WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

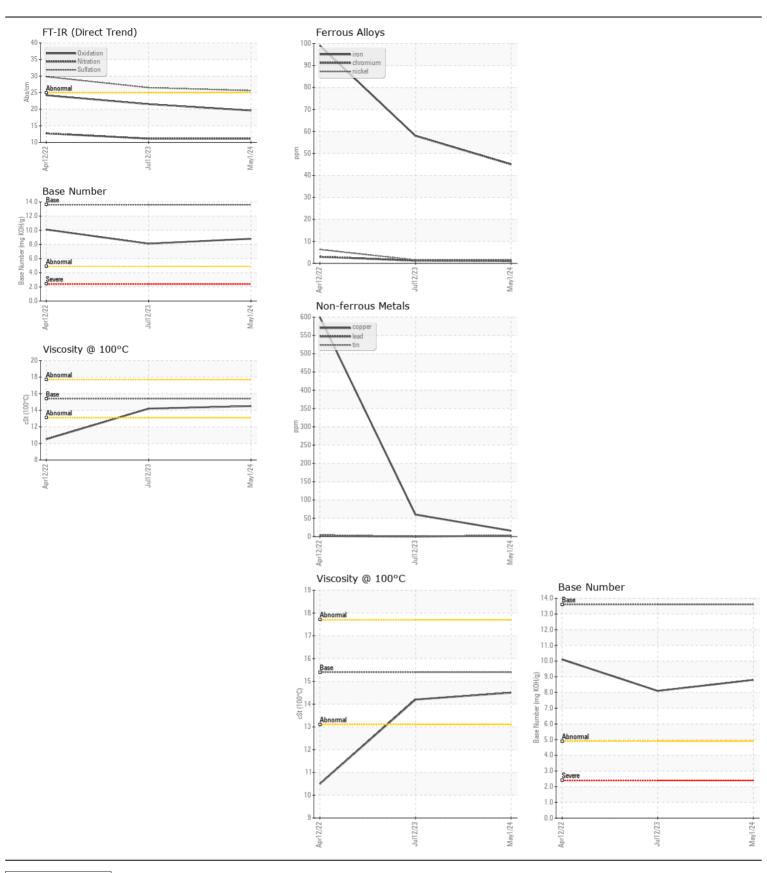
Machine Id

## **JOHN DEERE 250G 1FF250GXCMF611686**

**Diesel Engine** 

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		JR0207825	JR0176813	JR0123625
	Sample Date		Client Info		01 May 2024	12 Jul 2023	12 Apr 2022
	Machine Age	hrs	Client Info		1621	1123	535
	Oil Age	hrs	Client Info		498	588	535
	Filter Age	hrs	Client Info		498	588	535
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	>51	45	<u></u> 58	99
	Chromium	ppm	ASTM D5185m		1	1	3
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		2	2	6
	Titanium	ppm	ASTM D5185m		- <1	0	<1
	Silver	ppm	ASTM D5185m	<b>\3</b>	0	0	<1
	Aluminum	ppm	ASTM D5185m		6	4	7
	Lead	ppm	ASTM D5185m		2	0	1
	Copper	ppm	ASTM D5185m		16	<u></u> 60	<u>▲</u> 600
	Tin	ppm	ASTM D5185m		1	<1	4
	Vanadium	ppm	ASTM D5185m	24	- <1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		10	7	16
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3	2	4
	Fuel		WC Method		<1.0	<1.0	0.4
	Water		WC Method	>0.21	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.3	1.5	1.7
	Nitration	Abs/cm	*ASTM D7624	>20	11.1	11.1	12.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.6	26.5	29.8
	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	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	4	4	9
	Boron	ppm	ASTM D5185m		112	61	149
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		<1	0	0
	Molybdenum	ppm	ASTM D5185m		257	221	282
	Manganese	ppm	ASTM D5185m		<1	2	7
	Magnesium	ppm	ASTM D5185m		849	809	1016
	Calcium	ppm	ASTM D5185m		1560	1564	1797
	Phosphorus	ppm	ASTM D5185m		1029	893	1018
	Zinc	ppm	ASTM D5185m		1193	1154	1139
	Sulfur	ppm	ASTM D5185m		3041	3030	2579
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	21.5	24.2
	CAIGATION						10.1
	Base Number (BN)	ma KOH/a	ASTM DOROG	136	8.8	8.1	7/17







Report Id: VANASH [WUSCAR] 06174918 (Generated: 05/10/2024 16:00:49) Rev: 1

Laboratory Sample No. Unique Number : 11020971

Lab Number : 06174918

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0207825

Received **Tested** Diagnosed

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Test Package : CONST (Additional Tests: TBN)

: 09 May 2024

: 10 May 2024 : 10 May 2024 - Wes Davis

JRE - ASHEVILLE 101 BRUCE DRIVE ASHEVILLE, NC US 28806 Contact: Randy Warren

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. randy.warren@jamesriverequipment.com T: (528)667-0176

Contact/Location: Randy Warren - VANASH

F: (828)667-4865