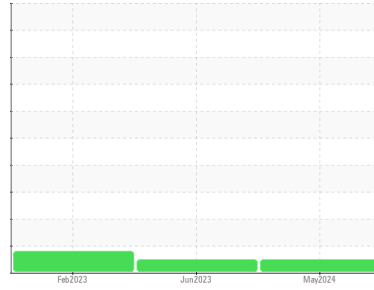


# OIL ANALYSIS REPORT

### Sample Rating Trend



**NORMAL**



Machine Id  
**JOHN DEERE 345G 1FF345GXTMF020937**  
 Component  
**Hydraulic System**  
 Fluid  
**HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>JR0200426</b>	JR0165462	JR0148169
Sample Date	Client Info			<b>29 May 2024</b>	05 Jun 2023	21 Feb 2023
Machine Age	hrs	Client Info		<b>1670</b>	963	507
Oil Age	hrs	Client Info		<b>1670</b>	0	0
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.075	<b>NEG</b>	NEG	NEG

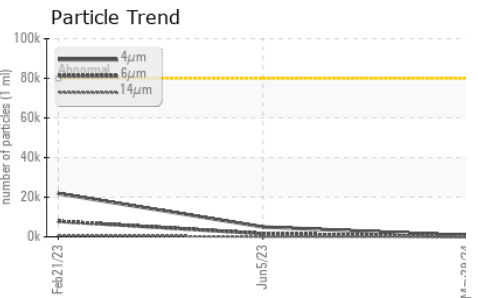
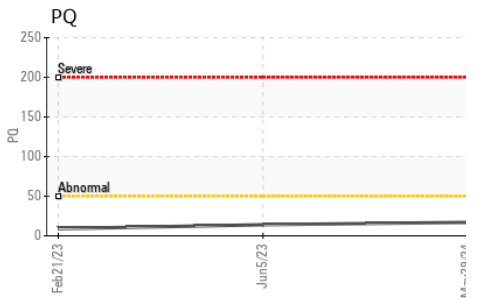
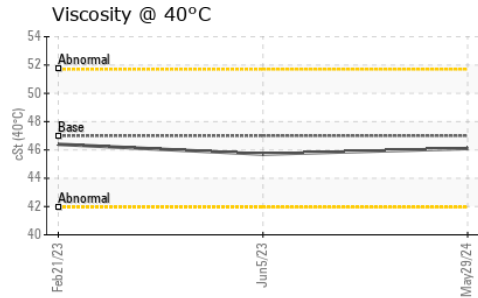
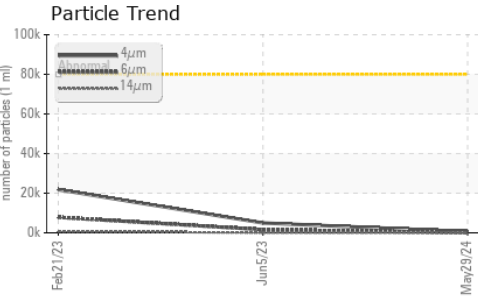
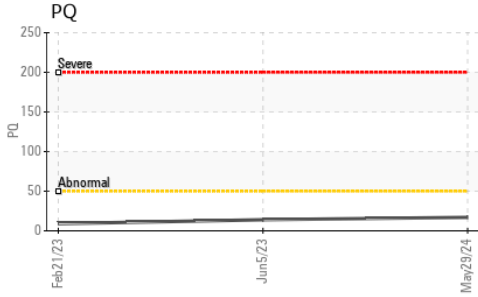
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	<b>17</b>	14	9
Iron	ppm	ASTM D5185m	>32	<b>3</b>	3	<1
Chromium	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	0	3
Calcium	ppm	ASTM D5185m		<b>3</b>	<1	2
Phosphorus	ppm	ASTM D5185m	827	<b>546</b>	587	493
Zinc	ppm	ASTM D5185m	0	<b>46</b>	32	32
Sulfur	ppm	ASTM D5185m	13	<b>63</b>	230	0

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>11	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m	>21	<b>0</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	<b>589</b>	4971	21794
Particles >6µm		ASTM D7647	>20000	<b>39</b>	1601	7834
Particles >14µm		ASTM D7647	>640	<b>3</b>	94	644
Particles >21µm		ASTM D7647	>160	<b>1</b>	17	125
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	8
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>16/12/9</b>	19/18/14	22/20/17

# OIL ANALYSIS REPORT

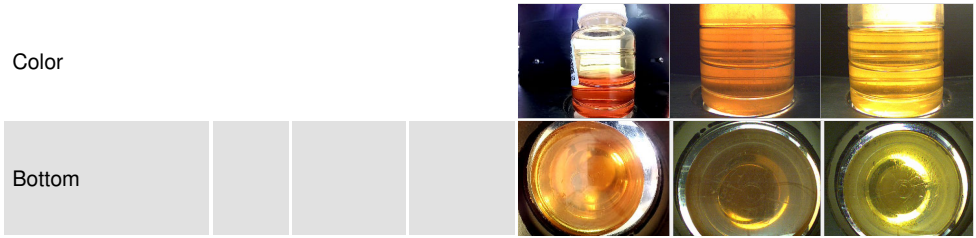


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.16</b>	0.10	0.086

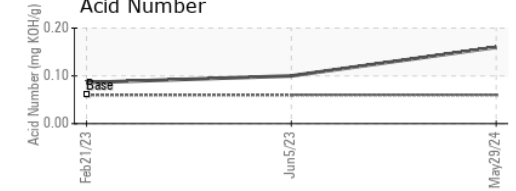
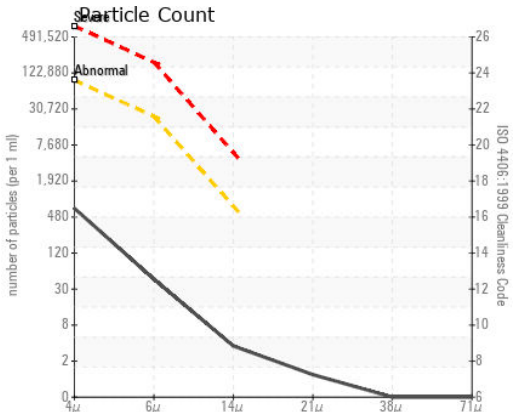
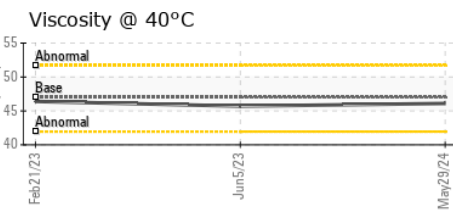
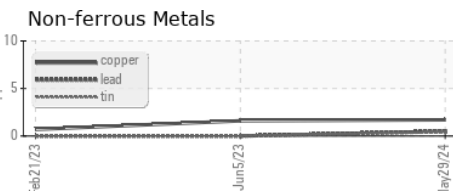
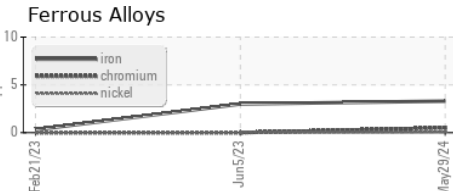
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>0.075	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	47	<b>46.1</b>	45.7	46.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0200426  
**Lab Number** : **06195323**  
**Unique Number** : 11057446  
**Test Package** : CONST ( Additional Tests: PQ )

**Received** : 30 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 01 Jun 2024 - Don Baldrige

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: DAVID ZIEG  
 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292

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)