



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

[48107]

Machine Id

JOHN DEERE 310E 1DW310EXJPF716428

Component

Rear 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		JR0225772	JR0211180	JR0192312
Sample Date		Client Info		16 Jul 2024	10 Apr 2024	08 Nov 2023
Machine Age	hrs	Client Info		2465	1950	1475
Oil Age	hrs	Client Info		515	917	955
Filter Age	hrs	Client Info		0	917	0
Oil Changed		Client Info		Not Changed	Changed	N/A
Filter Changed		Client Info		Not Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		48	183	172
Iron	ppm	ASTM D5185m	>500	93	283	222
Chromium	ppm	ASTM D5185m	>10	<1	3	2
Nickel	ppm	ASTM D5185m	>10	3	8	6
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	3	2	2
Lead	ppm	ASTM D5185m	>25	8	15	15
Copper	ppm	ASTM D5185m	>100	67	185	125
Tin	ppm	ASTM D5185m	>10	3	9	8
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

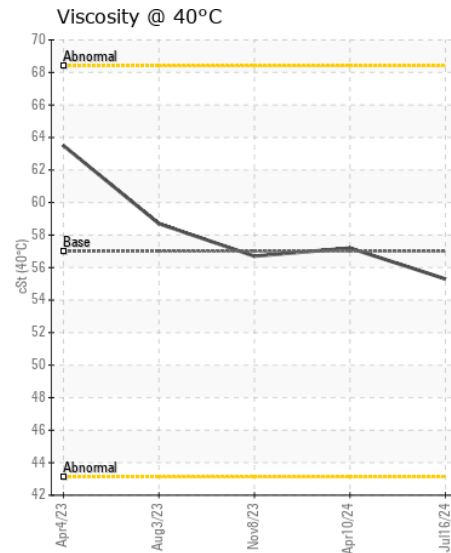
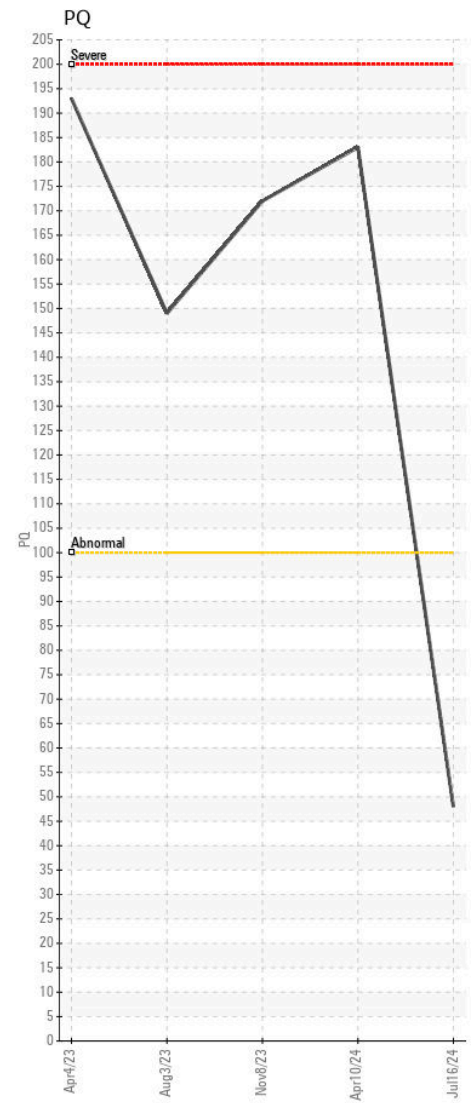
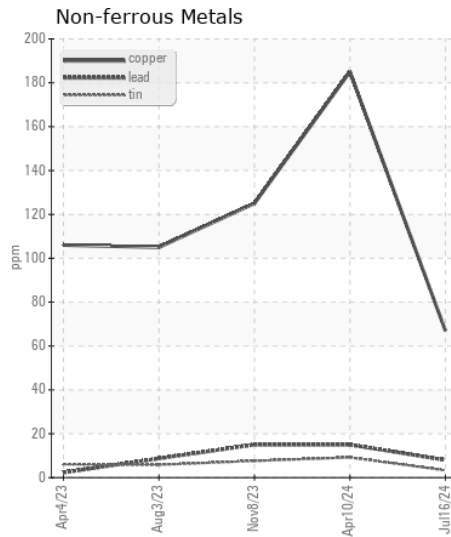
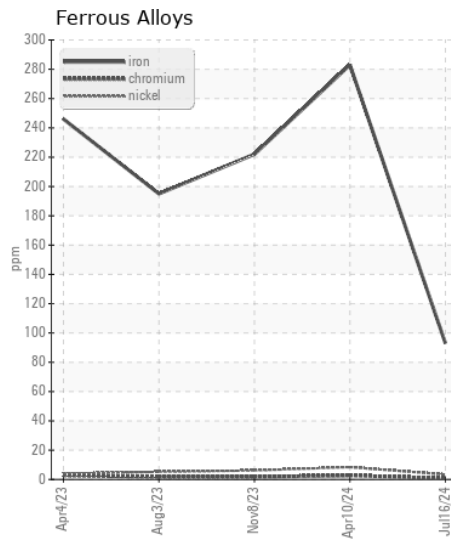
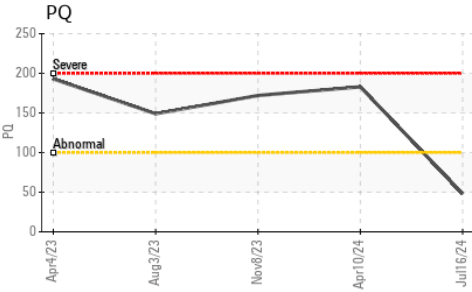
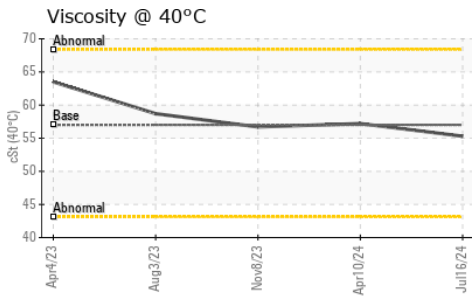
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	7	13	11
Potassium	ppm	ASTM D5185m	>20	2	2	1
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.

Sodium	ppm	ASTM D5185m		0	9	9
Boron	ppm	ASTM D5185m	6	20	53	45
Barium	ppm	ASTM D5185m	0	<1	2	0
Molybdenum	ppm	ASTM D5185m	0	9	7	4
Manganese	ppm	ASTM D5185m		9	32	28
Magnesium	ppm	ASTM D5185m	145	116	87	96
Calcium	ppm	ASTM D5185m	3570	3367	3526	3458
Phosphorus	ppm	ASTM D5185m	1290	893	1204	1087
Zinc	ppm	ASTM D5185m	1640	1258	1273	1380
Sulfur	ppm	ASTM D5185m		3461	4468	3491
Visc @ 40°C	cSt	ASTM D445	57.0	55.3	57.2	56.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0225772 **Received** : 17 Jul 2024
Lab Number : 06239412 **Tested** : 18 Jul 2024
Unique Number : 11128246 **Diagnosed** : 18 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)