



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE 135G 1FF135GXTLF502028**  
 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>JR0222133</b>	JR0177485	JR0188785
Sample Date		Client Info		<b>14 Jun 2024</b>	20 Oct 2023	15 Sep 2023
Machine Age	hrs	Client Info		<b>2457</b>	2121	2121
Oil Age	hrs	Client Info		<b>2457</b>	2121	2121
Filter Age	hrs	Client Info		<b>0</b>	0	2121
Oil Changed		Client Info		<b>Not Chngd</b>	Oil Added	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	<b>17</b>	11	13
Iron	ppm	ASTM D5185m	>32	<b>3</b>	7	9
Chromium	ppm	ASTM D5185m	>9	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	4	4
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
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

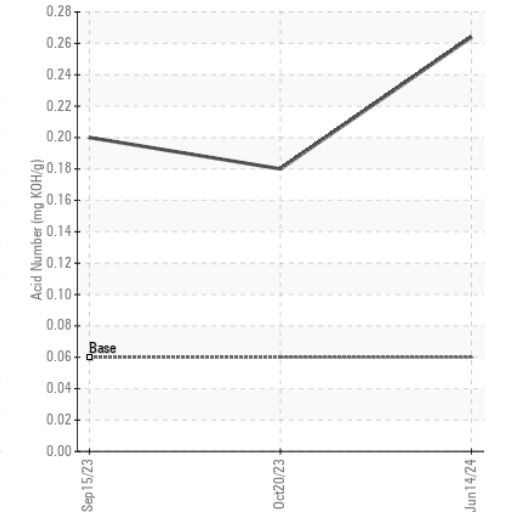
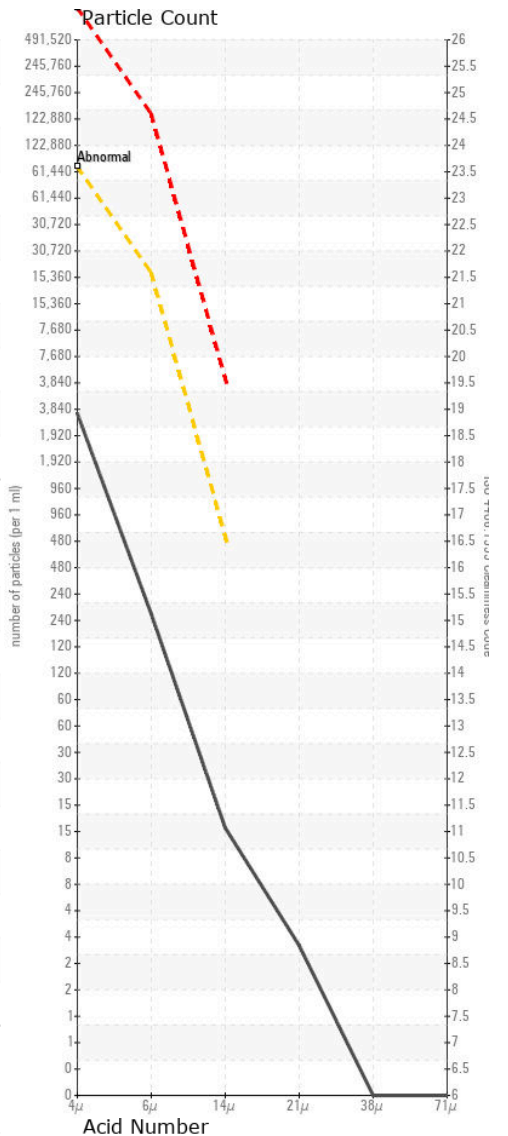
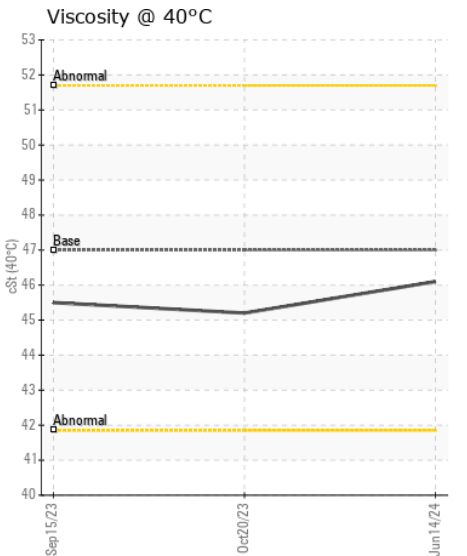
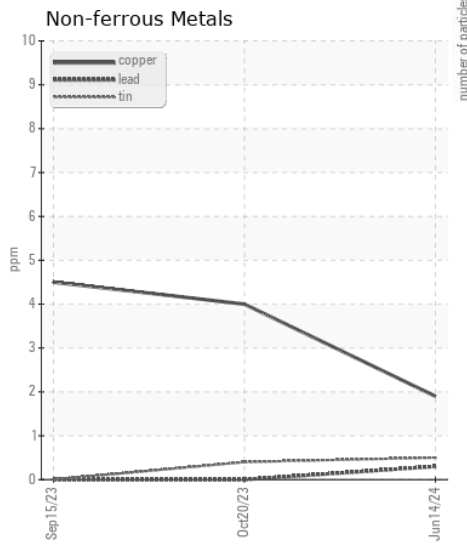
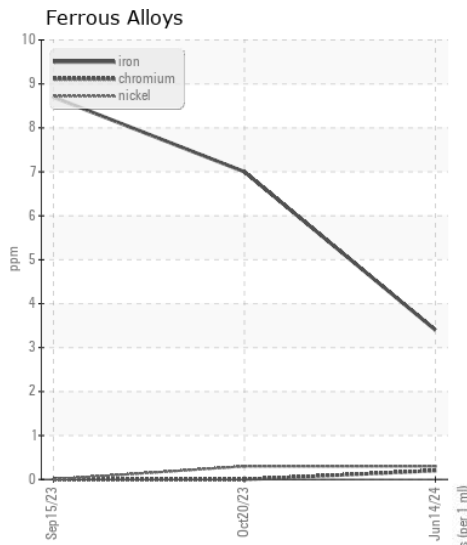
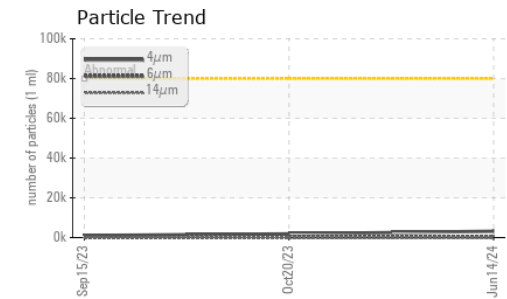
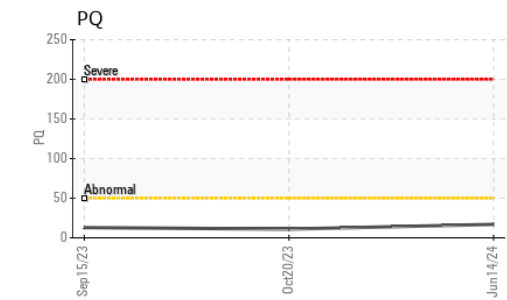
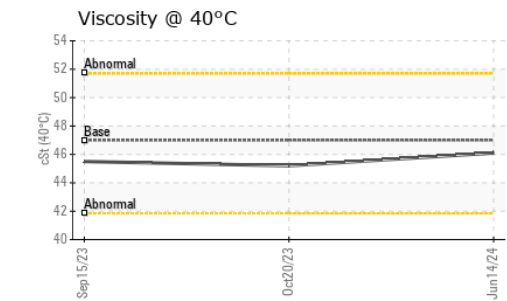
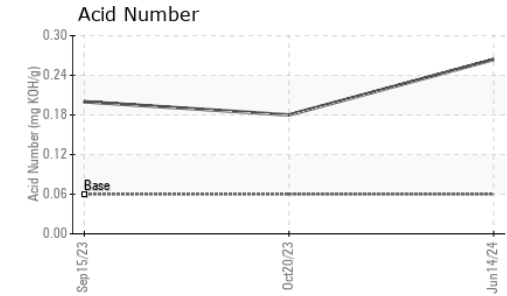
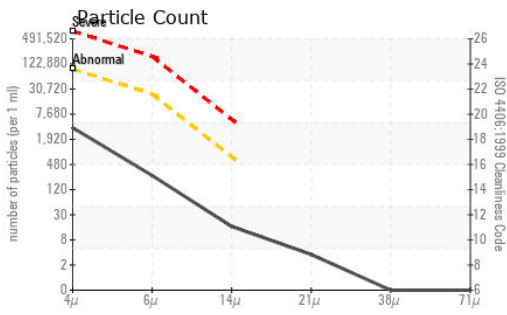
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>11	<b>1</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>3176</b>	1863	1037
Particles >6µm		ASTM D7647	>20000	<b>230</b>	150	75
Particles >14µm		ASTM D7647	>640	<b>14</b>	6	11
Particles >21µm		ASTM D7647	>160	<b>3</b>	2	3
Particles >38µm		ASTM D7647	>40	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>19/15/11</b>	18/14/10	17/13/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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>	1	2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	3	0
Calcium	ppm	ASTM D5185m		<b>0</b>	204	215
Phosphorus	ppm	ASTM D5185m	827	<b>512</b>	468	486
Zinc	ppm	ASTM D5185m	0	<b>22</b>	▲ 127	▲ 122
Sulfur	ppm	ASTM D5185m	13	<b>32</b>	364	380
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	<b>0.264</b>	0.18	0.20
Visc @ 40°C	cSt	ASTM D445	47	<b>46.1</b>	45.2	45.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0222133 **Received** : 18 Jun 2024  
**Lab Number** : 06213347 **Tested** : 19 Jun 2024  
**Unique Number** : 11086211 **Diagnosed** : 20 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GARNER**  
 4161 AUBURN CHURCH RD  
 GARNER, NC  
 US 27529

Contact: RALEIGH SHOP  
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.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)

T: (919)614-2260  
 F: (919)779-5432