



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[W68912]
 Machine Id
JOHN DEERE 310E 1DW310EXPJF691440
 Component
Front Differential
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W68912)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205910	JR0206375	JR0171253
Sample Date		Client Info		16 Jul 2024	20 Mar 2024	30 Jun 2023
Machine Age	hrs	Client Info		5478	4961	4478
Oil Age	hrs	Client Info		517	483	2874
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Not Changd
Filter Changed		Client Info		N/A	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		280	203	210
Iron	ppm	ASTM D5185m	>500	838	443	445
Chromium	ppm	ASTM D5185m	>10	2	1	2
Nickel	ppm	ASTM D5185m	>10	<1	2	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	2
Lead	ppm	ASTM D5185m	>25	10	0	<1
Copper	ppm	ASTM D5185m	>100	142	130	96
Tin	ppm	ASTM D5185m	>10	5	5	4
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

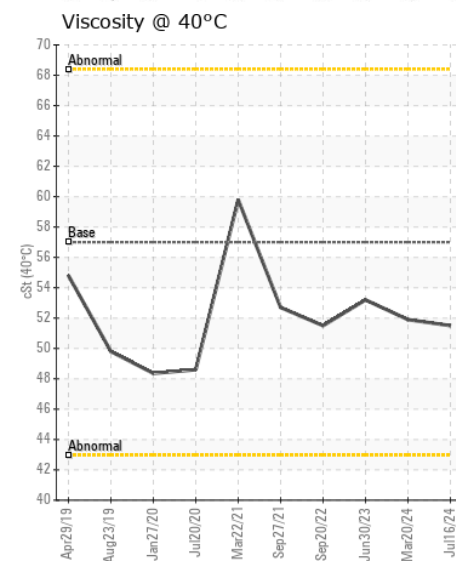
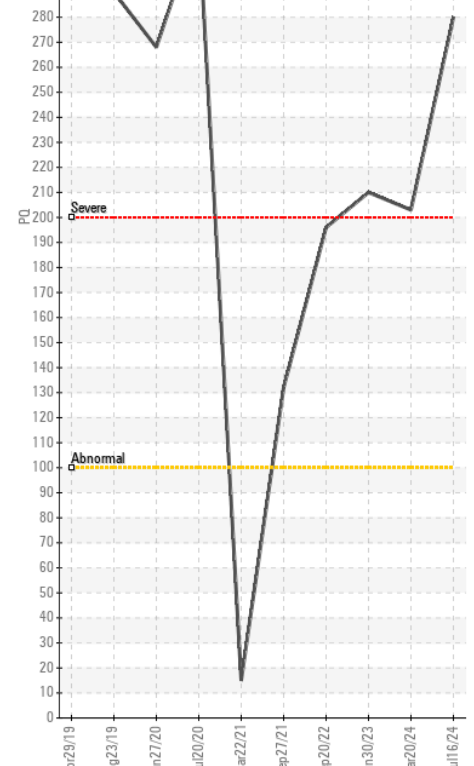
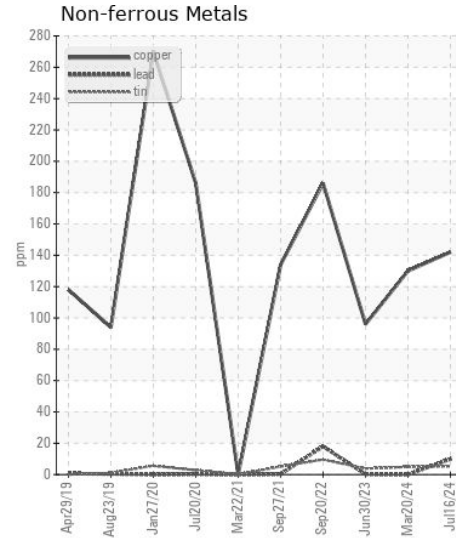
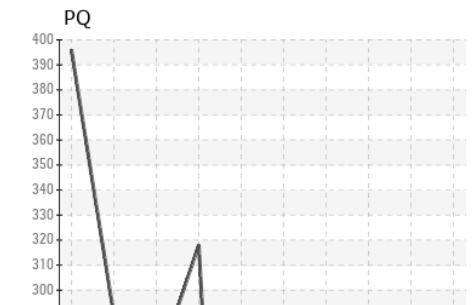
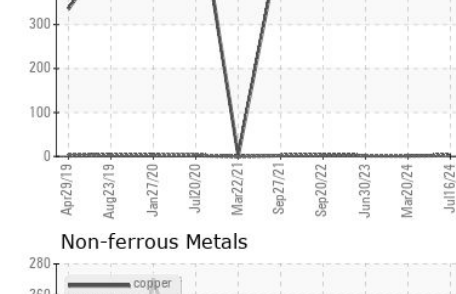
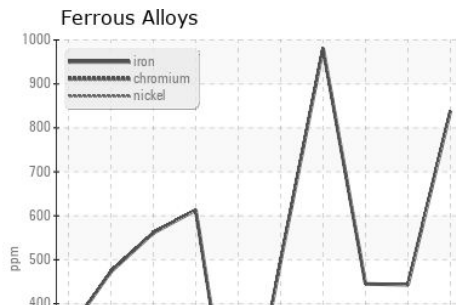
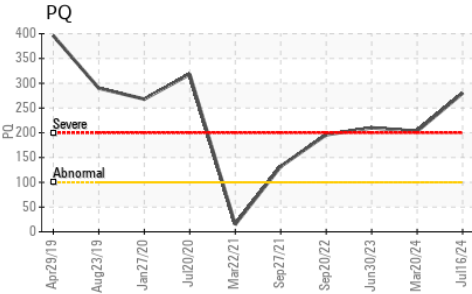
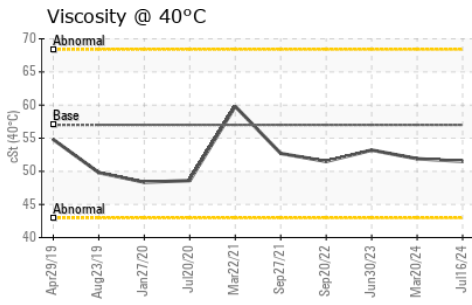
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>75	11	10	11
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	NONE	LIGHT
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 fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	1	0
Boron	ppm	ASTM D5185m	6	4	4	8
Barium	ppm	ASTM D5185m	0	<1	<1	3
Molybdenum	ppm	ASTM D5185m	0	2	1	3
Manganese	ppm	ASTM D5185m		9	5	7
Magnesium	ppm	ASTM D5185m	145	94	103	99
Calcium	ppm	ASTM D5185m	3570	3456	3426	3577
Phosphorus	ppm	ASTM D5185m	1290	994	1024	1061
Zinc	ppm	ASTM D5185m	1640	1158	1247	1274
Sulfur	ppm	ASTM D5185m		4154	3942	4287
Visc @ 40°C	cSt	ASTM D445	57.0	51.5	51.9	53.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205910 **Received** : 18 Jul 2024
Lab Number : 06240556 **Tested** : 19 Jul 2024
Unique Number : 11129390 **Diagnosed** : 20 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: PQ)

JRE - CHARLOTTE
 9550 STATESVILLE ROAD
 CHARLOTTE, NC
 US 28269
 Contact: CHARLOTTE SHOP
 myoung@jamesriverequipment.com
 T: (704)597-0211
 F: (704)596-6198

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)