

History1

History2

Machine Id

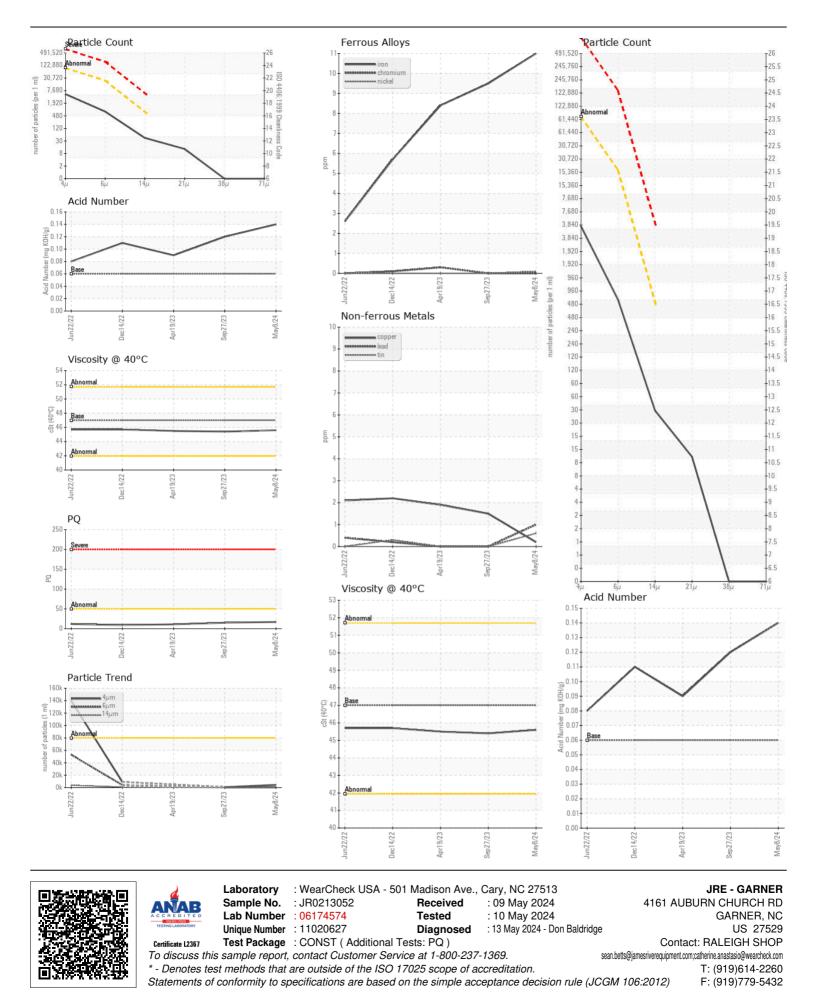
JOHN DEERE 245G 1FF245GXTMF802196 omponent

Hydraulic System

HITACHI HYDRAULIC SUPER EX 46HN (35 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current
	Sample Number		Client Info		JR0213052
Resample at the next service interval to monitor.	Sample Date		Client Info		08 May 202
	Machine Age	hrs	Client Info		3030
	Oil Age	hrs	Client Info		3030
	Filter Age	hrs	Client Info		0
	Oil Changed		Client Info		Not Chang
	Filter Changed		Client Info		Changed
	Sample Status				NORMAL
WEAR	PQ		ASTM D8184	. 50	17
WEAR	Iron	000			11
All component wear rates are normal.	Chromium	ppm	ASTM D5185m ASTM D5185m	>32 >9	0
	Nickel	ppm	ASTM D5185m		0 <1
	Titanium	ppm	ASTM D5185m	>0	0
	Silver	ppm ppm	ASTM D5185m		0
	Aluminum	ppm	ASTM D5185m	> 0	1
	Lead	ppm	ASTM D5185m		1
	Copper	ppm	ASTM D5185m	>50	- <1
	Tin	ppm	ASTM D5185m		<1
	Vanadium	ppm	ASTM D5185m	/0	0
	White Metal	scalar	*Visual	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>11	1
	Potassium	ppm	ASTM D5185m	>20	4
The amount and size of particulates present in the system are	Water		WC Method	>0.075	NEG
acceptable. There is no indication of any contamination in the oil.	Particles >4µm		ASTM D7647	>80000	4579
	Particles >6µm		ASTM D7647		673
	Particles >14µm		ASTM D7647	>640	37
	Particles >21µm		ASTM D7647		11
	Particles >38µm		ASTM D7647		0
	Particles >71µm		ASTM D7647		0
	Oil Cleanliness		ISO 4406 (c)		19/17/1
	Silt	scalar	*Visual	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORM
	Odor	scalar	*Visual	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.075	NEG
	Sodium	ppm	ASTM D5185m	>21	2
	Boron	ppm	ASTM D5185m		0
The AN level is acceptable for this fluid. The condition of the oil is	Barium	ppm	ASTM D5185m		0
suitable for further service.	Molybdenum	ppm	ASTM D5185m		0
	Manganese	nom	ASTM D5185m		-1

Sample Number						
Oampic Number		Client Info		JR0213052	JR0186611	JR0167396
Sample Date		Client Info		08 May 2024	27 Sep 2023	19 Apr 2023
Machine Age	hrs	Client Info		3030	2159	1551
Oil Age	hrs	Client Info		3030	2159	1551
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL
PQ		ASTM D8184	>50	17	15	11
Iron	ppm	ASTM D5185m	>32	11	10	8
Chromium	ppm	ASTM D5185m	>9	0	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	1	<1	1
Lead	ppm	ASTM D5185m	>28	1	0	0
Copper	ppm	ASTM D5185m	>50	<1	2	2
Tin	ppm	ASTM D5185m	>5	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	A MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>11	1	<1	3
Potassium	ppm	ASTM D5185m	>20	4	<1	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	4579	828	
Particles >6µm		ASTM D7647	>20000	673	92	
Particles >14µm		ASTM D7647	>640	37	9	
Particles >21µm		ASTM D7647	>160	11	3	
Particles >38µm		ASTM D7647	>40	0	0	
Particles >71µm		ASTM D7647	>10	0	0	
Oil Cleanliness		ISO 4406 (c)	>23/21/16	19/17/12	17/14/10	
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	>0.075	NEG	NEG	NEG
	ooului				I VEG	NLO
Sodium	ppm	ASTM D5185m	>21	2	1	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	2	1
Calcium	ppm	ASTM D5185m		<1	1	2
Phosphorus	ppm	ASTM D5185m	827	552	527	525
Zinc	ppm	ASTM D5185m	0	48	37	47
Sulfur	ppm	ASTM D5185m	13	157	132	165
	mg KOH/g	ASTM D8045	0.06	0.14	0.12	0.09
Acid Number (AN)						
Acid Number (AN) Visc @ 40°C	cSt	ASTM D445	47	45.6	45.4	45.5



Report Id: RWMGAR [WUSCAR] 06174574 (Generated: 05/13/2024 13:30:44) Rev: 1

Submitted By: Steven Bass Page 2 of 2