



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXCKF697812
Component
Front 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		JR0213372	JR0187327	JR0145730
Sample Date		Client Info		11 May 2024	23 Oct 2023	27 Dec 2022
Machine Age	hrs	Client Info		3542	3001	2190
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		14	112	272
Iron	ppm	ASTM D5185m	>500	2	444	▲ 548
Chromium	ppm	ASTM D5185m	>10	<1	2	3
Nickel	ppm	ASTM D5185m	>10	0	3	3
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	4
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>100	<1	244	▲ 340
Tin	ppm	ASTM D5185m	>10	<1	6	6
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

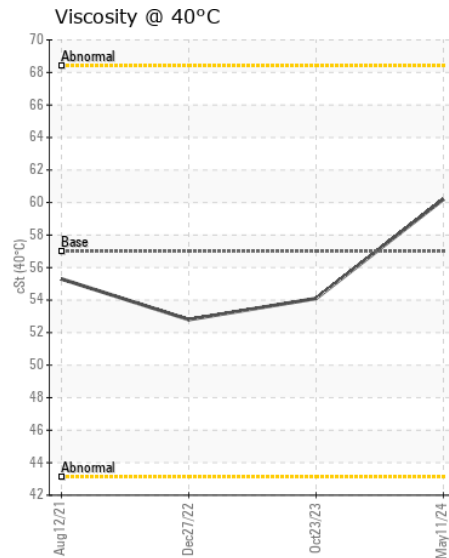
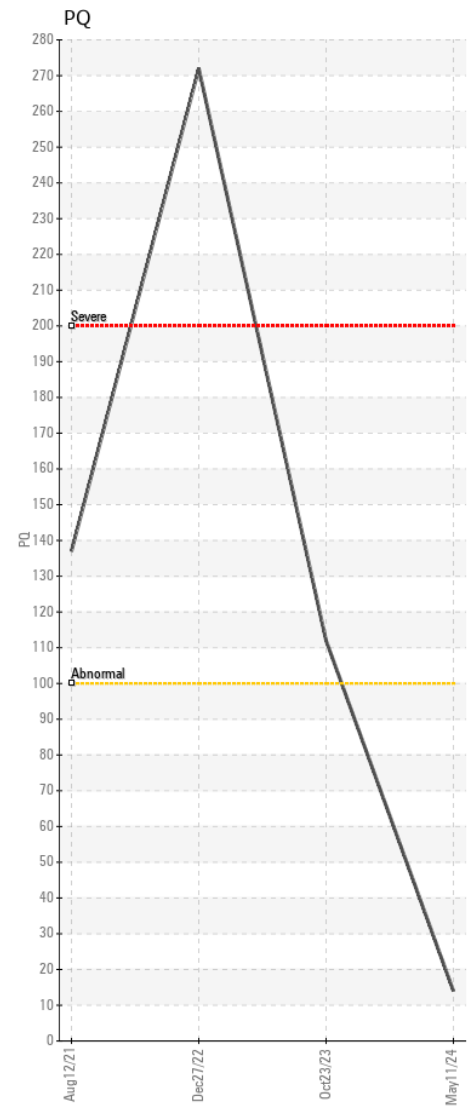
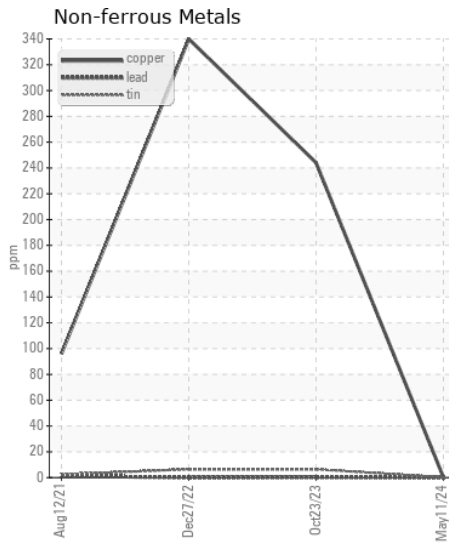
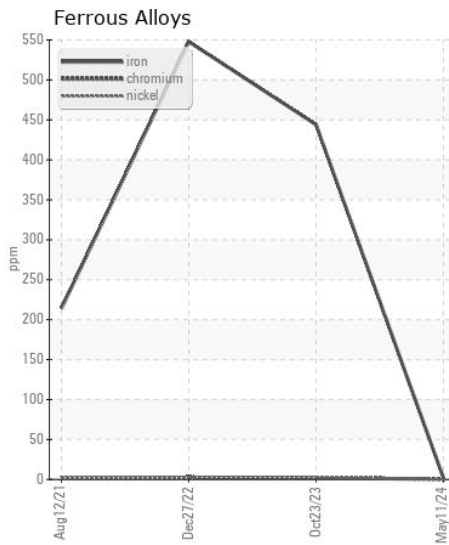
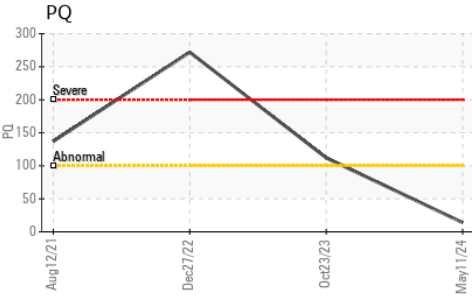
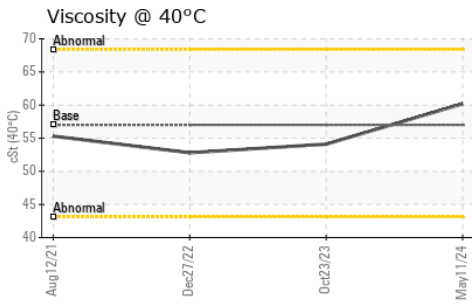
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	7	12	14
Potassium	ppm	ASTM D5185m	>20	2	1	2
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		2	3	4
Boron	ppm	ASTM D5185m	6	19	20	18
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	0	15	13	8
Manganese	ppm	ASTM D5185m		0	13	21
Magnesium	ppm	ASTM D5185m	145	171	137	105
Calcium	ppm	ASTM D5185m	3570	4348	3304	3458
Phosphorus	ppm	ASTM D5185m	1290	1476	1064	1042
Zinc	ppm	ASTM D5185m	1640	1630	1322	1278
Sulfur	ppm	ASTM D5185m		4966	3647	4482
Visc @ 40°C	cSt	ASTM D445	57.0	60.2	54.1	52.8



Certificate L2367

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

Sample No. : JR0213372

Lab Number : 06175786

Unique Number : 11021839

Test Package : CONST (Additional Tests: PQ)

Received : 10 May 2024

Tested : 13 May 2024

Diagnosed : 13 May 2024 - Wes Davis

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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