



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
1DW310EXCMF711937
Component
Center Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (36 QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0210327	JR0160377	JR0157397
Sample Date		Client Info		06 Mar 2024	01 Feb 2023	26 Jan 2023
Machine Age	hrs	Client Info		4153	1955	1945
Oil Age	hrs	Client Info		4000	0	1945
Filter Age	hrs	Client Info		4000	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Bearing and/or bushing wear is indicated. All other component wear rates are normal.

PQ		ASTM D8184		113	27	105
Iron	ppm	ASTM D5185m	>500	198	66	181
Chromium	ppm	ASTM D5185m	>10	2	<1	2
Nickel	ppm	ASTM D5185m	>10	6	2	8
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	1	2
Lead	ppm	ASTM D5185m	>25	13	4	13
Copper	ppm	ASTM D5185m	>100	▲ 245	45	141
Tin	ppm	ASTM D5185m	>10	8	2	5
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

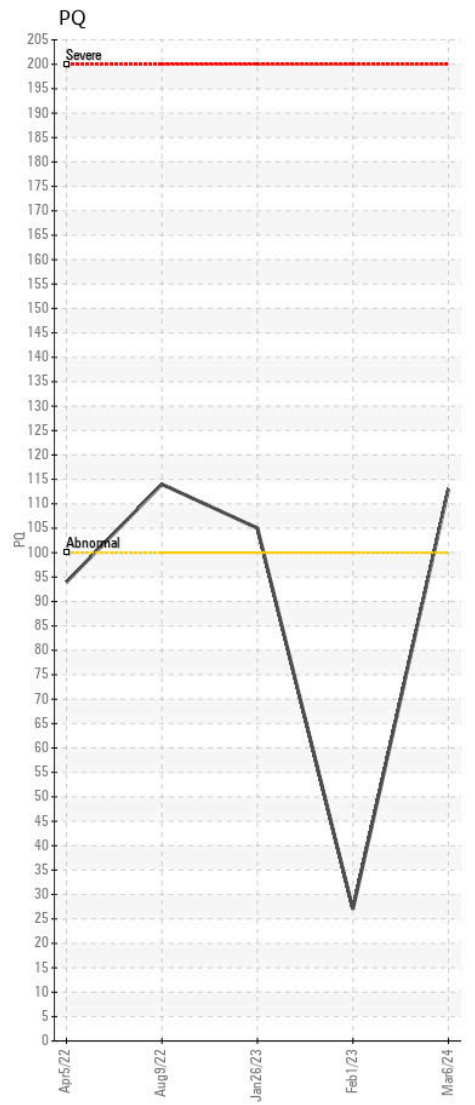
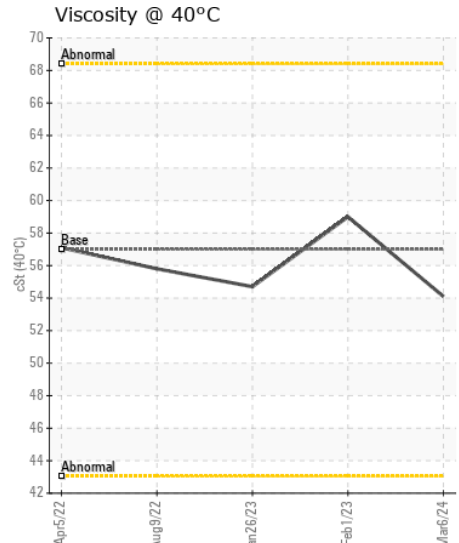
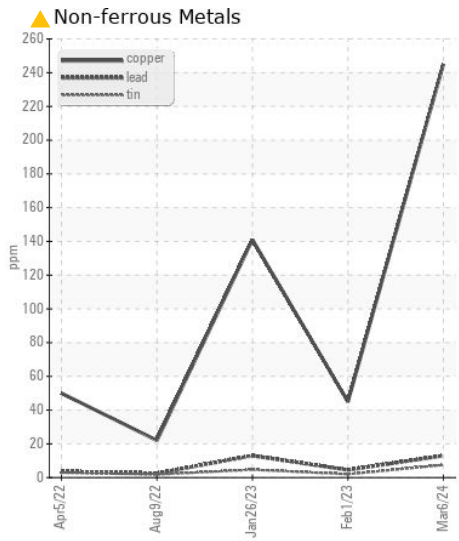
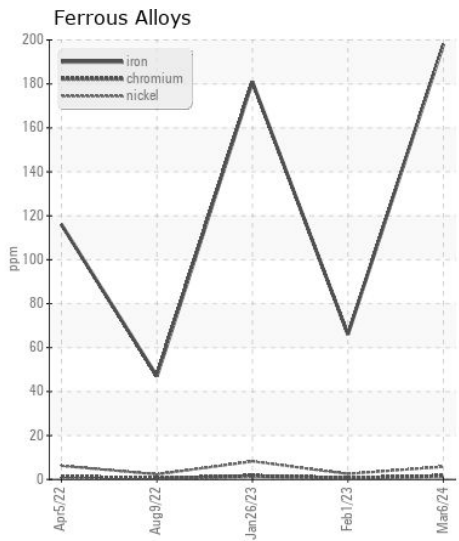
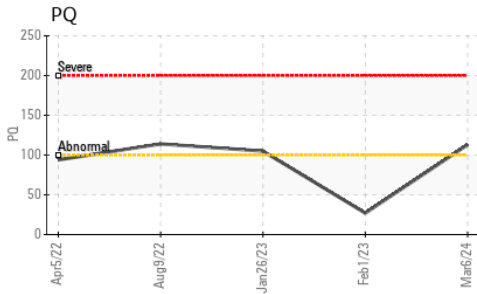
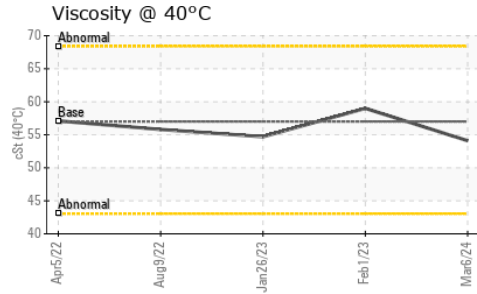
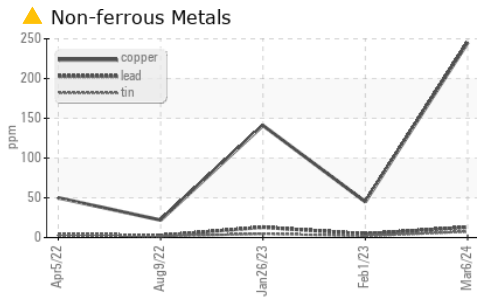
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	13	7	11
Potassium	ppm	ASTM D5185m	>20	2	0	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	LIGHT	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		4	<1	10
Boron	ppm	ASTM D5185m	6	16	14	33
Barium	ppm	ASTM D5185m	0	<1	0	<1
Molybdenum	ppm	ASTM D5185m	0	6	6	5
Manganese	ppm	ASTM D5185m		12	7	19
Magnesium	ppm	ASTM D5185m	145	109	106	87
Calcium	ppm	ASTM D5185m	3570	3525	3249	3220
Phosphorus	ppm	ASTM D5185m	1290	997	938	976
Zinc	ppm	ASTM D5185m	1640	1283	1124	1133
Sulfur	ppm	ASTM D5185m		3834	3837	3631
Visc @ 40°C	cSt	ASTM D445	57.0	54.1	59.0	54.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0210327 **Received** : 20 Mar 2024
Lab Number : 06123958 **Tested** : 21 Mar 2024
Unique Number : 10938109 **Diagnosed** : 22 Mar 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

PATRIOT DEVELOPMENT CORP
 22721 LADBROOK DRIVE STE 120
 STERLING, VA
 US 20166
 Contact: ROBERT MOSS
 robert.moss@patriotdev.net

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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F: