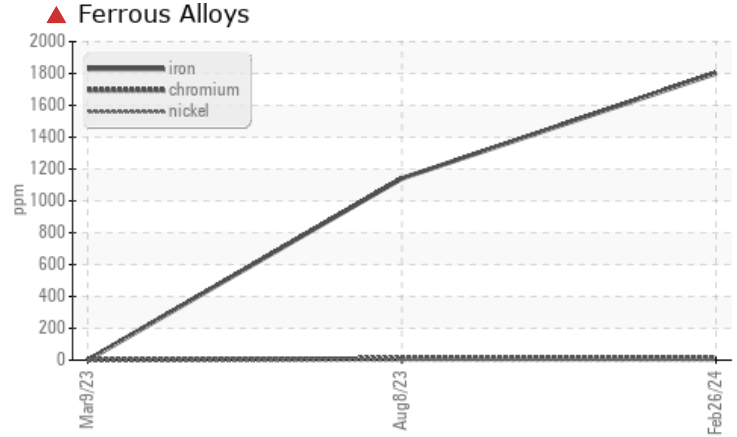
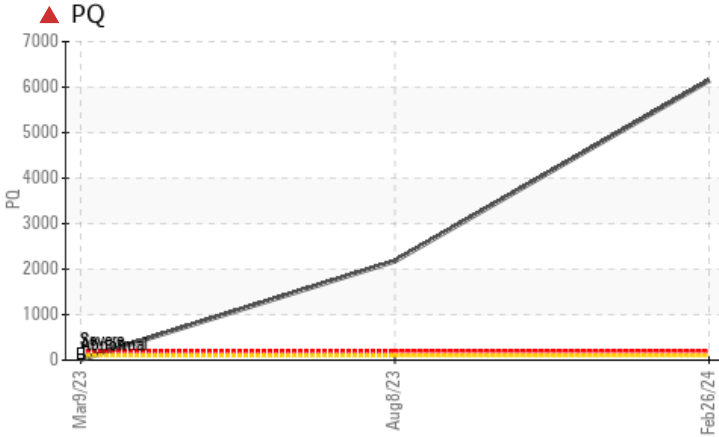
Sample Rating Trend



VISUAL METAL



COMPONENT CONDITION SUMMARY



RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: W47882)

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
PQ		ASTM D8184		▲ 6142	2174	8
Iron	ppm	ASTM D5185m	>500	▲ 1801	▲ 1141	0
Chromium	ppm	ASTM D5185m	>10	▲ 15	11	0
Yellow Metal	scalar	*Visual	NONE	▲ HEAVY	NONE	NONE

Customer Id: RWMFAY
 Sample No.: JR0202336
 Lab Number: 06101178
 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

To change component or sample information:
 Customer Service +1 1-800-237-1369
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.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

08 Aug 2023 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

[view report](#)



09 Mar 2023 Diag: Sean Felton

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

[view report](#)

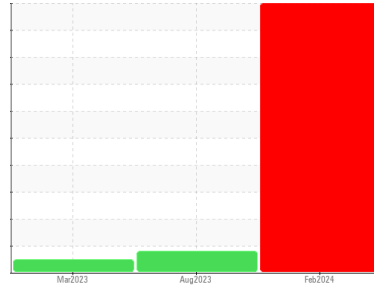


OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Area
[W47882]
 Machine Id
HITACHI 85USB-5 HCMDEF60K00021559
 Component
Left Final Drive
 Fluid
JOHN DEERE GL-5 80W90 (1 QTS)



DIAGNOSIS

▲ Recommendation
 The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: W47882)

▲ Wear
 Gear wear is indicated. Moderate concentration of visible metal present. The very high ferrous density (PQ) index indicates that severe wear is occurring.

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			JR0202336	JR0181419	JR0163817
Sample Date	Client Info			26 Feb 2024	08 Aug 2023	09 Mar 2023
Machine Age	hrs	Client Info		2145	1469	900
Oil Age	hrs	Client Info		2145	1469	0
Oil Changed	Client Info			Changed	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

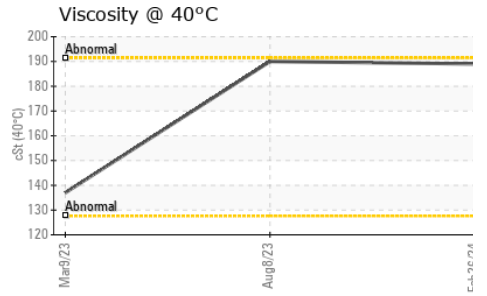
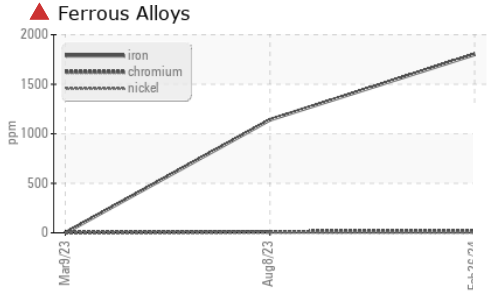
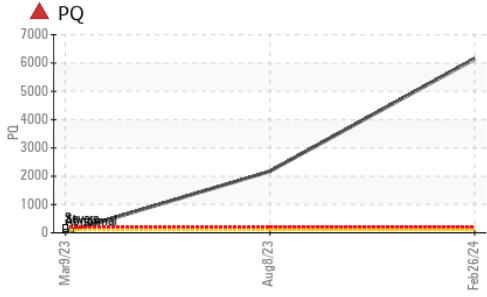
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		▲ 6142	2174	8
Iron	ppm	ASTM D5185m	>500	▲ 1801	▲ 1141	0
Chromium	ppm	ASTM D5185m	>10	▲ 15	11	0
Nickel	ppm	ASTM D5185m	>10	1	2	0
Titanium	ppm	ASTM D5185m		2	2	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	4	<1
Lead	ppm	ASTM D5185m	>25	0	2	0
Copper	ppm	ASTM D5185m	>50	7	9	0
Tin	ppm	ASTM D5185m	>10	<1	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		40	43	0
Barium	ppm	ASTM D5185m		60	49	0
Molybdenum	ppm	ASTM D5185m		0	2	0
Manganese	ppm	ASTM D5185m		19	15	0
Magnesium	ppm	ASTM D5185m		4	1	1
Calcium	ppm	ASTM D5185m		8	8	27
Phosphorus	ppm	ASTM D5185m		419	433	340
Zinc	ppm	ASTM D5185m		179	126	12
Sulfur	ppm	ASTM D5185m		14320	17461	22261

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	37	27	<1
Sodium	ppm	ASTM D5185m		0	6	<1
Potassium	ppm	ASTM D5185m	>20	0	4	<1

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

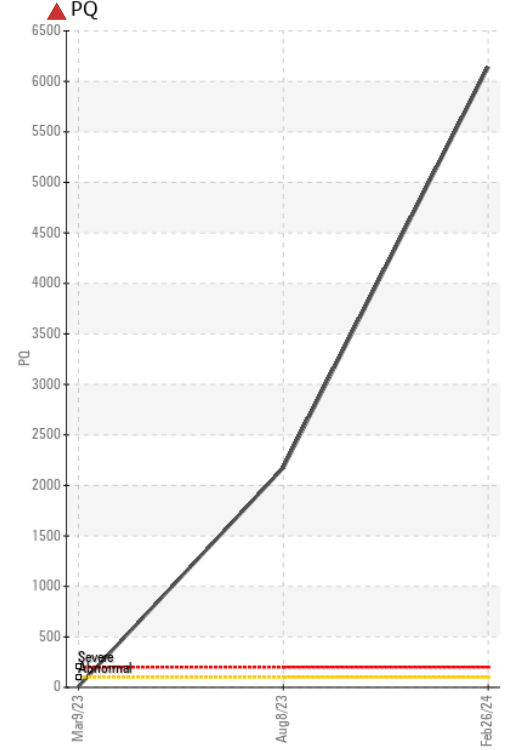
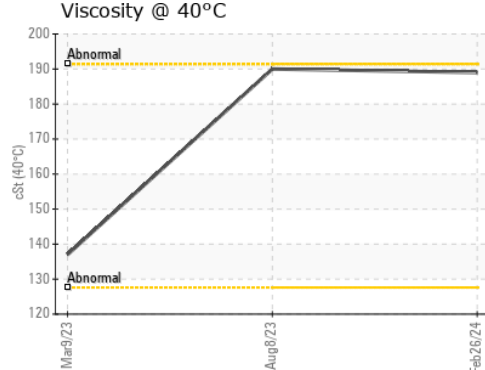
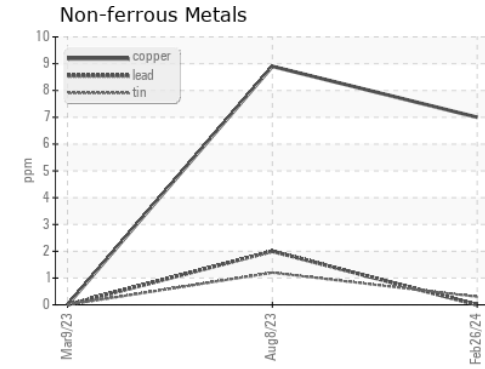
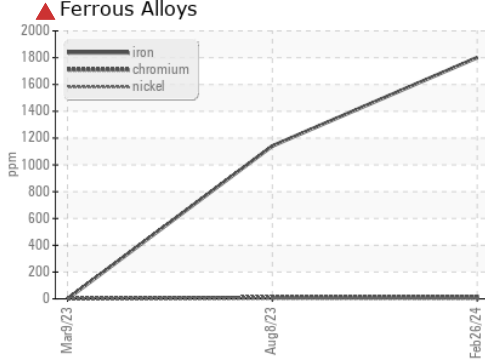
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	189	190	137

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. : JR0202336 **Received** : 26 Feb 2024
Lab Number : 06101178 **Tested** : 28 Feb 2024
Unique Number : 10899408 **Diagnosed** : 28 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

JRE - HOPE MILLS/FAYETTEVILLE
 5039 HWY 301 SOUTH
 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; canastasio@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)