



WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
[44632]
 Machine Id
HITACHI ZX210 1FFDCJ70LEE330546
 Component
Right Final Drive
 Fluid
JOHN DEERE GL-5 80W90 (6 QTS)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

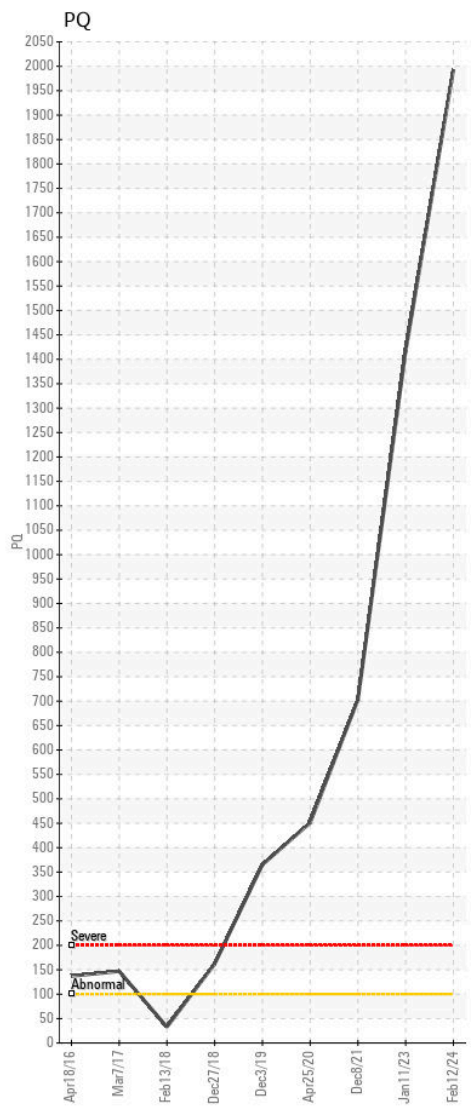
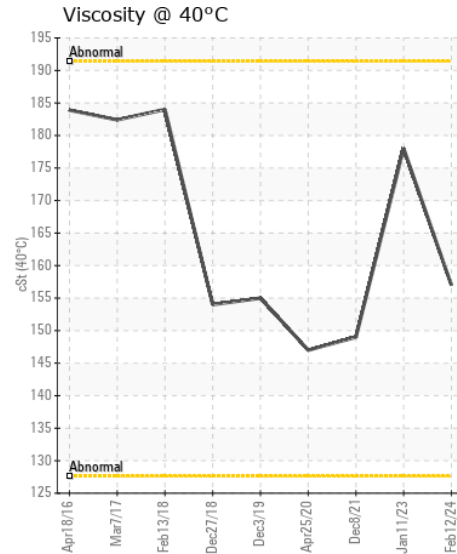
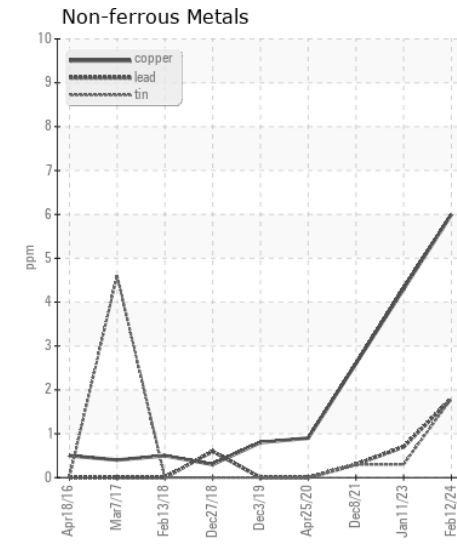
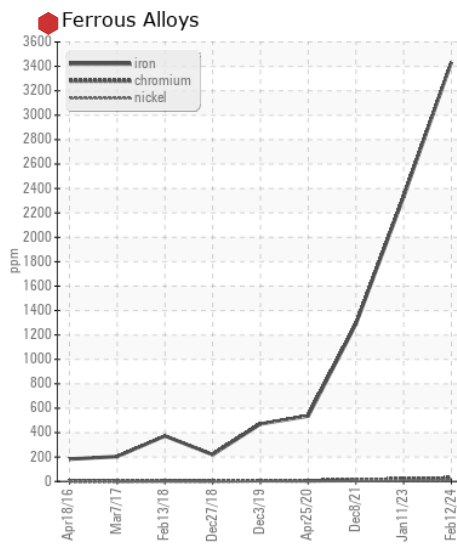
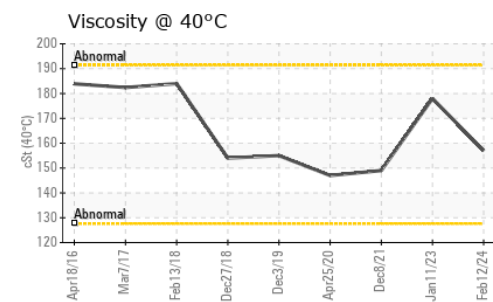
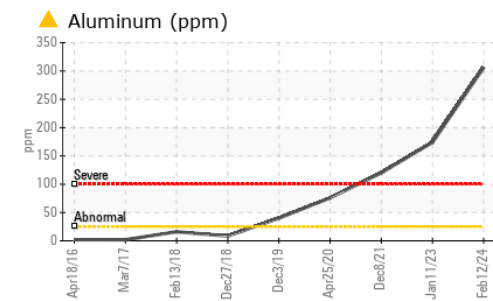
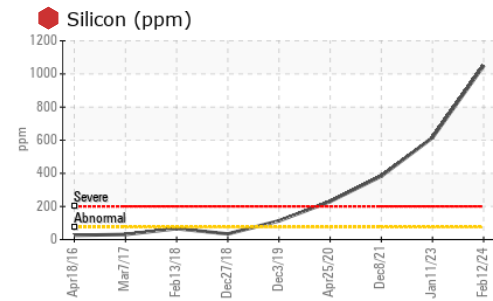
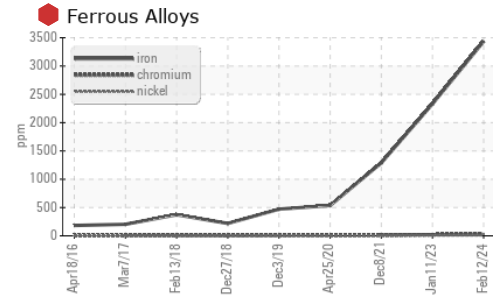
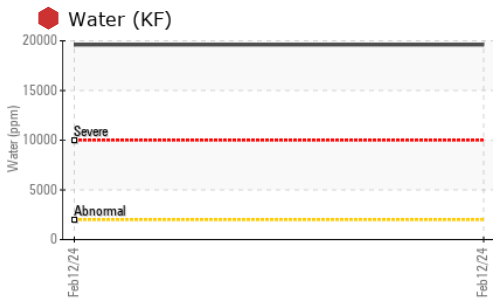
CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0203278	JR0157770	JR0110694
Sample Date		Client Info		12 Feb 2024	11 Jan 2023	08 Dec 2021
Machine Age	hrs	Client Info		7239	6545	5625
Oil Age	hrs	Client Info		4675	4901	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	None	Not Changd
Sample Status				SEVERE	SEVERE	SEVERE
PQ		ASTM D8184		1993	1417	703
Iron	ppm	ASTM D5185m	>500	3434	2331	1289
Chromium	ppm	ASTM D5185m	>10	28	20	11
Nickel	ppm	ASTM D5185m	>10	8	6	2
Titanium	ppm	ASTM D5185m		25	14	9
Silver	ppm	ASTM D5185m		<1	0	2
Aluminum	ppm	ASTM D5185m	>25	306	174	120
Lead	ppm	ASTM D5185m	>25	2	<1	<1
Copper	ppm	ASTM D5185m	>50	6	4	3
Tin	ppm	ASTM D5185m	>10	2	<1	<1
Vanadium	ppm	ASTM D5185m		2	<1	<1
White Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	1049	615	383
Potassium	ppm	ASTM D5185m	>20	96	47	35
Water	%	ASTM D6304	>0.2	1.96	---	---
ppm Water	ppm	ASTM D6304	>2000	19600	---	---
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	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG	NEG
Sodium	ppm	ASTM D5185m		38	21	17
Boron	ppm	ASTM D5185m		19	9	44
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		5	2	1
Manganese	ppm	ASTM D5185m		29	21	12
Magnesium	ppm	ASTM D5185m		99	43	29
Calcium	ppm	ASTM D5185m		123	81	69
Phosphorus	ppm	ASTM D5185m		2211	2118	2347
Zinc	ppm	ASTM D5185m		62	47	26
Sulfur	ppm	ASTM D5185m		26503	25056	23070
Visc @ 40°C	cSt	ASTM D445		157	178	149



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0203278 **Received** : 14 Feb 2024
Lab Number : 06089713 **Tested** : 16 Feb 2024
Unique Number : 10877158 **Diagnosed** : 16 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: KF, PQ)

JRE - MANASSAS PARK
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 F: (703)631-4715

Certificate L2367
 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)