



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXAMF708863
Component
Front Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (39 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218496	JR0211100	JR0199051
Sample Date		Client Info		09 Jul 2024	25 Mar 2024	04 Jan 2024
Machine Age	hrs	Client Info		7628	7036	6583
Oil Age	hrs	Client Info		7175	453	2000
Filter Age	hrs	Client Info		7175	453	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		50	52	51
Iron	ppm	ASTM D5185m	>500	113	97	163
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	1	1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	1
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>100	44	29	63
Tin	ppm	ASTM D5185m	>10	2	2	3
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

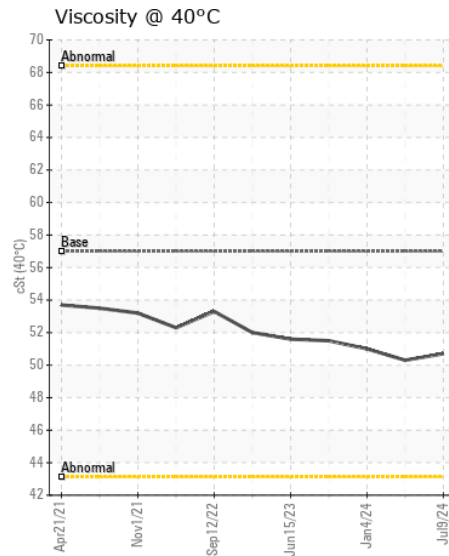
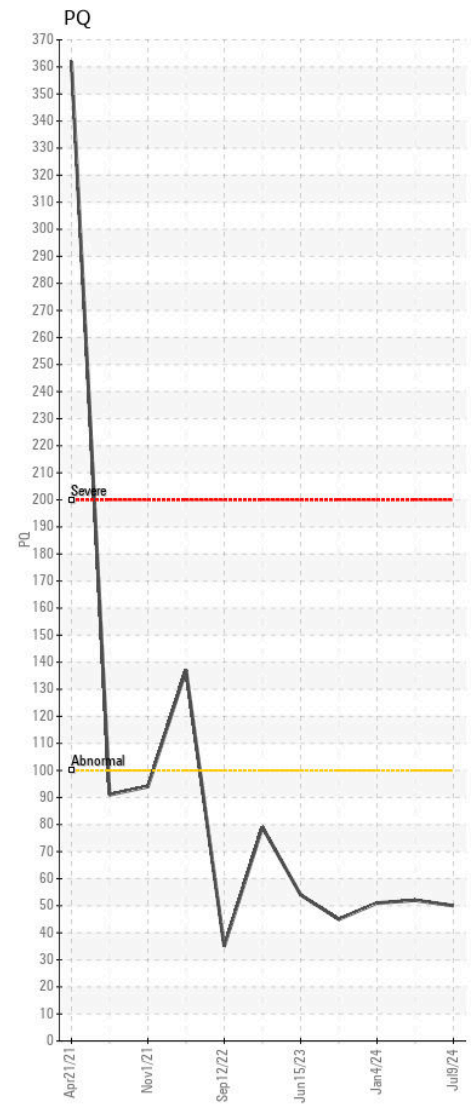
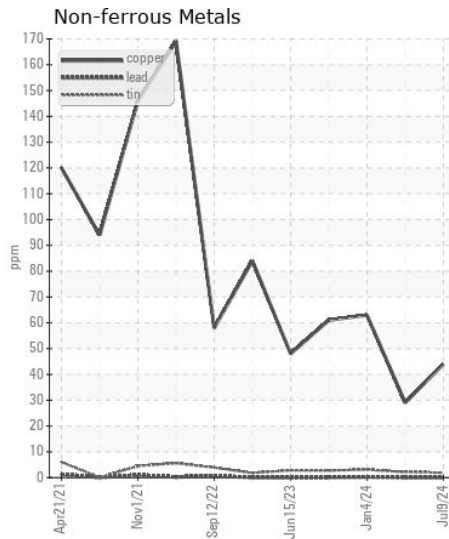
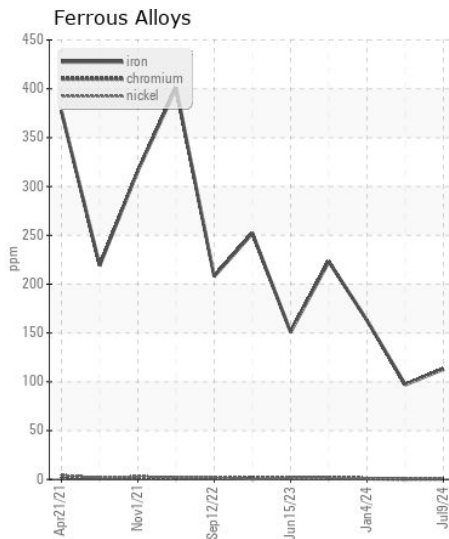
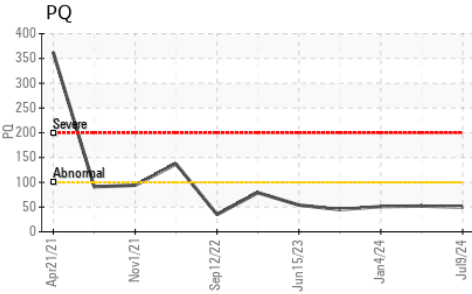
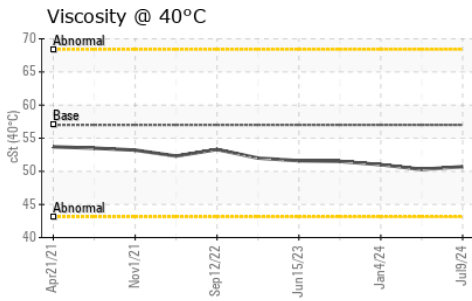
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	9	11	11
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water		WC Method	>.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	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		0	3	2
Boron	ppm	ASTM D5185m	6	13	9	11
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	8	7	8
Manganese	ppm	ASTM D5185m		4	3	6
Magnesium	ppm	ASTM D5185m	145	119	119	124
Calcium	ppm	ASTM D5185m	3570	3561	3239	3325
Phosphorus	ppm	ASTM D5185m	1290	1048	1000	1055
Zinc	ppm	ASTM D5185m	1640	1286	1201	1221
Sulfur	ppm	ASTM D5185m		3566	4130	3498
Visc @ 40°C	cSt	ASTM D445	57.0	50.7	50.3	51.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218496 **Received** : 11 Jul 2024
Lab Number : 06233486 **Tested** : 12 Jul 2024
Unique Number : 11116979 **Diagnosed** : 12 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

JRE - MANASSAS PARK
 9107 OWENS DRIVE
 MANASSAS PARK, VA
 US 20111

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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)