



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



Machine Id  
**JOHN DEERE 650J 9X2 (S/N T0650JX115089)**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (15 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0191402</b>	JR0149505	JR0111803
Sample Date		Client Info		<b>20 Dec 2023</b>	16 Nov 2022	19 Nov 2021
Machine Age	hrs	Client Info		<b>1849</b>	1807	1803
Oil Age	hrs	Client Info		<b>1849</b>	1807	811
Filter Age	hrs	Client Info		<b>42</b>	1807	811
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	<b>21</b>	16	20
Iron	ppm	ASTM D5185m	>23	<b>17</b>	16	17
Chromium	ppm	ASTM D5185m	>9	<b>10</b>	10	10
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>9	<b>4</b>	5	3
Lead	ppm	ASTM D5185m	>28	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>51	<b>27</b>	26	28
Tin	ppm	ASTM D5185m	>5	<b>0</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

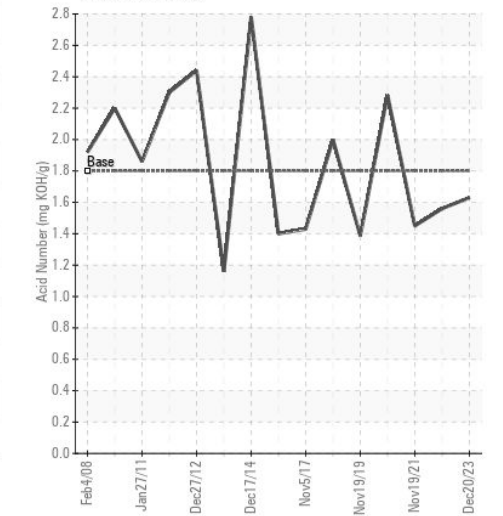
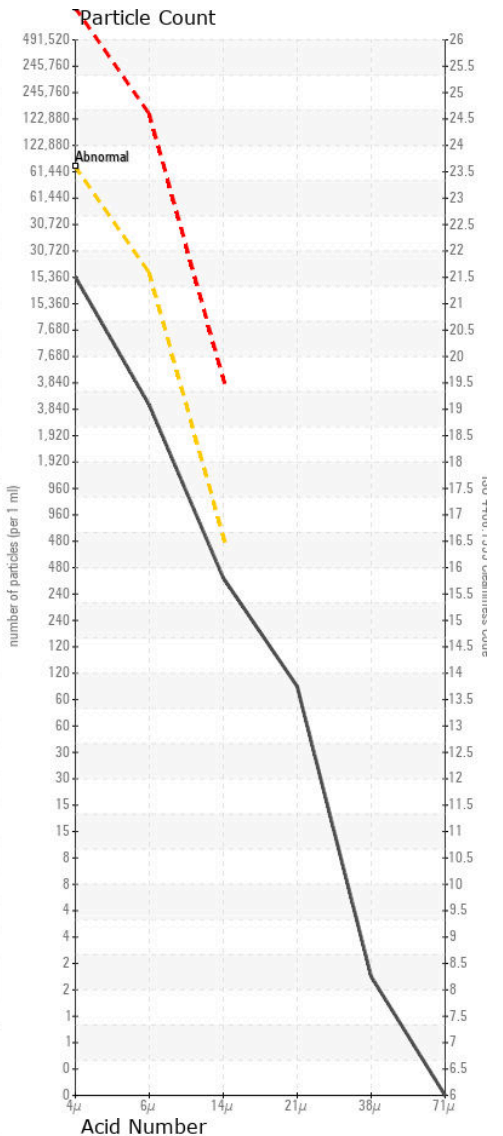
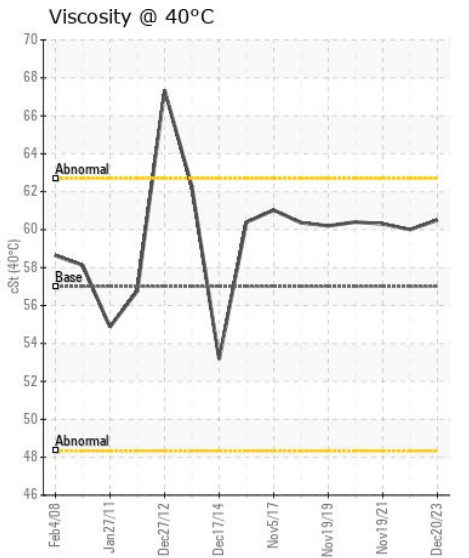
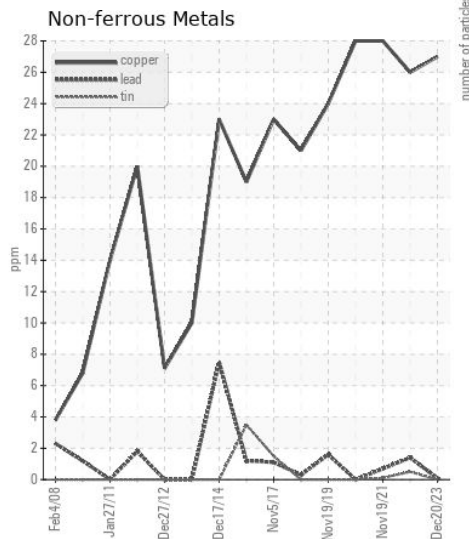
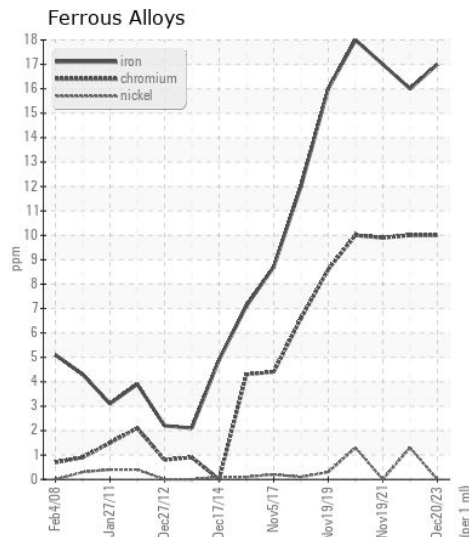
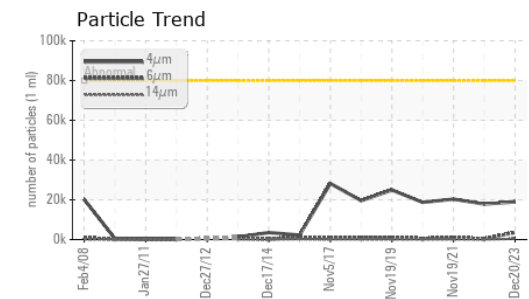
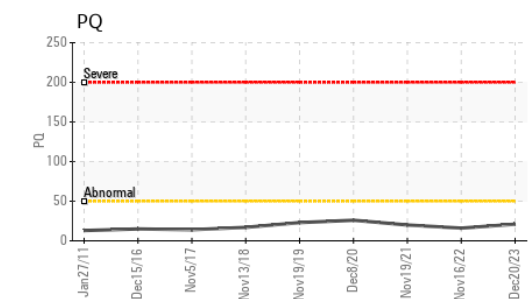
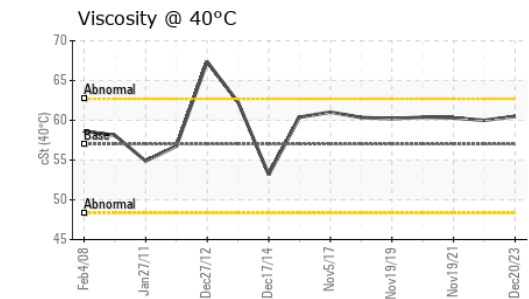
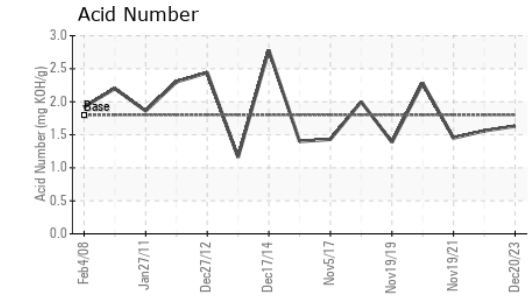
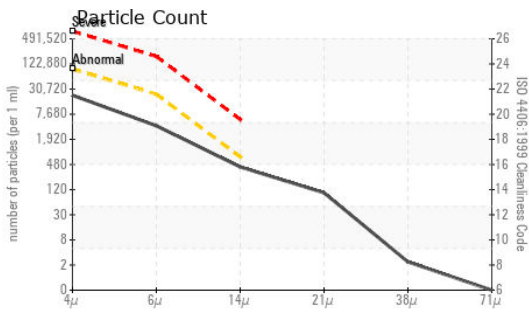
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>31	<b>15</b>	15	14
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Water		WC Method	>0.075	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>80000	<b>18942</b>	17861	20346
Particles >6µm		ASTM D7647	>20000	<b>3542</b>	433	841
Particles >14µm		ASTM D7647	>640	<b>369</b>	19	84
Particles >21µm		ASTM D7647	>160	<b>89</b>	7	23
Particles >38µm		ASTM D7647	>40	<b>2</b>	1	0
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	<b>21/19/16</b>	21/16/11	22/17/14
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>4</b>	4	0
Boron	ppm	ASTM D5185m	6	<b>19</b>	20	23
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>21</b>	23	22
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	145	<b>252</b>	272	268
Calcium	ppm	ASTM D5185m	3570	<b>2409</b>	2154	2271
Phosphorus	ppm	ASTM D5185m	1290	<b>1027</b>	1035	1082
Zinc	ppm	ASTM D5185m	1640	<b>1232</b>	1258	1190
Sulfur	ppm	ASTM D5185m		<b>4090</b>	4772	3348
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	<b>1.63</b>	1.56	1.450
Visc @ 40°C	cSt	ASTM D445	57.0	<b>60.5</b>	60.0	60.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0191402 **Received** : 17 Jan 2024  
**Lab Number** : 06062524 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10833906 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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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)