



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 470 HCMJAA70K00030813
 Component
Right Swing Drive Gear Case
 Fluid
JOHN DEERE GL-5 80W90 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224441	JR0180030	JR0147339
Sample Date		Client Info		10 Jul 2024	26 Sep 2023	12 Dec 2022
Machine Age	hrs	Client Info		13968	12978	11953
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Gear wear is indicated. All other component wear rates are normal.

PQ		ASTM D8184		22	15	16
Iron	ppm	ASTM D5185m	>200	▲ 447	27	36
Chromium	ppm	ASTM D5185m	>10	5	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m		2	<1	2
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m		<1	<1	<1
Tin	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

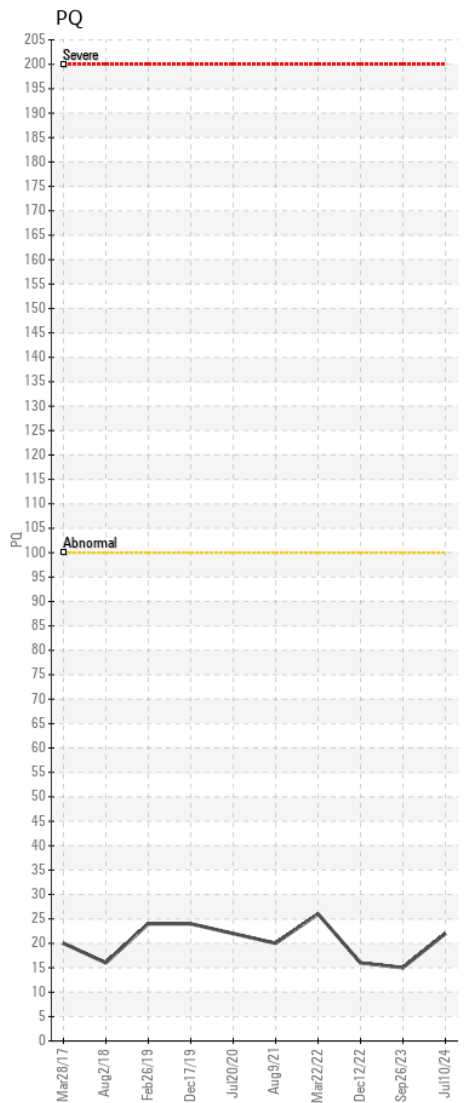
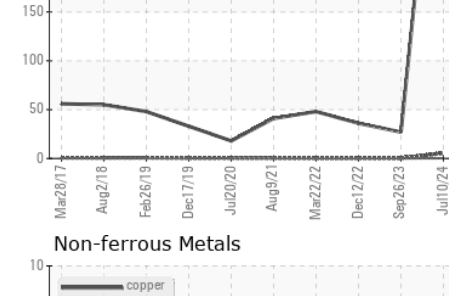
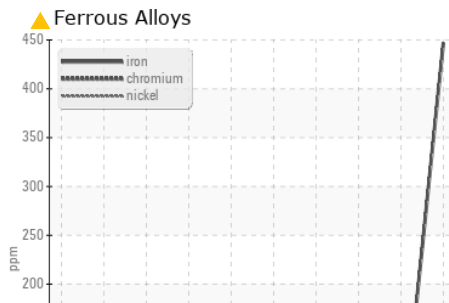
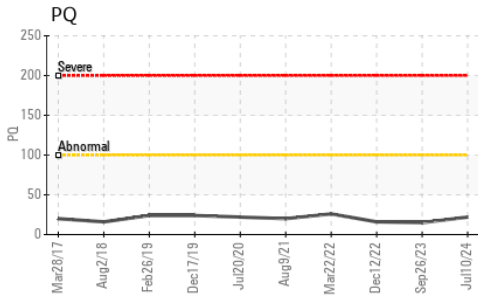
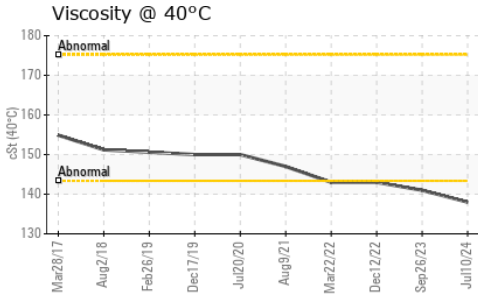
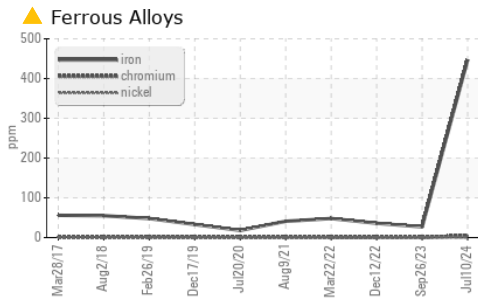
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m		9	4	7
Potassium	ppm	ASTM D5185m	>20	6	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	0	<1
Boron	ppm	ASTM D5185m		11	49	138
Barium	ppm	ASTM D5185m		2	2	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		6	<1	<1
Magnesium	ppm	ASTM D5185m		3	<1	2
Calcium	ppm	ASTM D5185m		6	15	16
Phosphorus	ppm	ASTM D5185m		1769	622	875
Zinc	ppm	ASTM D5185m		12	18	14
Sulfur	ppm	ASTM D5185m		25377	21635	25056
Visc @ 40°C	cSt	ASTM D445		138	141	143



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224441 **Received** : 11 Jul 2024
Lab Number : 06234072 **Tested** : 12 Jul 2024
Unique Number : 11122906 **Diagnosed** : 14 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)