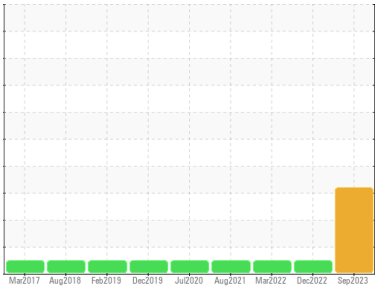
PROBLEM SUMMARY

Sample Rating Trend

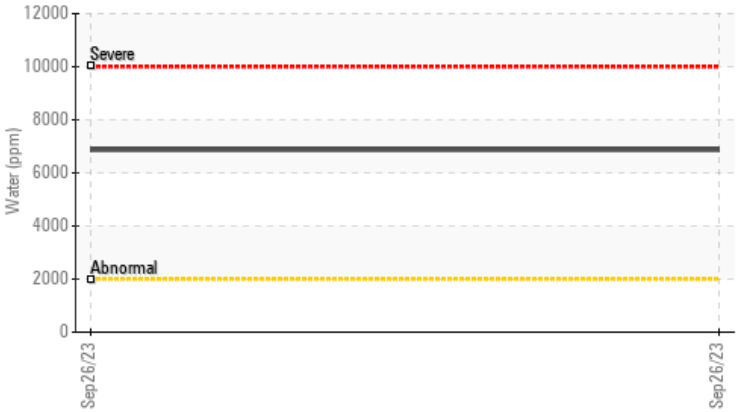


WATER

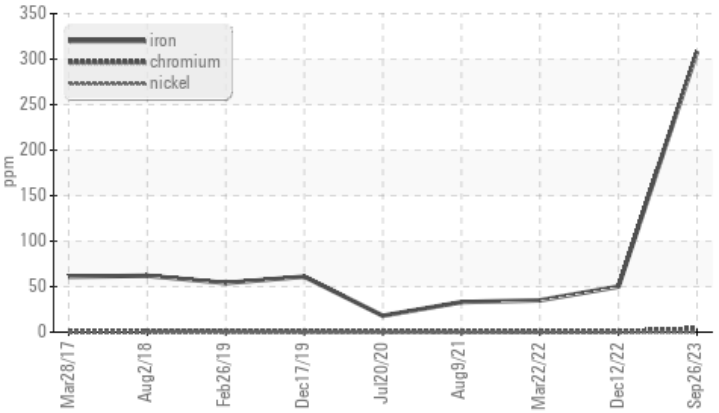
Area
[W46760]
Machine Id
HITACHI 470 HCMJAA70K00030813
Component
Left Swing Drive Gear Case
Fluid
JOHN DEERE GL-5 80W90 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Water (KF)



▲ Ferrous Alloys



RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	▲ **308**	50	35
Water	%	ASTM D6304	>0.2	▲ **0.687**	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ **6870**	---	---
Appearance	scalar	*Visual	NORML	▲ **MILKY**	NORML	NORML

Customer Id: JAMASH
Sample No.: JR0180031
Lab Number: 05963704
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
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

12 Dec 2022 Diag: Don Baldridge

NORMAL

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

view report

22 Mar 2022 Diag: Jonathan Hester

NORMAL

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

view report

09 Aug 2021 Diag: Don Baldridge

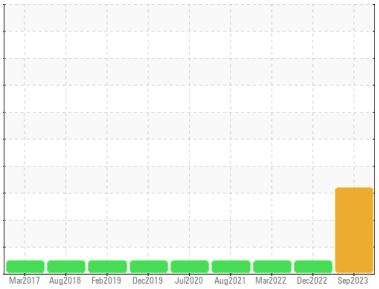
NORMAL

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

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
[W46760]
Machine Id
HITACHI 470 HCMJAA70K00030813
Component
Left Swing Drive Gear Case
Fluid
JOHN DEERE GL-5 80W90 (--- QTS)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
Gear wear is indicated.

Contamination
Appearance is unacceptable There is a moderate concentration of water present in the oil.

Fluid Condition
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR0180031**	JR0147338	JR0125426
Sample Date		Client Info		**26 Sep 2023**	12 Dec 2022	22 Mar 2022
Machine Age	hrs	Client Info		**12978**	11953	10953
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**24**	13	25
Iron	ppm	ASTM D5185m	>200	▲ **308**	50	35
Chromium	ppm	ASTM D5185m	>10	**4**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m		**<1**	2	<1
Lead	ppm	ASTM D5185m		**0**	0	0
Copper	ppm	ASTM D5185m		**<1**	<1	<1
Tin	ppm	ASTM D5185m		**0**	0	0
Antimony	ppm	ASTM D5185m	>5	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

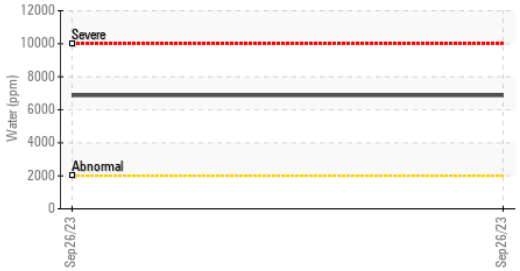
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**38**	82	103
Barium	ppm	ASTM D5185m		**2**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Manganese	ppm	ASTM D5185m		**5**	<1	<1
Magnesium	ppm	ASTM D5185m		**3**	1	<1
Calcium	ppm	ASTM D5185m		**33**	11	18
Phosphorus	ppm	ASTM D5185m		**611**	886	980
Zinc	ppm	ASTM D5185m		**22**	20	5
Sulfur	ppm	ASTM D5185m		**23154**	25056	24381

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**5**	4	2
Sodium	ppm	ASTM D5185m		**<1**	1	0
Potassium	ppm	ASTM D5185m	>20	**10**	0	1
Water	%	ASTM D6304	>0.2	▲ **0.687**	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ **6870**	---	---

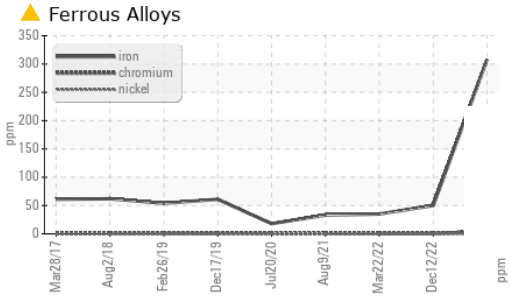
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt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

OIL ANALYSIS REPORT

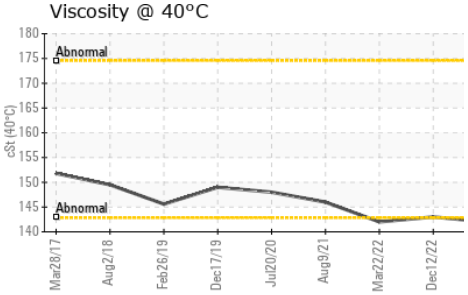
Water (KF)



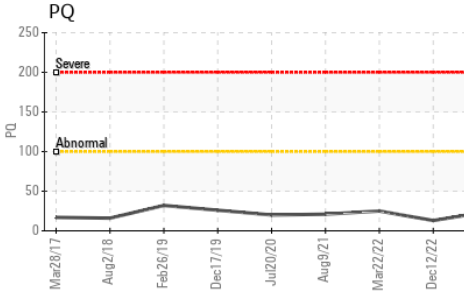
Ferrous Alloys



Viscosity @ 40°C



PQ

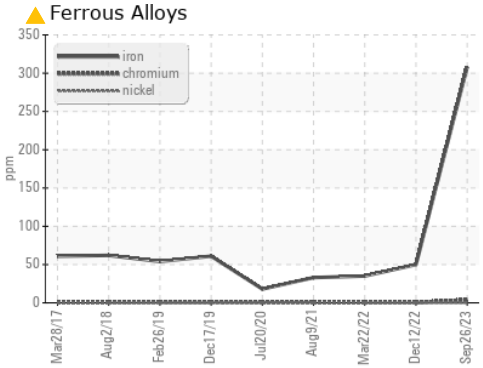


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**142**	143	142

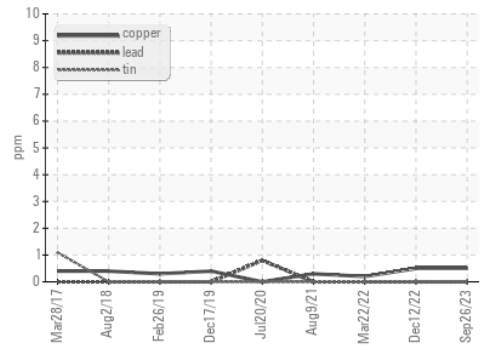
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

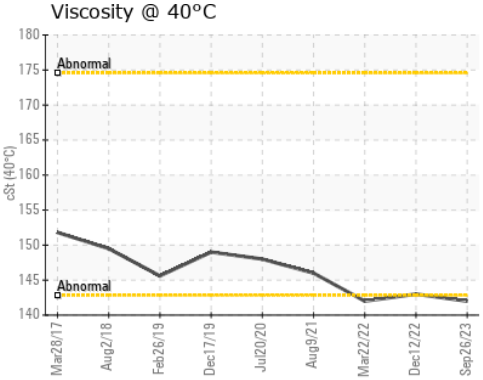
Ferrous Alloys



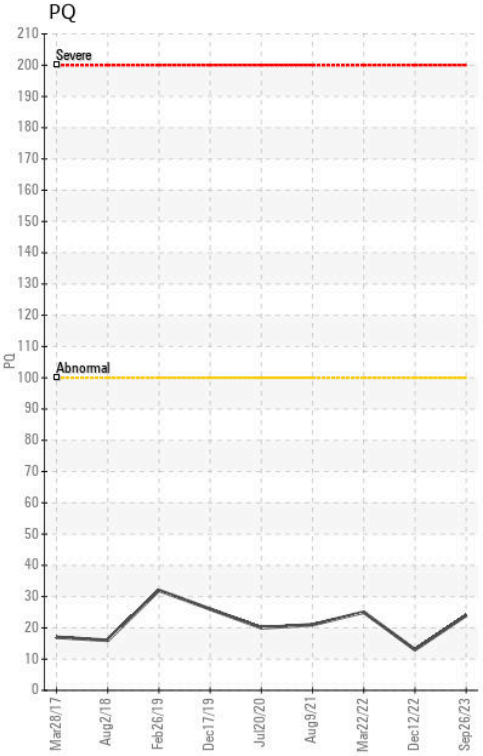
Non-ferrous Metals



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0180031 **Received** : 28 Sep 2023
Lab Number : 05963704 **Diagnosed** : 29 Sep 2023
Unique Number : 10670255 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: KF, PQ)

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)

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