



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXCLF705871

Component
Rear Differential

Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0202254	JR0186050	JR0168070
Sample Date		Client Info		12 Feb 2024	09 Oct 2023	05 May 2023
Machine Age	hrs	Client Info		2996	2554	2300
Oil Age	hrs	Client Info		2996	2554	2300
Filter Age	hrs	Client Info		0	0	1000
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		14	116	108
Iron	ppm	ASTM D5185m	>500	20	141	206
Chromium	ppm	ASTM D5185m	>10	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	<1	3	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		2	0	0
Aluminum	ppm	ASTM D5185m	>25	1	0	0
Lead	ppm	ASTM D5185m	>25	0	0	8
Copper	ppm	ASTM D5185m	>100	4	▲ 113	▲ 105
Tin	ppm	ASTM D5185m	>10	<1	3	3
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

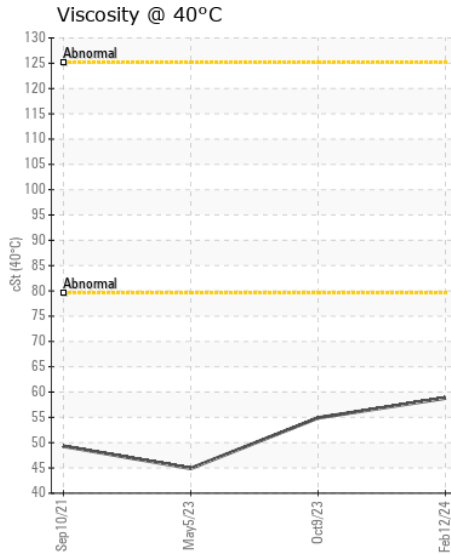
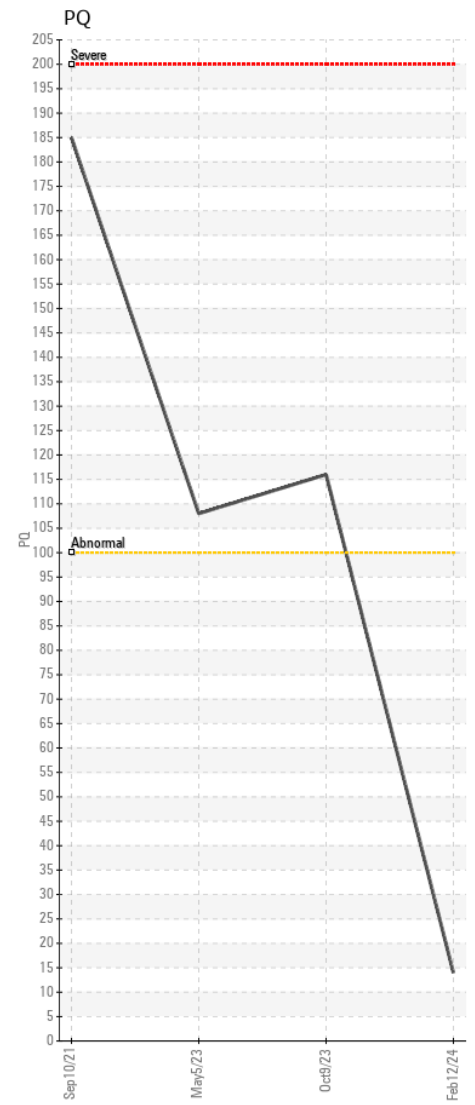
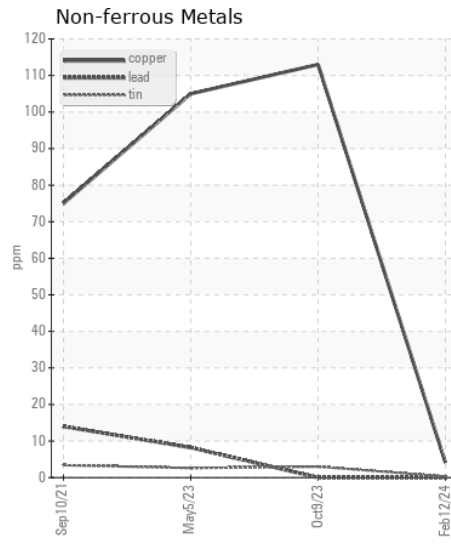
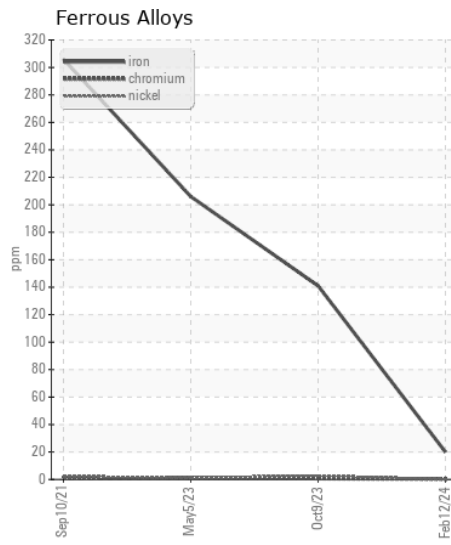
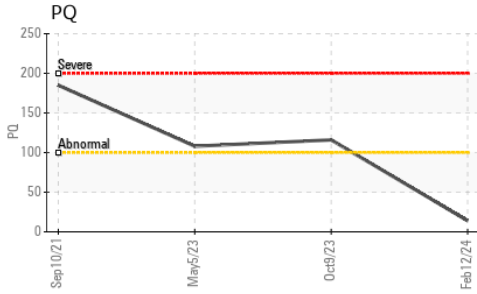
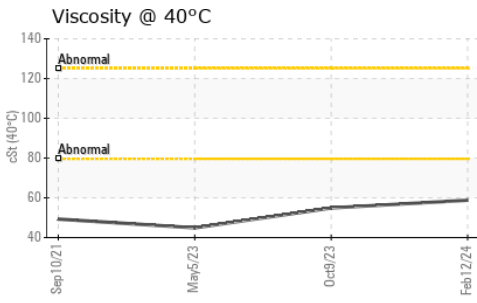
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	5	10	9
Potassium	ppm	ASTM D5185m	>20	2	2	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	LIGHT	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	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	0	3
Boron	ppm	ASTM D5185m		3	6	19
Barium	ppm	ASTM D5185m		11	<1	0
Molybdenum	ppm	ASTM D5185m		<1	2	2
Manganese	ppm	ASTM D5185m		<1	6	7
Magnesium	ppm	ASTM D5185m		86	94	82
Calcium	ppm	ASTM D5185m		2791	3378	3360
Phosphorus	ppm	ASTM D5185m		854	1027	997
Zinc	ppm	ASTM D5185m		1064	1297	1264
Sulfur	ppm	ASTM D5185m		2412	4566	4003
Visc @ 40°C	cSt	ASTM D445		58.8	54.9	44.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0202254 **Received** : 13 Feb 2024
Lab Number : 06087663 **Tested** : 14 Feb 2024
Unique Number : 10875108 **Diagnosed** : 14 Feb 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
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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)

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