**WEAR** CONTAMINATION **FLUID CONDITION** 

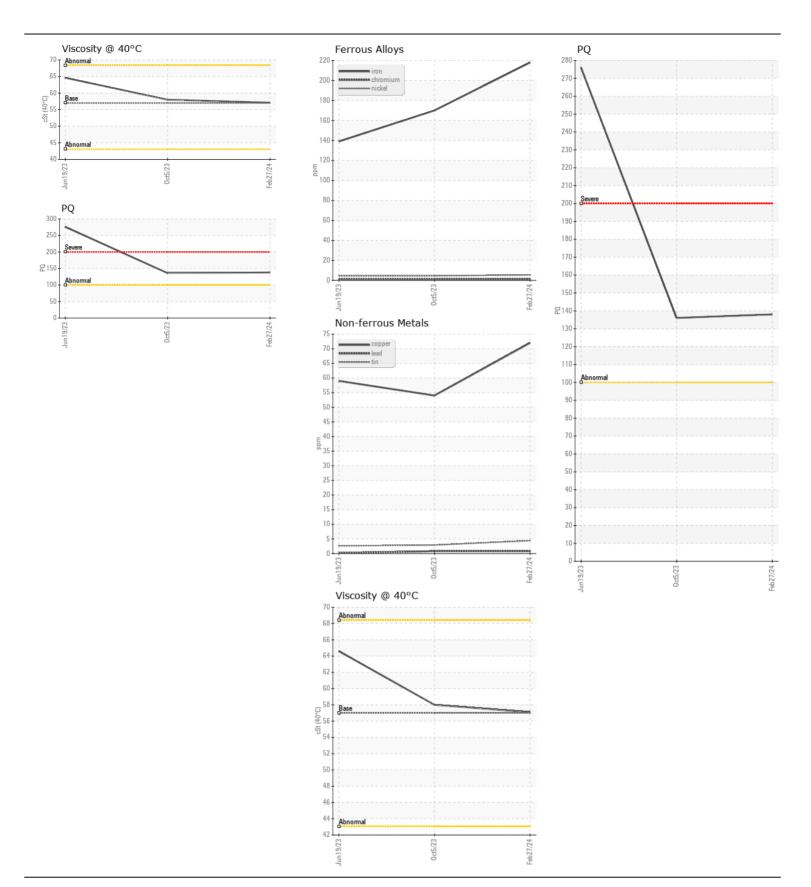
**NORMAL NORMAL NORMAL** 

[05W45056]

## **JOHN DEERE 310 P 1DW310PAJPFB06363**

Component Front Differential

JOHN DEERE HY-GARD HYD/TRANS (36 Q	TS)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0203094	JR0190326	JR017621
	Sample Date		Client Info		27 Feb 2024	05 Oct 2023	19 Jun 202
	Machine Age	hrs	Client Info		1464	942	465
	Oil Age	hrs	Client Info		987	477	465
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Not Changd	Not Changd	Changed
	Filter Changed		Client Info		N/A	N/A	None
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	PQ		ASTM D8184		138	136	276
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>500	218	170	139
	Chromium	ppm	ASTM D5185m	>10	1	1	1
	Nickel	ppm	ASTM D5185m	>10	5	4	4
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		2	4	2
	Lead	ppm	ASTM D5185m		<1	<1	<1
	Copper	ppm	ASTM D5185m		72	54	59
	Tin	ppm	ASTM D5185m	>10	4	3	3
	Vanadium	ppm	ASTM D5185m		0	0	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	12	11	10
	Potassium	ppm	ASTM D5185m	>20	0	0	2
	Water		WC Method	>.2	NEG	NEG	NEG
	Silt	scalar	*Visual	NONE	NONE	NONE	MODE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		8	8	17
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		29	35	120
	Barium	ppm	ASTM D5185m		2	0	0
	Molybdenum	ppm	ASTM D5185m	0	3	3	<1
	Manganese	ppm	ASTM D5185m		19	18	28
	Magnesium	ppm	ASTM D5185m		96	97	10
	Calcium	ppm	ASTM D5185m		3274	3325	3497
	Phosphorus	ppm			1013	1061	1188
	Zinc	ppm	ASTM D5185m	1640	1230	1373	1463
	Sulfur	ppm	ASTM D5185m		3508	3648	3758
	Visc @ 40°C	cSt	ASTM D445	5/.0	57.1	58.0	64.6







Laboratory Sample No.

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

**Lab Number** : 06103215 Unique Number : 10901445

: JR0203094

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received : 28 Feb 2024 Tested Diagnosed

: 01 Mar 2024

: 01 Mar 2024 - Wes Davis Test Package : CONST ( Additional Tests: PQ )

BRISTOW, VA US 20136 Contact: DANNY HUFF dhuff@bandssite.com T: (540)270-3203

\* - 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)

**B & S SITE DEVLEOPMENT** 

7800 PINEY BRANCH LANE

F: (703)753-0605