WEAR CONTAMINATION FLUID CONDITION

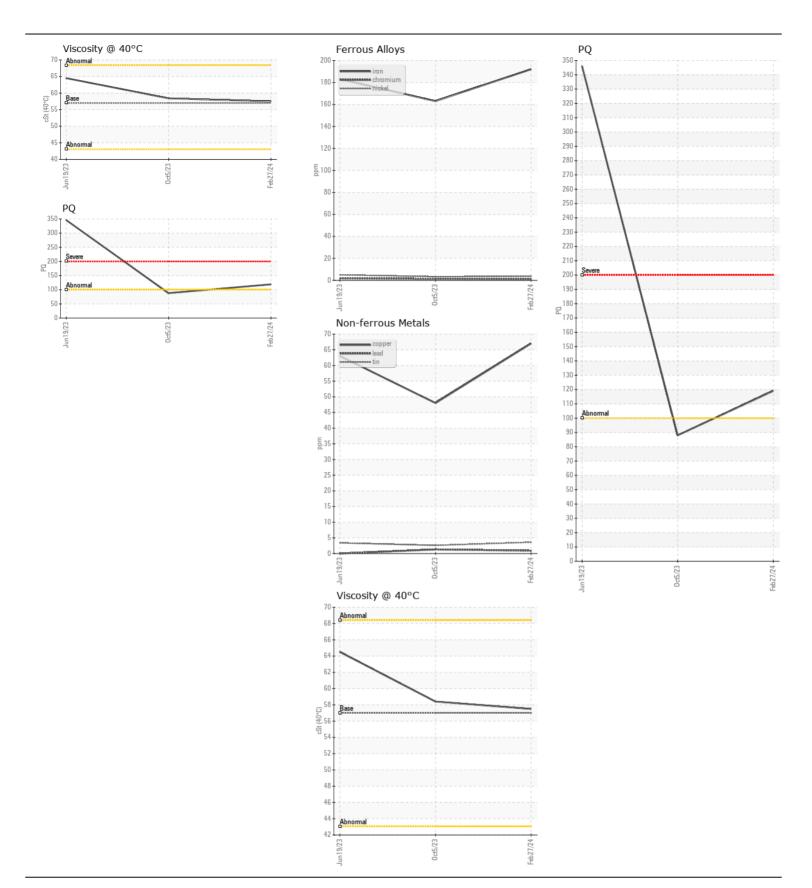
NORMAL NORMAL NORMAL

[05W45056]

JOHN DEERE 310 P 1DW310PAJPFB06363

Component Rear Differential

JOHN DEERE HY-GARD HYD/TRANS (36 QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0203096	JR0190324	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		119	88	346
All component wear rates are normal.	Iron	ppm	ASTM D5185m	>500	192	163	183
	Chromium	ppm	ASTM D5185m	>10	1	1	2
	Nickel	ppm	ASTM D5185m	>10	4	3	5
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m	>25	2	5	2
	Lead	ppm	ASTM D5185m	>25	<1	1	0
	Copper	ppm	ASTM D5185m	>100	67	48	63
	Tin	ppm	ASTM D5185m	>10	4	3	3
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	MODER	HEAV
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	12	12	11
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	0	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		7	8	19
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	6	33	40	119
	Barium	ppm	ASTM D5185m	0	<1	0	0
	Molybdenum	ppm	ASTM D5185m	0	6	4	<1
	Manganese	ppm	ASTM D5185m		19	18	35
	Magnesium	ppm	ASTM D5185m	145	104	100	9
	Calcium	ppm	ASTM D5185m	3570	3288	3446	3496
	Phosphorus	ppm	ASTM D5185m	1290	1016	1100	1185
	Zinc	ppm	ASTM D5185m	1640	1259	1423	1457
	Sulfur	ppm	ASTM D5185m		3378	3977	3655
	Visc @ 40°C	cSt	ASTM D445	57.0	57.5	58.4	64.5







Laboratory Sample No.

Lab Number : 06103213 Unique Number : 10901443

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0203096

Received **Tested**

: 28 Feb 2024 Diagnosed Test Package : CONST (Additional Tests: PQ)

: 01 Mar 2024

: 01 Mar 2024 - Wes Davis

Contact: DANNY HUFF

dhuff@bandssite.com T: (540)270-3203 F: (703)753-0605

B & S SITE DEVLEOPMENT

7800 PINEY BRANCH LANE

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)

BRISTOW, VA

US 20136