



WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

[SOLSTICE HISTORIC]

Machine Id
JOHN DEERE 331G 1T0331GKVL371276

Component
Left Final Drive

Fluid
JOHN DEERE GL-5 80W90 (--- QTS)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221353	JR0159552	JR0112072
Sample Date		Client Info		25 Jun 2024	27 Feb 2023	01 Feb 2022
Machine Age	hrs	Client Info		1900	1227	531
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

Gear wear is indicated.

PQ		ASTM D8184	>1250	369	86	73
Iron	ppm	ASTM D5185m	>750	▲ 2361	▲ 1609	▲ 1119
Chromium	ppm	ASTM D5185m	>9	▲ 24	▲ 21	▲ 15
Nickel	ppm	ASTM D5185m	>10	15	11	7
Titanium	ppm	ASTM D5185m		20	5	3
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>40	● 152	● 39	29
Lead	ppm	ASTM D5185m	>15	<1	0	<1
Copper	ppm	ASTM D5185m	>40	3	2	2
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		2	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

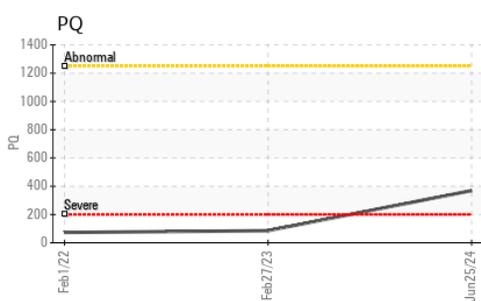
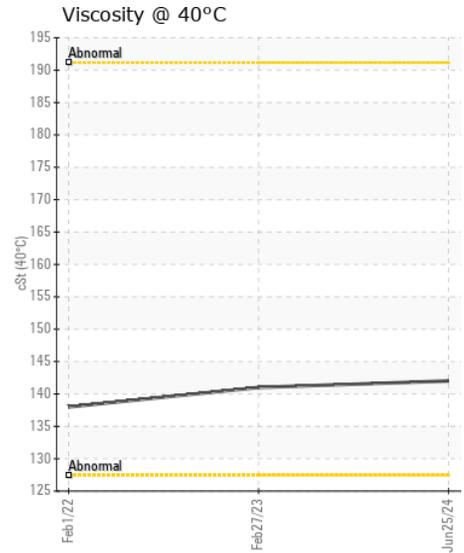
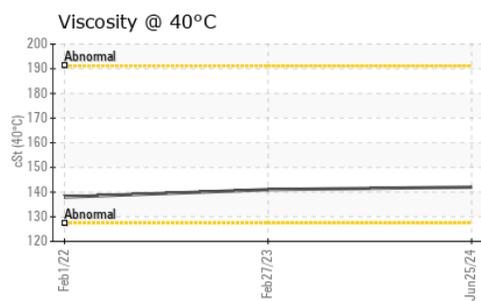
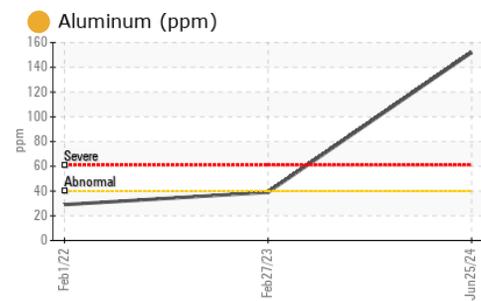
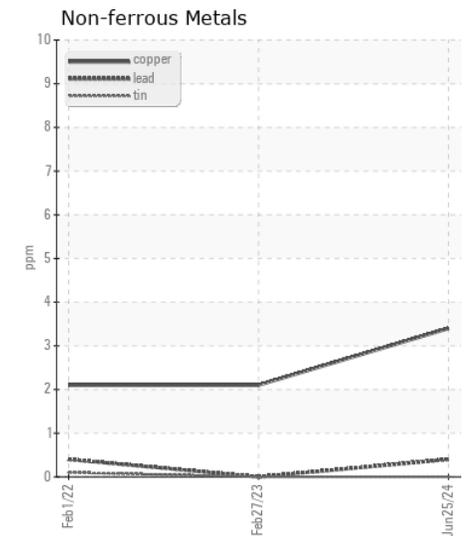
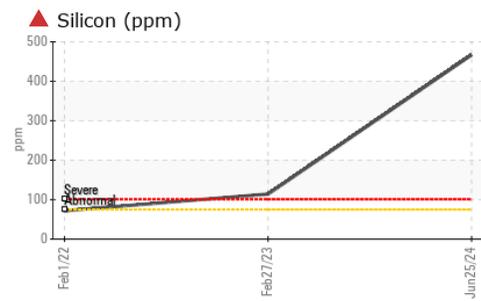
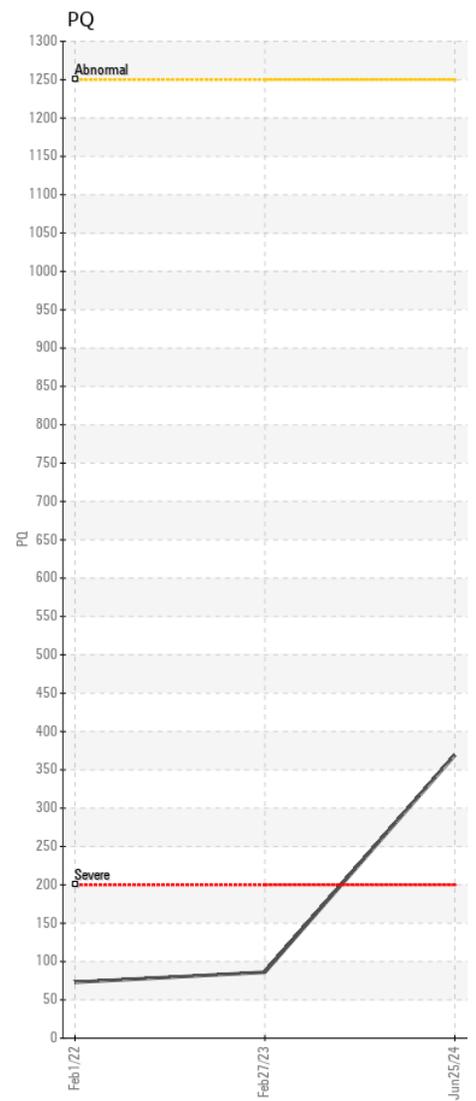
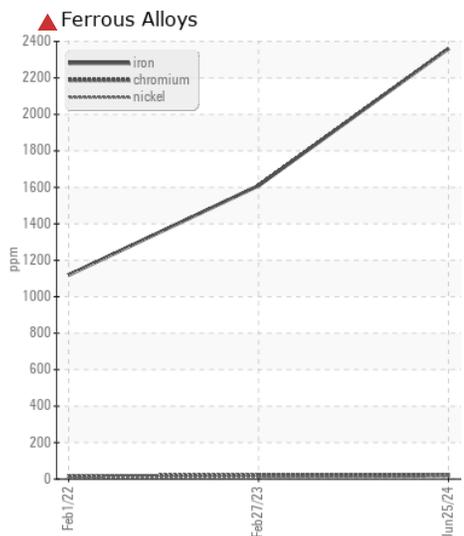
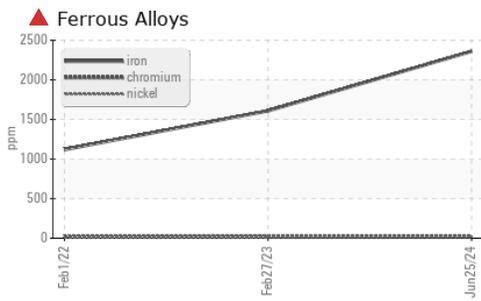
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 467	▲ 114	72
Potassium	ppm	ASTM D5185m	>20	43	25	27
Water		WC Method	>0.075	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	>0.075	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	11	8	12
Boron	ppm	ASTM D5185m		21	61	78
Barium	ppm	ASTM D5185m		24	42	69
Molybdenum	ppm	ASTM D5185m		4	3	2
Manganese	ppm	ASTM D5185m		21	16	12
Magnesium	ppm	ASTM D5185m		30	13	10
Calcium	ppm	ASTM D5185m		47	27	29
Phosphorus	ppm	ASTM D5185m		294	408	763
Zinc	ppm	ASTM D5185m		15	34	26
Sulfur	ppm	ASTM D5185m		16160	21465	19335
Visc @ 40°C	cSt	ASTM D445		142	141	138



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0221353 **Received** : 02 Jul 2024
Lab Number : 06226501 **Tested** : 03 Jul 2024
Unique Number : 11109994 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PQ)

JRE - STEPHENSON
 245 YARDMASTER COURT
 STEPHENSON, VA
 US 22656-1761
 Contact: PHIL DAUGHERTY
 pdaugherty@jamesriverequipment.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)

T: x:
 F: (540)693-2588