



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXCMF712451
Component
Center Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0219649	JR0181061	JR0125143
Sample Date		Client Info		08 Jul 2024	21 Nov 2023	08 Mar 2022
Machine Age	hrs	Client Info		2490	1969	463
Oil Age	hrs	Client Info		521	0	463
Filter Age	hrs	Client Info		0	0	463
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		66	48	178
Iron	ppm	ASTM D5185m	>500	142	238	257
Chromium	ppm	ASTM D5185m	>10	1	2	3
Nickel	ppm	ASTM D5185m	>10	2	3	4
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	3	2	4
Lead	ppm	ASTM D5185m	>25	6	▲ 23	7
Copper	ppm	ASTM D5185m	>100	185	▲ 321	108
Tin	ppm	ASTM D5185m	>10	7	▲ 11	7
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

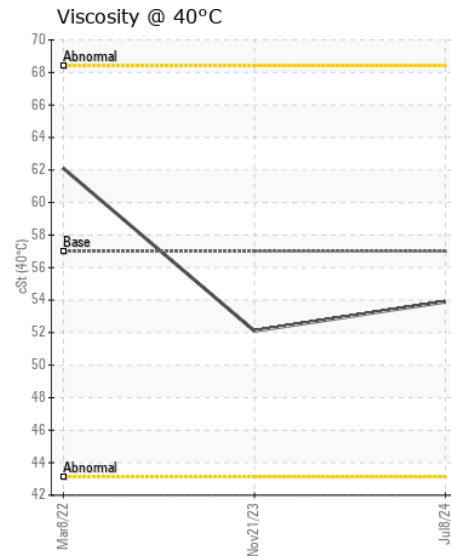
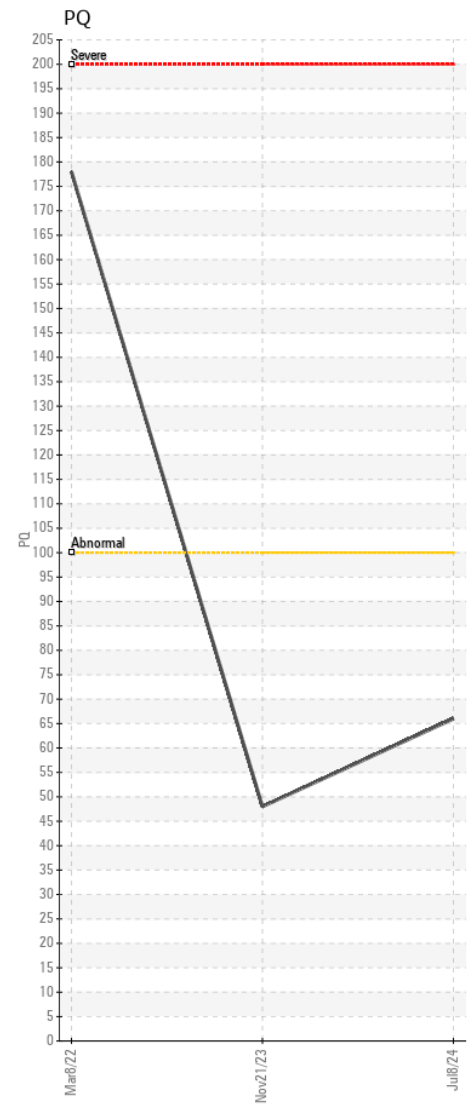
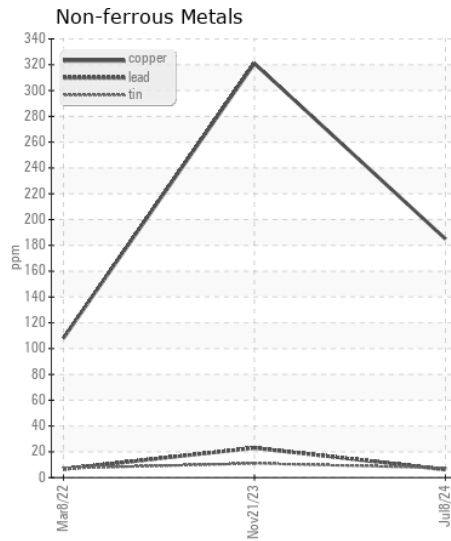
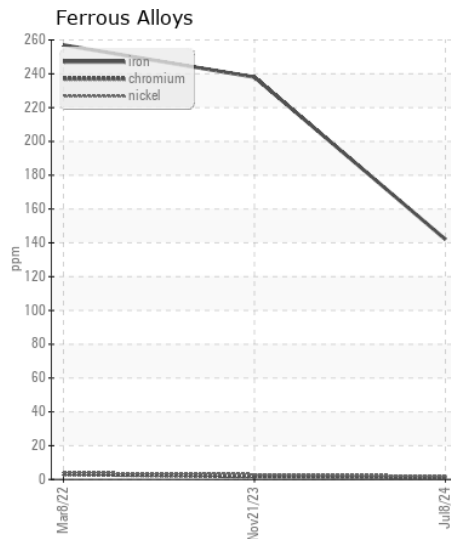
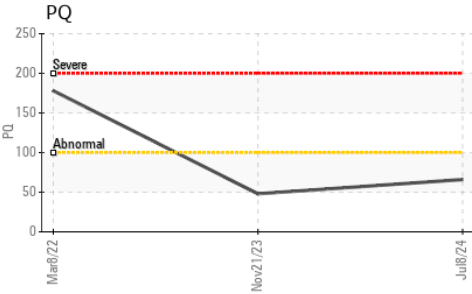
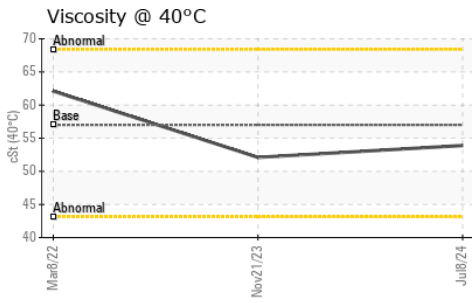
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	13	9	17
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>.2	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	>.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	8	17
Boron	ppm	ASTM D5185m	6	12	15	96
Barium	ppm	ASTM D5185m	0	1	<1	0
Molybdenum	ppm	ASTM D5185m	0	4	<1	<1
Manganese	ppm	ASTM D5185m		3	16	61
Magnesium	ppm	ASTM D5185m	145	108	90	25
Calcium	ppm	ASTM D5185m	3570	3437	3231	3537
Phosphorus	ppm	ASTM D5185m	1290	1045	1022	1172
Zinc	ppm	ASTM D5185m	1640	1250	1241	1413
Sulfur	ppm	ASTM D5185m		4209	3213	3332
Visc @ 40°C	cSt	ASTM D445	57.0	53.9	52.1	62.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0219649 **Received** : 11 Jul 2024
Lab Number : 06233497 **Tested** : 15 Jul 2024
Unique Number : 11116990 **Diagnosed** : 15 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)