



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXVMF712829
Component
Rear Axle
Fluid
JOHN DEERE HY-GARD HYD/TRANS (36 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218495	JR0211097	JR0199498
Sample Date		Client Info		09 Jul 2024	01 Apr 2024	04 Jan 2024
Machine Age	hrs	Client Info		5727	5087	4470
Oil Age	hrs	Client Info		5110	617	2749
Filter Age	hrs	Client Info		5110	0	1000
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		44	51	74
Iron	ppm	ASTM D5185m	>1501	90	80	191
Chromium	ppm	ASTM D5185m	>11	<1	<1	1
Nickel	ppm	ASTM D5185m	>10	2	2	4
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>21	2	1	1
Lead	ppm	ASTM D5185m	>51	8	6	17
Copper	ppm	ASTM D5185m	>101	85	49	147
Tin	ppm	ASTM D5185m	>10	3	3	6
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

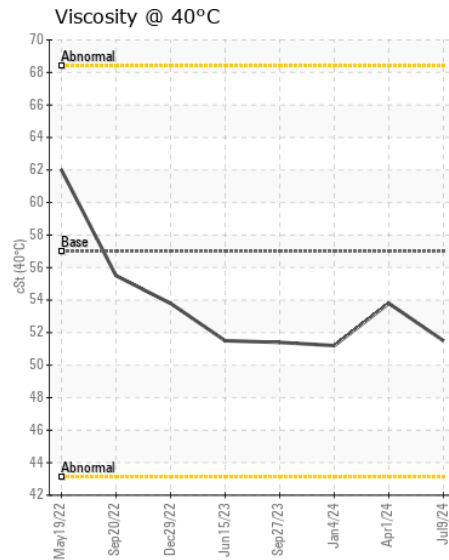
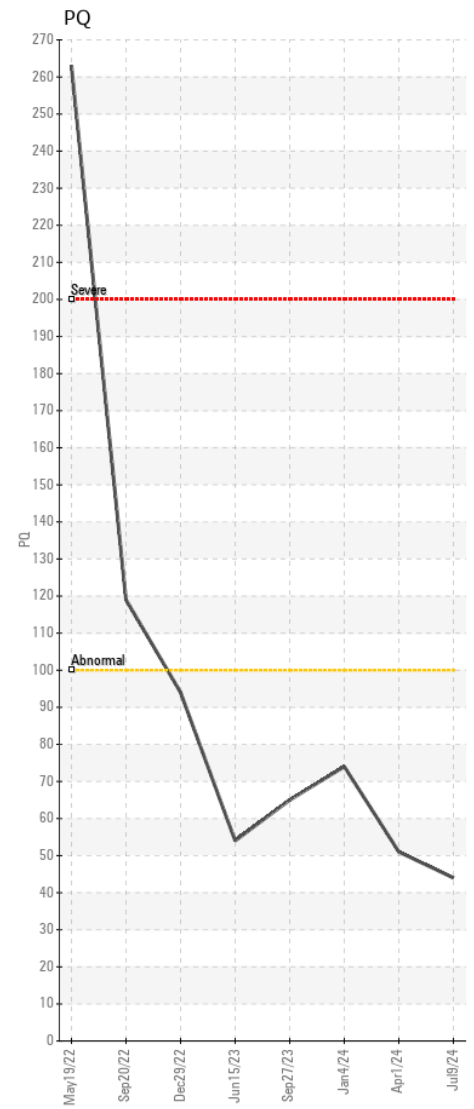
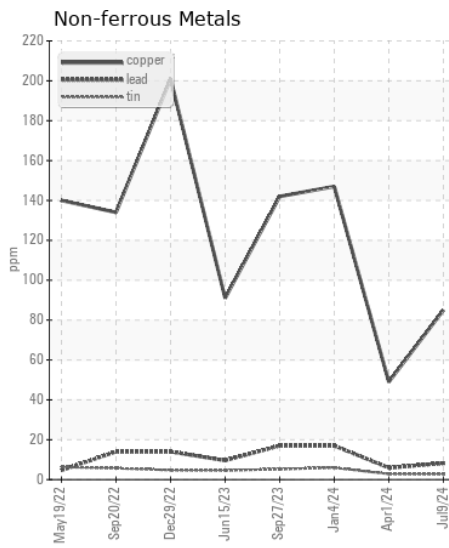
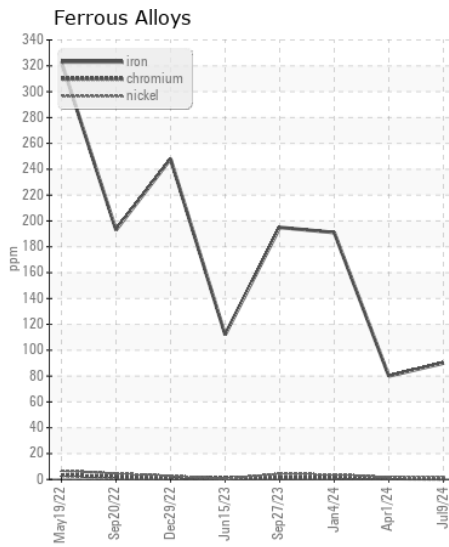
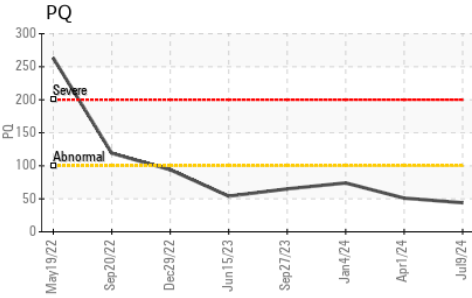
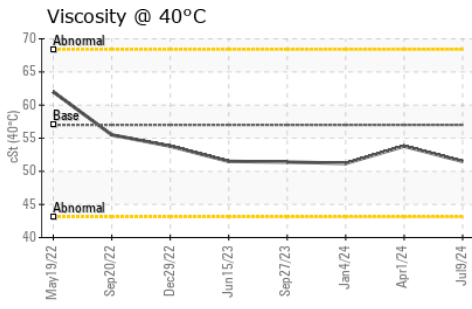
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	8	6	11
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>0.1	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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	0	3	5
Boron	ppm	ASTM D5185m	6	14	11	19
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	6	5	7
Manganese	ppm	ASTM D5185m		4	4	13
Magnesium	ppm	ASTM D5185m	145	114	115	124
Calcium	ppm	ASTM D5185m	3570	3422	3244	3346
Phosphorus	ppm	ASTM D5185m	1290	1035	965	1082
Zinc	ppm	ASTM D5185m	1640	1256	1210	1257
Sulfur	ppm	ASTM D5185m		4231	4158	3756
Visc @ 40°C	cSt	ASTM D445	57.0	51.5	53.8	51.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0218495

Lab Number : 06233475

Unique Number : 11116968

Test Package : CONST (Additional Tests: PQ)

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 12 Jul 2024 - Wes Davis

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)