



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXVMF712233
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		JR0213760	JR0122265	JR0114163
Sample Date		Client Info		21 May 2024	31 May 2022	11 Jan 2022
Machine Age	hrs	Client Info		3934	955	484
Oil Age	hrs	Client Info		0	955	0
Filter Age	hrs	Client Info		0	955	0
Oil Changed		Client Info		N/A	Not Chngd	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		111	147	55
Iron	ppm	ASTM D5185m	>500	250	176	112
Chromium	ppm	ASTM D5185m	>10	2	2	2
Nickel	ppm	ASTM D5185m	>10	6	6	7
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	3	3
Lead	ppm	ASTM D5185m	>25	0	<1	<1
Copper	ppm	ASTM D5185m	>100	146	74	74
Tin	ppm	ASTM D5185m	>10	6	4	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	MODER	MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

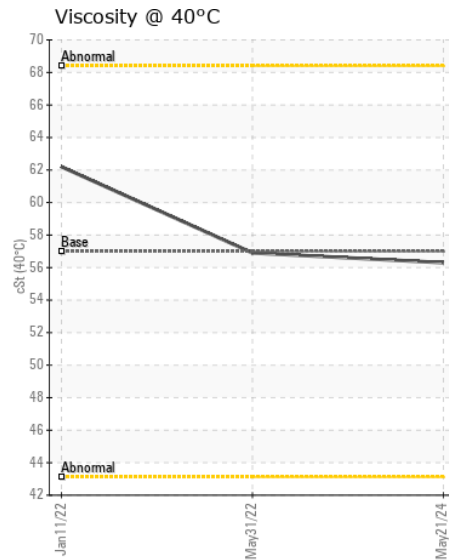
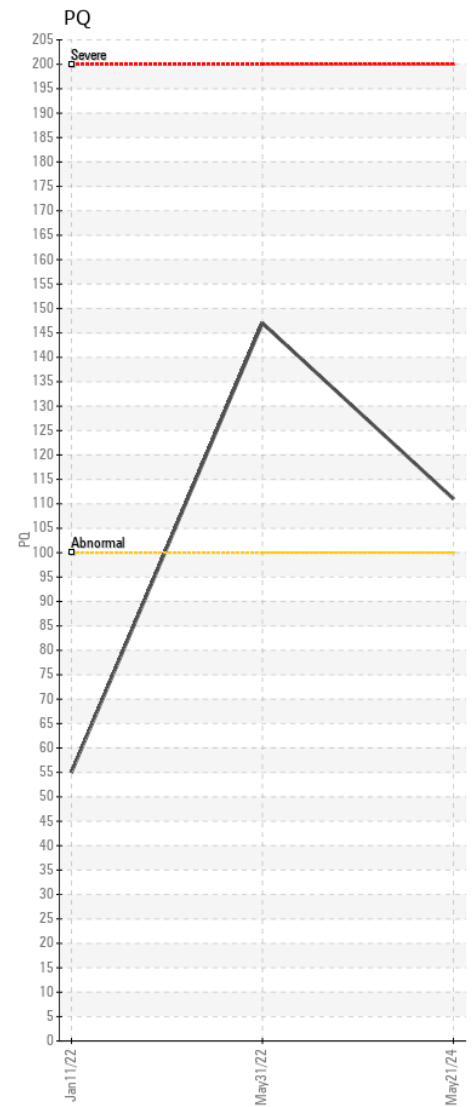
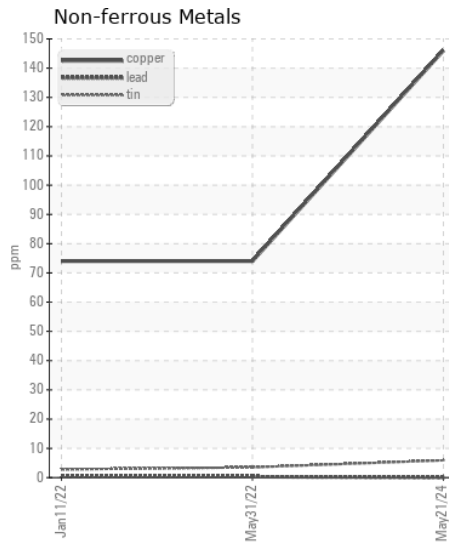
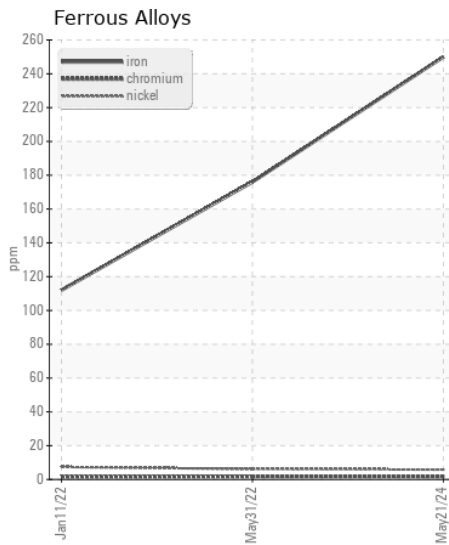
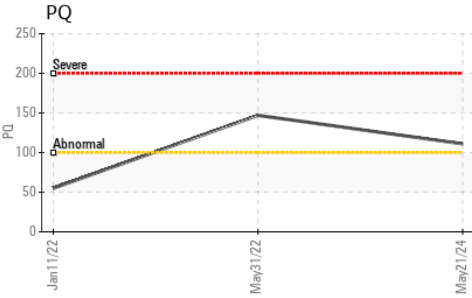
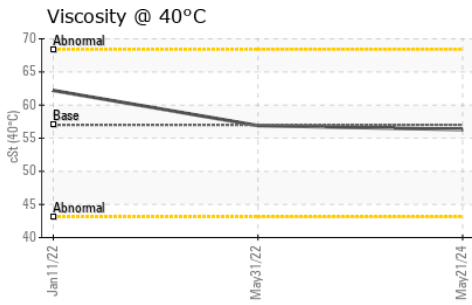
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	15	12	13
Potassium	ppm	ASTM D5185m	>20	0	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		9	9	17
Boron	ppm	ASTM D5185m	6	56	45	97
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	0	22	<1	<1
Manganese	ppm	ASTM D5185m		17	26	27
Magnesium	ppm	ASTM D5185m	145	149	67	24
Calcium	ppm	ASTM D5185m	3570	3266	3586	3638
Phosphorus	ppm	ASTM D5185m	1290	865	1118	1188
Zinc	ppm	ASTM D5185m	1640	1245	1369	1436
Sulfur	ppm	ASTM D5185m		4046	4087	3313
Visc @ 40°C	cSt	ASTM D445	57.0	56.3	56.9	62.2



Certificate L2367

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

Sample No. : JR0213760

Lab Number : 06187943

Unique Number : 11044695

Test Package : CONST (Additional Tests: PQ)

Received : 22 May 2024

Tested : 24 May 2024

Diagnosed : 24 May 2024 - Sean Felton

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)

JRE - GREENSBORO

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