



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**JOHN DEERE 245G 1FF245GXCGF800133**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0221115</b>	JR0186135	JR0163419
Sample Date		Client Info		<b>27 Jun 2024</b>	30 Oct 2023	17 Mar 2023
Machine Age	hrs	Client Info		<b>4645</b>	4233	4158
Oil Age	hrs	Client Info		<b>4570</b>	0	4000
Filter Age	hrs	Client Info		<b>0</b>	0	1000
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>17</b>	12	4
Iron	ppm	ASTM D5185m	>32	<b>8</b>	8	25
Chromium	ppm	ASTM D5185m	>9	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>50	<b>0</b>	<1	2
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

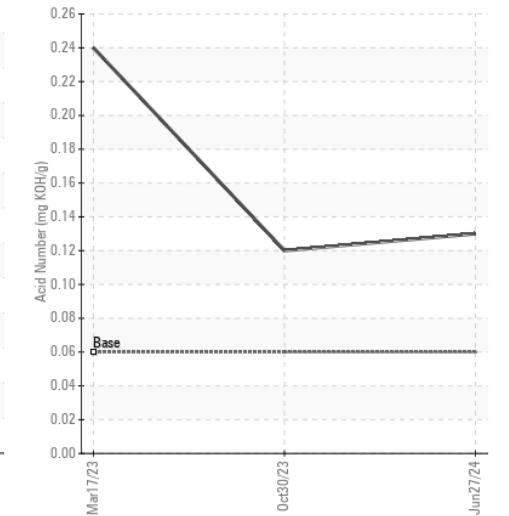
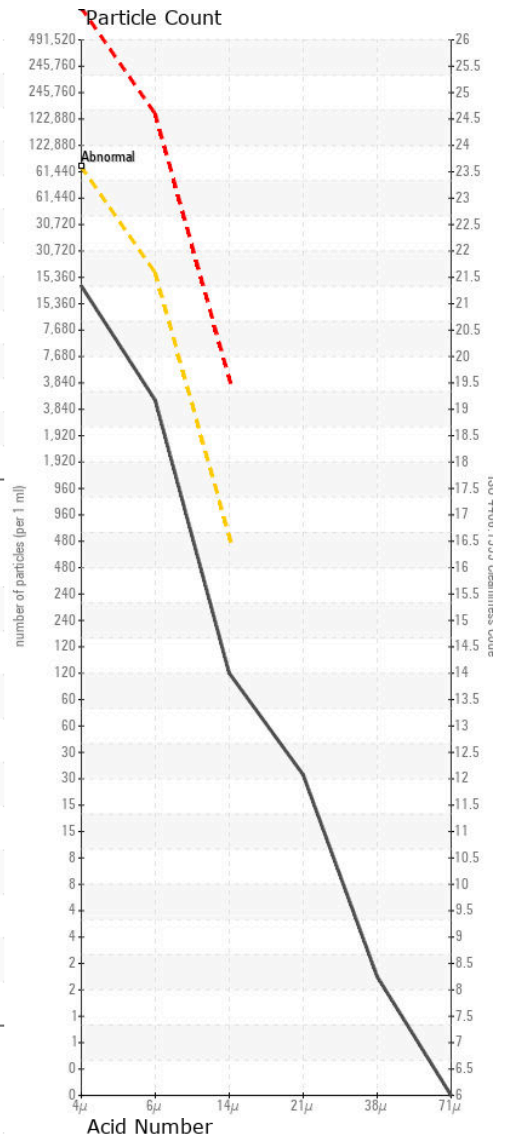
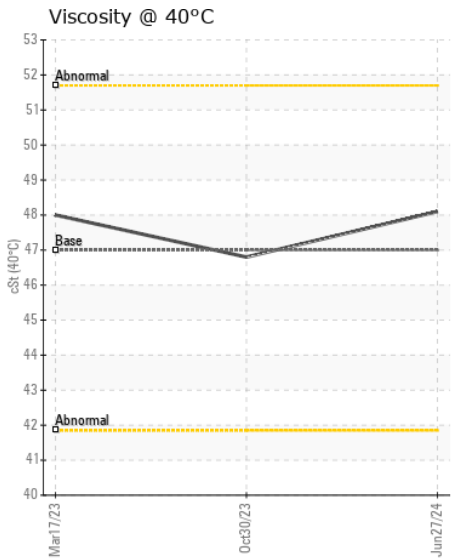
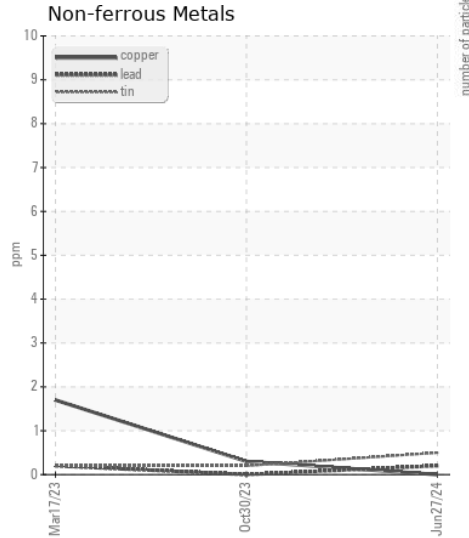
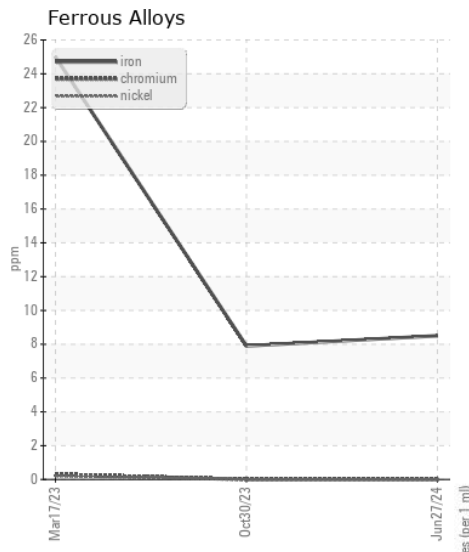
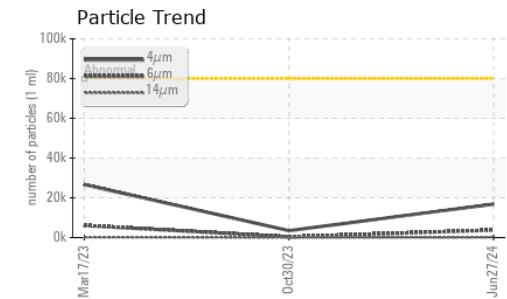
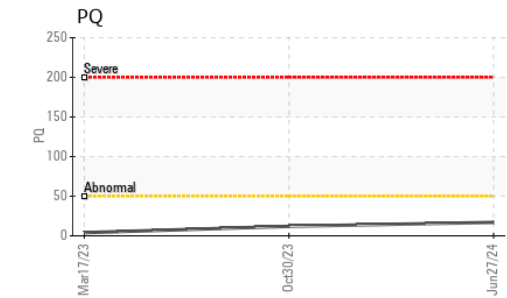
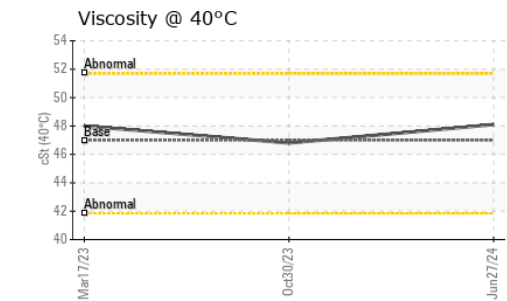
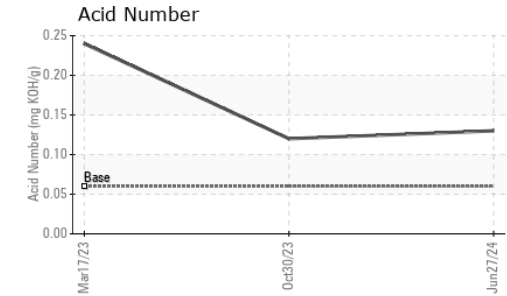
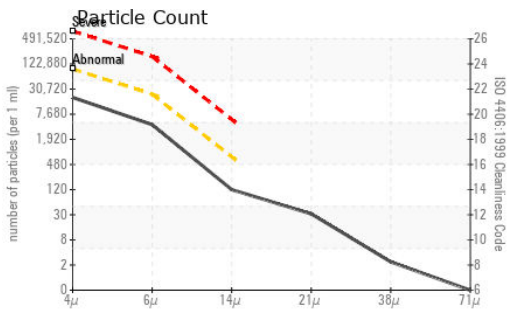
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>11	<b>&lt;1</b>	1	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	3
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>16832</b>	3484	26657
Particles >6µm		ASTM D7647	>20000	<b>3767</b>	390	6100
Particles >14µm		ASTM D7647	>640	<b>106</b>	18	169
Particles >21µm		ASTM D7647	>160	<b>28</b>	3	24
Particles >38µm		ASTM D7647	>40	<b>2</b>	0	1
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/19/14</b>	19/16/11	22/20/15
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<b>0</b>	0	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	4
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	1	8
Calcium	ppm	ASTM D5185m		<b>12</b>	8	13
Phosphorus	ppm	ASTM D5185m	827	<b>507</b>	477	410
Zinc	ppm	ASTM D5185m	0	<b>35</b>	13	▲ 90
Sulfur	ppm	ASTM D5185m	13	<b>59</b>	86	775
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.13</b>	0.12	0.24
Visc @ 40°C	cSt	ASTM D445	47	<b>48.1</b>	46.8	48.0



Certificate L2367

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

Sample No. : JR0221115

Lab Number : 06224456

Unique Number : 11102653

Test Package : CONST ( Additional Tests: PQ )

Received : 01 Jul 2024

Tested : 02 Jul 2024

Diagnosed : 02 Jul 2024 - Angela Borella

**JRE - NEW BERN**  
3816 MARTIN LUTHER KING BLVD  
NEW BERN, NC  
US 28562

Contact: NEW BERN SHOP

nick.etherdridge@jamesriverequipment.com;canastasio@wearcheckusa.com

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: