



WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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

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)

Test	UOM	Method	Limit/Abn	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
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		None	N/A	N/A
Sample Status				SEVERE	ABNORMAL	NORMAL

WEAR

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

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
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	▲ HEAVY	NONE	NONE

CONTAMINATION

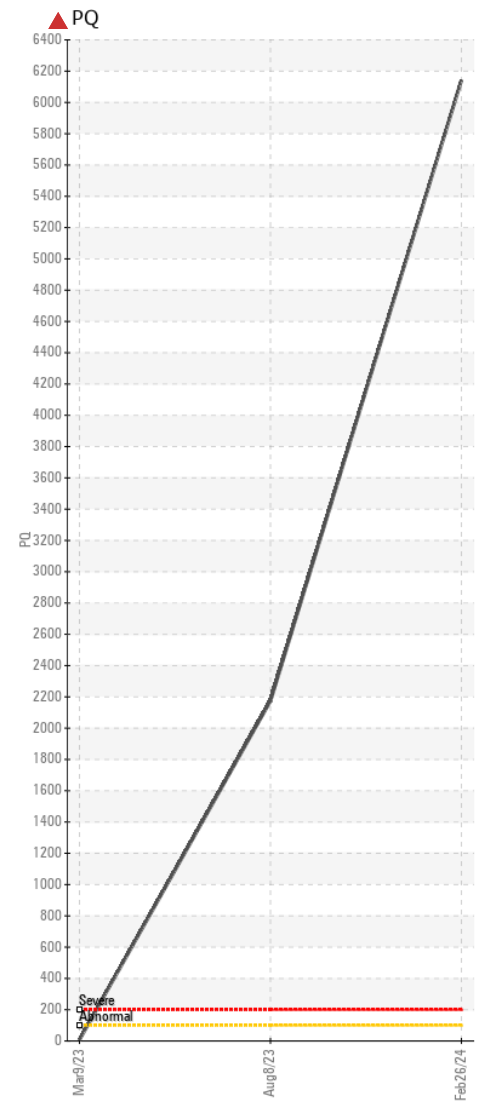
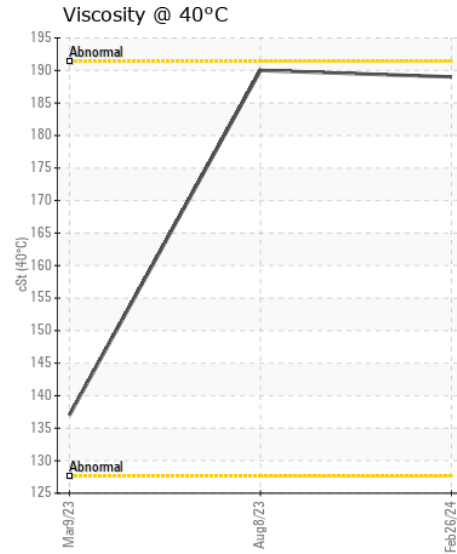
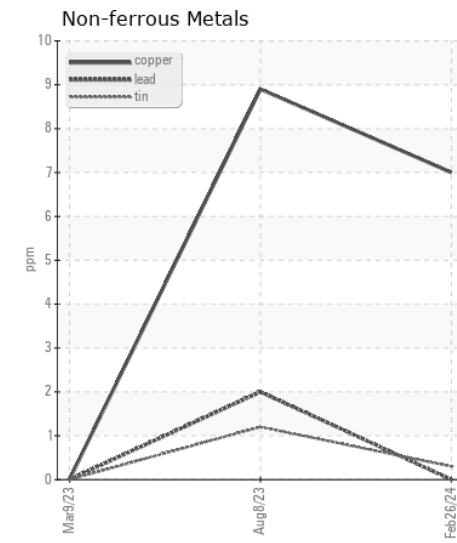
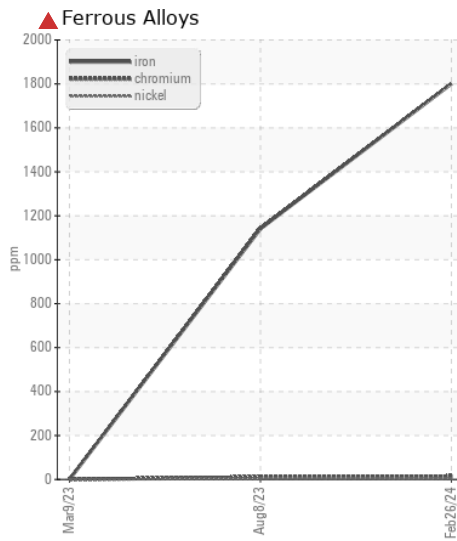
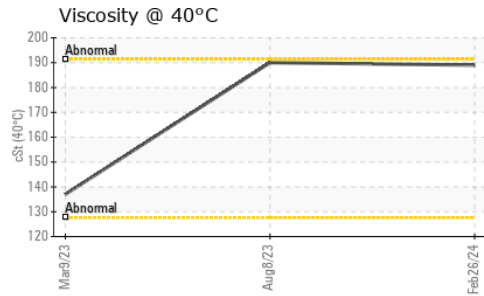
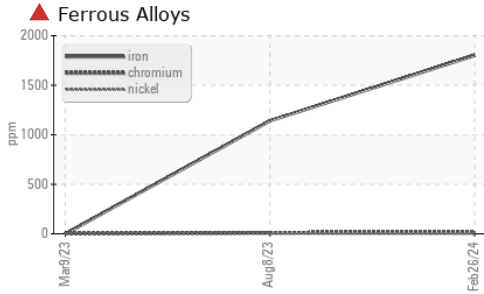
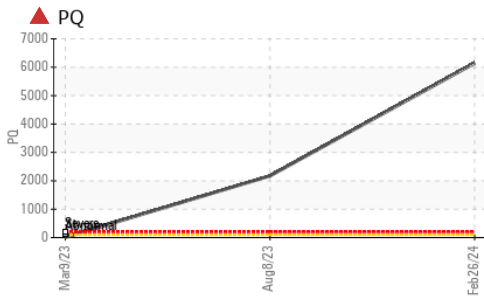
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	37	27	<1
Potassium	ppm	ASTM D5185m	>20	0	4	<1
Water		WC Method	>0.2	NEG	NEG	NEG
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	6	<1
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
Visc @ 40°C	cSt	ASTM D445		189	190	137



Certificate L2367

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
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 HOPE MILLS, NC
 US 28348
 Contact: FAYETTEVILLE SHOP
 stephen.mullis@jamesriverequipment.com; canastasio@wearcheck.com
 T:
 F:

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)