



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXELF705139
Component
Center Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

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		JR0170807	JR0162365	JR0133814
Sample Date		Client Info		25 Aug 2023	30 May 2023	04 Jul 2022
Machine Age	hrs	Client Info		3538	2994	2457
Oil Age	hrs	Client Info		3001	2994	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Not Changed	Not Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Bearing and/or bushing wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		208	10	12
Iron	ppm	ASTM D5185m	>500	416	1	2
Chromium	ppm	ASTM D5185m	>10	1	0	0
Nickel	ppm	ASTM D5185m	>10	3	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	5	<1	2
Lead	ppm	ASTM D5185m	>25	1	<1	<1
Copper	ppm	ASTM D5185m	>100	▲ 133	<1	0
Tin	ppm	ASTM D5185m	>10	▲ 4	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

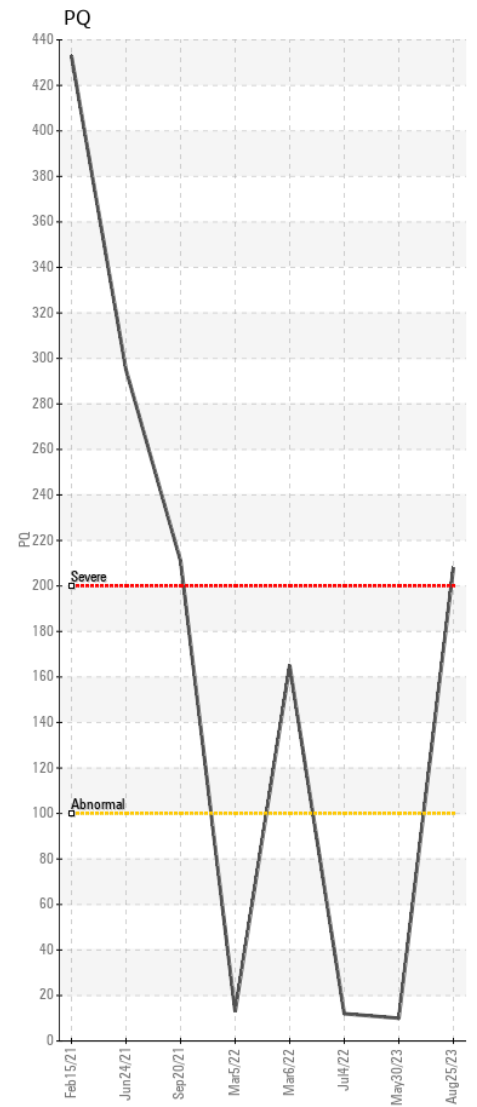
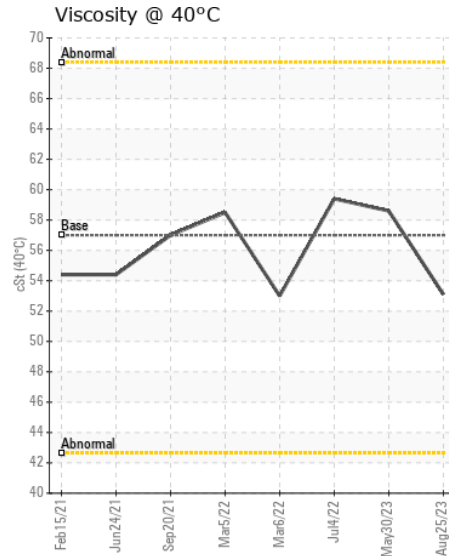
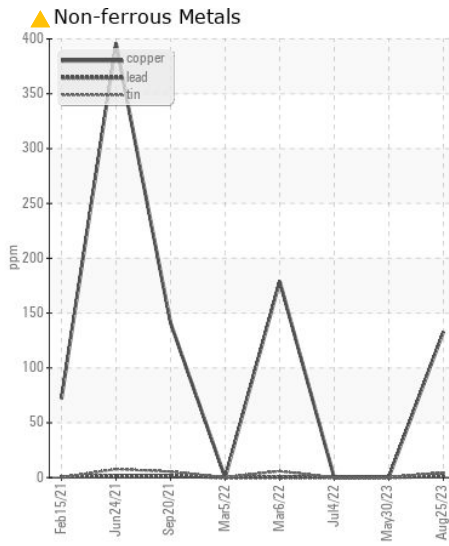
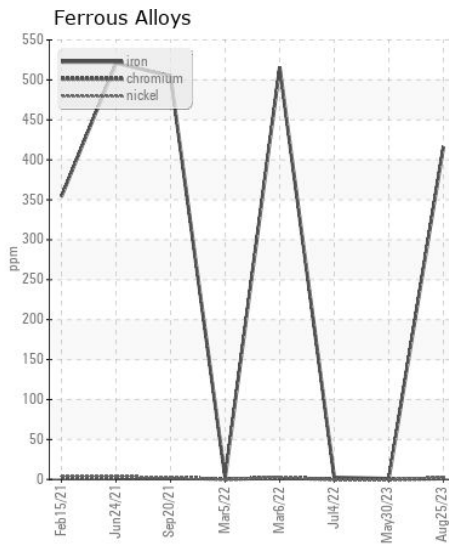
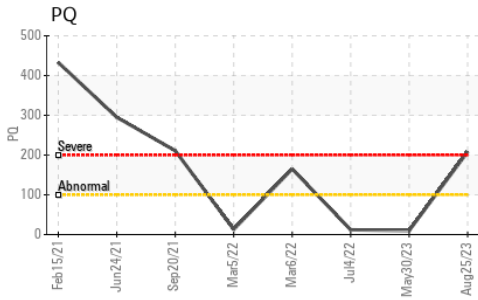
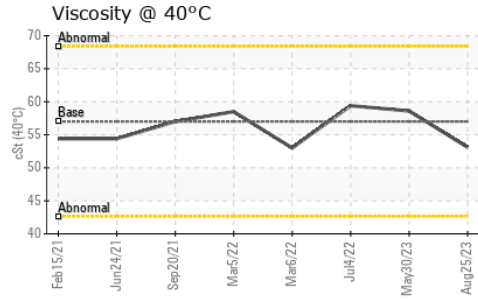
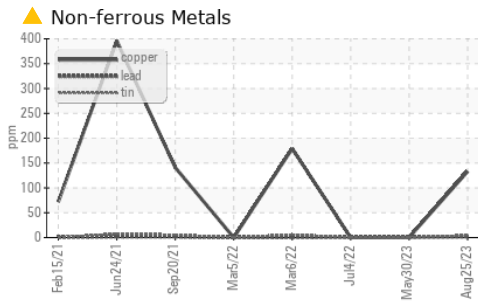
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	10	6	6
Potassium	ppm	ASTM D5185m	>20	<1	<1	1
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	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	>.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		3	1	0
Boron	ppm	ASTM D5185m	6	8	0	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	3	<1	<1
Manganese	ppm	ASTM D5185m		9	<1	0
Magnesium	ppm	ASTM D5185m	145	98	99	95
Calcium	ppm	ASTM D5185m	3570	3425	3427	3378
Phosphorus	ppm	ASTM D5185m	1290	1006	968	978
Zinc	ppm	ASTM D5185m	1640	1260	1217	1197
Sulfur	ppm	ASTM D5185m		4134	3991	4072
Visc @ 40°C	cSt	ASTM D445	57.0	53.1	58.6	59.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0170807 **Received** : 30 Aug 2023
Lab Number : 05939186 **Tested** : 01 Sep 2023
Unique Number : 10629798 **Diagnosed** : 01 Sep 2023 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

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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